

Fifth Regional 3R Forum in Asia and the Pacific

“Multilayer Partnerships and Coalition as the Basis for 3Rs Promotion in Asia and the Pacific”
Surabaya, Indonesia, 25-27 February 2014

Country Report

(Draft)

< Palau >

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

Fifth Regional 3R Forum in Asia and the Pacific 25-27 February 2014, Surabaya, Indonesia

Country Report

Name of the Country: PALAU

Name, Designation and Organization Respondent: Ministry of Public Infrastructure, Industries and Commerce - Palau

Other Organizations contributing to Country Report:

(**Note:** Though a number of key line Ministries of PALAU such as Ministry of Natural Resources, Environment, and Tourism and Ministry of Public Infrastructure, Industries, and Commerce, are invited to Fifth Regional 3R Forum in Asia-Pacific, only one consolidated joint country report is requested)

Voluntary reporting on progress/achievements/initiatives towards implementation of the *Ha Noi 3R Declaration – Sustainable 3R Goals for Asia and the Pacific (2013-2023)*

With the objective of demonstrating renewed interest and commitment of Asia-Pacific countries towards realizing a promising decade (2013-2023) of sustainable actions and measures for achieving resource efficient and sound material cycle society in the rapidly urbanizing region, the Fourth Regional 3R Forum in Asia-Pacific in 2013 discussed and agreed the “*Ha Noi 3R Declaration – Sustainable 3R Goals for Asia and the Pacific 2013-23*“. The objective of the Country Reporting is to share among the Asia-Pacific countries the progress and achievements made, including various challenges faced, by countries in implementing each of the underlined Goals of the Declaration. It is also expected to help development agencies, donors and multilateral development banks (MDBs) better devise their existing as well as future capacity building and technical assistance programs in the areas of 3Rs and resource efficiency, including building 3R infrastructures. While preparing the country report, it is highly recommended that all other relevant line Ministries/Agencies such as Ministry of Environment, Ministry of Industry, Ministry of Public Works, Ministry of Urban Development, Ministry of Energy, etc., are consulted.

Please list below the type of date reports/statistical compendium available in the areas of waste management in your country:

- 1.....
- 2.....
- 3.....
- 4.....

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Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration		
I. 3R Goals in Urban/Industrial Areas				
3Rs in municipal solid waste	1	Significant reduction in the quantity of municipal solid waste generated, by instituting policies, programmes, and projects at national and local levels, encouraging both producers and consumers to reduce the waste through greening production, greening lifestyle, and sustainable consumption.	Any action had been taken so far? <input type="checkbox"/> Not yet <input checked="" type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation:
	Examples of pilot projects and/or policies developed or under development – include websites/URLs where relevant- Development of National Solid Waste Management Plan and Implementation of 3R campaigns during special holidays.			
	Important Actions you will take in 2014- execute more 3R programs and activities throughout the year.			
	Is this Goal relevant for your country? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially			
3Rs in municipal	2	Full-scale utilization of the organic component of municipal waste, including food waste , as a valuable resource, thereby achieving multiple benefits such as the reduction of waste flows to final disposal sites,	Any action had been taken so far? <input type="checkbox"/> Not yet <input type="checkbox"/> Some (design – piloting) <input checked="" type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation: Procurement of equipments and training personnel.

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Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration	
	environmentally-friendly practices through applying environmental standards, clean technologies, and cleaner production.	<p>Examples of pilot projects and/or policies developed or under development – include URLs where relevant</p> <p>Through 3R campaign, some SMEs are now using biodegradable bags and some Farms are also using compost materials for farming.</p>	
		Important Actions you will take in 2014 Strengthen partnership with the private sector	
		Is this Goal relevant for your country? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially	
3Rs in industrial waste	6 Promote the greening of the value chain by encouraging industries and associated suppliers and vendors in socially responsible and inclusive ways.	Any action had been taken so far?	Challenges faced in implementation:
		<input checked="" type="checkbox"/> Not yet <input type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	
		Examples of pilot projects and/or policies developed or under development – include URLs where relevant	
		Important Actions you will take in 2014	

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Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration	
3Rs in industrial waste	8 Build local capacity of both current and future practitioners, to enable the private sector (including SMEs) to obtain the necessary knowledge and technical skills to foster green industry and create decent, productive work.	Any action had been taken so far? <input type="checkbox"/> Not yet <input checked="" type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation: Monitoring the private sector and their reporting of export amount of recyclables.
		Examples of pilot projects and/or policies developed or under development – include URLs where relevant Contract with private sectors to collect and export scrap metals and pet bottles off island.	
		Important Actions you will take in 2014 Capacity building for both private sector and regulators.	
		Is this Goal relevant for your country? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially	
3Rs in industrial	9 Develop proper classification and inventory of hazardous waste as a prerequisite towards sound management of such waste.	Any action had been taken so far? <input checked="" type="checkbox"/> Not yet <input type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation:

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Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration	
		Examples of pilot projects and/or policies developed or under development – include URLs where relevant	
		Important Actions you will take in 2014	
		Is this Goal relevant for your country? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially	
II. 3R Goals in Rural Areas			
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.	Any action had been taken so far? x Not yet <input type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation:
		Examples of pilot projects and/or policies developed or under development – include URLs where relevant	

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Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration	
12	Strengthen regional, national, and local efforts to address the issue of waste, in particular plastics in the marine and coastal environment.	Any action had been taken so far? x Not yet <input type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation:
		Examples of pilot projects and/or policies developed or under development – include URLs where relevant	
		Important Actions you will take in 2014	
		Is this Goal relevant for your country? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially	

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Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration	
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.	Any action had been taken so far? x Not yet <input type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation:
		Examples of pilot projects and/or policies developed or under development – include URLs where relevant	
		Important Actions you will take in 2014	
		Is this Goal relevant for your country? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially	

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Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration	
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.	Any action had been taken so far? x Not yet <input type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation:
		Examples of pilot projects and/or policies developed or under development – include URLs where relevant	
		Important Actions you will take in 2014	
		Is this Goal relevant for your country? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially	

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Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration	
15	Progressive implementation of “extended producer responsibility (EPR)” by encouraging producers, importers, and retailers and other relevant stakeholders to fulfill their responsibilities for collecting, recycling, and disposal of new and emerging waste streams, in particular e-waste.	Any action had been taken so far? x Not yet <input type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation:
		Examples of pilot projects and/or policies developed or under development – include URLs where relevant	
		Important Actions you will take in 2014	
		Is this Goal relevant for your country? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially	

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Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration	
16	<p>Promote the 3R concept in health-care waste management.</p>	<p>Any action had been taken so far?</p> <p><input checked="" type="checkbox"/> Not yet</p> <p><input type="checkbox"/> Some (design – piloting)</p> <p><input type="checkbox"/> Largely in Place</p> <p><input type="checkbox"/> Fully Completed</p> <p>(Please Check the box)</p>	<p>Challenges faced in implementation:</p>
		<p>Examples of pilot projects and/or policies developed or under development – include URLs where relevant</p>	
		<p>Important Actions you will take in 2014</p>	
		<p>Is this Goal relevant for your country? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially</p>	
IV. 3R Goals for Cross-cutting Issues			

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Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration	
17	Improve resource efficiency and resource productivity by greening jobs nation-wide in all economic and development sectors	Any action had been taken so far? x Not yet <input type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation:
		Examples of pilot projects and/or policies developed or under development – include URLs where relevant	
		Important Actions you will take in 2014	
		Is this Goal relevant for your country? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially	

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Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration	
18	Maximize co-benefits from waste management technologies for local air, water, oceans, and soil pollution and global climate change.	Any action had been taken so far? x Not yet <input type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation:
		Examples of pilot projects and/or policies developed or under development – include URLs where relevant	
		Important Actions you will take in 2014	
		Is this Goal relevant for your country? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially	

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Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration	
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.	Any action had been taken so far? x Not yet <input type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation:
		Examples of pilot projects and/or policies developed or under development – include URLs where relevant	
		Important Actions you will take in 2014	
		Is this Goal relevant for your country? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially	

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Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration	
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.	Any action had been taken so far? <input type="checkbox"/> Not yet <input checked="" type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation: Understaffed and need capacity building in some areas.
		Examples of pilot projects and/or policies developed or under development – include URLs where relevant Public Education and enhancement committee is now starting to implement 3R campaigns in the government sector and work their way to reach all stakeholders.	
		Important Actions you will take in 2014 Recruit personnel and capacity building	
		Is this Goal relevant for your country? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially	

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Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration	
21	<p>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.</p>	<p>Any action had been taken so far?</p> <p><input type="checkbox"/> Not yet</p> <p><input checked="" type="checkbox"/> Some (design – piloting)</p> <p><input type="checkbox"/> Largely in Place</p> <p><input type="checkbox"/> Fully Completed</p> <p>(Please Check the box)</p>	<p>Challenges faced in implementation:</p>
		<p>Examples of pilot projects and/or policies developed or under development – include URLs where relevant</p> <p>3R is a part of Elementary Schools Curriculum for third graders.</p>	
		<p>Important Actions you will take in 2014</p> <p>Expand on 3Rs to all grades including community college</p>	
		<p>Is this Goal relevant for your country? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially</p>	

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Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration	
22	<p>Integrate the 3R concept in relevant policies and programmes, of key ministries and agencies such as Ministry of Environment, Ministry of Agriculture, Forestry and Fisheries, Ministry of Industry, Ministry of Trade and Commerce, Ministry of Energy, Ministry of Water Resources, Ministry of Transport, Ministry of Health, Ministry of Construction, Ministry of Finance, Ministry of Labour, Ministry of Land and Urban Development, Ministry of Education, and other relevant ministries towards transitioning to a resource-efficient and zero waste society.</p>	<p>Any action had been taken so far?</p> <input type="checkbox"/> Not yet <input type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	<p>Challenges faced in implementation:</p>
		<p>Examples of pilot projects and/or policies developed or under development – include URLs where relevant</p>	
		<p>Important Actions you will take in 2014</p>	
		<p>Is this Goal relevant for your country? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially</p>	
23	<p>Promote green and socially responsible procurement at all levels, thereby creating and expanding 3R industries and markets for environmentally-friendly goods and products.</p>	<p>Any action had been taken so far?</p> <input checked="" type="checkbox"/> Not yet <input type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	<p>Challenges faced in implementation:</p>

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Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration	
25	<p>Protect public health and ecosystems, including freshwater and marine resources by eliminating illegal activities of open dumping, including dumping in the oceans, and controlling open burning in both urban and rural areas.</p>	<p>Any action had been taken so far?</p> <input type="checkbox"/> Not yet <input type="checkbox"/> Some (design – piloting) <input checked="" type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	<p>Challenges faced in implementation:</p>
		<p>Examples of pilot projects and/or policies developed or under development – include URLs where relevant</p> <p>Regulated by the Environmental Quality Protection Board (EQPB) in Palau.</p>	
		<p>Important Actions you will take in 2014</p>	
		<p>Is this Goal relevant for your country? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially</p>	
26	<p>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 <i>Basel Convention</i>, which contributes to the reduction of negative environmental impacts and the effective</p>	<p>Any action had been taken so far?</p> <input type="checkbox"/> Not yet <input type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	<p>Challenges faced in implementation:</p>
		<p>Examples of pilot projects and/or policies developed or under development – include URLs where relevant</p>	

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Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration	
	management of resources.	Important Actions you will take in 2014	
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.	Any action had been taken so far? <input type="checkbox"/> Not yet <input checked="" type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation:
		Examples of pilot projects and/or policies developed or under development – include URLs where relevant	
		Important Actions you will take in 2014	
		Is this Goal relevant for your country? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially	
28	Promote heat recovery (waste-to-energy), in case wastes are not re-usable or recyclable and proper and sustainable management is secured.	Any action had been taken so far? <input type="checkbox"/> Not yet <input checked="" type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation:

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Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration	
30	Pay special attention to issues and challenges faced by developing countries including SIDS in achieving sustainable development.	Any action had been taken so far?	Challenges faced in implementation:
		<input type="checkbox"/> Not yet <input type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	
		Examples of pilot projects and/or policies developed or under development – include URLs where relevant	
		Important Actions you will take in 2014	
		Is this Goal relevant for your country? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially	
31	Promote 3R + “Return” concept which stands for Reduce, Reuse, Recycle and “Return” where recycling is difficult due to the absence of available recycling industries and limited scale of	Any action had been taken so far?	Challenges faced in implementation:
		<input type="checkbox"/> Not yet <input type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	

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Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Ha Noi 3R Declaration	
33	Promote 3Rs taking into account gender considerations.	Any action had been taken so far? <input type="checkbox"/> Not yet <input type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation:
		Examples of pilot projects and/or policies developed or under development – include URLs where relevant	
		Important Actions you will take in 2014	
		Is this Goal relevant for your country? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially	

SOLID WASTE MANAGEMENT IN THE REPUBLIC OF PALAU



Contents

- ◎ Organization Chart
- ◎ Dumpsites/ Landfills
- ◎ Waste Generations
- ◎ Collection and Transportation
- ◎ Major Issues
- ◎ Good Practices
- ◎ Awareness Programs



Organization Chart FY 2013



Ministry of Public Infrastructure, Industries and Commerce

Administration Office

Bureau of Aviation

Bureau of Commercial Development

Bureau of Lands and Surveys

Bureau of Public Works

Division of Utilities

Division of Capital Improvement Project

Division of Facilities and Maintenance

Division of Road and Equipment

Administrative Specialist II (1)
 Administrative Specialist I (1)
 Administrative Assistant I (1)

Chief (1)

Road & Ground Maint. Branch Manager (v)

Equipment Operators
 Equip. Operator IV (3)
 Equip. Operator III (3)
 Equip. Operator II (2)

Heavy Equipment Mechanic
 Heavy Equip. Mech. Supvr. I (1)
 Heavy Equip. Mech. I (1)
 Auto. Mechanic I (3)
 Auto. Mechanic (1)
 Auto Mechanic Helper (1)
 Mechanic I (1)

Road & Ground Const. Maint.
 R/G Const. Maint. Supvr. II (1)
 R/G Const. Maint. Supvr. I (2)
 R/G Const. Maint. Supvr. (2)
 Ground Maint. Supvr. (6)
 General Laborer II (7)
 General Laborer I (17)
 Carpenter I (1)

Custodial Worker III (1)

Security Officer II (1)
 Security Officer I (2)

Welder I (1)

Solid Waste Management Manager (1)

SWM
 Coordinator (v)

Assistant
 Coordinator (v)

SWM
 Educator
 (1)

Assistant
 Educator
 (v)

Landfill
 Supervisor I (1)

Equip. Operator IV (v)

Equip. Operator III (3)

Hvy. Equip. Mech. Supvr. I (v)

Hvy. Equip. Mech. II (1)

Ground Maint. Supvr. (1)

Admin. Officer I
 (v)

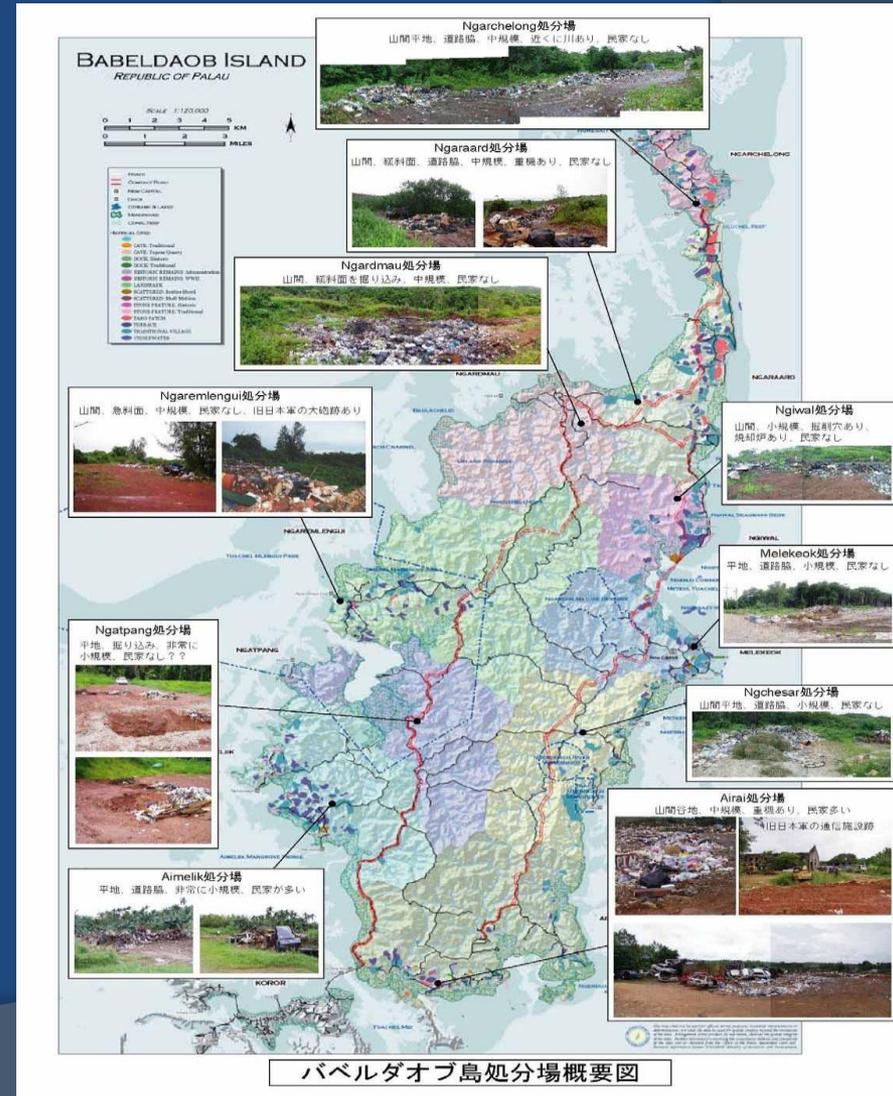


Dumpsites

There are 16 States in Palau and 12 existing dumpsites.

National landfill is located in Koror State

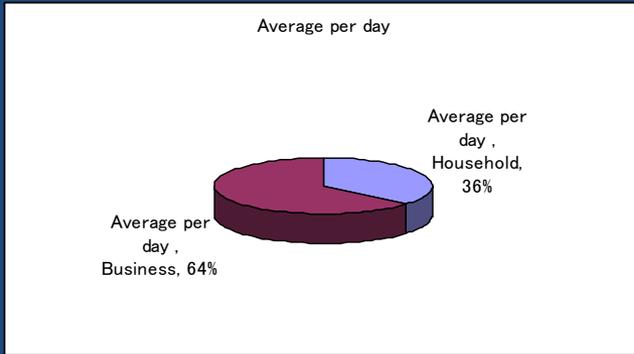
- Known as M-dock landfill
- Operation by National Government
- In operation for more than 50 years
- Land area: 13 acres
- Founded on a reef flat
- Volume of Waste: 300,000 cubic yards (1998)





Waste Generations

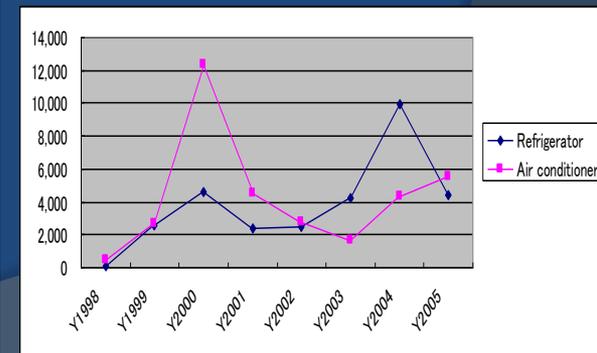
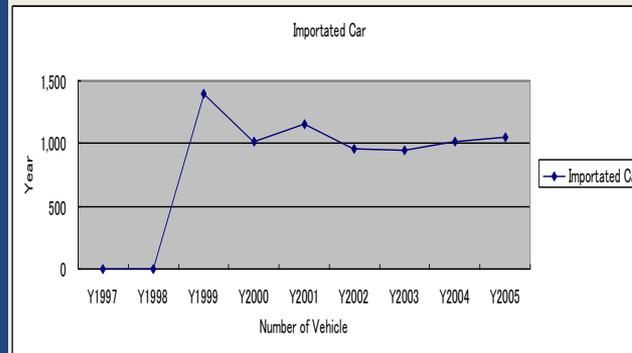
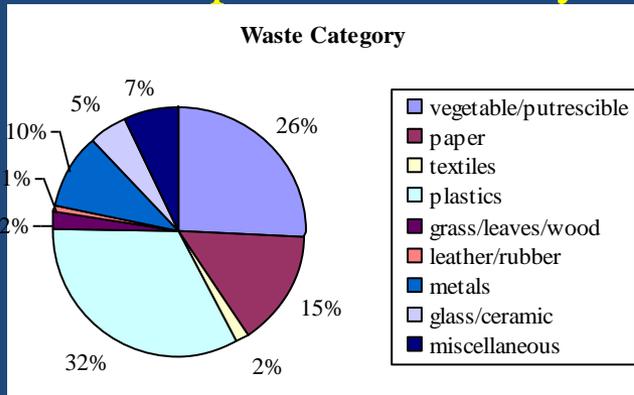
M-dock Landfill



	Household	Business	Total
Weight in one week	60,720	106,000	166,720
Average per day	8,670	15,140	23,810



Municipal Waste Survey



Collection / Transportation



- Each state does its own collection and transportation.
- Koror State is the largest.

SPJD
2010

C1. Compactor Truck:
NISSAN Model, Chassis No.: G2S41003952

Front Side



Front Side



-2 Nissan Compact truck, diesel, 1ton
-3 Isuzu Compact truck, diesel, half ton
-1 dump truck, diesel, half ton

SPJD
2010

C2. Compactor Truck:
MITSUBISHI Model, Chassis No.: FK617E510217

Front Side



SPJD
2010

C3. Dump Truck:
ISUZU Model, Chassis No.: NKR66E7496766

Front Rear



- Nissan Diesel- Compactor truck (3, 830kg), Diesel fuel,**
- Mitsubishi – Compact truck (5,360kg), diesel fuel**
- 2 Isuzu – Recycling truck (3,580kg) diesel fuel**



Major Issues



➤ Location of new landfill and its construction.

✓ August 2013- Executive Order: to establish the Landfill Task Force to review 3 options as follows:

- 1) One landfill in Palau
- 2) Several landfills in Palau
- 3) All 16 States will have its own landfill

➤ Waste Tires

✓ There are thousands of waste tires piled up in M-dock landfill and we are still looking for a solution to tackle the waste tire issue.



Good Practices



➤ Implementation of the Recycling Program.

Yearly DBC Report

Year	No. of DBC	DBC Fee
2011	10,353,738	\$ 1,035,373.80
2012	14,843,166	\$ 1,484,316.60
2013	9,517,593	\$ 951,759.30
Grand Total	34,714,497	\$ 3,471,449.70

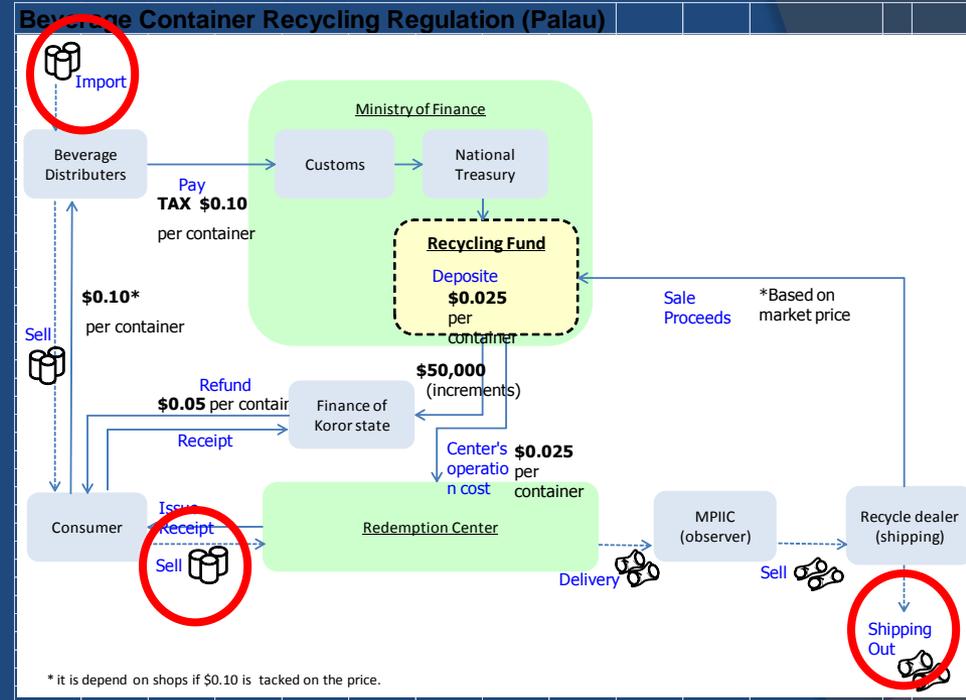
Note : 2013 shows data from Jan1-July 31

Average per month in Jan-Dec 2012

Import => 1.2 million => \$120,000

Redeemed => 1.9 million

Export => over 200 tons of aluminum cans and plastic bottles



➤ Composting activities by Koror State.

Public Education and Enhancement Committee (PEEC)



Chairman

- SWM Educator, Solid Waste Office- Bureau of Public Works

Members

- Division of Environmental Health
- Ministry of Education
- Koror State Solid Waste Office
- Palau Conservation Society (PCS)
- Palau Visitors Authority (PVA)

Collection & Transportation



Public Education & Enhancement Comm



Waste Segregation Stations



KSG Recycling Facility/ National Redemption Center



M-dock landfill



3R Campaigns



Workshops



Beverage Container Recycling



Recycling Program in Palau

- Background
- Outline of Program
- Role of Concerned Agencies
- Law and Regulations
- Program Impacts
- Challenges Faced
- Exporting
- Improvement Plans

Background

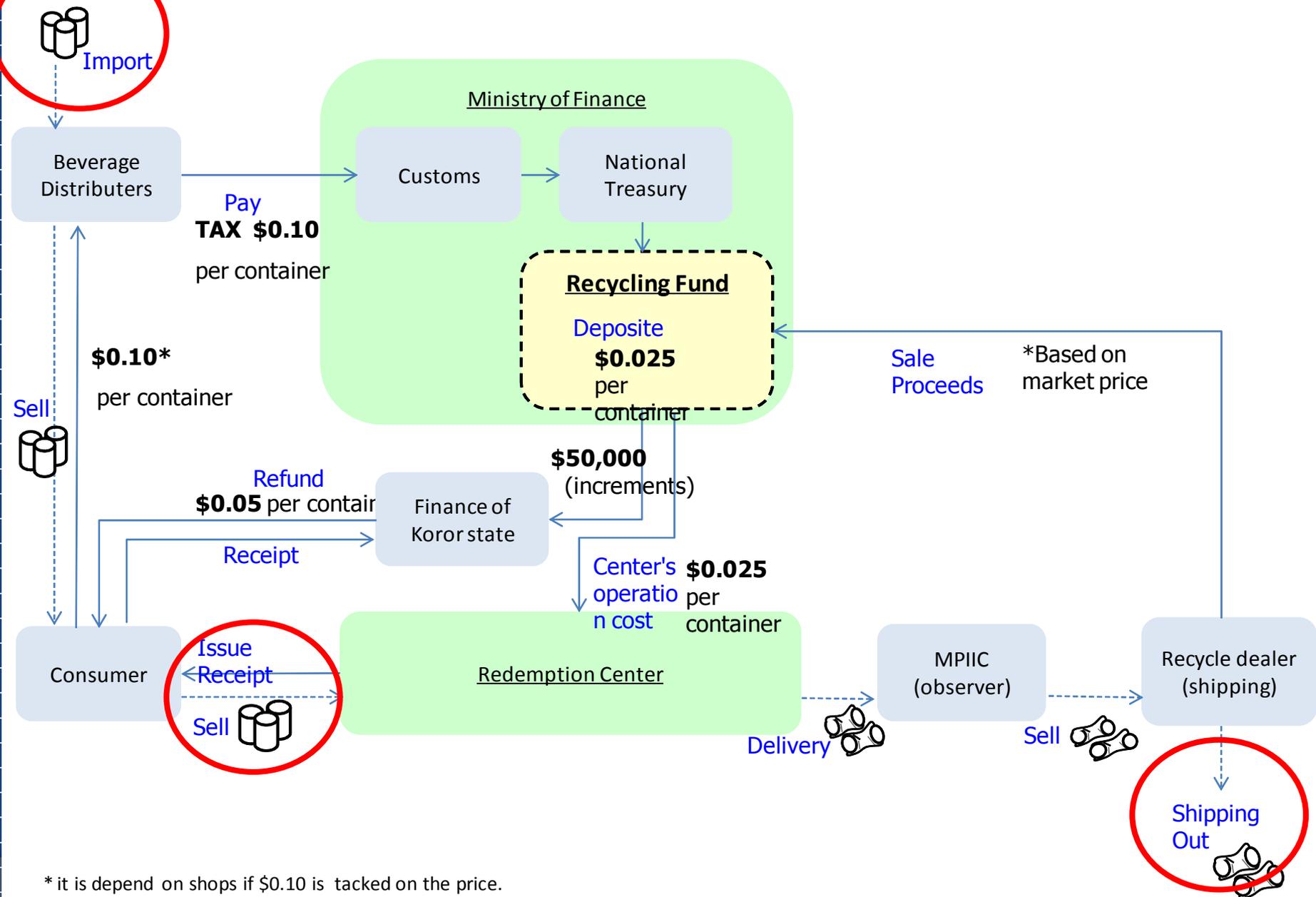
- In 2005, a survey showed that eleven (11) million cans are imported into Palau annually, not to mention other beverage containers such as, plastics, glass, etc.
- These containers are recyclable and should not be dumped in landfills as our landfills are over capacity and sites for landfills are limited.
- In 2008, the national landfill (M-dock landfill) was projected to reach its capacity in 2013. Through this recycling program, the SWM office was able to extend the life of m-dock landfill for another 2-3 years.
- The recycling program was also projected to be a sustainable financial source for solid waste management.
- **RPPL No. 7-24: Passed in October 2006.**
 - In 2009, President of the Republic of Palau approved and signed the Beverage Container Recycling Regulations.
 - In March 2011, the Attorney General's (AG's) Office and Customs Office held a workshop with all stakeholders including major importers of beverage containers to review the law and its contents.
 - In April 2011, the Customs Office started the collection of the deposit fee.

Background (continued)

- In October 2011, Memorandum of Understanding (MOU) between Ministry of Public Infrastructure, Industries & Commerce and Ministry of Finance and Koror State Government was adopted to make the recycling facility of Koror State Government a initial Redemption Center for the recycling program. At the same time, the redemption center opened its doors to the public.
- In July 2012, the Ministry of Public Infrastructure, Industries and Commerce (MPIIC) awarded a service contract to Palau Waste Collection Company to buy the redeemed containers from the government and export off island for final treatment.

The Program is now in full operation from Import → Redemption → Export

Beverage Container Recycling Regulation (Palau)



* it is depend on shops if \$0.10 is tacked on the price.

Roles of Concerned Agencies

Name of organization	Responsibility
Ministry of Finance (MOF)	Management and maintenance of fund Monitoring of Fund Collection of deposit fee by the Customs Office under MOF
Ministry of Public Infrastructure, Industries and Commerce (MPIIC)	Implementation of the recycling program Approve and monitor redemption center(s) Export or find ways to export redeemed containers
Koror State Government	Operation of the Redemption Center (initial redemption center)

Law and Regulations

- RPPL No. 7-24: Establishing a recycling program for the Republic of Palau, establishing a beverage container deposit fee, creating a recycling fund, and for other related purposes.
 - Passed in October 2006.
 - Places responsibility for differing aspects of the national beverage container recycling program on two Ministries of the National Government, the Ministry of Public Infrastructure, Industries and Commerce (MPIIC), and the Ministry of Finance (MOF).
 - These two Ministries shall develop a Beverage Container Recycling Regulations.
 - Basic Concept: Importers of Deposit Beverage Container shall pay a deposit fee of \$0.10 per container to the Ministry of Finance.
 - Deposit Beverage Container means the individual, separate, sealed glass, polyethylene terephthalate, high density polyethylene, or metal container less than or equal to 32 fl.oz, used for containing, at the time of sale to the consumer, a deposit beverage intended for use or consumption in the Republic.

Law and Regulations (continued)

- The Deposit Fee of \$0.10 shall split between the program participants as follows:
 - \$0.05 to the consumers
 - \$0.025 maximum to the redemption center(s)
 - \$0.025 minimum retained by the government as the recycling fund.

Positive Impacts of Deposit Fee

Yearly DBC Report Apr. 2011 - Sept. 2013

Year	No. of DBC	\$0.10 DBC Fee	25% Recycling Fund
2011	10,353,738	\$ 1,035,373.80	\$ 258,843.45
2012	14,843,166	\$ 1,484,316.60	\$ 371,079.15
2013	11,311,979	\$ 1,131,197.90	\$ 282,799.48
Grand Total	36,508,883	\$ 3,650,888.30	\$ 912,722.08



No. Of Redeemed	\$0.05 Payment	\$0.025/container for Redemption Center
34,290,628	\$ 1,714,531.40	\$ 857,265.70

Rate of Redeemed Containers %: 94%

Estimated amount of export:

Aluminum (kg)	PET Bottle (kg)	Metal (kg)	Total (kg)
311,793	118,785	15,689	446,267



Challenges Faced

- ⦿ RPPL No. 7-24: Passed in October 2006.
 - And it took five (5) years to start implementation.
 - Many agencies involved did not have the capacity to start such as, SWM-National, SWM-KSG, Customs Office.
 - And review and approval of regulations by the leadership was longer than expected.
- ⦿ How to deal with tetra-packs and army-packs.
 - Did not know how to recycle them. Did not want to redeem them. However, these items fall under the definition of deposit beverage container so the fee applies.
 - So, the AG's Office told us to follow the law and redeem them.
- ⦿ Accuracy of counts at the Redemption Center
 - Manual counting of containers were inaccurate sometimes.
- ⦿ Old containers eating up the fund.
 - People were saving their containers until the opening of the redemption center.
- ⦿ Monitoring System
 - Poor information sharing between MOF and MPIIC

Exporting

- Partnership with Local Recycling Companies
 - MPIIC decided to contract out the exporting of redeemed containers to a private recycling companies for the following reasons:
 - Recycling companies already exist in Palau
 - Experience in exporting recyclable materials
 - Have the capacity in terms of tools, equipments, facilities and personnel.
 - Most importantly, this program should support private companies and promote the 3R concept.
- The Contractor
 - The Contractor shall perform the following services:
 - Buy redeemed containers from the National Government.
 - Be responsible for picking up compressed and redeemed containers from the Redemption Center at their own expense.
 - Ship out of Palau compressed and redeemed containers (aluminum, plastics, and metals) within six (6) months after pick up from Redemption Center at its own expense.

Improvement Plans

- ⦿ Amend the law to include all sizes of beverage container. Existing law only calls for 32 oz. and lower.
- ⦿ Existing law exempt milk and dairy derived products. Need to include them as there are many milk products in aluminum/ metal cans and glass bottles.
- ⦿ Need to revise the Beverage Container Recycling Regulations to fit the needs of the operation of the Redemption Center and the overall recycling program.
- ⦿ Need to create a better monitoring system for the import- redeemed- export amount of beverage containers to monitor the amount of import vs. export so that we can understand the effectiveness of the program and make improvements as necessary.

Thank You!

