



J-PRISM II Regional Workshop on Preventive Maintenance of Vehicle and Heavy Machinery for a Sustainable Waste Management Service

Ms. Mayu Nomura, JICA Expert

On March 2nd the online workshop on **Preventive Maintenance of Vehicle and Heavy Machinery** took place to follow up on the Micronesian trainees who participated in the online trainings on the Pre- and Post-Operation Inspection held last year. The workshop aimed to re-cap the findings from the trainings, share good practices found through the trainings, and provide advanced technical knowledge regarding proper maintenance of the vehicles and heavy machinery. In total over 100 drivers, operators and mechanics from Palau, FSM, RMI, Fiji, and Solomon Islands participated in the workshop. 2.5-hour workshop was composed of three thematic areas: Pre- and Post-Operation Inspection for drivers/ operators, Periodic Inspection for mechanics, and Budgeting and Planning for managers. In organizations in charge of automobile maintenance to deliver public services, standardizing inspection practice that any workers can follow is a key to maintain facilities in good condition. The lecture not only explained the flow and technical tips of inspection, but also shared guiding tools to keep the practice at the standard level such as Standard Inspection Check Sheets, Periodic Inspection Scheduling Sheet, and Instructional Video of How to Conduct Pre- & Post-Inspection Operation. Questions were raised from the floor on the best timing for changing engine oil, potential causes for engine overheat, and so on. Despite the remote learning setting the participants were kept focused throughout the workshop. Some of the workshop materials are available on this website:

Standard Check Sheet: <https://www.sprep.org/j-prism-2/report-and-materials>

Video: https://www.youtube.com/watch?v=4t0dEIVh_ek

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Ambassador Michigami and his staff from the Japan Embassy with Mayor Jacob and his staff from the Kolonia Town Government in Pohnpei.

The Government of Japan hands over two new compactor garbage trucks for continued trash collection in Kolonia

Mr. Patrick Blank, Consultant, Kolonia Town Government

March 21, 2022

His Excellency Hisashi Michigami, Ambassador of Japan to the Federated States of Micronesia (FSM), handed over the keys to the two new compacting trash vehicles to Mr. Beterigo Jacob, the Honorable Mayor of Kolonia Town in Pohnpei State. In a short handover ceremony Ambassador Michigami reminded the crowd that in 2010 the Government of Japan first gave Kolonia Town two compactor truck vehicles that ran for 10 years, providing important waste management services for the town. The Ambassador mentioned how waste management is an increasing problem for islands and that it is essential to keeping the environment and people's lives safe. Based on the current solid waste management capabilities of Kolonia Town, which is currently using a flatbed pickup to remove the trash, these two new vehicles will increase the frequency of trash pickups from once every two weeks to once a week for Kolonia Town.

Mayor Jacob thanked the Ambassador and the Government of Japan for assisting in funding the two trucks. He told the Ambassador that they will take good care of the trucks by building a new roofed structure

to house the new vehicles and station them where everyone can see them. He promised to put them to good use.

The Japan International Cooperation Agency (JICA) technical team called the Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in the Pacific Island Countries, Phase II (J-PRISM II) has been supporting this project by developing Geographic Information System (GIS) maps for all the households in Kolonia Town and has helped the Public Works team from Kolonia Town Government to create daily pickup schedules to ensure that they are efficient and they can meet their goal of picking up trash once a week from all the participating households. In addition to the two vehicles, JICA/J-PRISM II funded 779 thirty-two-gallon trash bins to be used for the household pickup of solid waste in town. Together with the Vehicle and Heavy Machinery Maintenance Training conducted by J-PRISM II, the Kolonia Town Public Works division is set to start their new sanitation project and help the people in Kolonia Town live a safe and clean lifestyle.



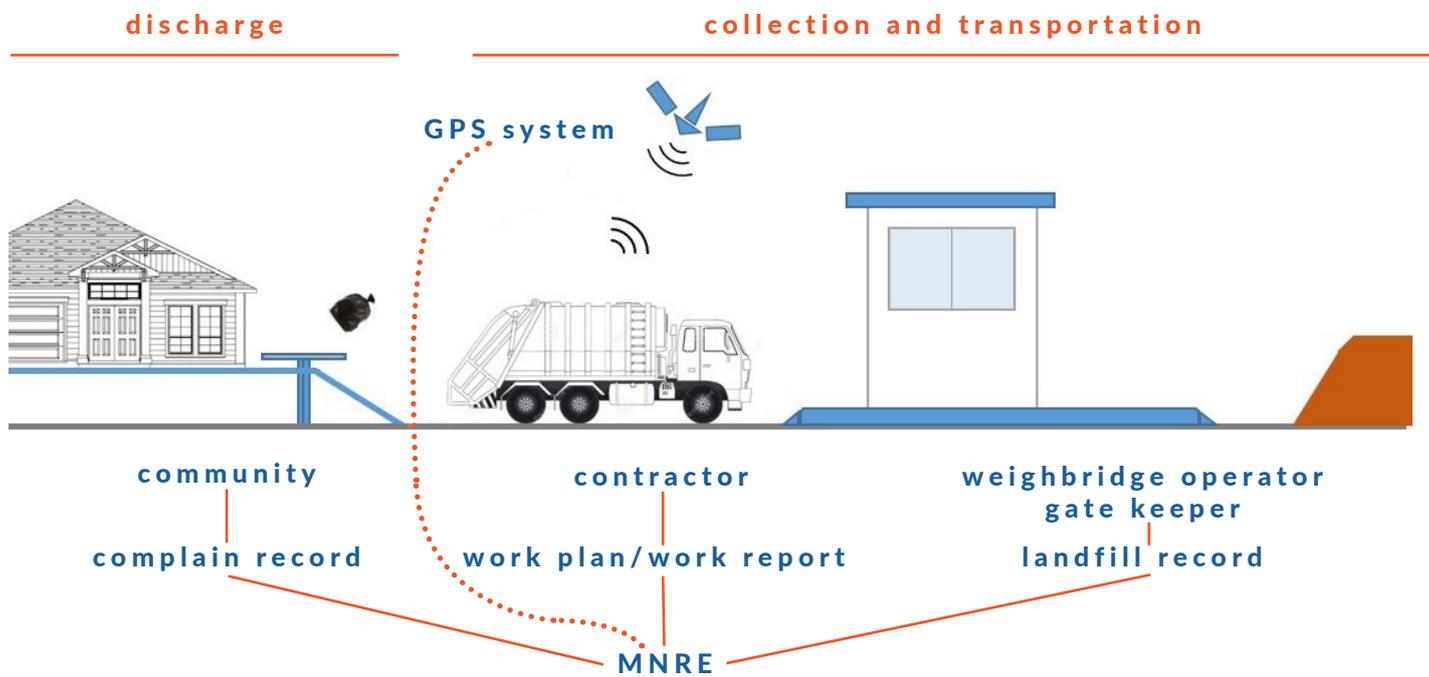
Mayor Beterigo Jacob receives the key to one of the new compacting trash vehicles from Ambassador Michigami.

Procurement of two sets of large monitors with stand for effective waste collection monitoring

Mr. Hiroshi Tsuruta, JICA Expert

The project assisted the procurement of the two sets of large monitors with stands through JICA Samoa office. They were handed over to the Ministry of Natural Resources and Environment of Samoa (MNRE) in October 2021. This procurement aimed at improving effectivity of operation of waste collection monitoring system which was introduced in November 2020 with technical cooperation through Samoa's country output 2 under J-PRISM II. One of the key components of the monitoring system is the **GPS system** which identifies the location of the waste collection vehicle in real time and tracks movement of the collection vehicle from the GPS track record. As the waste collection service

is provided for 19 zones that cover the entire country and each zone consists of the detailed collection routes, it is effective to project GPS system to a large digital screen so that the monitoring officer can easily overview the situation of the wide area avoiding the need to repeatedly zoom in and zoom out. Since the introduction of the waste collection monitoring system the workload of officials for on-site spot monitoring has reduced and the number of complains on waste collection service has decreased. With this procurement, further effective operation of the waste collection monitoring system is expected.





Lautoka City Council, landfill site visit.



Nasinu Town Council.

Technical Cooperation between J-PRISM team and 13 Municipal councils in associated with Department of Local Government (DLG) in Fiji

Mr. Shinnosuke Oda, JICA Expert

J-PRISM II expert team visited all 13 municipal councils in Fiji including those in Vanua Levu and Ovalau islands (old capital city, Levuka, is located in Ovalau). The field trip was joined by the officer from the Department of Local Government (DLG) and the project assistant. The purpose of this visit was to 1) follow up on the finalization of the Waste Management Master Plan, and 2) to brief the content of the new regular monitoring report system from the municipal councils to DLG.

During this trip, the project assistant took on a role of facilitating technical sessions for the health inspectors in each council. This approach proved to be successful. The project assistant has been communicating with the health inspectors regularly since last year providing brief trainings on how to identify dumping spot in GIS and how to record incoming vehicles to waste disposal site. The recording template for disposal site was distributed in January 2022 to the 7 municipal councils that did not have an access to the weigh bridge data. The estimation of waste amount to disposal site is to be made based on number of trips and loading capacity recorded. Most of municipal councils reported a progress of recording at disposal site as trial commenced last month for some councils.

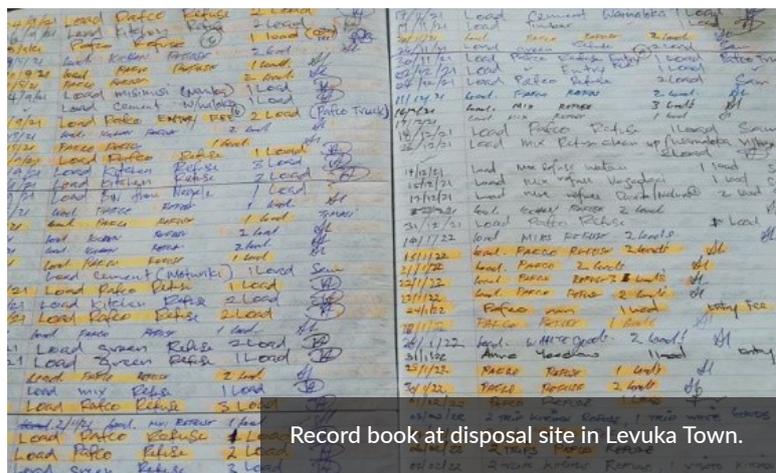


Levuka Town Council, village site visit.

During the trip DLG officer held active discussions about the process of preparing the budget proposal for municipal councils application for collection service in rural area for the next financial year. He also mentioned the importance of the financial sustainability to maintain the service in rural areas long term. The trip has resulted in a decision that the Waste Management Master Plan is to be completed in April. The municipal councils agreed that the new monitoring reporting will commence in April.



Suva City Council.



Record book at disposal site in Levuka Town.

Container Deposit Schemes in the Pacific: A Guide for Policy Makers

Ms. Mayu Nomura, JICA Expert

A Container Deposit Scheme (CDS) is a policy instrument that financially motivates people to collect and bring used beverage containers to a designated Collection Point, so that the beverage container materials can be treated for proper disposal or effective use of resources. Such a scheme builds a financial base for recycling and/or proper disposal of these items, and is part of a class of economic instruments called 'Product Stewardship Schemes' (PSS) which can be used to target a wide variety of materials for recycling.

As of today, there are a number of Pacific Island countries where a CDS is in place for the purpose of recycling or proper disposal. Most recently, Tuvalu commenced their own deposit scheme in 2019 starting with aluminum cans, PET bottles, and lead acid batteries for recovery. J-PRISM phase I has been assisting Palau and Pohnpei State of FSM in this area since 2017. Under the J-PRISM phase II, Chuuk State and Pohnpei State are currently reviewing their existing legislation to improve implementation. In Vanuatu, the Council of Ministers approved the proposed CDS concept in 2019 and as a result a working group was established in 2020 for the purpose of discussing the details of system design with concerned parties involving local manufactures, importers, retailers and, recyclers.

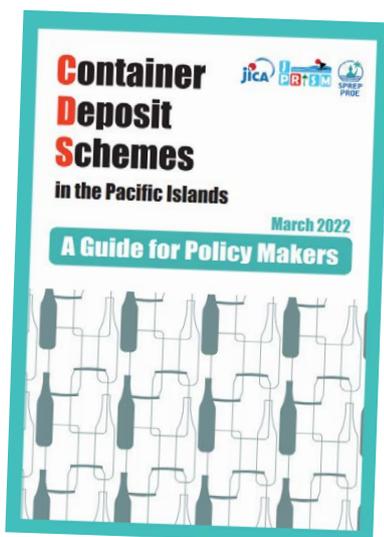
With this background, the guide 'Container Deposit Scheme in the Pacific – A Guide for Policy Makers' was developed to summarize the points necessary for system design regarding CDS based on actual cases in the Pacific Island countries. The aim of this guide is to assist the Pacific Island countries, or any other SIDs, that may wish to consider designing and implementing their own system of CDS.

Many officials have greatly contributed to the compilation of this guide. It would have been nearly impossible to produce this guide without their knowledge and expertise. We thank the officials in the Pacific, in particular Mr. Calvin Ikesiil, Mr. Selby P. Etibek, Mr. Katsuo Fuji, Ms. Christina Fillmed, Mr. Halston Wani de Brum, Ms. Jaqueline Lakmis, and Mr. Walter Pulogo.

Below is the overview of the CDS Guide. We believe that this guide leads you to design the best system to materialize circular economy in your country.

Contents of the CDS Guide

If the reader is interested in developing a CDS for their country, it is recommended in the first instance to read through the guide from the beginning to the end to get a good understanding of the contents, and overall design. Later, the guide may be useful as reference tool concerning specific aspects of CDS design and implementation.



The guide is composed of three parts. The first chapter covers three themes that are essential to consider before getting into the detailed design of the scheme: the key parties, or stakeholders, to work with; different operational models; and possible legal arrangements.

Chapter 1: Building Technical Knowledge

Unit 1: Key Stakeholders

There are three main stakeholder groups: Government, local commerce as represented by importers and local producers of drinks, along with private recyclers and waste collection operators, and the public. As it is the commercial sector who will pay the deposits at the start, it is very important that they are consulted early on in any system development. Any proposed system must have a clear understanding about the local business structure, public engagement that may be required, and government agencies and who bears the various responsibilities.

Unit 2: Operational Model

The management system suitable for the funds and the target materials varies from place to place worldwide. However, there are two main operational model types: the Special Fund Model and the Managing Agency Model, depending on the presence of industry and population size, which can be referred to as a starting point to determine how any CDS might work in a particular country.

Unit 3: Legal Arrangement

Getting a clear idea of the legislative pathway is essential early on, even if the details are worked out later once the system design is clearer.

The following chapters guide the reader through key elements for design of the details of the system, while offering practical methods to examine the feasibility of any proposals.

Download Container Deposit Scheme Guide here:

<https://www.sprep.org/j-prism-2/report-and-materials>



Chapter 2: Designing viable CDS/ conducting feasibility study

Element 1: Deciding the Target Products and Estimating Waste Generation

- Target products can be decided through a situation analysis, including analysis of waste audit data and review of any existing waste recovery, waste management, and recycling activities.
- Estimate the target product amounts by analysis of both local production quantities from businesses and import data from Customs.

Element 2: End of Use Product Management (Material Recovery Facility)

Plan how the collected materials will be treated, and what investment are required. Collected materials may be processed for recycling, reused locally, or otherwise disposed.

Element 3: Mapping the Collection/ Redemption Points

Determine where the Collection Points might be sited so the public can bring items in for refunds.

Element 4: Assessing Who Can Operate the System (System Operator)

Understand what capacity is needed for those who operate the physical collection and refund payment system, including collection, processing, recycling, export, and finance.

Element 5: Estimating the Running Costs (Handling Fee)

Identify how and at what cost the materials will be processed for recycling as well as re-purposing and/or disposal.

Element 6: Determining Refund Rate, and Deposit Rate

Determine the deposit and refund values through understanding the impact to both the public and business of different levels of deposit and refund, so that the impact is as small as possible whilst maintaining the incentive for consumers to bring in the target items.

Element 7: Establishing the Fund Management System

Set up provisions that protect the Recycling Fund, such as keeping it apart from any government revenue accounts, and the reporting system for claiming refunds.

Element 8: Absorbing Legacy Wastes

Estimate potential items that may be returned for refund but on which a deposit has NOT been paid as they were already in the country before system start up, for example existing litter.

Element 9: Data Reporting and Implementation Monitoring

Develop the systems whereby data is recorded and reported to the Fund manager and the regulating agency, so as to evaluate effectiveness and avoid problems developing, such as cash-flow issues.

Chapter 3: Case Studies in the Pacific Island Countries

Chapter 3 details the legislative framework and system design of those CDS already in place in the Pacific Island Countries. Lessons learnt and experience gained from implementation are very valuable.

Marshall Islands

- Legacy waste estimation and financing
- Development of legal framework
- Public awareness

Kiribati

- Satellite collection points
- Collection of legacy waste
- Naming the system

Kosrae State, Micronesia

- Adjustment to deposit rate
- Mobile collection points
- Alternate use for PET and glass

Yap State, Micronesia

- Support from the private sector
- Legacy waste financing
- Counting cans and bottles

Palau

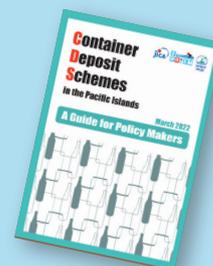
- Two redemption center operators
- Local capacity development for monitoring
- Operation manual

Newly published J-PRISM II's Documents and video

Report and materials



A. Pacific Island Countries Regional Disaster Waste Management Guideline



B. Container Deposit Scheme in the Pacific Islands. A Guide for Policy Makers- (March 2022)

C. Toolkit for Maintenance of Vehicles and Heavy Machinery (March 2022)

1. Pre- & Post- Operation Inspection

Full Requirements for Compactor Truck

Minimum Requirements for Compactor Truck

Full Requirements for Dump Truck and Boom Truck

Minimum Requirements for Dump Truck and Boom Truck

2. Periodic Inspection

Periodic Inspection Standard Check Sheet (Sample)



Full Requirements for Excavator and Bulldozer

Minimum Requirements for Excavator and Bulldozer

How-To Video: Pre-& Post-Operation Inspection



D. Results of the 1st Regional Solid Waste Management Monitoring (January 2022)



E. J-PRISM Waste Audit in Planning and Policy Making-Objectives, Approaches, and Methodology (March 2022)

Lessons Learnt/ Good Practice in the Pacific

<https://www.sprep.org/j-prism-2/lessons-learnt>

Vanuatu	Development of a user-pay system for waste management service	RMI	Introduction of Container Deposit Scheme
Vanuatu	Capacity Development for Local Governments through Partnership	RMI	Landfill Engineering for atoll
Papua New Guinea	City to City Cooperation	FSM	Kosrae State - Intermediate Collection System
Solomon Islands	Capacity Development for Local Government	FSM	Country - Formulation of the State Strategy
Samoa	Formulation of National Strategy	Region	Financial Arrangement in Solid Waste Management
Tonga	Waste Management Service Extension to Outer Islands	Region	Recycling Association Establishment
Palau	Container Deposit Scheme in Peleliu Island		

Message from Project office

Farewell message from Mayu

Ms. Mayu Nomura, JICA Expert

While J-PRISM II has 6 months to go until it ends, I have to say good bye to all of you in the Pacific. I am writing this message from the airplane heading back home to Japan, recalling moments we shared, and the milestones the projects made over the course of time. It was an exciting experience to work on addressing waste management issues in the Pacific. Given the pandemic from early 2020, it's been also challenging for me being a regional project officer to keep facilitating the regional exchanges among the member countries. This being said, I sincerely appreciate your consistent support and commitment to the regional activities such as your active participation in the online trainings and valuable inputs to the CDS guide development. I have learned that it is always important to take small steps, learn from actions, and build up on that especially when you are experiencing something unprecedented. As long as you have a vision, there will be folks who share the same vision and guide you towards accomplishment. I hope that J-PRISM Phase III continues the great work that has been done in the Pacific towards circular economy so far!

Faafetai lava, malo aupito, vinaka, tangkyu tumas, tagio tumas, tenkyu tru, kommoltata, salamat, arigato gozaimashita.



Upcoming events

Micronesia (FSM, Palau, RMI) Joint Coordinating Committee – May 2022 (In Palau and Virtual) (TBC)

J-PRISM 5th Steering Committee Meeting – September 2022 (TBC)

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