

Regional Cooperation in Waste Management in the Pacific Region

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IPLA Sub-Regional Secretariat for Pacific SIDS



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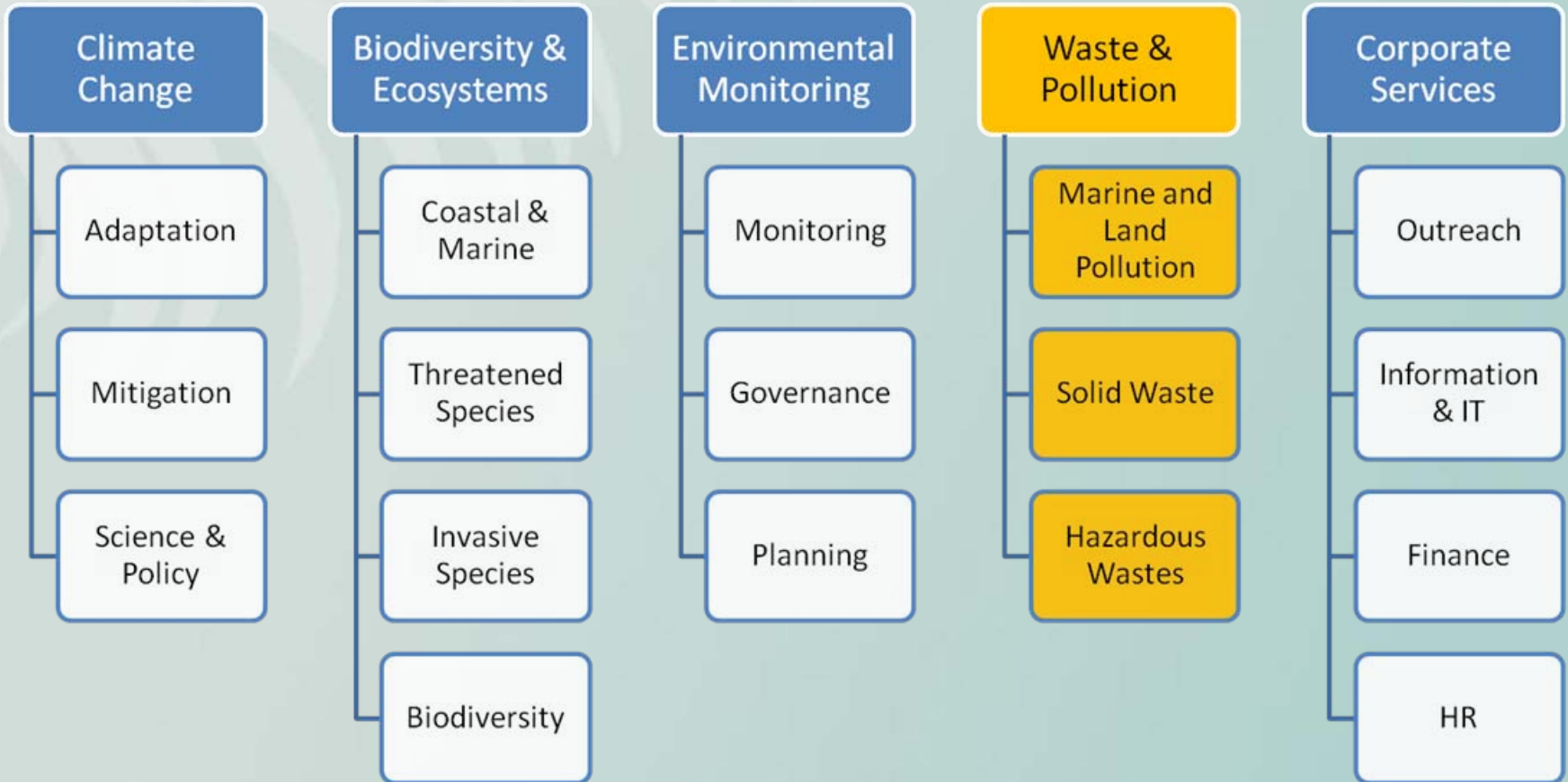
About SPREP

- Established in 1993 in Samoa

To promote cooperation in the Pacific islands region and to provide assistance in order to protect and improve the environment and to ensure sustainable development for present and future generations

- 21 Pacific island nations
- 5 metropolitan countries (Australia, France, NZ, UK, USA)
- IPLA Sub-regional Secretariat for Pacific SIDS

SPREP Structure



1. Marine and Land Pollution



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Minimise effects of ship related marine pollution

- Marine oil spill prevention and response
- Ships & port waste mgmt
- Invasive marine species
- Ballast water management
- Oil mgmt from 13 million tonnes sunken World War II vessels
- Marine plastics & debris

2. Solid Waste Management

Regional Strategy 2010-2015

- Integrated management (4Rs, Collection, Disposal)
- Capacity building
- Sustainable financing
- Legislation
- Awareness/education
- Environmental monitoring
- Policy development
- Private sector development



3. Hazardous Waste Management

Strategic Priorities:

- Asbestos
- E-waste
- Healthcare waste
- Used oil
- Seek funding for interventions
- Increase local capacity to manage safely



THE PACIFIC ISLANDS



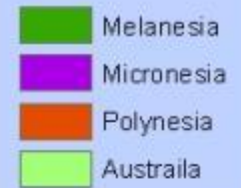
MICRONESIA

“Small Islands”

Over 2,000 atolls, islands & reefs

Harsh climates

21 Island nations
Over 9 million people
Over 7,500 islands
EEZ of 29 million km²
2% land area



MELANESIA

Volcanic, fertile, resource rich

98% of total Pacific land area

90% of the population

POLYNESIA

“Many islands”

Array of islands

What's in the Pacific 'rubbish' can?

Typical household waste in the Pacific

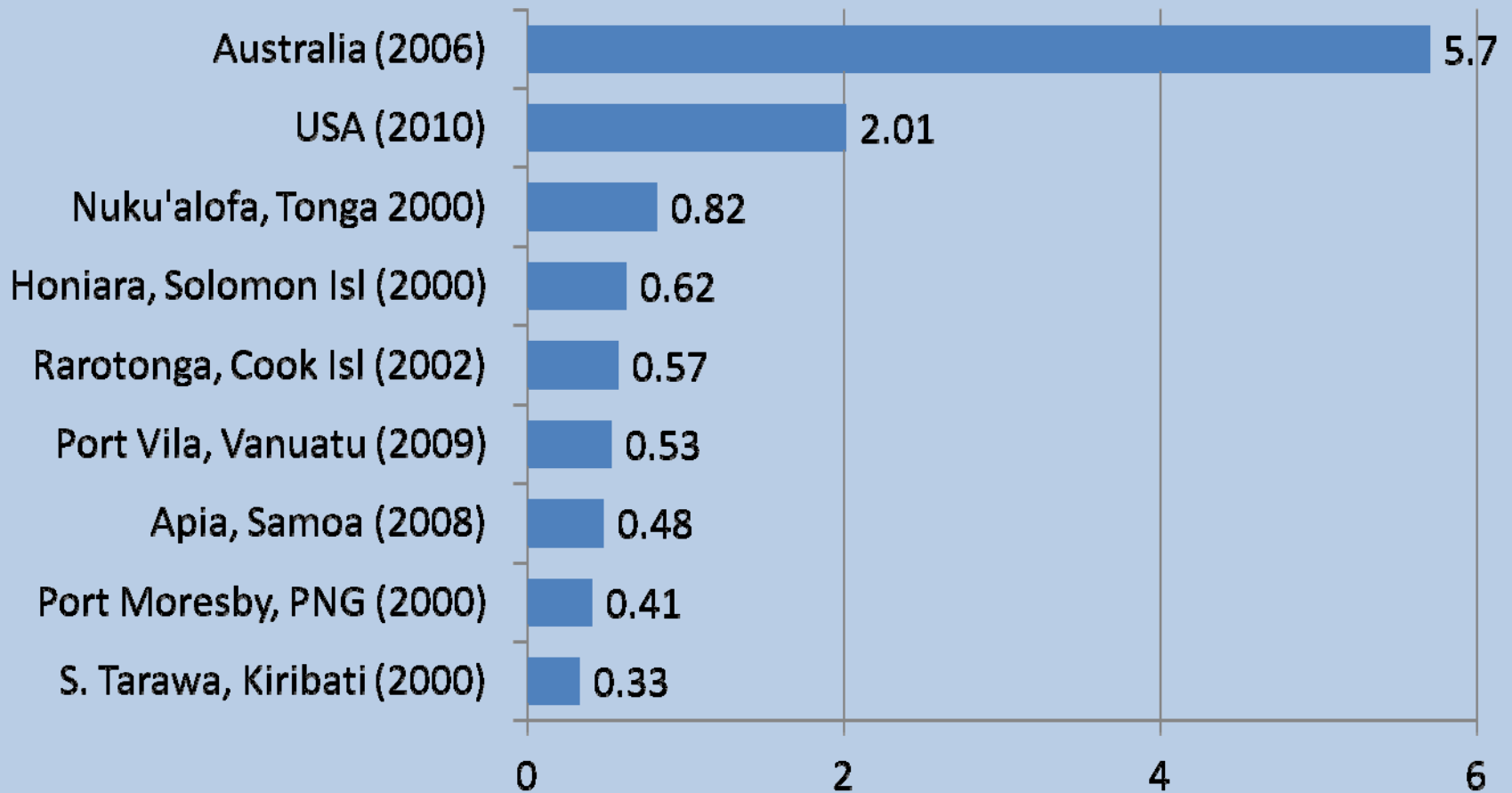


60% Organic

35% Potentially Recyclable
(Plastics, Metal, Glass, Paper)

5% Other waste (textiles,
potentially hazardous)

Household Waste Generation



Daily waste generated per person (kg)

Key Waste Management Challenges

- i. Technical
- ii. Institutional
- iii. Socio-cultural and Political
- iv. Economic and Financial



(i) Technical Challenges


- Lack of suitable landfill designs for atolls
- Small and sparse populations limiting the economies of scale

(ii) Institutional Challenges

- Waste management strategies often not integrated into annual corporate/business plans
- Laws often not enforced (worse in small communities)
- Staff turnover (limited succession planning)
- Self regulation (service provider & environmental regulator)



(iii) Socio-cultural and Political Challenges

- 
- Customary land tenure (difficult to acquire suitable lands)
 - Traditional practices at odds with best waste mgmt practices
 - Political will and support not always present

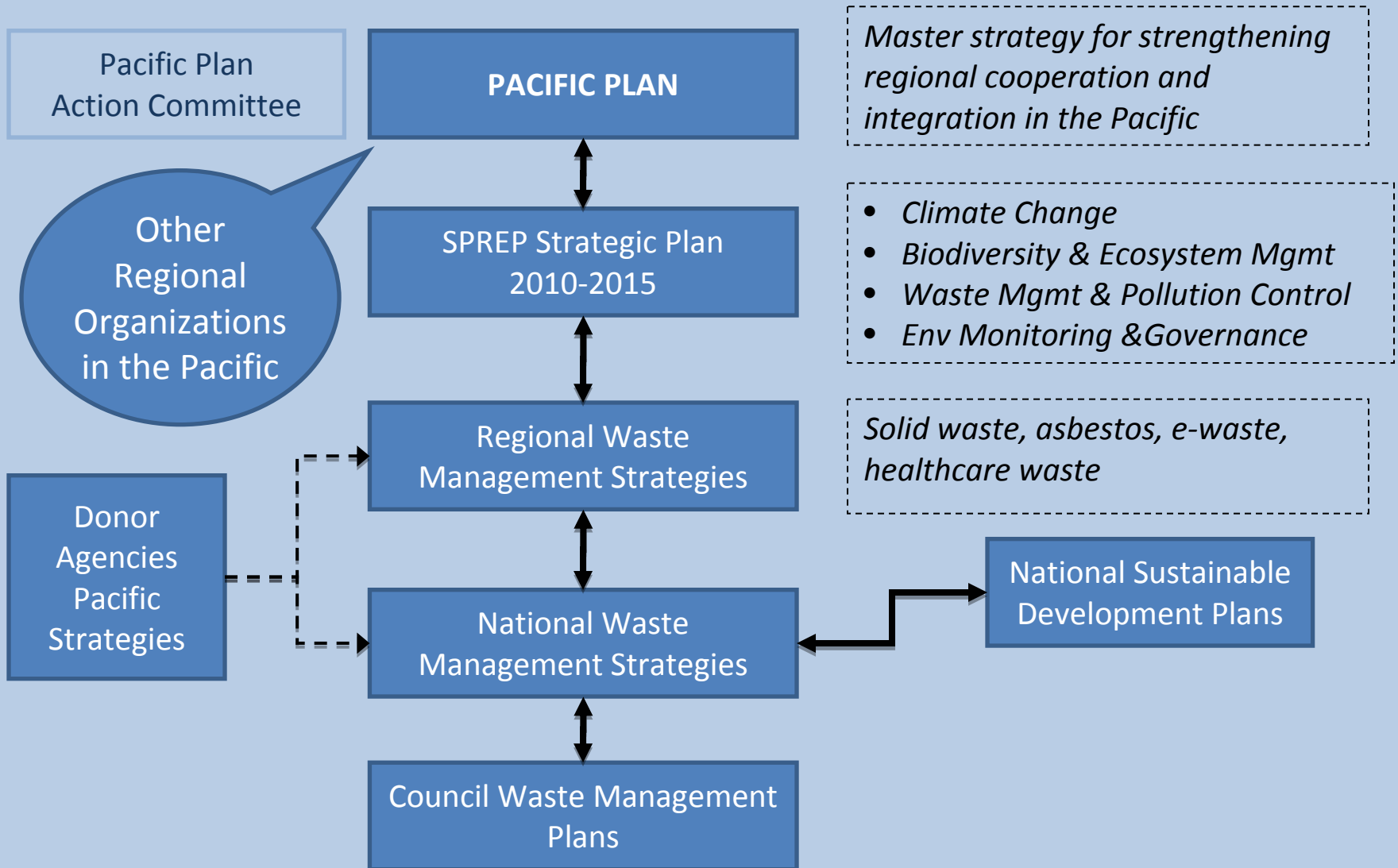
(iv) Economic and Financial Challenges

- Little implementation of user-pay systems
- Urban migration (also a social challenge)
- Population and economic growth

FRAMEWORK FOR REGIONAL COOPERATION IN SWM



Existing Framework for Regional Cooperation in SWM



A FEW EXAMPLES OF COUNTRY-COUNTRY COOPERATION



iRecycle Guam

- Aluminium can recycling programme for schools
- Waste company (collection)
- Shipping company (export)
- Anheuser Busch (buyer)
- Proceeds used to fund school environmental projects
- In Guam & Marshall Islands



The poster features the iRecycle logo at the top, which includes a recycling symbol with a palm tree. Below the logo is the slogan "reduce. reuse. recycle." and the main headline "IT'S TIME TO GO GREEN!". A sub-headline reads "Be a part of the change that will help both Guam's environment & earn money for YOUR school." The central illustration shows a recycling cycle: a person puts a can in a bin, a truck collects them, they are weighed and shipped, and finally, the money is used for school supplies. Text boxes explain each step: "Your school will receive the money earned from the recycled cans collected at your school & can be used for much needed supplies - like books, computers, sports equipment or air conditioning.", "Save your empty aluminum cans - Don't put them in the trash!", "Put them in the iRecycle bin!", "Mr. Rubbishman transports them to the shipping port.", and "Cans are weighed & baled, then shipped to the mainland." At the bottom, a "Do's and Don'ts" section provides instructions: "Do's: empty all cans of liquids, recycle all aluminum" and "Don'ts: DON'T crush aluminum cans, DON'T put steel cans into bins." A final warning states "PLEASE DO NOT PUT TRASH IN BINS!"

iRecycle
reduce. reuse. recycle.

IT'S TIME TO GO GREEN!

Be a part of the change that will help both Guam's environment & earn money for YOUR school.

Your school will receive the money earned from the recycled cans collected at your school & can be used for much needed supplies - like books, computers, sports equipment or air conditioning.

Save your empty aluminum cans - Don't put them in the trash!

Put them in the iRecycle bin!

Mr. Rubbishman transports them to the shipping port.

Cans are weighed & baled, then shipped to the mainland.

Do's
DO empty all cans of liquids.
DO recycle all aluminum

Don'ts
DON'T crush aluminum cans.
DON'T put steel cans into bins.

PLEASE DO NOT PUT TRASH IN BINS!

Samoa and Tokelau Waste Agreement

- Tokelau: 10 km², 1400 people, 500km N of Samoa
- Goods imported via Samoa
- Since 2007 Samoa accepts Tokelau's waste:
 - Recyclable commodities
 - Medical waste
 - Hazardous waste
- Samoan recycler provided training on processing recyclable commodities



STRATEGIES FOR ENHANCING REGIONAL COOPERATION

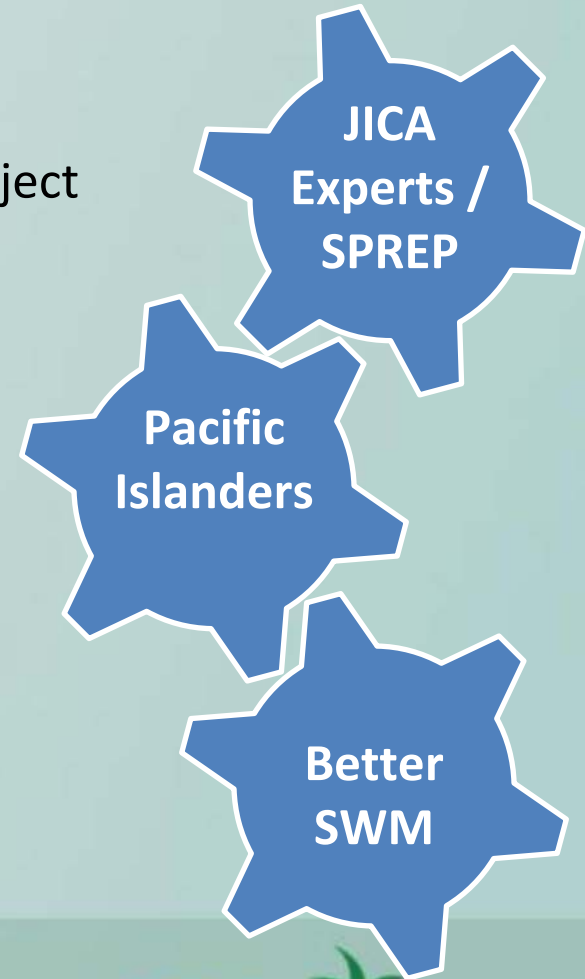


Strategies for Enhancing Regional Cooperation

1. Develop pool of regional waste management experts
2. Investigate potential for regional recycling (return for recycling)
3. Promote stewardship programmes (EPR)
4. Complete waste management pilot programmes in selected countries

1. Pool of Regional Waste Experts (i)

- JICA/SPREP J-PRISM Project
 - 5-year regional technical cooperation project (2011 - 2016), US\$ 10 million
 - Strengthened human capacity for SWM
 - 3Rs, waste collection & disposal
 - Awareness
 - Strengthen private sector
- In future:
 - JICA Experts replaced by Regional Experts



1. Pool of Regional Waste Experts (ii)

- Train-the-trainer SWM programme funded by AFD, developed by Griffith University and delivered at Fiji National University (FNU)
- 4 years (2013-2016) financial support for islanders
- FNU to offer the course on fee-paying basis after 2016



1. Pool of Regional Waste Experts (iii)

- 2 modules delivered over 2 weeks each
 - Waste Mgmt Techniques
 - Landfill/Dumpsite Mgmt
- 25 trainees from 9 countries trained in 2013
- 7 trainee-implemented projects to be supported in 2013



2. Potential for Regional Recycling (i)

- JICA study to investigate feasibility of a reverse logistics network to promote regional (return for) recycling
- Reverse Logistics: process of moving used materials & products from the point of consumption to the point of recycling, reuse or final disposal
- Target countries:
 - Fiji, Samoa, Tonga, Tuvalu & Vanuatu
 - 242 inhabited islands

2. Potential for Regional Recycling (ii)

- Marine transport cost can be as high as 30% of the cost of producing and shipping scrap metal from Pacific islands to Asia (excludes domestic transport)
- Create regional and domestic demand for cans and low value waste items (e.g. PET bottles, tires)
- Better collection systems needed to cover outer islands and sparsely inhabited islands
- Strengthen cargo handling operation in ports
- More awareness in the recycling industry of quarantine regulations of importing country

3. Promote Stewardship Programmes (i)

AFD Regional Initiative

US\$ 400,000 (2011-2015)

- Stewardship programmes for used oil management in Fiji, Vanuatu, Samoa
- Compliance of waste oil management with Stockholm, Basel, and Waigani Conventions



3. Promote Stewardship Programmes (ii)

- Pacific Hazardous Waste Management Project
 - Funded by European union
 - 4 years (2013-2017), € 8 mil
 - Stewardship programmes for E-waste
 - Asbestos
 - Healthcare waste



4. Waste Management Pilot Projects (i)

- Waste & Climate Change
AusAID Int'l Climate Change
Adaptation Initiative (ICCAI)
- Integrate CC adaptation
into waste mgmt sector
- Improve dumpsite
operation to be resilient to
CC impacts
- Fiji pilot site



4. Waste Management Pilot Projects (ii)



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The Little Fire Ant (*Wasmannia auropunctata*) is an invasive species in French Polynesia

Fonds Pacifique

€ 100,000 (2012-2013)

- Techniques to kill ant infestations in green and bulky waste and minimize its spread
 - Controlled composting of green waste (< 65 deg C)
 - Heat treatment for bulky waste

In Summary

- Many challenges because of
 - geography & demographics
 - society/culture
 - economic growth
- Progress is being made in regional waste management with support of several donors
 - AusAID, European Union, JICA, NZ Aid programme & UNEP/GEF



Future Work

PPP

- Policies
 - Define *Zero Waste* and relevant strategies for the Pacific region
 - Consolidate regional strategies and strengthen regional cooperation
- People
 - Continue enhancing local capacity for zero waste
 - Continue strengthening of private waste management sector
 - Politicians supportive of the waste management cause
 - Continue development of regional pool of experts
- Practice
 - Selection of technology appropriate for the Pacific region
 - Replicate existing good practices

.... and of course, we need continued funding & partnership support for all of the above, until the Pacific region becomes self-sufficient

Thank You

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