

Regional Technical Cooperation Project in Waste Management and 3R Sector



February 7, 2024

JICA Consultant Team for J-PRISM³
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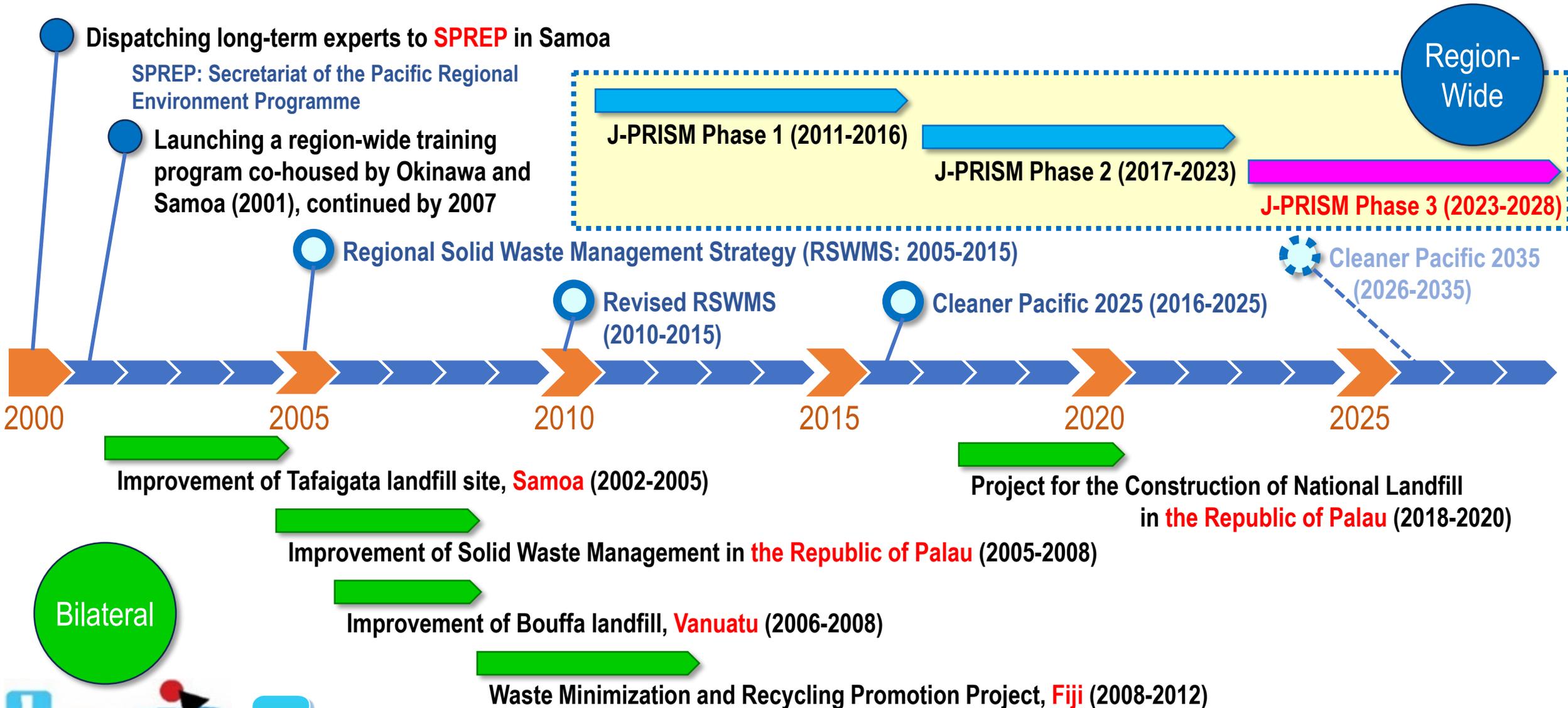
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History of Sectorial Cooperation in the Pacific Region



Source: Referred to "Creating a Sound Material-cycle Society in Small Islands, August 2014, JICA.



About J-PRISM

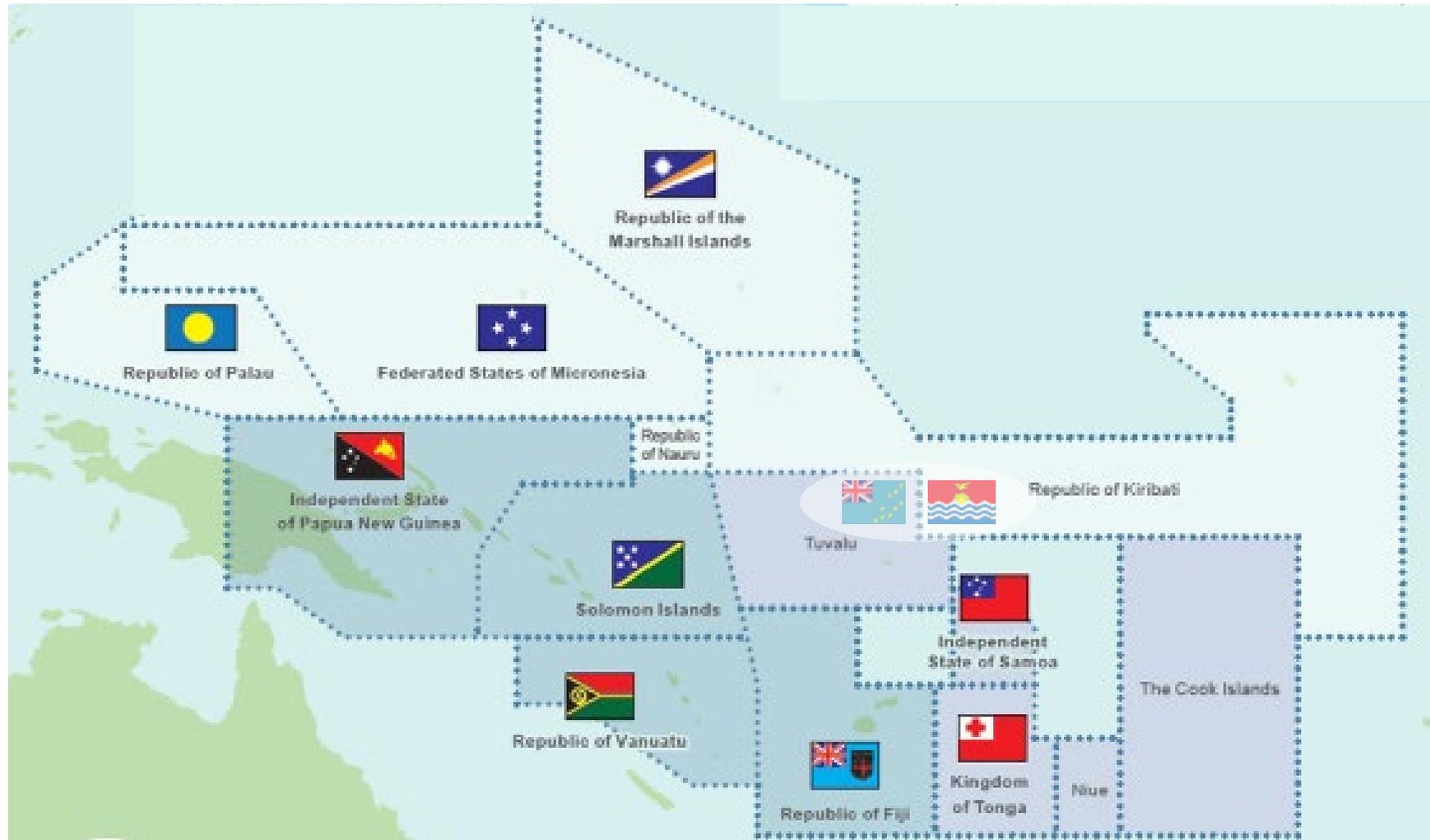
Japanese Technical Cooperation Project for **P**romotion of **R**egional **I**nitiative on **S**olid Waste **M**anagement in Pacific Island Countries

	J-PRISM I (2011 – 16) for 11 Countries	J-PRISM II (2017 – 2023) for 9 countries
Overall Goal	Sustainable management of solid waste in the Pacific Region is enhanced	Sustainable management of solid waste in the Pacific region is enhanced based on Pacific Regional Waste and Pollution Management Strategy 2016-2025 (Cleaner Pacific 2025).
Project Purpose	Human and institutional capacity base for sustainable Solid Waste Management in the Pacific Region is strengthened through implementation of the Pacific Regional Solid Waste Management Strategy (2010-2015)	(Region-wide) Implementation of the Cleaner Pacific 2025 on solid waste management is timely monitored and supported based on Pacific-to-Pacific cooperation. (Country-wide) different by each country or each state in FSM
Achieved Outputs/ Projects/ Activities	Outputs of the Project are divided into 12 individual projects (11 independent projects in individual PICs and the Region-wide Activities) which have been separately managed and monitored by each individual Project Design Matrix (PDM)/Plan of Operations (PO).	46 Outputs of the Project are set in total (2 to 4 for each projects in individual PICs and 4 for the Region-wide Activities) which have been separately managed and monitored by each individual Project Design Matrix (PDM)/Plan of Operations (PO).

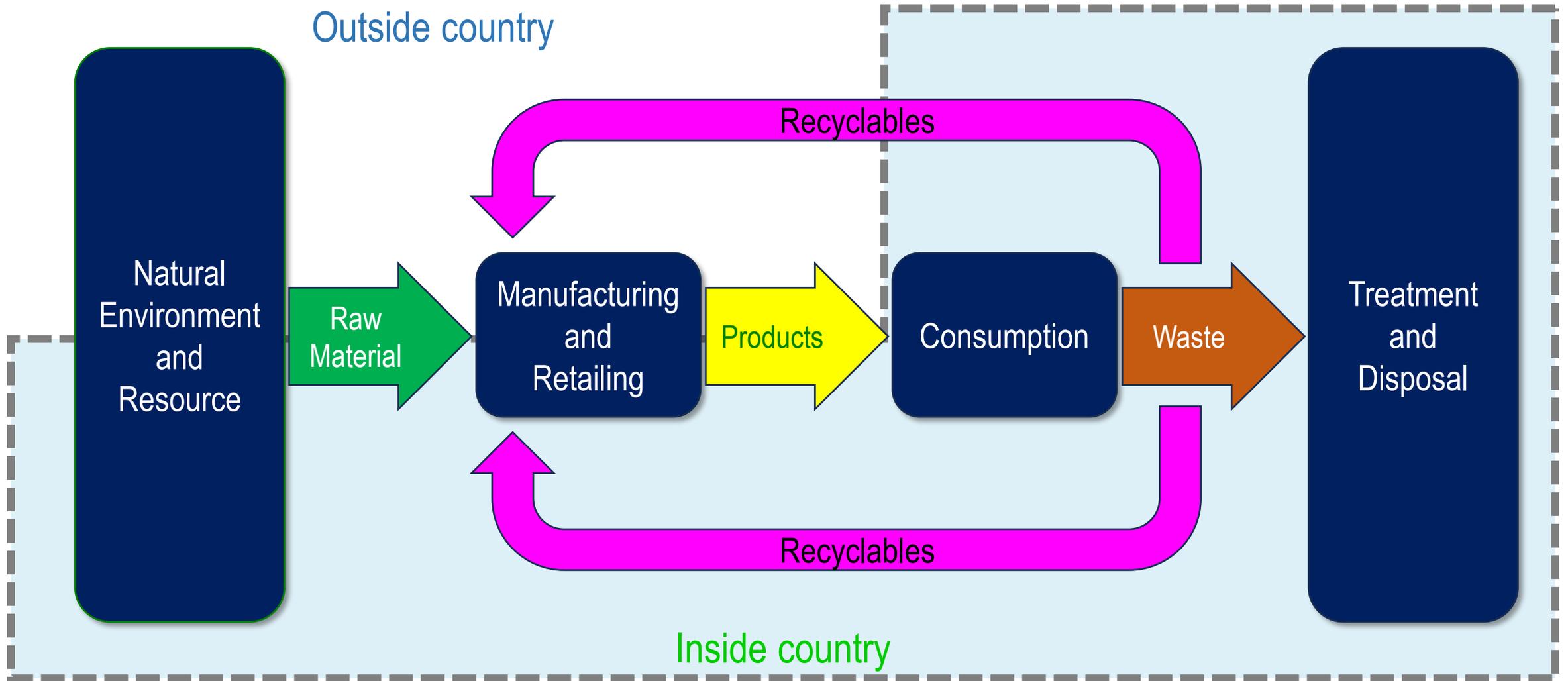


Targeted Countries to J-PRISM 1, 2 & 3

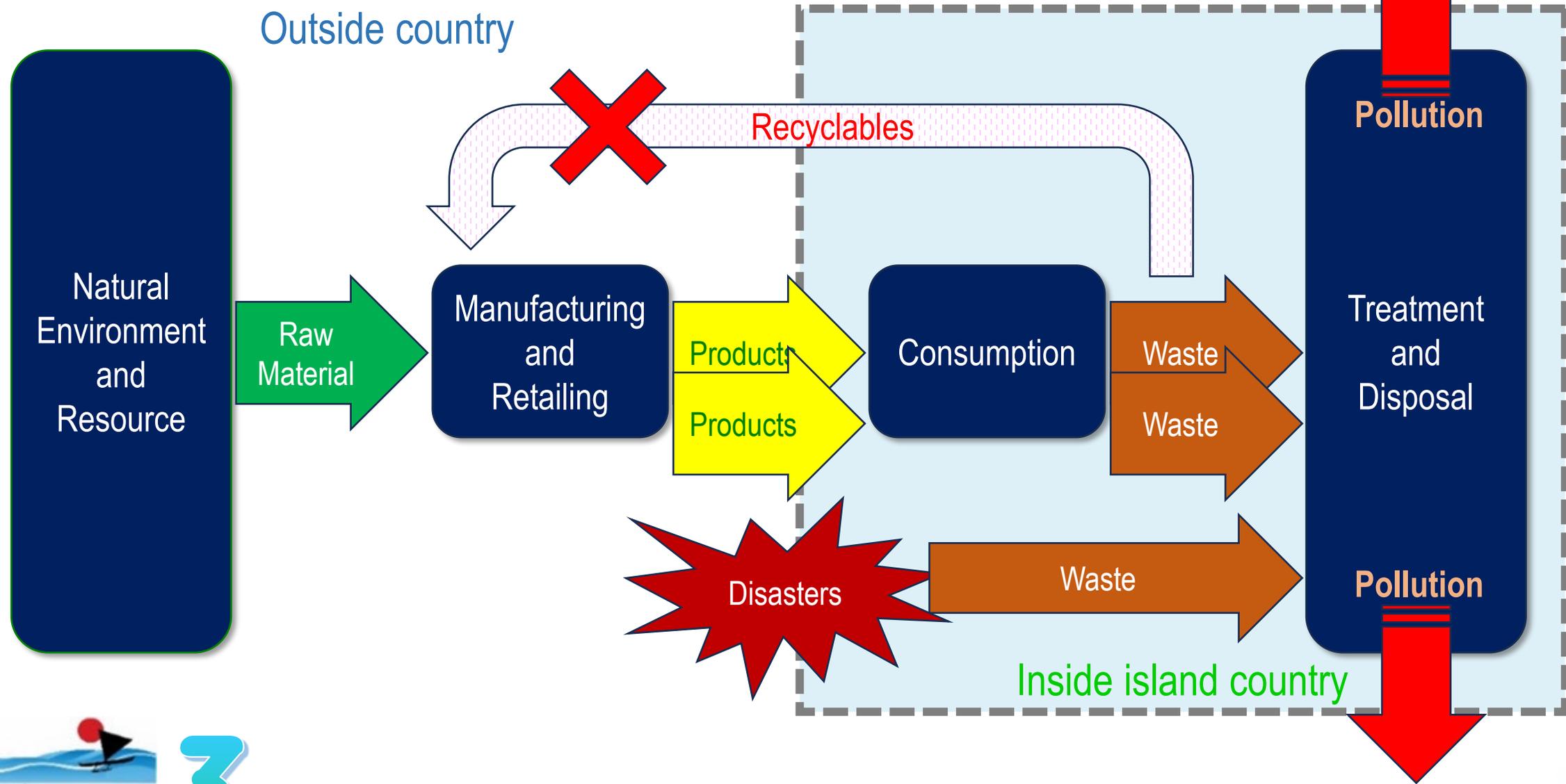
1. Palau
2. FSM
(Yap, Chuuk, Pohnpei, Kosrae)
3. RMI
4. PNG
5. Solomon Islands
6. Vanuatu
7. Fiji
8. Tonga
9. Samoa
10. Tuvalu (Phase 1)
11. Kiribati (Phase 1)



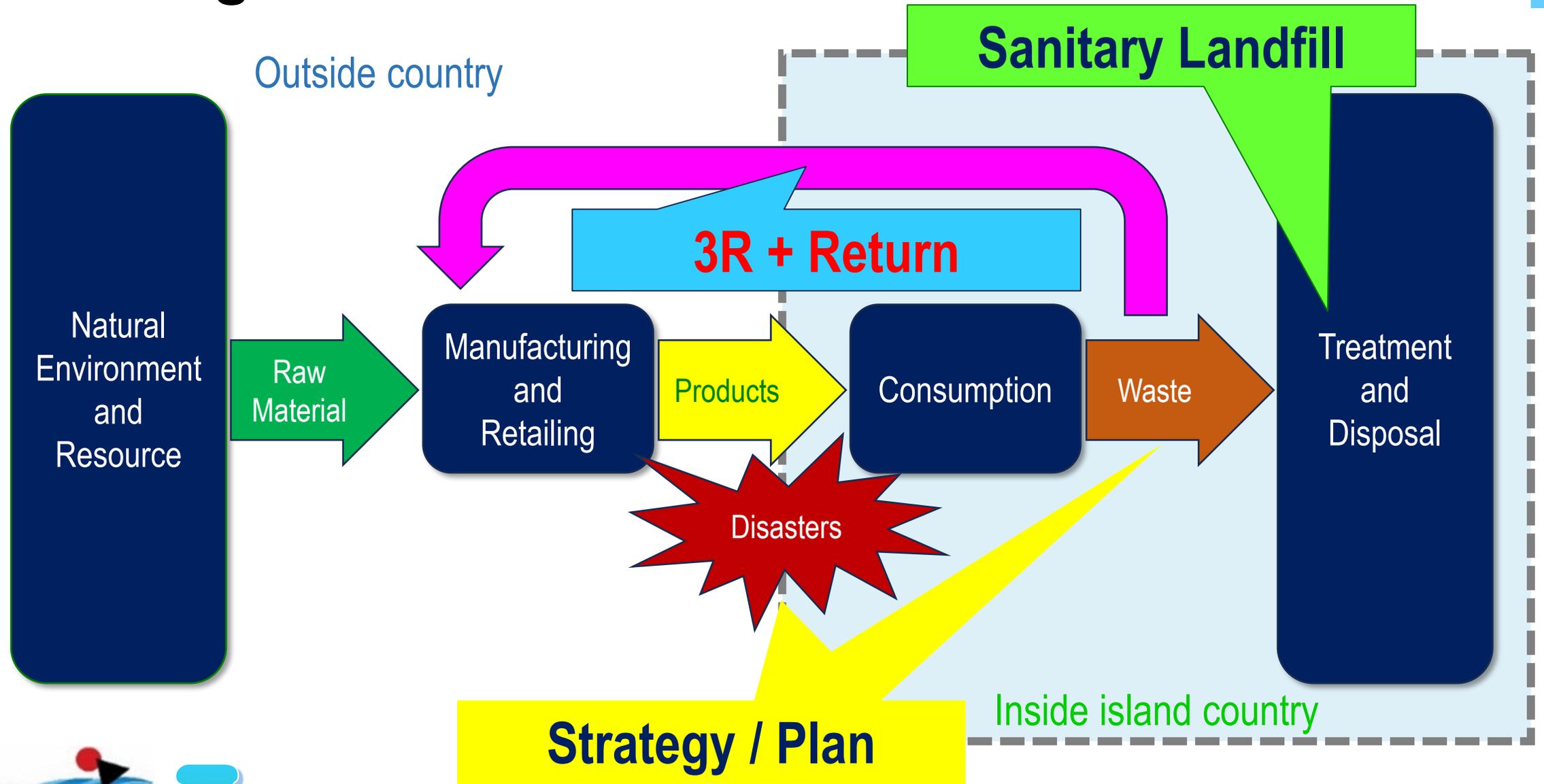
Material Flow in General



Material Flow at Island Countries



Main Targets in J-PRISM



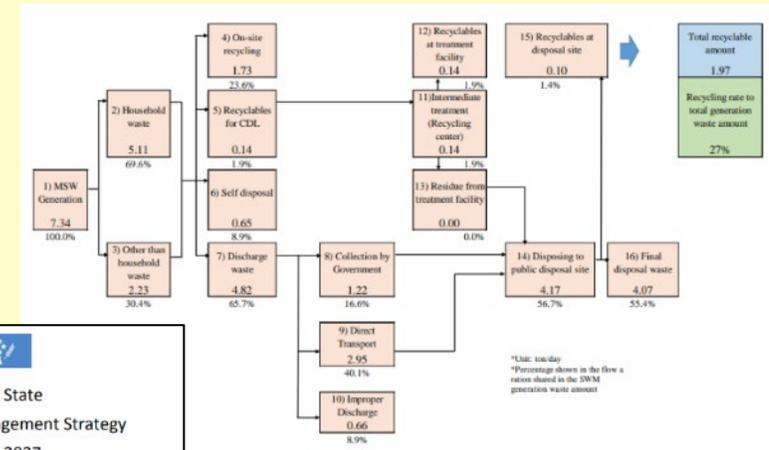
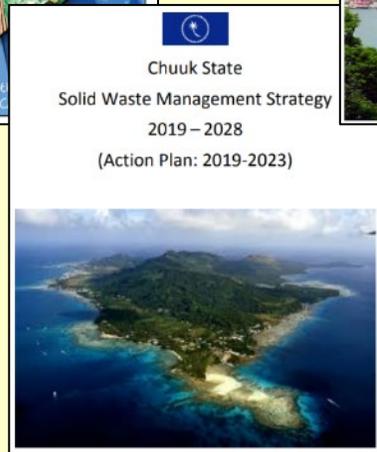
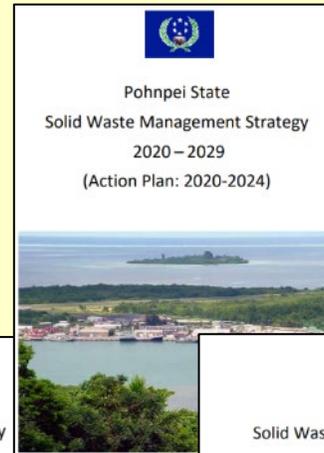
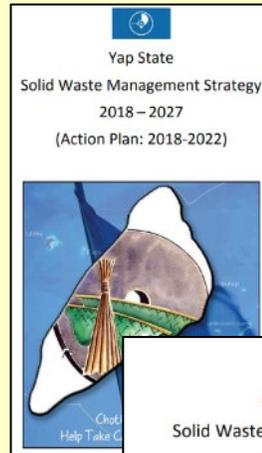
Outputs from J-PRISM 1 & 2 (Strategy and Plan)

In over 30 municipalities in 9 countries of the Pacific region, their waste management strategies or master / action plans were developed.



Case of FSM

State Solid Waste Management Strategy (SSWMS) together with 5-years Action Plan was developed at each state, Yap, Chuuk, Pohnpei and Kosrae



Integrated Waste Collection System

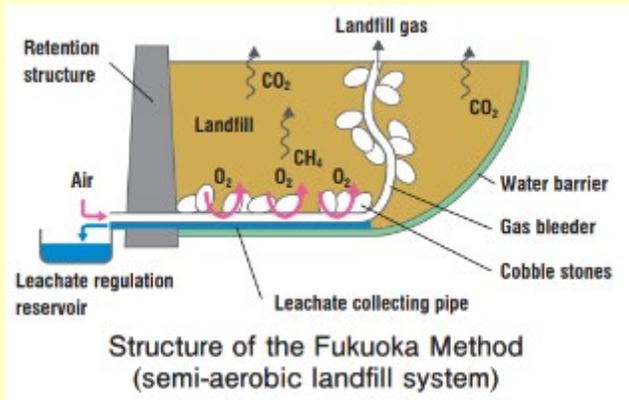
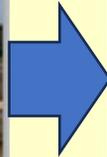
Outputs from J-PRISM 1 & 2 (Final Disposal)

Many final disposal sites in the Pacific region were improved as sanitary landfill partially with “Semi-aerobic landfill system (Fukuoka Methods)”.



Case of FSM

Open dump site in Pohnpei State of FSM was improved by counterparts at their own initiative



Case of PNG



Port Moresby



Case of Solomon



Honiara

Gizo



Source: Referred to “Creating a Sound Material-cycle Society in Small Islands, August 2014, JICA
 : “The Integrated Terminal Evaluation Report on J-PRISM, September 2015, JICA



Outputs from J-PRISM 1 & 2 (3R + Return)

Due to lack of recycling facilities and recycling markets in the Pacific region, 3R will be promoted together with realizing "Return" by exporting back (returning) the recyclables / waste to outside.



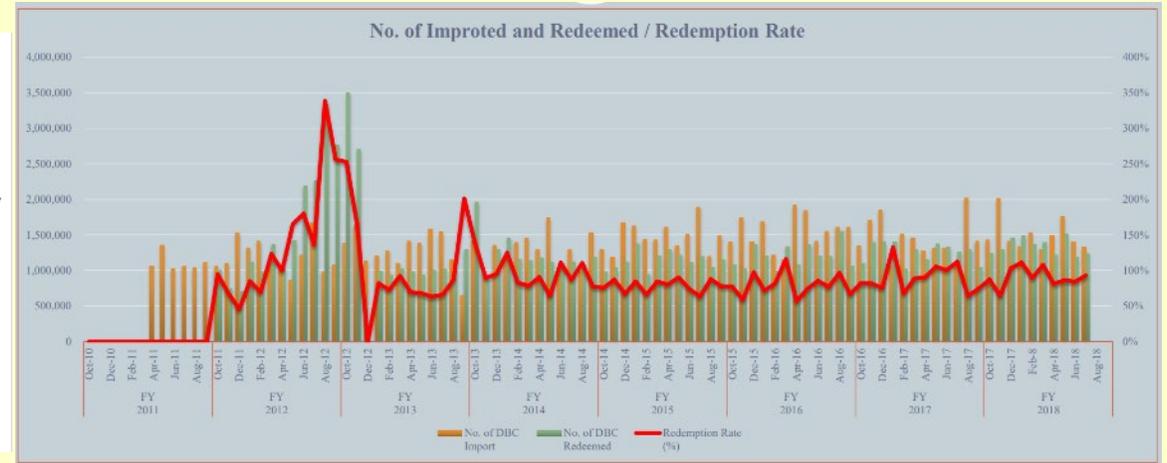
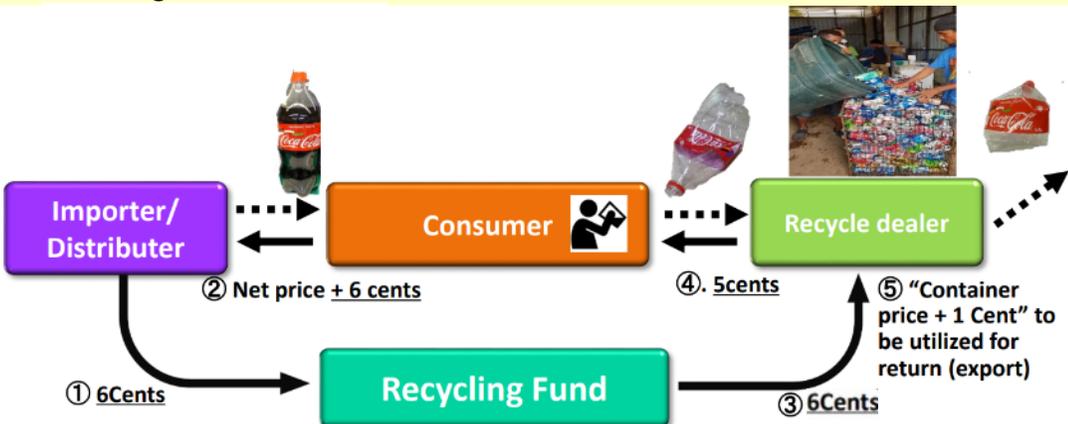
Case of RMI

Container Deposit Legislation (CDL) is introduced to recover the beverage containers with economic



Case of Palau

High redemption rate has been kept after the initial turmoil period.



Source: JICA's Approach to Marine Waste Management, 25 February, JICA
: "Deposit Beverage Containers Recycling Program, BPW-MPIIC, Republic of Palau"



Outputs from J-PRISM (Human Resource Development)

Human resource development is provided to more than 300 waste management leaders who can lead their own countries' solid waste management systems without depending on foreign aid.



Cooperation at the grassroots level

- ❑ Introducing Shibushi Model (by **Shibushi City**)
- ❑ Promoting stakeholder collaborations (by **LEAF**)
- ❑ Improving roads with sandbags (by **CORE**)
- ❑ Turning resources into products (by **OCRM**)

Outline of J-PRISM 3 (Goal, Purpose and Outputs)

Project Period	July 2023 to July 2028 (Five years)
Implementation Agency	SPREP and 9 target countries
Overall Goal	Basic framework and necessary measures towards sound material cycle society through 3R+Return are in place in the Pacific region.
Project Purpose	The mechanism for self-sustaining solid waste management and 3R+Return is strengthened.
Expected Outputs	<ol style="list-style-type: none">1. Organizational, institutional and financial capacities on solid waste management are enhanced/improved.2. Capacity of providing public services on waste management is enhanced.3. "3R+Return" System is promoted.4. The knowledge and experiences in the region are shared.





Palau

Counterpart	Bureau of Public Works, Ministry of Public Infrastructure and Industries
Project Site	Babeldaob Island, Koror State and Outlying Islands

Achievement goals for each output

Output 1	Organizational, institutional and financial capacities on solid waste management are enhanced/improved
	1.1 Draft regulation is developed in preparation for the introduction of tipping fees for public (national and state government) and commercial waste generators at the National landfill.
Output 2	Capacity of providing public services on waste management is enhanced
	2.1 At least 2 pilot projects on improvement/closure of public open dumpsite are conducted to prevent environmental pollution, generating lessons learned for future scale-up.
Output 3	"3R+Return" System is promoted
	3-1 An overarching law to expand Advance Recovery Fee & Deposit (ARFD) towards sound material cycle society is drafted and a legal framework for at least one problematic waste stream (end of life vehicles, e-waste, batteries, waste tires, etc.) is drafted. 3.2. Feasibility is examined for the proposed legal framework for at least one problematic waste stream in order to identify a financially viable model including value added recycling value chain.
Output 4	The knowledge and experiences in the region are shared
	No country-based indicator

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FSM

Achievement goals for each output

Counterpart	Federal: Department of Environment, Climate Change and Emergency Management Yap: Department of Public Works and Transportation (DPWT), Environmental Protection Agency (EPA) Chuuk: DTPW, EPA Pohnpei: EPA, Office of Transportation and Infrastructure Kosrae: Kosrae Island Resource Management Authority, Department of Transportation and Infrastructure
Project Site	Yap, Chuuk, Pohnpei, Kosrae

Output 1	Organizational, institutional and financial capacities on solid waste management are enhanced/improved
	1.1. Suitable measures for sustainable financing of SWM are identified. (Yap)
Output 2	Capacity of providing public services on waste management is enhanced
	2.1 Waste collection is expanded in Yap 2.2 The new waste disposal site takes into account measures for environmentally sound, efficient and safe disposal (Chuuk) 2.3 Waste disposal sites are managed in an environmentally sound and safe manner. (Kosrae)
Output 3	"3R+Return" System is promoted
	3.1 National / regional approach is explored to optimize the recycling and return of collected recyclable waste. (Federal Government) 3.2 Viable measures to improve the sustainability of 3R+Return of target waste streams are identified. (Yap, Chuuk, Pohnpei, Kosrae)
Output 4	The knowledge and experiences in the region are shared
	No country-based indicator





RMI

Counterpart	Environmental Protection Authority (EPA), Majuro Atoll Waste Company (MAWC), Kwajalein Atoll Local Government (KALGOV), Ministry of Works, Infrastructure and Utilities (MWIU), Majuro Atoll Local Government (MALGOV)
Project Site	Majuro and Ebeye

Achievement goals for each output

Output 1	Organizational, institutional and financial capacities on solid waste management are enhanced/improved
	None
Output 2	Capacity of providing public services on waste management is enhanced
	None
Output 3	"3R+Return" System is promoted
	3.1. National / regional approach is explored to optimize the recycling and return of collected recyclable waste. (EPA) 3.2. Viable measures to improve the sustainability of 3R+Return of target waste streams are identified. (EPA, Majuro and Ebeye)
Output 4	The knowledge and experiences in the region are shared
	No country-based indicator

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PNG

Counterpart	Conservation and Environment Protection Authority (CEPA), National Capital District Commission (NCDC)
Project Site	National Capital District (NCD), Kokopo, Alotau, Lae and Goroka

Achievement goals for each output

Output 1	Organizational, institutional and financial capacities on solid waste management are enhanced/improved
	1.1 The National Waste Management Policy including the development of a national legislation on waste management is implemented. 1.2 Solid Waste Management Plan is developed and implemented in the targeted ULLGs.
Output 2	Capacity of providing public services on waste management is enhanced
	2.1. Capacities of solid waste management including infrastructure management are improved.
Output 3	"3R+Return" System is promoted
	3.1 "3R+Return" system is promoted through public-private partnerships.
Output 4	The knowledge and experiences in the region are shared
	No country-based indicator

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Solomon Islands

Counterpart	Ministry of Environment, Climate Change, Disaster Management and Meteorology (MECDM) and Honiara City Council (HCC)
Project Site	Honiara, Auki, Tulagi and Gizo

Achievement goals for each output

Output 1	Organizational, institutional and financial capacities on solid waste management are enhanced/improved
	1-1 Capacity on data / information management focusing on waste of MECDM is enhanced.
Output 2	Capacity of providing public services on waste management is enhanced
	2-1 HCC's capacity on waste collection and landfill operation, and supporting other semi-urban areas is strengthened. 2-2 Waste collection and transport services in Auki, Tulagi and Gizo are improved. 2-3 Management of landfill sites in Tulagi, Auki and Gizo are improved.
Output 3	"3R+Return" System is promoted
	3-1 Practical ""Recycle"" and ""Return"" model of plastic (i.e. PET) is examined through the pilot project.
Output 4	The knowledge and experiences in the region are shared
	No country-based indicator

DRAFT for Work Plan Discussion





Vanuatu

Counterpart	Department of Environmental Protection and Conservation (DEPC)
Project Site	Port Vila, Shefa province and Luganville

Achievement goals for each output

Output 1	Organizational, institutional and financial capacities on solid waste management are enhanced/improved
	1-1 The National Waste Management and Pollution Control Strategy (NWMPCS) the National Solid Waste Minimization Plan (NSWMP) and the National Plastic Strategy (NPS) are finalized. 1-2 Disaster Waste Management Plan (DWMP) is incorporated with National Disaster Management Plan (NDMP).
Output 2	Capacity of providing public services on waste management is enhanced
	2-1 PVCC's capacity on waste collection is improved. 2-2 Operation and management of Bouffa Landfill and Luganville Landfill are strengthened. 2-3 PVCC's capacity of supporting other provincial centres is strengthened.
Output 3	"3R+Return" System is promoted
	3-1 Awareness programme on waste literacy is developed through a pilot project including waste segregation.
Output 4	The knowledge and experiences in the region are shared
	No country-based indicator

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Fiji

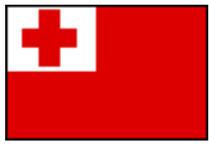
Counterpart	Implementing Agency: Ministry of Local Government and Municipal Councils
Project Site	Municipalities including delegated areas and informal settlements

Achievement goals for each output

Output 1	Organizational, institutional and financial capacities on solid waste management are enhanced/improved
	<ul style="list-style-type: none"> 1-1 MMPs are continuously monitored and reported at biannually throughout the project period. 1-2 Financial capacity of municipal councils is enhanced. 1-3 Capacity of Disaster Waste Management is enhanced.
Output 2	Capacity of providing public services on waste management is enhanced
	<ul style="list-style-type: none"> 2-1 Waste collection and transportation in areas of priority(*4) is enhanced. 2-2 Capacity of landfill management is strengthened. <p><i>*4 Areas including Council area and extended areas beyond boundary.</i></p>
Output 3	"3R+Return" System is promoted
	<ul style="list-style-type: none"> 3-1 Recycling activities are promoted through the collaboration between municipal councils and recycling partners
Output 4	Local knowledge and experiences in the region are shared
	No country-based indicator

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Tonga

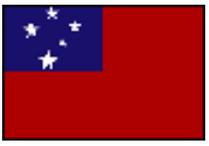
Counterpart	Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications (MEIDECC), Waste Authority Limited (WAL)
Project Site	Vava'u, Ha'apai, 'Eua, Niua

Achievement goals for each output

Output 1	Organizational, institutional and financial capacities on solid waste management are enhanced/improved
	1.1 WAL's mid-term business plan (MBP) is properly implemented. 1.2 Feasibility of SWM service for Niua islands is examined.
Output 2	Capacity of providing public services on waste management is enhanced
	2.1. WAL's capacity on implementation of sustainable landfill operation is strengthened in Tongan outer islands.
Output 3	"3R+Return" System is promoted
	3.1 Practical 3R+Return model in Tonga is identified.
Output 4	The knowledge and experiences in the region are shared
	No country-based indicator

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Samoa

Counterpart	Ministry of Natural Resources and Environment (MNRE)
Project Site	All of Samoa

Achievement goals for each output

Output 1	Organizational, institutional and financial capacities on solid waste management are enhanced/improved
	1-1 The new INWMS is developed. 1-2 Draft regulations for user pay system are submitted to the Cabinet for approval. 1-3 Preparatory measures are taken based on the DWMRP.
Output 2	Capacity of providing public services on waste management is enhanced
	2-1 The capacity of landfill data management is enhanced.
Output 3	"3R+Return" System is promoted
	3-1 Coordination capacity of MNRE is strengthened. 3-2 Practical "Recycle" and "Return" model of plastic is examined through the pilot project with SRWMA.
Output 4	The knowledge and experiences in the region are shared
	No country-based indicator

DRAFT for Work Plan Discussion





Output 4 Activities (common activities for all member countries)

Achievement goals	Objectively verifiable indicators	Activities
<p>The knowledge and experiences in the region are shared</p> <div style="border: 1px solid green; padding: 5px; margin-top: 10px;"> <p>Related Projects</p>  </div>	<p>4-1 By 2025, the upcoming strategy (post CP2025) is drafted in collaboration between each country and SPREP.</p> <p>4-2 Good practices and lessons learnt become accessible to each country.</p>	<p>4-1 Each country presents annually on activities implemented, good practices and/or lessons learnt in the country and report to SPREP. (e.g. in occasions of CPRT and SC meetings)</p> <p>4-2 Each country provides necessary information requested by SPREP for the development of the upcoming strategy (post CP2025).</p> <p>4-3 SPREP and Project Office accumulate and publish the good practices and lessons learnt.</p>

Prioritized Activities at each country

◎ most prioritized, ○ prioritized

Activities on each Output	Palau	FSM	RMI	PNG	Solomon	Vanuatu	Fiji	Tonga	Samoa
Output 1 : Organizational, institutional and financial capacities on solid waste management are enhanced/improved									
1. Organizational Capacity						○		○	○
2. Institutional Capacity				○		○			○
3. Financial Capacity	○	○		○			○		○
4. Waste Management plan				○		○	○	○	○
5. Disaster waste management						○	○		○
Output 2 : Capacity of providing public services on waste management is enhanced									
1. Collection and transportation		○		○	○	○	○	○	
2. Final disposal site (landfill)	○	○		◎	◎	◎	○	◎	○
3. Inter-municipal cooperation					○	○			
Output 3 : "3R+Return" System is promoted									
1. Recycling association				○	○				○
2. 3R + Return System	○	○	○					○	
3. 3R + Return activities	◎	◎	◎	○		○	○		○
Output 4 : The knowledge and experiences in the region are shared									
1. Mutual understanding among member countries via development of new "Cleaner Pacific"									
2. Effective utilization of good practices and lessons learned by using accessible tools									



Implementation Schedule

	1 st Term												2 nd Term									
	2023		2024				2025				2026		2027				2028					
	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q		
1) Work Plan Preparation	■										■											
2) Project Activities																						
Output 1	Organizational, institutional and financial capacities on solid waste management are enhanced/improved.																					
Output 2	Capacity of providing public services on waste management is enhanced																					
Output 3	"3R+Return" System is promoted																					
Output 4	The knowledge and experiences in the region are shared																					
3) Data Reviews	Baseline		Waste												Endline							
4) Trainings			★Regional 1								■ in Japan				★Regional 2							
5) Steering Committee			▲1 st SC		▲CPRT		△2 nd SC				▲3 rd SC with CPRT				△4 th SC		5 th SC△					
6) JCC (at each country)		1 st				2 nd				3 rd				4 th				5 th				
7) Monitoring Sheets				◆				◆				◆				◆				◆		
8) Reports			▼ Work Plan 1		▼ Progress 1-1				Progress 1-2 ▼				▼ Work Plan 2		▼ Progress 2-1				Project Completion ▼			



Implementation Structure (PNG)



Project Director

Managing Director, CEPA will be responsible for the overall supervision of the Project

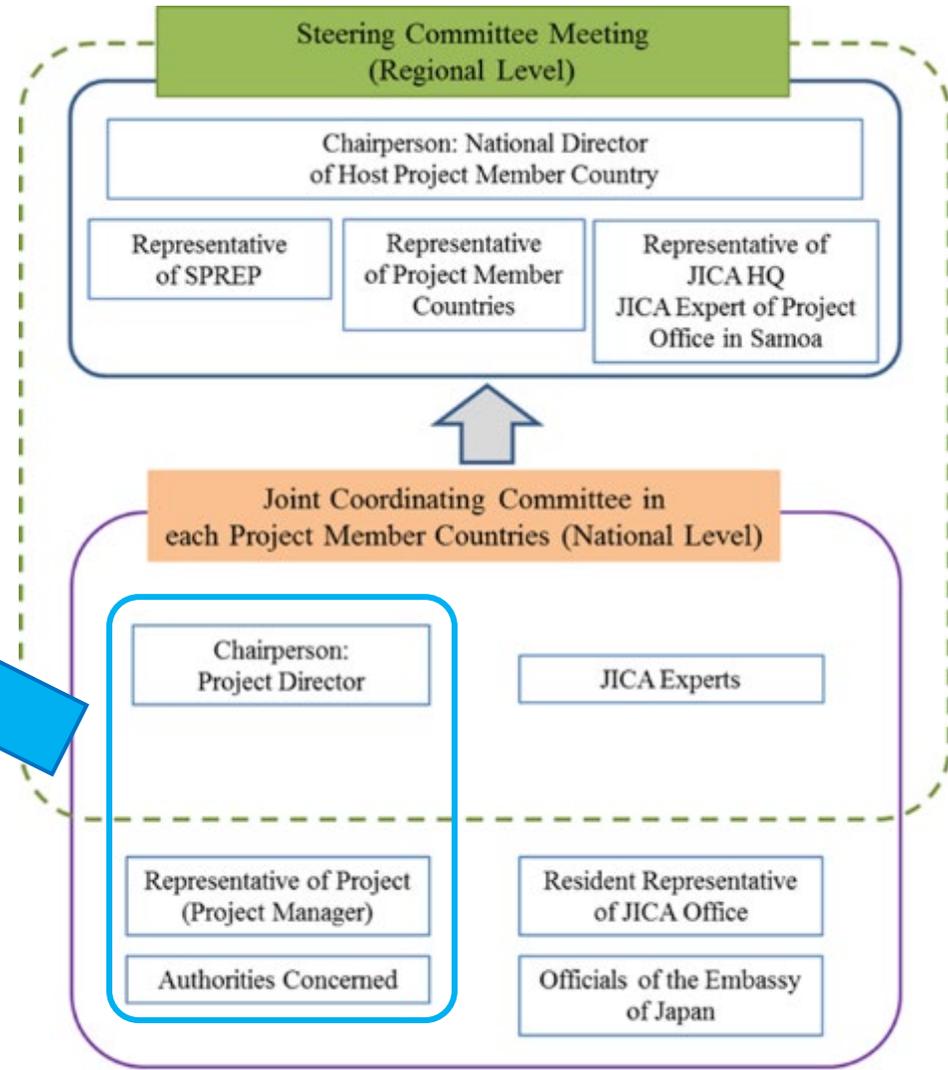
Co-Project Manager

Manager, Infrastructure Utilities and Conventions Branch, CEPA, and Manager, Waste Management Division, NCDC, will be responsible for the implementation of the Project

Counterpart (C/P) personel

C/P personnel from CEPA, NCDC, Urban Local Level Governments of Kokopo, Alotau, Lae and Goroka are assigned to each Output described in the PDM and will work closely with JICA experts.

CEPA: Conservation and Environment Protection Authority
NCDC: National Capital District Commission



Implementation Structure



Implementation Structure (FSM)



National Level

Project Director
Secretary, DECEM will be responsible for the overall supervision of the Project

Project Manager
Assistant Secretary, DECEM will be responsible for the implementation of the Project

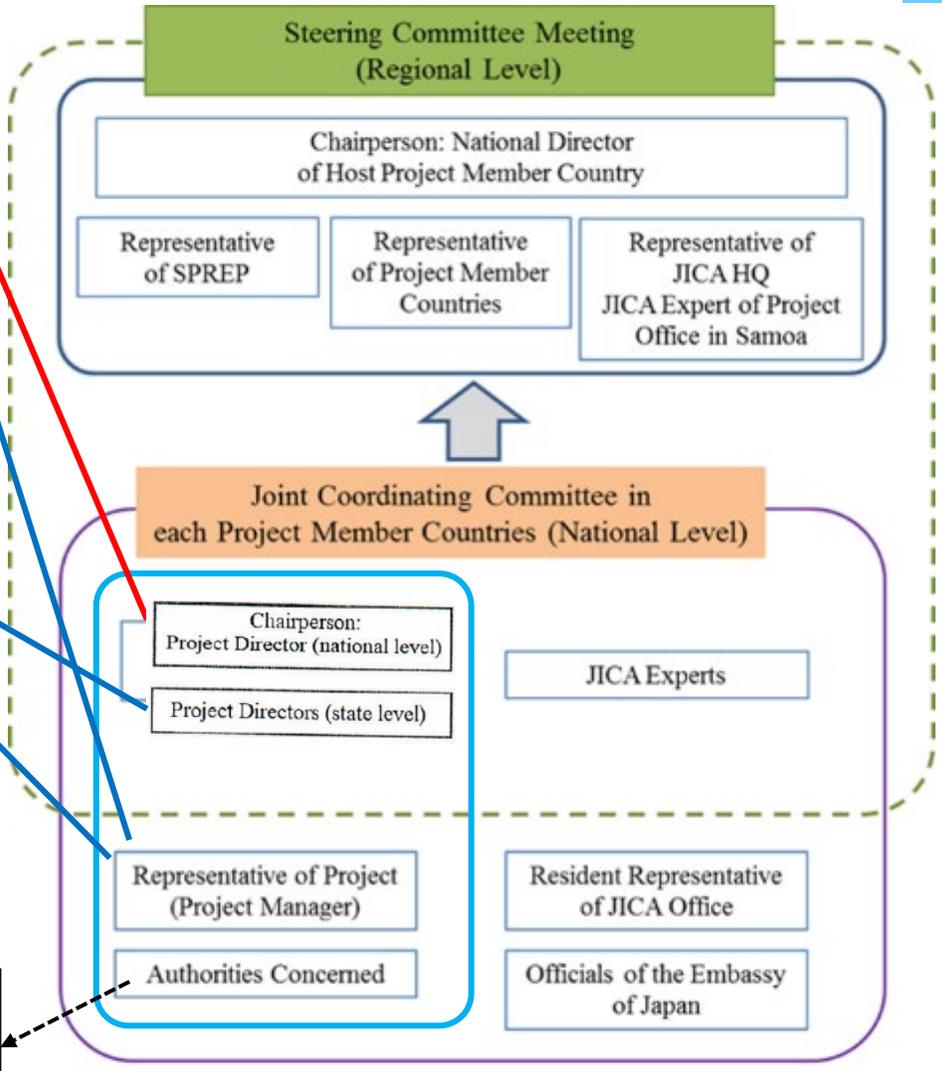
Counterpart (C/P) personnel
 C/P personnel from DECEM are assigned to each Output described in the PDM and will work closely with JICA experts.

State Level

	Yap	Chuuk	Pohnpei	Kosrae
Project Director	Director Yap DPW&T	EO Chuuk EPA	EO Pohnpei EPA	Director KIRMA
Project Manager	EO Yap EPA	Director Chuuk DTPW	Administrator Pohnpei T&I	Director Kosrae DT&I
Other C/P	C/P personnel from above mentioned organizations			

DECEM: Department of Environment, Climate Change and Emergency Management
 EPA: Environmental Protection Agency
 DPW&T: Department of Public Works and Transportation
 KIRMA: Kosrae Island Resources Management Authority
 DTPW: Department of Transportation and Public Works
 T&I: Office of Transportation and Infrastructure
 DT&I: Department of Transportation & Infrastructure

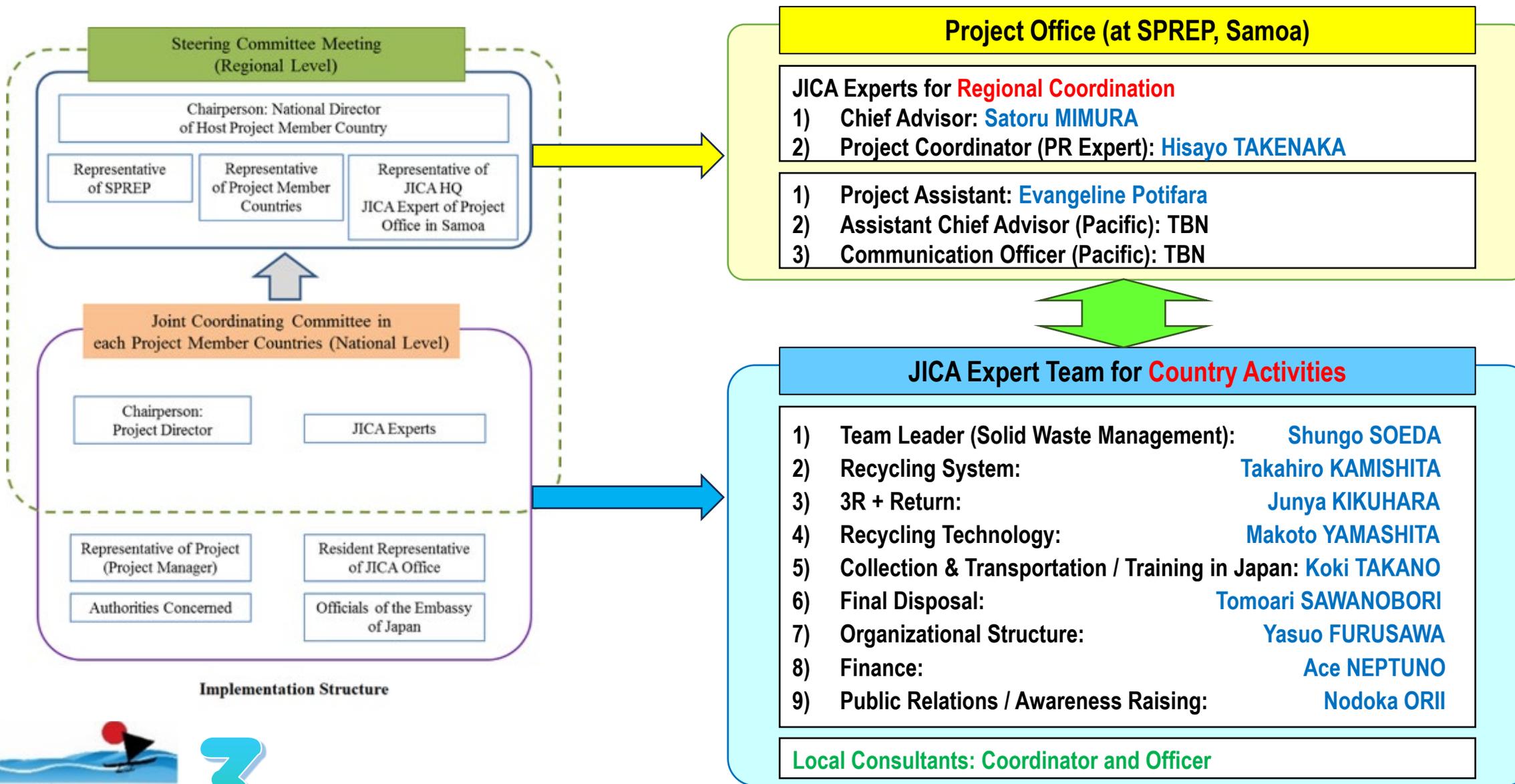
Authorities Concerned (Stakeholders)
 To be discussed and invited



Implementation Structure



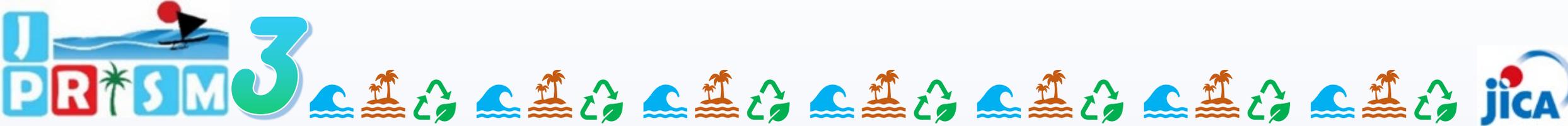
Implementation Structure (JICA Expert Team)



Implementation Structure



Facts and Challenges on J-PRISM 3





Palau

✓ Aimeliik National Landfill



✓ Recycling related Activities





✓ Yap Landfill



Kosrae Landfill



Pohnpei Landfill



<https://www.facebook.com/100000037285546/videos/pcb.7447162635294905/385927647178956>





FSM

✓ Recycling related Activities (Kosrae)



(Pohnpei)



(Yap)





RMI

✓ Majuro Landfill



✓ Ebeye Landfill





RMI

✓ Recycling related Activities (Majuro)



(Ebeye)





PNG

✓ Baruni Landfill



✓ Recycling related Activities





Fiji

✓ Final Disposal Site



✓ Recycling related Activities





Samoa

✓ Tafaigata Landfill



✓ SRWMA



Ends of Drive, Fun, Dream, Excites...



Sources : 東日本大震災に関する自動車リサイクルおよび二輪車リサイクルの取組み【最終報告】
(公益財団法人 自動車リサイクル促進センター・一般社団法人 自動車再資源化協力機構、平成27年3月)

<https://www.jarc.or.jp/topics/2015/150304/pdf/01.pdf>



We are watching YOU!!

