

SPREP
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MEMORANDUM OF UNDERSTANDING

AMONG

MINISTRY OF NATURAL RESOURCES AND ENVIRONMENT;

JAPAN INTERNATIONAL COOPERATION AGENCY;

SAMOA RECYCLING AND WASTE MANAGEMENT ASSOCIATION;

AND

**SECRETARIAT OF THE PACIFIC REGIONAL ENVIRONMENT
PROGRAMME.**

**SRWMA/J-PRISM II JOINT PILOT PROJECT FOR THE PROMOTION OF
RECYCLING TECHNOLOGY UNDER THE JAPANESE TECHNICAL
COOPERATION PROJECT FOR PROMOTION OF REGIONAL INITIATIVE
ON SOLID WASTE MANAGEMENT
IN PACIFIC ISLAND COUNTRIES PHASE II (J-PRISM II)**

June 2021

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This **Memorandum of Understanding** (“**MOU**”) is made among the following respective Parties:

The **Ministry of Natural Resources and Environment** (hereinafter referred to as “**MNRE**”);

The **Japan International Cooperation Agency** (hereinafter referred to as “**JICA**”) in Samoa;

The **Samoa Recycling & Waste Management Association** (hereinafter referred to as “**SRWMA**”),
and

The **Secretariat of the Pacific Regional Environment Programme** (hereinafter referred to as “**SPREP**”).

(Together referred to as Parties)

OBJECTIVES:

This MOU is a collaborative effort among the Parties in relation to the collection and recycling of identified recyclable waste items (hereinafter referred to as “**Pilot Project**”) under the **Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management, Phase II** (hereinafter referred to as “**J-PRISM II**”). Whereas all parties have agreed to fulfill the roles and responsibilities stated in this document for the successful implementation of the Pilot Project in accordance with the Note Verbale exchanged between the Government of Japan and the Government of the Independent State of Samoa dated 22nd November 2016, and the Record of Discussions between MNRE and JICA signed on 30 November 2016. A brief outline of the Pilot Project is summarized in Annex 1, 2, 3 of this MOU.

All Parties agreed to their respective contributions and obligations as follows:

1.0 SAMOA RECYCLING & WASTE MANAGEMENT ASSOCIATION (SRWMA) CONTRIBUTION AND ROLES

1.1 Management of Collected Target Wastes (Target wastes and the processing methods are set out in Annex 1,2,3):

- **SRWMA** will provide a collection of Target wastes in Samoa;
- **SRWMA** will provide cages and/or IBC tanks for Target Wastes at designated locations;
- **SRWMA** will provide appropriate facilities for the safe unloading of the collected Target wastes within its compound and facilities;
- **SRWMA** will sort and process the collected Target wastes into various categories with assistance from MNRE for official record purposes under this Pilot Project at the Pacific Recycle Co. Ltd recycling facility at Tafaigata and/or at the SRWMA recycling facility and SRWMA Waste Oil Management Project Facility in Tafaigata depending on the progress of the recycling facility construction project under the GGP project by the Embassy of Japan;
- **SRWMA** will prepare and pack the collected materials and export to its overseas markets or develop domestic markets with any generating revenues to assist its running operation for this Pilot Project; and
- **SRWMA** will transport the collected waste and unload during the Pilot Project period at the Pacific Recycle Co. Ltd recycling facility at Tafaigata and/or at the SRWMA

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recycling facility and SRWMA Waste Oil Management Project Facility in Tafaigata depending on the progress of the recycling facility construction project under the GGP project by the Embassy of Japan;

1.2 Information Recording and Reporting:

- **SRWMA** will record the incoming Target wastes and provide monthly information and data to MNRE and the J-PRISM Project Office; and
- **SRWMA** will provide reports to MNRE and the J-PRISM II every three months on the materials exported to other countries or sold in the domestic market as well as sharing any information on any revenues generated for Pilot Project purposes.

2.0 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) CONTRIBUTION AND ROLES

2.1 Project Coordination and Management:

- **JICA** will provide technical assistance to assist project stakeholders with the planning and implementation of this Pilot Project;
- **JICA** will support the development of a pilot collection and management of Target wastes in Samoa through introduction of equipment for the implementation listed in Annex 2 of this MOU;
- **JICA** will assist the development and the production of the results of this Pilot Project in consultation with stakeholders, and through preparation of the reports.; and
- **JICA** will provide recommendations on way forward to MNRE and SPREP for this Pilot Project continuation once its implementation period is completed.

2.2 Ownership and Operation maintenance of Equipment and Machinery:

- **JICA** will be the owner of the Equipment and Machineries procured for this pilot project during the Pilot Project period;

2.3 Public Awareness and Education:

- **JICA** through the J-PRISM II will promote public awareness on the proposed collection of Target wastes of the Pilot Project; and

2.4 Capacity Development Needs:

- **JICA** through the J-PRISM II will provide relevant trainings for capacity development of this Pilot Project targeting the key players and other relevant supporting stakeholders for sustainability purposes.

2.5 Monitoring and Reporting:

- **JICA** through the J-PRISM II will monitor and supervise the progress of the Pilot project with SRWMA.

2.6 Project Review and Evaluation:

- **JICA** through the J-PRISM II will review and evaluate the pilot project progress.

2.7 Sharing of Information and Lessons Learnt:

- **JICA** will, upon approval by all Parties, share any information and lessons learnt from this Pilot project with other donors and countries if needed.

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3.0 MINISTRY OF NATURAL RESOURCES AND ENVIRONMENT (MNRE) CONTRIBUTION AND ROLES

3.1 Project Coordination and Management:

- MNRE through the Waste Management Unit (“WMU”) under the Division of Environment and Conservation (“DEC”) will coordinate and manage the implementation of the Pilot Project;
- MNRE through WMU will coordinate and provide advice and directions to stakeholders on all matters pertaining to the project with technical advice and inputs from J-PRISM II Experts;
- MNRE will cooperate with JICA and J-PRISM II Experts in assuring the successful implementation of the Pilot Project; and
- MNRE will provide JICA and J-PRISM II Experts with necessary information such as waste management data, map, information and documents that will allow efficient and effective implementation of the Pilot Project.

3.2 Ownership and Operation maintenance of Equipment:

- MNRE will be responsible for the operation and maintenance of the Equipment procured for this pilot project after the Pilot Project period;
- MNRE will monitor the conditions of the Equipment at least once a month during the Pilot Project period, where the MNRE detects that the Equipment may be faulty or damaged, MNRE will inform SRWMA, JICA and J-PRISM II Experts within 24 hours; and
- MNRE will consider and determine the ownership of the Equipment after completion of the Pilot Project through consultation among the parties before the completion of the Pilot Project.

3.3 Public Awareness and Education:

- MNRE will promote public awareness on the proposed collection of Target wastes of the Pilot Project; and
- MNRE will consult with other relevant government agencies, private sectors (supermarkets, small shops, hotels), schools and communities on all matters pertaining to this pilot project through meetings, workshops and other appropriate and economical communication tools available on the pilot project on the following:
 - i) Any information to promote public awareness, support and participation to this Pilot Project;
 - ii) Consultation on information necessary for future waste management system design based on the implementation of the pilot project and implementation results.

3.4 Capacity Development Needs:

- MNRE in collaboration with JICA through the J-PRISM II will provide relevant trainings for capacity development of this Pilot Project targeting the key players and other relevant supporting stakeholders for sustainability purposes.

3.5 Monitoring and Reporting:

- MNRE will monitor and supervise the progress of the Pilot project with SRWMA and provide once in every three months reports and recommendations to JICA through the J-PRISM II.

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3.6 Project Review and Evaluation:

- **MNRE** in collaboration with J-PRISM Office will review and evaluate the pilot project progress after six (6) months of implementation and provide recommendations to JICA through the J-PRISM II.

3.7 Sharing of Information and Lessons Learnt:

- **MNRE** will upon request, which should not be unreasonably withheld, share any information and lessons learnt from this Pilot project with other J-PRISM II Project Countries and if needed; and
- **MNRE** will allow visiting missions from J-PRISM Project Countries as well as other interested delegations from other countries to observe this Pilot Project implementation upon requests.

4.0 SECRETARIAT OF THE PACIFIC REGIONAL ENVIRONMENT PROGRAMME (SPREP) CONTRIBUTION AND ROLES

4.1 Provision of Technical Assistance

- **SPREP** in collaboration with J-PRISM II will provide technical advice in the planning and implementation of the Pilot Project including relevant capacity building activities, if requested.

4.2 Project Monitoring, Review and Evaluation

- **SPREP** in collaboration with J-PRISM II will monitor, review, and evaluate the progress of the Pilot Project periodically, i.e. after six (6) months of implementation and provide recommendations to JICA through the J-PRISM II.

4.3 Sharing of Information and Lessons Learnt:

- **SPREP** will, upon approval by all Parties, share any information and lessons learnt from this Pilot project with other donors and countries if needed.

5.0 TERM

This agreement shall be effective from the date of execution by authorized representatives of all Parties. The duration for this Agreement shall be for twelve (12) months.

6.0 VARIATIONS

6.1 Each party to this Agreement may, in writing, request the other Parties to consider making variations. Any such request shall be duly considered by the other Parties and consent shall not be unreasonably withheld by any Party unless the request adversely affects the project and its stakeholders, or not in accordance with national laws and policies as well as the Government official system, processes and procedures.

6.2 No Variation to this Agreement will be effective unless it is in writing and signed by authorized representatives of all Parties.

7.0 INTELLECTUAL PROPERTY RIGHTS

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7.1 All intellectual property rights which subsist in and relate to the information/data under this Agreement for this Pilot Project in Samoa remains with the MNRE, SRWMA, SPREP, and JICA (for the J-PRISM II).

8.0 RESTRICTIONS

8.1 J-PRISM Countries and any third parties shall not by way of trade or otherwise, use, sell, hire out or otherwise circulate information/data generated under this Agreement without both the MNRE's and JICA's prior written consent and without a similar condition including this condition imposed on the subsequent holder of the information/data.

9.0 DISPUTE RESOLUTION

9.1 All Parties will use their best endeavours to resolve any dispute that may arise under this Agreement. Should a resolution between the Parties for this Agreement not be possible, senior officials from the Parties will discuss the dispute in order to reach an amicable resolution. If there is a dispute, all Parties will continue to perform their obligations as far as practicable given the nature of the dispute.

10.0 NON-LIABILITY

10.1 For Failure Beyond Control

No Party under this Agreement is liable for any delay or failure to perform their obligations if such failure or delay is due to force majeure or any other event beyond the Parties' reasonable control.

10.2 For Loss or Damage

MNRE and its staff are not liable under this Agreement or any person claiming through or under SRWMA for any loss or damage howsoever arising whether directly or indirectly from this Pilot project implementation, whether arising in contract, tort or otherwise. SRWMA releases MNRE from, and will indemnify MNRE against any loss or damage including (but not limited to) all claims, damages, loss or costs arising out of this project.

11.0 CONFIDENTIALITY

The Parties agree that this MOU is confidential, and all confidential information exchanged and/or given in connection with this MOU will be treated as confidential by the Parties and not to be disclosed to any third parties.

12.0 LAW AND JURISDICTION

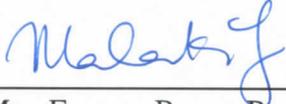
This MOU shall be construed and interpreted in accordance with the laws of the Independent State of Samoa.

13.0 ATTACHMENTS

Annex 1, 2 and 3 form an integral part of this Agreement

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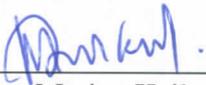
IN FURTHERANCE OF their respective goals and objectives, the Parties jointly agree to abide by the provisions of this MOU, and caused this MOU to be duly executed.



 Mrs. Frances Brown Reupena
Chief Executive Officer
Ministry of Natural Resources and Environment

11/06/2021

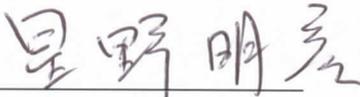
Date



Mrs. Marina Keil
President
Samoa Recycling & Waste Management Association

11/6/21

Date



Mr. Akihiko Hoshino
Resident Representative
JICA Samoa Office
Japan International Cooperation Agency

10/6/2021

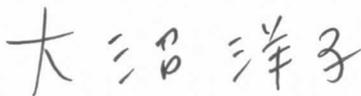
Date



Mr. Kosi Latu
Director General
SPREP
Secretariat of the Pacific Regional Environment Programme

14/6/2021

Date



Ms. Yoko Onuma
JICA Expert (Monitoring / 3R+Return)
J-PRISM II
Japanese Technical Cooperation Project for
Promotion of Regional Initiative on Solid Waste
Management in Pacific Island Countries Phase II

9/6/2021

Date

ANNEX 1: OVERVIEW OF THE PILOT PROJECT

1) Outline:

Purpose	<ul style="list-style-type: none"> The recycling capacity for Samoa is strengthened. The economical and eco-friendly waste treatment methods are studied. The necessary improvements and adjustments to continue sustainable and practical 3R+Return system are proposed. 	
Activities	<ul style="list-style-type: none"> Output1: PET Bottle Recycling Output2: Plastics Bricks Manufacturing Output3: Waste Oil Collection and Storage 	
Implementation Schedule (Tentative)	Output 3 (Waste Oil)	Output 1 and 2 (PET Bottle and Plastics Bricks)
	<p>May 2021</p> <ul style="list-style-type: none"> Sign MOU among MNRE, SRWMA, JICA, SPREP <p>June 2021</p> <ul style="list-style-type: none"> Selection and Finalization of Equipment Procure Equipment <p>July to December 2021</p> <ul style="list-style-type: none"> Implement the Pilot Project for 6 months 	<p>May 2021</p> <ul style="list-style-type: none"> Sign MOU among MNRE, SRWMA, JICA, SPREP <p>June-Dec 2021</p> <ul style="list-style-type: none"> Selection and Finalization of Equipment Procure Equipment <p>January to June 2022</p> <ul style="list-style-type: none"> Implement the Pilot Project for 6 months
Evaluation Schedule (Tentative)	July to August 2022	

The above-mentioned period may be subject to change in accordance with the situation such as COVID-19 or others.

2) Pilot Project Implementation Location (Machine Installation Site):

(Output1 and 2: Waste oil)

Name: Pacific Recycle Co. Ltd

Address: Tafaiata, Apia, Samoa Phone: +685 22117

(Output3: Waste oil)

Name: SRWMA Waste Oil Management Project Facility

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Address: Tafaigata, Apia, Samoa Phone: +685 22117

The above pilot project implementation location may be relocated depending on the progress of the recycling facility in Tafaigata that SRWMA is constructing under the GGP project.

ANNEX 2: TENTATIVE PROCUREMENT LIST OF MACHINERY AND EQUIPMENT

The following is the tentative list of machineries and equipment provided by JICA. If there is a change in the equipment to be procured, this Annex 2 and 3 will be revised.

In accordance with the Note Verbale exchanged between the Government of Japan and the Government of the Independent State of Samoa dated 22nd November 2016, and the Record of Discussions between MNRE and JICA signed on 30 November 2016, the Government of the Independent State of Samoa shall exempt the provided equipment, machinery and materials from custom duties and fiscal charges or assume the payment thereof.

Output	Description	Qty
Output1: PET Bottle Recycling	Shredder Machine	1
	PET Storage Bags	30
	Cutters	5
	Gloves	5
	Bath Tub	1
	Brush	5
	Mesh Pallets	10
	Flexible Container Bags	6
Output2: Plastic Bricks Manufacturing	Plastic Pelletizer and Extruder Machine	1
	Mesh Pallets	2
	Flexible Container Bags	4
	Moldings (2-3 molds)	2-3
	Scissors	3
	Grove	3
Output3: Waste Oil Appropriate Collection and Storage	Truck with crane	1
	Forklift	1
	Signages	2
	Spill kits	2
Weighing Equipment	Weigh Scale	1
Security measure	Security Camera	1-2

ANNEX 3: IMPLEMENTATION PLAN ON SRWMA/J-PRISM II PILOT PROJECT

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J-PRISM II



Japan International Cooperation Agency

Implementation Plan on SRWMA/J-PRISM II Pilot Project



In collaboration with

May, 2021



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Executive Summary

The J-PRISM II (Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management, Phase II) is a regional waste management project targeting 9 Pacific Island Countries that is being implemented from 2017 to 2022 with " Human and institutional capacity base for sustainable Solid Waste Management in the Pacific region is strengthened through implementation of Cleaner Pacific 2025" as the project goal.

Output 4 in the regional collaboration activity in the J-PRISM II aims to "strengthen the 3R + Return system in the Pacific", and J-PRISM II is conducting surveys on the recycling practices and recyclable flow in the region and supporting the establishment and activities of recycling associations in the target countries.

The Samoa Waste Management and Recycling Association (SRWMA) is the first recycling association established in the Pacific Island Countries in 2018. As a top runner in the region, SRWMA has a history of voluntarily collection activities on the beverage containers and waste oil from 2019 with the aim of promoting the proper collection and processing of low-economic value wastes in Samoa.

This report presents an implementation contents and methods of the Pilot Project by SRWMA and J-PRISM II which is scheduled from 2021 to 2022. The outline of the Pilot Project is as follows.

SRWMA/J-PRISM II Pilot Project Overview



Implementation period	Oct, 2021 –Feb, 2022 (Tentative)
Purpose	<ol style="list-style-type: none"> To strengthen the recycling capacity of Samoa To develop Economic and Environmentally friendly waste treatment methods To examine Practical and Sustainable 3R+Return System
Content	<ol style="list-style-type: none"> PET Bottle Recycling Plastic Brick Manufacturing Waste Oil Collection
Implementer	<ul style="list-style-type: none"> J-PRISM II/JICA SRWMA MNRE SPREP
Implementation Site	<ul style="list-style-type: none"> Pacific Recycling Yard SRWMA Recycling Facility



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I. Background

I.1 Key Policy Goals of the National Waste Management Strategy

In 2019, National Waste Management Strategy 2019-2023 has been developed by Ministry of Natural Resources and Environment (MNRE) as integrated waste management strategy which targets both solid wastes and chemical and hazardous wastes to address priority actions to be taken in Samoa for the next 5 years.

The contents of the Strategy are summarized the guiding principles and priority areas in the Figure 1 below. This pilot project, which J-PRISM II will carry out with MNRE, SRWMA, SPREP will be implemented to challenge and contribute to the underlined policy objectives with the aim of linking with the national strategy.

Vision	Clean and Healthy Samoa
Mission	Collaboration with every citizen through participatory approach and commitment to waste management
Guiding Principles	<ul style="list-style-type: none"> • <u>Reduce, Reuse, Recycle and Return</u> • Polluter pays principle • Public Consultation and participation • Sound decision making • <u>Selection of appropriate and affordable technology</u> • <u>Public-private partnership</u>
Priority Areas	<p>A. Enhance environmental awareness of the public on waste related issues and the countermeasures</p> <p>B. Strengthen operational planning on SWM</p> <p>C. Implement regular survey for Basic SWM data collection</p> <p>D. <u>Study Feasibility of future SWM options</u></p> <p>E. Establish efficient monitoring system on SWM operation</p> <p>F. Strengthen legal framework and enforcement</p> <p>G. Improve capacity of officials related to SWM</p> <p>H. Improve Chemical and Hazardous Waste Management</p>



Figure 1: National Waste Management Strategy 2019-2023

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1.2 Challenges towards the improvement of recycling capacity in Samoa

Given the content of the priority areas listed by the National Strategy, the current challenges of developing a recycling business in Samoa can be summarized in the following points.

- 1) Segregation of Household and Industrial waste is limited.
- 2) Separate collection of Household and Industrial waste has not been carried out.
- 3) Technical and economical recycling methods that can be used by the Government and private recycling companies are limited.
- 4) No incentive mechanism to increase recyclable waste collection volume and develop recycling level due to lack of recyclable waste buyers in Samoa and rely on exports to develop customers.
- 5) National legal system and business license system aimed at promoting Recycling is underdeveloped.

Especially for plastics, the countermeasures have been attracting attention as a priority policy issue worldwide. China's decision to no longer be the dumping ground for the world's recycled waste from January 2018, so waste plastics has lost its market value and is more likely to be generated and stocked as waste in each country. Originally, plastics had a low market value in Samoa, so a domestic sustainable solution is urgently needed.

1.3 Current Generation Amount - PET Bottle -

In Samoa, the Waste Generation Amount and Waste Discharged Amount and those compositions were surveyed with waste audit conducted in Nov 2017. The audit was conducted by collecting waste samples from selected 40 households with 365 persons in 5 villages for 1 week. As a result of the survey shown in Figure 2, the Waste Generation Amount was identified as 1,060 g/person/day and Waste Discharged Amount was 387g/person/day.

In the above waste audit survey in Nov 2017, as PET bottle discharged weigh was 7.33g (accounting for 1.89% of total daily waste discharged amount (387g/person/day)), if estimating the population of Samoa at 200,000, the daily discharge amount of PET bottle in Samoa is estimated approximately

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1.46 ton/day. Estimating this daily discharge amount, the monthly discharge amount of PET bottles is estimated approximately 35.18 ton/month.

MNRE provides waste collection service for 5 days a week except Sunday for all households and businesses by its contractors. Assuming that the annual waste collection days are 288 days (24 days a month), it is estimated that the monthly discharge amount of PET bottles is 35.18 ton/month, and the annual discharge amount of PET bottles is 422.20 ton/year.

Waste Generation Amount (g/person/day)	1,060
Waste Discharged Amount (g/person/day)	387

Figure 2: Waste Generation Amount and Waste Discharged Amount
(Source: National Waste Management Strategy 2019-2023, p.13)

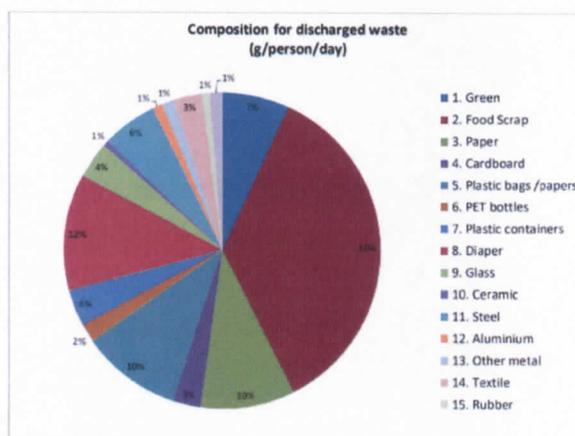


Figure 3: Composition for Discharged Waste
(Source: National Waste Management Strategy 2019-2023, p.15)

1.4 Current Generation Amount - E-Waste -

JICA conducted a Data collection survey on reverse logistics in 2012 and estimated the 2011 generation amount and generation forecasts in 2020 for the 5 E-waste items (Television, Refrigerator, Washing Machine, Air Conditioner, Computer) generated in Samoa. With reference to this survey result, in total of the 5 E-waste items, it was estimated that 10,260 units, total weight 310 ton/year will be discharged from Samoa in 2020.

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I.5 Current Generation Amount – Waste Oil –

There are very few studies that have estimated waste oil generations in Samoa in the past. Since we have obtained the "Used Oil Audit Survey -An audit survey of used oils in Samoa-" conducted by the New Zealand consulting firm, Envirocare Engineering Consult Ltd. in 2012, we will use the results of this survey as basic data, the amount of waste oil generation from Samoa in the 2010s is summarized below. Assuming that Figure 4 below is used as reference information, the total amount of waste oil discharged in Samoa is estimated to be approximately 842,212 liters per year when the lubricating oil generation amount (2011) and Engine and Hydraulic oil generation amount (Used Oils Generated) are added up.

Lubricant Oil Generation Amount (litter)	2011	2010	2009
	593,849	562,562	469,439

Engine Oil and Hydraulic Oil Generation Amount (litter)	Imported	Usage	Used Oils generated	Used Oils in storage	Used Oils disposed
	660,841	630,941	248,363	8,400	248,363

Figure 4: Used Oil in Samoa

(Source: Envirocare Engineering Consult Ltd [2012], "Used Oils Audit Survey")

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II. Pilot Project

2.1 Outline of the Pilot Project

Based on the current institutional status and issues in Samoa, J-PRISM II and SRWMA have been discussing the contents of the pilot project implementation plan since April 2020. As a result of the discussions, the details of this pilot project are decided as follows.

Purpose	<ul style="list-style-type: none"> The recycling capacity for Samoa is strengthen. The economical and eco-friendly waste treatment methods are studied. The necessary improvements and adjustments to continue sustainable and practical 3R+Return system are proposed. 	
Activities	<ul style="list-style-type: none"> Output1: PET Bottle Recycling Output2: Plastics Bricks Manufacturing Output3: Waste Oil Collection and Storage 	
Implementation Schedule (Tentative)	Output 3 (Waste Oil)	Output 1 and 2 (PET Bottle and Plastics Bricks)
	<p>May 2021</p> <ul style="list-style-type: none"> Sign MOU among MNRE, SRWMA, JICA, SPREP <p>June 2021</p> <ul style="list-style-type: none"> Selection and Finalization of Equipment Procure Equipment <p>July to December 2021</p> <ul style="list-style-type: none"> Implement the Pilot Project for 6 months 	<p>May 2021</p> <ul style="list-style-type: none"> Sign MOU among MNRE, SRWMA, JICA, SPREP <p>June-Dec 2021</p> <ul style="list-style-type: none"> Selection and Finalization of Equipment Procure Equipment <p>January to June 2022</p> <ul style="list-style-type: none"> Implement the Pilot Project for 6 months

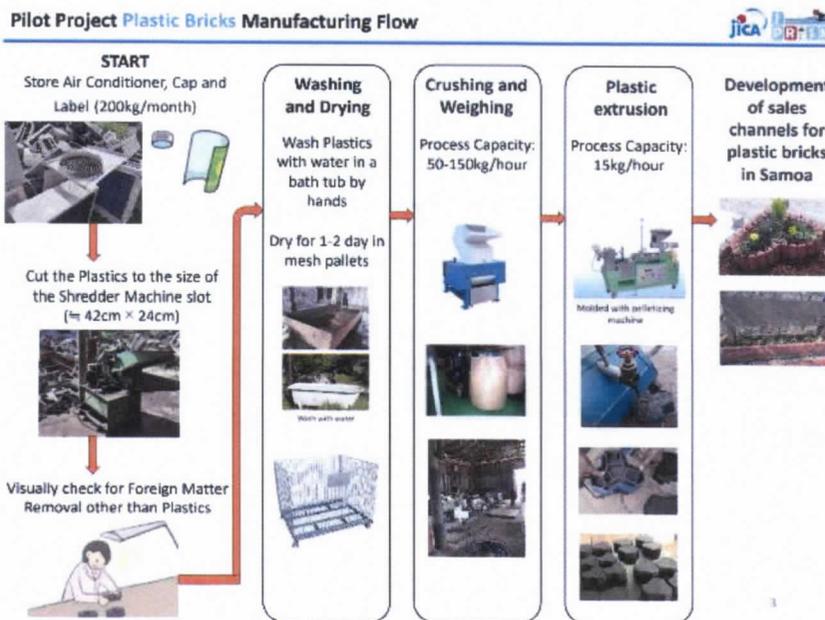
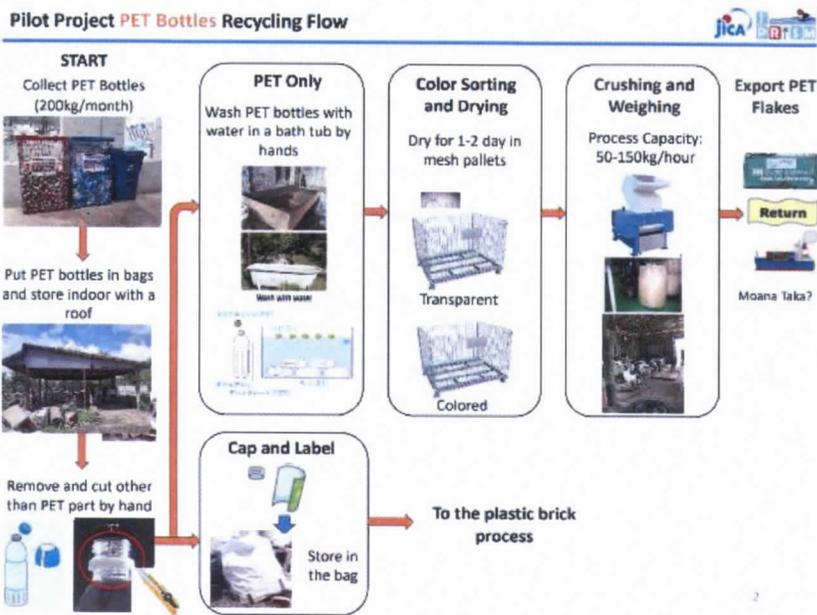
Figure 5: Outline of SRWMA/J-PRISM II Pilot Project

2.2 Waste processing flow of the Pilot Project

The waste processing flows for the three activities are assumed as shown in Figure 6 below. The 3-waste processing flow is designed based on the results of determining the specifications of the equipment and machinery based on the current processing flow of SRWMA and the results of interviews with plastic and waste oil recyclers in Japan.

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All of these flows are tentative project implementation plans at this stage, and the processing process may be changed as appropriate during the actual implementation of the Pilot Project. This pilot project aims to improve the best processing flow by the end of the pilot project, assuming that changes and improvements in the processing flow are given.



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Pilot Project Waste Oil Collection Flow

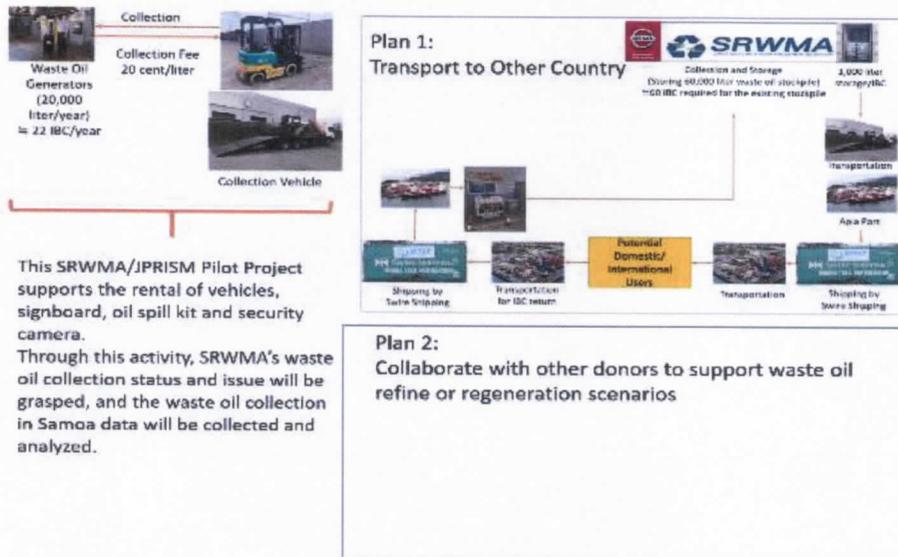


Figure 6: Outline of waste processing flow in the Pilot Project

Output	Description	Qty
Output1: PET Bottle Recycling	Shredder Machine	1
	PET Storage Bags	30
	Cutters	5
	Gloves	5
	Bath Tub	1
	Brush	5
	Mesh Pallets	10
	Flexible Container Bags	6
Output2: Plastic Bricks Manufacturing	Plastic Pelletizer and Extruder Machine	1
	Mesh Pallets	2
	Flexible Container Bags	4
	Moldings (2-3 molds)	2-3
	Scissors	3
Output3: Waste Oil Appropriate Collection and Storage	Grove	3
	Truck with crane	1
	Forklift	1
	Signages	2
Weighing Equipment	Spill kits	2
	Weigh Scale	1
Security measure	Security Camera	1-2

Figure 7: Procurement List (Tentative)

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Input from J-PRISM II/JICA	Input from MNRE (Recipient Government)
<ul style="list-style-type: none"> • Provide technical assistance to implement the Pilot Project • Provide equipment and machinery • Provide technical and institutional recommendations on way forward to MNRE and SPREP once its implementation period is completed 	<ul style="list-style-type: none"> • Pilot Project coordination and management • Exempt the provided equipment, machinery and materials from custom duties and fiscal charges or assume the payment thereof • Public awareness and education • Monitoring and reporting • Project review and evaluation • Ownership and operation maintenance of equipment and machinery after completion of the Pilot Project
Input from SRWMA	Input from SPREP
<ul style="list-style-type: none"> • Management of collected target wastes (includes payment of labor, electricity, water and fuel cost of the implementation of the Pilot Project) • Information recording and reporting 	<ul style="list-style-type: none"> • Provision of technical assistance • Project monitoring, review and evaluation • Sharing of information and lessons learnt

Figure 8: Division of Role in Pilot Project implementation

2.3 Expected Outcomes

Based on discussions between J-PRISM II and SRWMA, the target wastes will be processed into recycled products or be stored properly and promote appropriate collection in this pilot project, as shown in Figure 9 below.

2.4 Implementation Schedule

The implementation schedule is as shown in Figure 5 "Outline of SRWMA/J-PRISM II Pilot Project" which shall be changed in accordance with the situation of COVID-19 and the equipment procurement schedule.

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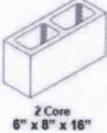
Output	Current Status	Final products from Pilot Project	
Output1: PET Bottle Recycling			
	PET Collection Cage	PET Flake ϕ 10 mm	PET Pellet 5 mm
Output2: Plastic Bricks Manufacturing			
	Stockpiled Plastics	6-inch brick 2 Core 6" x 8" x 16"	Floor/Foot Path Tile
Output3: Waste Oil Appropriate Collection and Storage			
	Stocked waste oil	Promotion of Collection	Storage in IBC tank

Figure 9: Expected Outcomes from the Pilot Project

2.5 Implementation Site

Implementation site of the Pilot Project will be at Pacific Recycling Co. Ltd yard in the Figure 10 below. SRWMA submitted a proposal for a "SRWMA recycling facility construction project" to the Embassy of Japan's GGP (the Grant Assistance for Grassroots Human Security Projects) ", which was approved in March 2021. The planned construction site for the SRWMA recycling facility is shown in the Figure. 10.

Based on that, if the SRWMA recycling facility is constructed by the GGP project before the implementation of this SRWMA/J-PRISM II pilot project, the implementation site of the pilot project may be moved to the SRWMA recycling facility.

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Figure 10: Pilot Project Implementation Site

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III. Expected Achievements

3.1 Output I: PET Bottle Recycling

1) PET Collection of Recycling Station Project

Since 2019, SRWMA has started "Recycling Station Project" as a voluntary activity which collects used PET Bottles, Aluminum Cans from Restaurants, Hotels, Bars, Supermarkets, and Institutions in Apia. SRWMA's Recycling Station project collection cages are collected when the collection partners like Restaurants, Hotels' collection cages are full and calls SRWMA. Currently, SRWMA collects PET bottles once a week basis. The collected PET bottles are stored outdoors in the SRWMA member's yard.

SRWMA has installed approximately 22 small cages and 23 big cages in the town area as of November 2020, and the current SRWMA monthly collection amount of PET bottles is estimated to be 200-300 kg/month. SRWMA PET Bottles monthly collection volume can be estimated to account for approximately 0.56-0.85% of the total monthly generation amount of PET bottles in Samoa.

2) Utilization of PET bottles collected in Recycle Week

SRWMA celebrated its 3rd anniversary with a 6-day recycling day from March 15th to 20th, 2021. As one of the activities of this event, SRWMA ran a recycling competition including PET Bottles collection that were weighed throughout 4 weeks from February to March. The 14 primary schools to collect the most waste to be weighed by category won the prizes accordingly. The total collection amount weighed by SRWMA was 4.144 ton. These 4,144 tons were the total weight of PET bottles and aluminum cans, but most of them were PET bottles, so the collection volume of PET Bottles is estimated about 3 tons by SRWMA.

Considering that the current SRWMA's Recycling Station Project collection is 200-300 kg per month, the total collection for this Recycling week's event was found to be comparable to their PET bottle collection volume for about 1 year to 1 year and a half.



Figure 11: Primary School Recycling Competition Winners

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3) Expected achievements

In this pilot project, the target processing amount of Output1 is about 6 to 7 tons which consists of a combination of about 2.4-3.6 tons of PET bottles collected annually in the SRWMA Recycling Station project and about 3 tons of PET bottles collected during 2021 Recycling Week. Comparing the target processing amount of 5-6 tons in Output 1 with the annual discharge amount of PET bottles is 422.20 ton/year in Samoa, the PET bottles processed in this pilot project will account for about 1.42-1.65% of the annual PET Bottles discharge amount in Samoa.

3.2 Output2: Plastic Bricks Manufacturing

1) Air Conditioner Receiving Amount by SRWMA

J-PRISM II has conducted a recycling industry survey in Samoa in 2019, and interviewed SRWMA members to confirm their receiving amount of major recyclable wastes. The average receiving amount of E-waste (used home appliances) by item by SRWMA core members are as shown in Figure 12.

When comparing the estimated E-Waste generation amount for 2020 which is 310 ton/year by JICA reverse logistics survey and the SRWMA E-waste receiving amount which is 45.5 ton/year by JICA recycling industry survey, the ratio of annual SRWMA's E-Waste receiving amount to the nationwide E-waste generation amount is approximately 25.8 %. Dividing this SRWMA annual E-Waste receiving amount by 12 months and calculating the monthly SRWMA's E-Waste receiving amount is approximately 6.66 ton/month.

Since the above calculation based on the total weight of E-Waste 5 items, the ratio of plastic to the total weight is calculated in the Figure 12. The Figure 13 shows the plastic receiving amount of SRWMA calculated based on the E-waste material composition ratio by item in Japan. Among these home appliances, air conditioner has the highest metal content, and SRWMA is actively receiving air conditioner for metal recovery.

Based on the above background, SRWMA and J-PRISM II have decided that the target items for this brick manufacturing will be the air conditioners stored by SRWMA.

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	Samoa	SRWMA Receiving Amount			
	Estimated E-waste Generation Amount for 2020 (Tons/year)	Receiving Amount (Tons/year)	Average Weight per unit (Kg/unit)	Annual Receiving Number (unit/year)	Monthly Receiving Number (unit/month)
Television	54	N/A	N/A	N/A	N/A
Refrigerator	120	10.8	125-140	86-77	7-6
Washing Machine	26	10.8	60-80	135-180	11-15
Microwave and ovens	33	10.5	18	583	48
Air conditioner	48	45.5	50-60	758-910	63-75
PC Desktop	29	2.4	5-10	240-480	20-40
Total Weight	310	80	-	-	-
Receiving Share		25.8%			

Figure 12: E-Waste Receiving Amount and Number by SRWMA
(Source: JICA Survey, JPRISM II Recycling Industry Survey 2019)

	Percentage (%)		Recyclable Material Weight by SRWMA (Tons/year)	
	Metal	Others (Inc. Plastics)	Metal	Others (Inc. Plastics)
Refrigerator	33	67	3.56	7.23
Washing Machine	36	64	3.88	6.91
Air conditioner	81	19	36.85	8.64
CRT TV	20	30	-	-
Liquid Crystal TV	53	47	-	-

Figure 13: Potential Plastics Storage Amount Estimated from SRWMA Received E-Waste

As shown in Figure 12, it is estimated that SRWMA is currently receiving 63-75 Air Conditioner units per month. Based on that, we are planning to process 25 units/month, which is about one-third of the monthly Air conditioner receiving volume by SRWMA in this pilot project, and work on the manufacturing of plastic bricks for the first time in Samoa.

2) Expected achievements

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In this pilot project, the monthly ACs plastic processing amount of 200 kg (\approx 25 units) is planned to be carried out for 6 months, so the total plastic processing amount will be 1.2 tons for the implementation period of SRWMA/J-PRISM II Pilot Project.

Comparing the annual discharge unit of Air Conditioners is 1,106 unit/year in Samoa's generation forecast in 2020, the Air Conditioner processed in this pilot project will account for about 2.2% of the annual Air Conditioner discharge unit numbers in Samoa.

3.3 Output3: Waste Oil Collection and Storage

1) SWOMP Launching and Waste Oil Collection Amount by SRWMA

SRWMA have launched the Samoa Waste Oil Management Program (SWOMP) in 2019 and is operating a voluntary activity to collect waste oil from major generators in Samoa.



Figure 14: SRWMA Waste Oil Facility in Tafaigata

To support the success of the program a \$0.20 sene fee will apply to every litter of waste oil collected which will aid in the sustainability of the program and the continued export of waste from the region. Through this program collected waste oil will be exported from Samoa and will be used as an alternate energy source, to provide fuel for another industry.

According to SRWMA survey, SRWMA members have stored waste oil in their stockyards before the start of SWOMP, and the total waste oil storage amount by SRWMA is estimated to be about 20,000 liters.

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Collection days per week	3 days a week (Monday, Wednesday and Friday)
Collection per day	1-4 IBC per day
Collection weight per day	1,000-4,000 liters per day
Collection required time per day	2-8 hours per day (Approx. 2 hours per IBC)
Waste oil drop off days per week (Days when customers can bring in waste oil to the facility)	2 days a week (Tuesday, Thursday)
Monthly collection amount	12,000-48,000 liters per month (=12-48 IBCs per month)
Waste oil total collection amount for 6 months during Pilot project	72,000-288,000 liters per 6 months (=72 IBC-288 IBC) (=less than 72 tons-288 tons)
Number of required workers	2 workers (1 onsite, 1 out in the field)

Figure 15: SRWMA Waste Oil Collection Plan

2) Expected achievements

In this Pilot Project, the monthly used oil collection frequency is 3 days a week. As shown in Figure 15, this Pilot Project aims to recover 1,000-4,000 liters of waste oil per day. Therefore, we aim to collect about 12,000 liters to 48,000 liters per month.

The monthly waste oil collection amount of 12,000-48,000 liters is planned to be carried out for 6 months, so the total waste oil collection amount will be 72,000 liters to 288,000 liters for the implementation period of SRWMA/J-PRISM II Pilot Project.

Comparing the annual waste oil generation amount 842,212 liters/year, the waste oil collected in this pilot project will account for about 8.54-34.19% of the annual waste oil generation amount in Samoa.

One of the expected outcomes of this pilot project is that the collected waste oil will be refilled in IBC tanks and properly stored in the SRWMA waste oil facility shown in Figure 16. This IBC tank is a recommended storage container for shipping waste oil and exporting it overseas. Most of the waste oil that SRWMA members have stored in their stockyard is stored indoors or outdoors in normal drums, and there are no measures to prevent corrosion or tipping over of the storage container, so this pilot project is considered that there will be a progress in the storage method through this process change.

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Another expected outcome of this pilot project is that we will support improvements in data collection method to identify the type of waste oil collected from waste generators as much as possible. Currently, SRWMA hands a receipt to the waste oil generator when collecting 20 sene per liter from the SWOMP customer. However, SRWMA does not always get information about the types of waste oil from its customers, so it is not possible to identify those types of waste oil later when storing or refilling in drums or IBC tanks. SRWMA stores waste oil in IBC tanks and is considering exporting it when the storage amount reaches a certain amount. If this collected waste oil will be used as an alternate energy source, to provide fuel for another industry like steel factory to smelt the large volumes of waste scrap steel, it is not always necessary for the discharger to specify the type of waste oil, and it may be accepted as mixed waste oil, but when using waste oil for other purposes or processing, mixed waste oil may increase a handling risk. SRWMA needs to take responsibility for knowing the type of waste oil in order to avoid such risks and make it easier to find a buyer.

In this pilot project, we will collaborate with other donors to support the collection and management of waste oil planned for new activity in Samoa, and support the promotion of waste oil collection and treatment scenario development in Samoa.

Based on the expected outcomes above, we will support to improve the collection and storage, and identify the types of waste oil with other donors to develop domestic waste oil appropriate collection and treatment methods in the future.

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IV. Evaluation of Pilot Project

4.1 Purpose of Evaluation

The purpose of the evaluation is as follows. The analysis results of these evaluations will be used for the development of recycling technology suitable for Samoa and the proposal of future recycling legislation systems.

- Evaluation of individual activities that make up the pilot project:
Evaluate individual activities and compile recommendations and lessons for plastic and waste oil activities.
- Evaluation of the entire pilot project:
Summarize evaluations and lessons learned regarding the results of the SRWMA / J-PRISM II pilot project

4.2 Pilot Project Implementation and Evaluation Period

- 1) Pilot Project Implementation Period: July-December 2021 (for Waste Oil), January - June 2022 (for PET and Plastic Bricks)
- 2) Pilot Project Evaluation Period: July to August, 2022 (including report preparation)

4.3 Evaluator / Evaluation Team

The evaluator / Evaluation team is as follows.

- MNRE Division of Environment and Conservation Team
- SPREP Waste Management and Pollution Control Team
- J-PRISM II/JICA Team

4.4 Target of Evaluation

The target of Evaluation team is as follows.

- SRWMA Team

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- J-PRISM II/JICA Team

4.5 Evaluation Method

The evaluation is carried out in the evaluation process shown in Figure 16. Detailed evaluation items will be determined through consultations between J-PRISM II/JICA, MNRE, and SPREP.

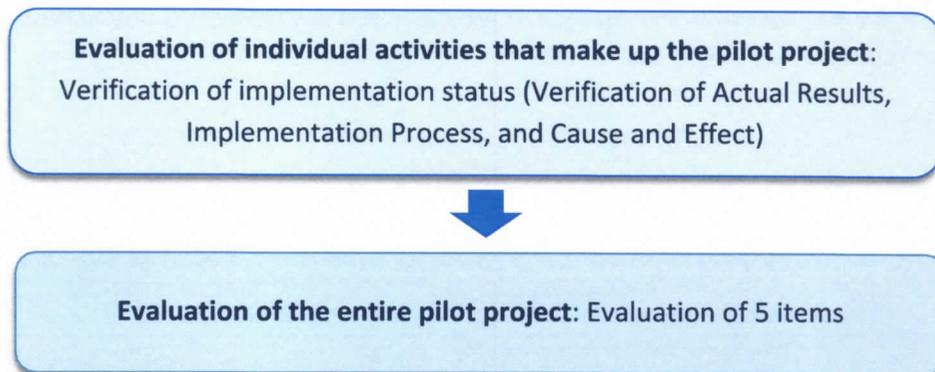


Figure 16: Evaluation Process

1) Verification of implementation status

Verification of the implementation status consists of verification of actual results based on the evaluation indicators in Figure 17, verification of the implementation process, and verification of causal relationships.

2) Evaluation of 5 Items

Evaluation will be carried out based on the following 5 item evaluations.

(1) Relevance

Evaluate whether the project approach is appropriate as a solution to problems and issues, whether the project goals meet the needs of the beneficiaries, and whether it is consistent with the policies of the partner country (Samoa) and Japanese government's aid policy.

(2) Effectiveness

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Evaluate whether the implementation of the project has achieved the goals of the project and has benefited the beneficiaries and target societies.

(3) Efficiency

Evaluate whether the invested resources are being used effectively focusing on the relationship between project input and results.

(4) Impact

Evaluate the achievement of long-term effects and spillover effects brought about by the implementation of the project.

(5) Sustainability

Evaluate whether the effects of the project are expected to continue even after the end of cooperation.

5 items	Evaluation Indicators	Evaluation contents
(1) Relevance	<ul style="list-style-type: none"> Was the project approach appropriate as a solution to problems and issues? Did the project goals meet the needs of the beneficiaries? Was it consistent with the policies of the partner country (Samoa) and Japanese government's aid policy? 	<ul style="list-style-type: none"> Confirm consistency with Samoa National Waste Management Strategy Confirm Japanese Government Commitments on Waste Management sector at PALM
(2) Effectiveness	<ul style="list-style-type: none"> Did the implementation of the project achieve the goals of the project and benefit the beneficiaries and target societies? 	<ul style="list-style-type: none"> Verification of collection / recycling capacity Verification of recycling technology and process
(3) Efficiency	<ul style="list-style-type: none"> Did the invested resources are being use effectively focusing on the relationship between project input and results? 	<ul style="list-style-type: none"> Machines and Equipment usage rate Development status of new markets
(4) Impact	<ul style="list-style-type: none"> Did the achievement of long-term effects and spillover effects bring about by the implementation of the project? 	<ul style="list-style-type: none"> Evaluate the possibility that the technology and the working flow will continue to be used in the future
(5) Sustainability	<ul style="list-style-type: none"> Did the effects of the project are expected to continue even after the end of cooperation? 	<ul style="list-style-type: none"> Comprehensively evaluate the results of the above four items

Figure 18: Evaluation Indicators

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Attachment I: Basic Information on Independent State of Samoa

Country Name	The Independent State of Samoa
Area	2,830 sq km
Population	Approximately 200,000 (2018, World Bank)
Capital	Apia
Major Languages	Samoaan, English
Major Religion	Christianity
Currency	Tala
Major Industries	Agriculture, Coastal Fisheries
GDP	US \$ 820 million (2018, World Bank)
GNI (Gross National Income) per capita	US \$ 4,020 (2018, World Bank)
Economic Growth Rate	-2.1% (2018, World Bank)
Price Increase rate	2.0% (2018, World Bank)
Total Trade Amount	(1) Export US \$ 47.5 million (2) Import US \$ 390.9 million (2018, Asian Development Bank)
Major Trade Items	(1) Export Seafood, Noni products, Health Foods, Beer, Coconut Cream (2) Import Food, Meat, Machinery, Transportation Equipment, Manufactured Products
Major Trading Countries	(1) Export United States, Afghanistan, New Zealand (2) Import New Zealand, Singapore, United States, Australia (2018, Asian Development Bank)



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Attachment 2: Introduction of Recycling Association Support Activities in the J-PRISM II

I) Recycling Association Support Activity in the J-PRISM II

Waste Management has been recognizing as pressing challenges in the Pacific island countries, posing a serious threat to the sustainable environment and development of the Pacific region. Based on this problem awareness, Japan International Cooperation Agency (hereinafter JICA) has started assisting Pacific island countries in terms of solid waste management in collaboration with the Secretariat of the Pacific Regional Environment Programme (hereinafter SPREP) to realize the commitment announced by the Government of Japan at the 2nd PALM (Japan-Pacific Leaders' Meeting) since 2000.

Under the Pacific Regional Solid Waste Management Strategy (2016-2025) as Cleaner Pacific 2025 which has been already formulated in previous J-PRISM I Project (2011-2016) cooperation, JICA has conducted "Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management, Phase II (J-PRISM II)" in partnership with the responsible agencies of the waste management of each target countries and SPREP.

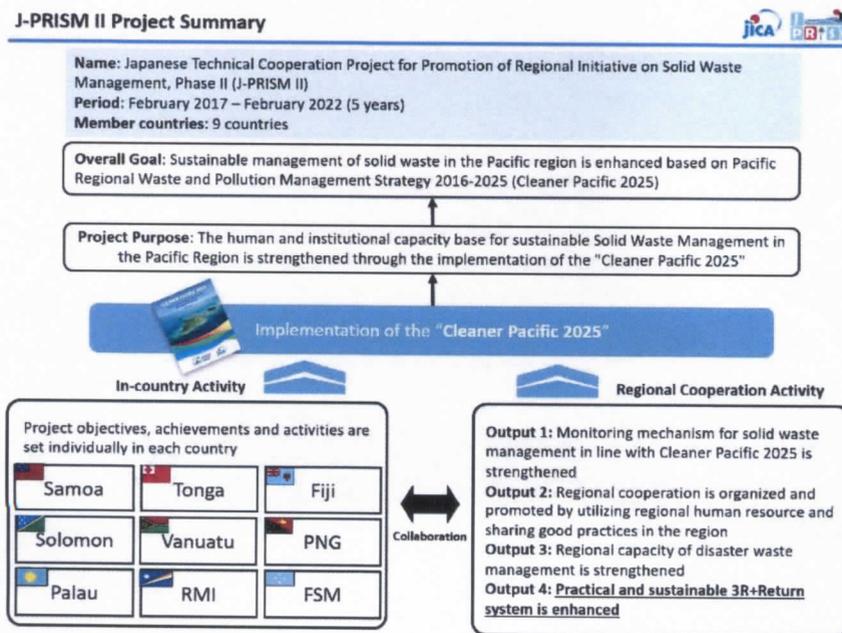


Figure 18: J-PRISM II Project Summary

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As part of the support for Output 4 in the regional cooperation activity as shown in above Figure 19, J-PRISM II has been supporting the establishment of the recycling association in the Pacific from the beginning. Samoa Waste Management and Recycling Association (hereinafter SRWMA) has been launched in 2018 as the first recycling association in the Pacific Island Countries with the support of Honorable Tuilaepa Lufesoliai Neioti Aiono Sailele Malielegaoi (Prime Minister of Samoa, Patron of SRWMA), the Ministry of Natural Resources and Environment (hereinafter MNRE), J-PRISM II/JICA, and SPREP.

With reference to the establishment and activities of the SRWMA, both Vanuatu and Solomon Islands in 2 Melanesian countries' recycling associations have been established in November 2019. J-PRISM II/JICA will continue to support the establishment and activities of recycling associations in each country and region of the Pacific Island Countries.

SRWMA is an organization that has always held an important position as a regional leader for private recycling industry in the Pacific.

	Samoa	Solomon	Vanuatu	Fiji
Organization Name	Samoa Recycling & Waste Management Association (SRWMA)	Solomon Islands Recycling & Waste Management Association (SIRWMA)	Vanuatu recyclers and Waste Management Association (VRWMA)	Waste Management & Resource Recovery Association of Fiji (WMRRAF)
Launching	March, 2018	November 28, 2019	November 25, 2019	TBD
Number of members	5 members	4 members	1 member	5 members
Main Activities	<ul style="list-style-type: none"> Samoa Waste Oil Management Programme (SWOMP). Recycling station program (Beverage Container Collection Initiative) 	<ul style="list-style-type: none"> Advocating on promotion of 3R+Return (Plastic Injection) Campaign Honiara Central Market – "Say NO To Plastic Bags" 	<ul style="list-style-type: none"> Draft policy paper on Container Deposit Scheme Logo concepts Facebook page Discussions with Government and potential donors 	<ul style="list-style-type: none"> Formalization of WMRRAF Support introduction of CDS regulation Utilization of the Naboro Tax Free Zone for the new and existing recyclers
Establishment summary	JPRISM II provided technical support for establishing the recycling association			Voluntarily established

Figure 19: Overview of Recycling Associations in the Pacific

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SRWMA Strategic Plan (2018-2023) announcement event held in Oct, 2018



J-PRISM II invited Solomon Islands recyclers to Samoa to study SRWMA activities in Oct, 2018



J-PRISM II and SRWMA attended the Plasticity Oceania event in Fiji in March, 2019



SRWMA attended the 3R Forum in Thailand in March, 2019



SWOMP Launching Ceremony conducted in August 2019



SRWMA, VRWMA, SIRWMA, and WMRRAF joined J-PRISM II steering committee held in September 2019.



SRWMA and J-PRISM II interviewed Fiji's local recyclers in November 2019



SRWMA and J-PRISM II visited Naboro Sanitary Landfill in Suva City, Fiji in November 2019

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Figure 20: SRWMA/J-PRISM II Activity Photos

2) Roadmap for building 3R+Return network in the Pacific

During J-PRISM I and II project implementation, “3R + Return” concept has been promoted. Most of the countries in the region are lacking recycling facilities and limited recycling markets in the country due to the small scale of the economy. The “3R+Return” concept would promote the proper resource recycling and appropriate disposal by exporting(returning) valuable waste or difficult waste for disposal while returning organic waste into soil for effective utilization. As for the realization of “3R+Return” concept, proper organic waste treatment, effective/efficient resource recycling, and appropriate disposal, within and across the country would be significant, but it is still a continuous challenge among PICs to set up “3R+Return” system.

As shown in the Roadmap in Figure 21 below, J-PRISM II engages in supporting the Recycling Association and implementing pilot projects in Samoa and Solomon Islands in order to build a 3R+Return network in the Pacific.

J-PRISM II first analyzes the actual resource usage and recycling capacity in the research phase. Through Recycling Association support phase and the pilot project implementation phase, we will strengthen the recycling association’s processing capacity in the target countries, and verify the necessary equipment, waste collection and processing capacity, and cost effectiveness.

The results of these activities will be utilized for the content of the next project that will be started in the Pacific after the completion of J-PRISM II.

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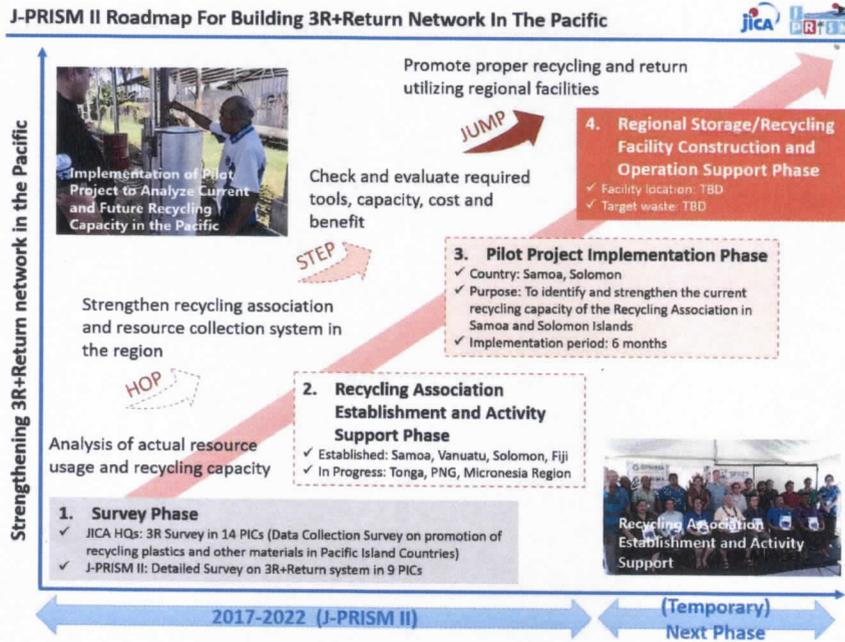


Figure 21: J-PRISM II Roadmap for 3R+Return networking in the Pacific

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Attachment 3: Introduction of SRWMA Activities

Name	Samoa Recycling & Waste Management Association (SRWMA)
Patron	Honorable Tuilaepa Sailele Malielegaoi, Prime minister of Samoa
Members (in 2020)	5 Companies: Pacific Recycle, Waste Management, Metal Man, One Scrap, Nissan Samoa
Affiliate Members (in 2020)	10 Affiliate Members: Tokelau Office, National University of Samoa, Mynas Supermarket, Lynns Supermarket, Ligis Takeaway, Farmer Joe Supermarket, Big Boys Autoshop, Best, Ywam, Samoa shipping services
Annual Income (in 2019)	55,000.00 Tala
Annual Expenditure (in 2019)	48,600.00 Tala
Year of Establishment	SRWMA is a recycling association founded in 2017 with members of recycling companies, distributors and manufacturers in Samoa as the first recycling association in the Pacific Island Countries.
Main Activities	<p>The main activities of SRWMA <u>is</u> to collect domestic and commercial waste with low economic value and to process it to promote recycling for Samoa. Currently, SRWMA is mainly engaged in the following two voluntary waste management activities targeting the problematic wastes listed in the SRWMA Strategic Plan 2018-2023.</p> <p>1) Recycling Station SRWMA has advanced efforts to promote segregation of PET bottles and Aluminium cans, collecting these streams from centralized drop-off points stationed at selected supermarkets, hotels, restaurants etc. across Upolu for exportation to foreign recycling destinations in the future.</p> <p>2) SWOMP -Samoa Waste Oil Management Program- SRWMA estimates that 20,000 liters of waste oil <u>is</u> discharged annually from Samoa, SRWMA has started SWOMP since 2019 with the aim of promoting the collection waste oil, and charges 20 cents per litter to collect it from main waste generators like car service garages, gas stations, construction and transportation companies from all over Samoa and Tokelau.</p>



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Attachment 4: SRWMA Recycling Facility Construction Project by GGP

SRWMA Recycling Facility Overview

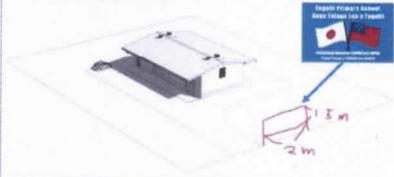


SRWMA Recycling Facility Construction Project

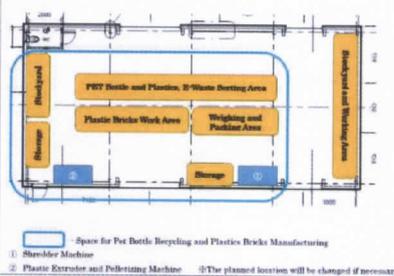


- 1. Site**
Tafaigata Landfill (SRWMA has obtained land use permit from MNRE for 20 year lease contract)
- 2. Facility area**
3,008 m² (30% (= 0.74 acer) of the total area of SRWMA land (2.5 acer) will be used as the facility)
- 3. Project to Apply for**
Grant Assistance For Grassroots Human Security Projects (GGP)
- 4. Total project cost (construction cost)**
USD 190,123 (Approx. 450,000 Tala)
- 5. JPRISM Support**
 - Support for preparation and confirmation of application documents
 - Architectural design, Structural design calculation, BOQ estimate cost support (20,000 Tala)
 - Coordination with JPRISM pilot project and other donors

Facility construction will be completed by the end of 2021



SRWMA recycling facility floor plan



SRWMA Recycling Facility Site



SRWMA Recycling Facility

Tafaigata Landfill Main Gate

Pacific Recycle Land

Edwin Land

Waste Management Land



SRWMA Recycling facility seen from WM Land (Behind the blue arrow)



Planned access road (Behind the blue arrow)



Other signboards at the Landfill Main Gate

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