MID-TERM REVIEW REPORT

CLEANER PACIFIC 2025

Pacific Regional Waste and Pollution Management Strategy

2016–2025

SPREP PROE

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Acronyms

AS	American Samoa
CDP	Container deposit programme
CI	Cook Islands
CNMI	Commonwealth of the Northern Mariana Islands
CP2025	Cleaner Pacific 2025: Pacific Regional Waste and Pollution Management Strategy 2016–2025
CPRT	Clean Pacific Roundtable
EPR	Extended Producer Responsibility
FJ	Fiji
FP	French Polynesia
FSM	Federated States of Micronesia
GU	Guam
IP	Implementation Plan
JICA	Japan International Cooperation Agency
KI	Kiribati
NA	Nauru
NC	New Caledonia
NI	Niue
PA	Palau
PICTs	Pacific island countries and territories
PNG	Papua New Guinea
RMI	Republic of the Marshall Islands
SA	Samoa
SDGs	Sustainable Development Goals
SI	Solomon Islands
SPREP	Secretariat of the Pacific Regional Environment Programme
SWM	Solid waste management
TK	Tokelau
TO	Tonga
TV	Tuvalu
UNEP	United Nations Environment Programme
UPOPs	Unintentional persistent organic pollutants
VU	Vanuatu
WF	Wallis and Futuna
WCP	Waste, chemicals and pollution

1 Executive summary

This report presents findings from the mid-term review of the Cleaner Pacific 2025: Pacific Regional Waste and Pollution Management Strategy 2016–2025 (CP2025). The mid-term review was requested by the Secretariat of the Pacific Regional Environment Programme (SPREP) as part of CP2025's monitoring and evaluation framework, and funded by the United Nations Environment Programme (UNEP).

The review examined progress made at regional and national levels under the 2016–2019 CP2025 Implementation Plan (IP 2016–2019). More specifically, the review:

- Assessed implementation progress in terms of CP2025's 20 performance indicators and 15 strategic actions, and evaluated their relevance;
- Examined the extent to which IP 2016–2019's 124 activities had been completed, and identified activities requiring further work;
- Evaluated progress towards achieving the strategic goals of CP2025, and relevant Sustainable Development Goals; and
- Identified recommendations to enhance the delivery and regional relevance of CP2025, and to inform a revised Implementation Plan for 2021–2025.

Mid-term review assessments were completed, and findings collated, on a regional and national basis. Key findings and recommendations are highlighted below.

CP2025 implementation successes

At a regional level, seven (of 20) CP2025 performance indicators were found to have exceeded or met their 2020 targets. The seven indicators that demonstrated good progress showed that from 2016 to 2019, the Pacific region achieved:

- **Reduced (average) municipal solid waste generation per capita**
  (2014 baseline and 2020 target of 1.3 kg/person/day; 1.2 kg/person/day estimated for 2020 based on most recent data available);
- **An increased number of container deposit programmes**
  (2014 baseline of four programmes, 2020 target of seven programmes, eight recorded for 2020 in FSM [Kosrae, Pohnpei, Yap], KI, PA, RMI, TV, WF);
- **An increased number of EPR programmes for used oil**
  (2014 baseline of 2 programmes, 2020 target of three programmes, four recorded for 2020 in NC, PA, SA, TV);
- **Increased (average) national waste collection coverage**
  (2014 baseline of 68%, 2020 target of 70%, 74% recorded for 2020);
- **An increased (average) waste recycling rate**
  (2014 baseline of 32%, 2020 target of 60%, 60% recorded for 2020);
- **An increased number of national environmental monitoring programmes**
  (2014 baseline of three programmes, 2020 target of five programmes, 11 recorded for 2020 in AS, CNMI, CI, FSM, FP, GU, PA, RMI, SA, SI, TV); and
- **An increased number of national chemicals and pollution inventories**
  (2014 baseline of two inventories, 2020 target of three inventories, four recorded for 2020 in FSM, KI, PNG, SA).

Based on these performance indicator results it was evident that some progress was made towards achieving all four CP2025 strategic goals: (1) prevent and minimise generation of wastes and pollution, (2) recover resources from wastes and pollution, (3) improve life-cycle management of residuals, and (4) improve monitoring of the receiving environment. However, with six (of 20) performance indicators not meeting their 2020 targets (see below for further details), it is clear that further progress in some areas is required.

Pacific island countries benefited from leadership, technical support and capacity-building provided, or facilitated by, SPREP and JICA/J-PRISM I and II. Examples of the activities progressed at a national level with assistance from SPREP and/or JICA/J-PRISM include:

- Development of waste and WCP (waste, chemicals, pollution) management strategies and plans – FSM (Chuuk, Kosrae, Pohnpei, Yap), KI (still in draft form), NA, PA, RMI (Kwajalein), SA, SI, TV, VU;
- Waste surveys and audits – FSM, PA, PNG, RMI, SA, SI, VU;
- Port waste reception facility gap analyses – FJ, SA, PNG, FP, NC, RMI;
- Container Deposit Programmes – FSM (Chuuk, Pohnpei - recommendations identified for improvement of existing CDP), RMI (establishment), SI, VU (feasibility studies);
- Establishment of national recycling associations – SA, SI, VU, FJ, TV;
- User-pays waste collection systems – FSM (Yap, implementation), SA (investigation and analysis), TO (implementation);
- Landfill design, operation and/or management training/workshops – FSM, PA, PNG, RMI, SI; and
- Disaster waste management training/workshops – FSM, PA, RMI, SA, SI, TO, TV, VU.

In addition to the above, SPREP and JICA/J-PRISM published regional guidance covering topics such as development of solid waste management plans, waste surveys, landfill management, contract management (for private sector services), occupational health and safety, recycling, education and awareness-raising, in conjunction with local experts from FSM, FJ, PA, PNG, SI, TO, VU.

SPREP and JICA/J-PRISM also made significant progress in establishing regional partnerships and developing collaborative initiatives and coordination mechanisms through the Clean Pacific Roundtable and SPREP-led projects (e.g. PacWaste, GEFPAS). The good networks that have been established should be used to promote the sharing of WCP management information and experiences, particularly with countries and territories that are lagging in CP2025 implementation.

Other notable successes were SPREP's publication of *Regulating Plastics in Pacific Island Countries: a guide for policymakers and legislative drafters*, and the *Pacific Regional Action Plan: Marine Litter 2018–2025*. Complementary to these publications, new or amended national laws addressing single-use plastics were introduced in FSM, FJ, GU, KI, NC, NI, PA, RMI and SA.

Some alignment was apparent between CP2025 implementation and the Sustainable Development Goals, with reasonable progress being made towards SDGs 11 (make cities and settlements inclusive, safe, resilient, sustainable), 12 (ensure sustainable consumption and production), and 14 (conserve and sustainably use the oceans, seas and marine resources), particularly in terms of increased national waste collection coverage (SDG 11), an increased regional recycling rate (SDG 12), and new national level laws and initiatives to address marine litter, particularly single-use plastics (SDG 14). However, there is a need to pursue greater alignment with other WCP-related SDGs, namely, 3 (ensure healthy lives and promote wellbeing) and 6 (ensure availability and sustainable management of water and sanitation) – see below for further details.

CP2025 implementation challenges and barriers

With the CP2025 mid-term review being heavily reliant on desktop research, and with there being limited direct input from countries and territories (partly due to COVID-19 travel restrictions, which prevented direct face-to-face engagement within the region), it was difficult to fully ascertain the CP2025 implementation challenges and barriers during the 2016–2019 period. Some key factors were identified, nonetheless, and these are summarised below.

Countries and territories without a WCP or waste management strategy or plan aligned with CP2025, typically made limited progress with CP2025 implementation. While these countries and territories may have pursued WCP initiatives, they were not necessarily linked to the strategic actions and activities of CP2025, and hence, they were difficult to identify and evaluate.

Another implementation barrier for some countries and territories was the absence of a national steering or coordinating committee for WCP management, to provide effective oversight and ensure that WCP management activities were regularly monitored and reported. In combination, WCP waste management strategies or plans and national steering or coordinating committees are important for helping countries and territories to identify progress gaps and to prioritise resourcing. They also encourage implementation accountability to national governments, regional partners and donors.

Limited dedicated WCP resources at a national level are an ongoing issue for most countries and territories, and this has implications for CP2025 implementation between 2016 and 2019. With limited national level capacity, the focus is sometimes more on short-term donor-funded projects (e.g. PacWaste, GEFPAS, Ridge to Reef, INTEGRE), rather than on CP2025 more broadly.

Resourcing shortfalls for some countries were partly addressed through the technical support provided by SPREP and JICA/J-PRISM, and through financial support from donors such as UNEP, European Union, Australia, New Zealand, Japan and France. Countries and territories that did not receive dedicated support from the two main regional implementation partners, SPREP and JICA/J-PRISM, typically lagged in implementation.

Another challenge for countries and territories was related to the political nature of some activities, e.g. establishment of new legislation and/or mechanisms for Container Deposit Programmes and Extended Producer Responsibility schemes. Activities such as these cannot always be implemented quickly, even where clear technical guidance has been provided, as they tend to require high-level government deliberation and sometimes extensive consultation with the private sector, before implementation support can be secured.

Effective monitoring and reporting was a big challenge during the 2016 to 2019 implementation period, at both regional and national levels. SPREP indicated that the development of a monitoring and reporting system, as prescribed under the CP2025 monitoring and evaluation framework, was put on hold due to limited availability of human and financial resources. SPREP staff were juggling country assistance requests and project-related activities (including project-specific monitoring and reporting), and found it difficult to prioritise CP2025 monitoring and reporting. Without regional guidance from SPREP, there was no routine CP2025 monitoring and reporting at a national level. It should be noted, however, that Tuvalu and Vanuatu both completed regular monitoring and reporting against their national WCP strategies and plans.

In the absence of a formal monitoring and reporting mechanism for CP2025, neither SPREP nor the countries and territories were really held accountable for implementation between 2016 and 2019. In turn, this meant that there was no evidence-based means for identifying corrective actions that needed to be taken, or additional support mechanisms required, to improve CP2025 implementation during the first phase of the strategy. The lack of a monitoring and reporting system resulted in significant data gaps at the time of the CP2025 mid-term review. Some of the available data was of poor quality due to the application of inconsistent monitoring and analysis methods across the region. Data confidence was deemed to be 'low' for almost half (eight) of the twenty performance indicators, and there was no, or insufficient, data for evaluating the performance of six indicators. Additionally, the CP2025 progress rating of some countries was impacted due to their lack of data for the CP2025 performance indicators (e.g. PA, PNG, RMI, SI, VU).

Limited resources and funding hampered several activities under IP 2016–2019. These included training for ODS capture and management; used oil management and biosecurity waste management, and a regional assessment of the status of liquid waste management. Liquid waste and wastewater management is not typically a priority area for SPREP, and activities in this area (e.g. infrastructure improvements) tend to require significant financial investment. There is, nonetheless, a recognised need to improve liquid waste and wastewater management as part of working towards the CP2025 vision of "A cleaner Pacific environment", but this area will require specific attention and support from donors to progress.

CP2025 implementation gaps and opportunities

At a regional level, six (of 20) performance indicators did not meet their 2020 targets, these were:

- **No. of marine pollution incidents**
  (target of zero, five incidents recorded in FJ, NC, PNG [2], SI);
- **No. of port waste reception facilities**
  (target of 10, five facilities recorded in FJ, FP, NC, PNG, SA – no change from the 2014 baseline);
- **No. of PICTs with national, state or municipal composting programmes**
  (target of 17, 14 recorded in AS, FSM, FJ, FP, GU, NA, NI, PA, PNG, RMI, SA, SI, TV, VU);
- **No. of national EPR programmes for e-waste**
  (target of five, two programmes recorded in NC, SA);
- **No. of PICTs with national, state or municipal user-pays systems for waste collection**
  (target of 14, 13 user-pays systems recorded in AS, FSM, FJ, GU, KI, NA, NC, PA, PNG, RMI, SI, TO, VU); and
- **Quantity of used oil stockpiles**
  (target of 1480 m^3, 4866 m^3 recorded).

The above suggests that there is further work to be done in the areas of marine pollution prevention and control; organic waste, e-waste and used oil management; and establishment of user-pays systems for waste collection.

Based on progress results from the national level CP2025 assessments, some of the broad areas requiring further work that were identified include:

- **Development and expansion of routine monitoring and reporting**, e.g. for WCP management activities and the receiving environment – relevant to all countries and territories;
- **Development and finalisation of integrated WCP strategies, policies and action plans** aligned with CP2025 – particularly relevant to AS, CNMI, FJ, FP, KI (current draft very close to finalisation), NC, NI, PNG, RMI, TK, TO, WF, but also to FSM and VU, as their current strategies and plans end in 2020. It should also be noted that SI, TV and VU were the only countries that developed and endorsed integrated WCP strategies and policies between 2016 and 2019 (i.e. strategies and policies covering waste streams beyond solid waste, including hazardous wastes such as used oil, healthcare waste, chemicals, liquid waste, e-waste, asbestos). Where feasible, countries and territories should be encouraged to develop integrated WCP strategies and policies to ensure more complete alignment with the scope of CP2025;
- **Development of practical and enforceable WCP legislation** – particularly relevant to Nauru and Papua New Guinea;
- **Development of public-private partnerships** e.g. for container deposit, EPR and recycling programmes – particularly relevant to AS, CNMI, CI, FSM, FJ, GU, NA, NI, PA, PNG, RMI, TO, WF;
- **Implementation of WCP prevention and reduction programmes** – relevant to all countries and territories;
- **Management of hazardous waste, including development of inventories** – relevant to all countries and territories;
- **Improvement of WCP management infrastructure**, working towards sustainable operation and maintenance – particularly relevant to AS, CNMI, CI, FSM, FP, GU, KI, NC, NI, PA, RMI, SA, SI, TV, VU; and
- **Development and implementation of WCP education and behavioural-change programmes** – particularly relevant to FSM, SA, SI, TK, TV, VU.

The importance of national WCP steering or coordinating committees was referred to under implementation challenges and barriers. Further consultation should take place with countries and territories (except with GU, PNG, SA, TV, who have active national committees), to confirm if committees are in place, if they need to be established, and if establishment assistance is required.

A number of specific activity gaps were identified as part of assessing progress against the 124 activities in IP 2016–2019. Key activities that should be considered for the second implementation phase of CP2025, especially in light of the CP2025 performance indicator results and the broad areas for further work referred to above, include: development of national disaster waste management plans; updating of national oil spill contingency plans; development of public-private partnerships to support waste management initiatives (e.g. EPR, container deposit, recycling); implementation of national measures to restrict and regulate the importation, handling, storage and sales of hazardous substances; evaluation and scaling up of organic waste recycling programmes; and development of WCP equipment and maintenance capacity.

Recognising the significant data gaps that exist across all countries and territories, and the low data confidence for eight (of 20) CP2025 performance indicators, there is a clear need to support and prioritise CP2025 monitoring and reporting. This can be done through establishing mechanisms and guidelines for the collection, analysis and storage of relevant data (e.g. templates, databases); through standardising data collection and analysis methodologies across all countries and territories, as well as regional partners and donors (especially for indicators like municipal solid waste generation per capita, waste recycling rate, waste collection coverage); and through providing national level capacity-building for monitoring and reporting, where it is needed.

It is understood that SPREP and JICA/J-PRISM II are doing work to help countries and territories undertake regular and consistent monitoring and reporting – this should definitely be continued and may benefit from additional donor support. Adopting proposed revisions for some of the performance indicators, baselines and targets; and closely reviewing the national WCP monitoring and reporting frameworks established by Tuvalu and Vanuatu, may also assist with establishing a more robust CP2025 monitoring and reporting framework.

In terms of CP2025 and linkages with WCP-related SDGs, further consideration needs to be given to addressing SDGs 3 (ensure healthy lives and promote wellbeing) and 6 (ensure availability and sustainable management of water and sanitation), in terms of implementation of relevant activities and also SDG-focused monitoring and reporting, to clearly demonstrate progress is being made. Evidence of progress is currently limited for SDGs 3 and 6, although relevant work is certainly being done (e.g. SDG 3: air quality studies in FJ, SI, NC; SDG 6: secondary wastewater treatment capacity in CNMI, FJ, FP, GU, NC, SA and regular water quality monitoring in AS, CNMI, CI, FSM, FP, GU, PA, RMI, SA, SI, TV).

IP 2016–2019 assessment, and recommendations for IP 2021–2025

IP 2016–2019 was ambitious in its scope (124 activities) and did not include a practical framework for progress monitoring and assessment (20 overarching performance indicators linked to the CP2025 strategic goals, plus 124 activity-linked KPIs not linked to the strategic goals). It is thus unsurprising that no progress was made with almost one-third (39 or 31%) of the activities listed in IP 2016–2019. Good progress was achieved for 30 activities (24%), and limited progress was achieved for 55 (44%) of activities. On the basis of these latter figures, 30 to 40 activities is deemed to be a reasonable estimate of the number of activities that can be feasibly implemented with full effect, within a four-year period.

It is strongly recommended that a streamlined approach be adopted for IP 2021–2025. The over-arching CP2025 performance indicators should be the primary means for assessing implementation progress, as they are clearly linked to CP2025's strategic goals and allow for focused and achievable performance evaluation at both regional and national levels. The effectiveness and validity of some of the current performance indicators is, however, reduced by unclear or incorrectly calculated baselines, data analysis variability, and limited data availability. Some indicators will benefit from revision to support more robust monitoring and reporting (see Table 3 in section 4.1.1 and Appendix 2 for further details and suggestions). Revised (or new) performance indicators must be clear and meaningful, with realistic targets.

IP 2021–2025 should focus on a limited number of high-priority activities that address key implementation gaps, as well as current priority issues for Pacific island countries and territories (i.e. activities which countries and territories are already focused on progressing, or which they are particularly keen to progress over the next few years). Some starting points for identifying high-priority activities are the activity gaps listed in Table 4, section 4.1.2, and the strategic actions requiring further work listed in Table 8, section 4.2.3, (also referred to in the previous section, implementation gaps and opportunities). It will be important to ensure that all activities are logically linked to CP2025's performance indicators and strategic goals, so they can effectively advance progress towards these. This linkage will also allow for more straightforward progress monitoring and assessment.

Given the complexity that exists across the region there will always be a degree of tension between developing a regional implementation plan with appropriately detailed activities, while ensuring sufficient scope for activities to be tailored at a national level to address the specific needs of different countries and territories. A mix of prescriptive, detailed activities for a sub-set of Pacific island countries and territories, and broader activities applicable to all, with sufficient scope for national level tailoring, is likely to be required.

CP2025 strategic goals 1 (prevent and minimise generation of wastes and pollution), 2 (recover resources from wastes and pollutants), and 3 (improve life-cycle management of residuals) remain relevant and valid for IP 2021–2025. Strategic goal 4 (improve monitoring of the receiving environment) is limited in scope. Strategic goal 4 should be revised to "improve monitoring and reporting", to encompass monitoring and reporting for both WCP management activities and the receiving environment.

2 Background and objectives

The Cleaner Pacific 2025: Pacific Regional Waste and Pollution Management Strategy 2016–2025 (CP2025) is a comprehensive, long-term strategy for waste management and pollution prevention and control in the Pacific islands region. It was developed in consultation with SPREP's 21 Pacific island members along with financial and technical support from the Japan International Cooperation Agency (JICA). CP2025 outlines four strategic goals and 15 strategic actions to address priority waste and pollution issues in the region. SPREP and Pacific island countries and territories are responsible for the delivery of these actions, with deliverables articulated in the 2016–2019 CP2025 Implementation Plan (IP 2016–2019).

With the first implementation phase for CP2025 now ended, SPREP requested that a mid-term progress review be completed in line with CP2025's monitoring and evaluation framework. This mid-term review report thus addresses two main objectives, to:

- Verify and evaluate CP2025 implementation progress from 2016–2019; and
- Identify necessary corrective actions and strategic recommendations for the second half of the CP2025 implementation period, 2021–2025, to form the basis of a revised Implementation Plan.

3 Methodology

3.1 Overview

The CP2025 mid-term review involved five main activities:

- Desktop review of regional strategies and plans; national legislation, policies, strategies, plans and websites; technical, project, meeting and workshop reports; and international frameworks relevant to waste management and pollution control (refer to Appendix 6 for a list of documents reviewed);
- Based on the desktop review, assessment of CP2025 implementation progress at a regional and national level,[1] and assessment of progress towards the Sustainable Development Goals (further details below);
- Distribution of the regional assessments to SPREP, UNEP and JICA; and distribution of the national assessments to SPREP, UNEP and the 21 Pacific island countries and territories for review, validation and/or input of additional information;
- Skype meetings with SPREP and UNEP to support the design and delivery of the mid-term review, and with government officials from Pacific island countries and territories to support data collection and validation (refer to Appendix 7 for a record of stakeholder consultation); and
- Identification of implementation successes, challenges, gaps and opportunities; and strategic recommendations to enhance the delivery and regional relevance of CP2025, and to inform a revised Implementation Plan for 2021–2025.

All consultation was conducted remotely due to the mid-term review being completed during the COVID-19 pandemic.

3.2 Regional progress assessment

The 2016–2019 Implementation Plan included two levels of performance assessment: (1) 20 overarching performance indicators linked to CP2025's four strategic goals, and (2) 124 key performance indicators (KPIs) linked to 124 activities (note, the KPIs did not correspond directly to the CP2025 strategic goals). To account for this complexity, the regional level progress assessment examined:

1. The 20 performance indicators and four strategic goals in CP2025;

- the 2020 status of the performance indicators was assessed at a regional level, with reference to 2014 baseline data;
- progress towards achieving the strategic goals was determined, based on the 2020 status of linked performance indicators; and
- the relevance and suitability of the performance indicators and strategic goals was evaluated for the next CP2025 implementation period, 2021–2025.

2. The 15 strategic actions, 124 activities and 124 key performance indicators (KPIs) in IP 2016–2019

- The 124 activities were evaluated with reference to their KPIs, and given a rating of:

'**good progress**' – activity completed, or clear KPI-based evidence of progress, and/or ≥ half of the priority PICTs progressed the activity;

'**limited progress**' – activity progress was made but could not be easily assessed against the KPI, or < half of the priority PICTs progressed the activity; or

'**no progress**' – no evidence for activity progress reported by lead agencies, or no evidence found during the desktop review

- across the 15 strategic actions, areas requiring further effort were identified, based on the activity assessments.

[1] The regional and national level progress assessments focused on analysis of activities and achievements within the scope of IP 2016–2019.

3.3 National progress assessments

Individual progress assessments were completed for each of the 21 Pacific island countries and territories for the initial implementation phase of CP2025, 2016–2019. Assessment comprehensiveness varied between countries and territories depending on data and information available at the time of the CP2025 mid-term review (April–July 2020).

Each national level progress assessment examined:

1. Waste, chemicals and pollution (WCP) legislation, policies, strategies, plans

- the status of WCP legislation,[2] policies, strategies and plans at the commencement of CP2025 (2016) was compared with their 2020 status.

2. The 20 performance indicators in CP2025

- the 2020 status of the performance indicators was assessed at a national level, with reference to 2014 baseline data.

3. The 15 strategic actions and relevant, linked activities[3] in IP 2016–2019

- activities progressed by countries and territories were documented for each of the 15 strategic actions; and
- based on the number of activities progressed or not progressed, the strategic actions were assigned a 'good progress', 'limited progress' or 'no progress' rating at a national level.

Progress assessment results were then reviewed across 1 (WCP legislation, policies, strategies, plans), 2 (CP2025 performance indicators), and 3 (strategic actions and activities), and five activity areas requiring further work were identified for each country or territory. An overall CP2025 progress rating of 'good', 'fair' or 'limited' was also assigned to each country or territory (explained in Table 1).

TABLE 1 Ratings and criteria for determining CP2025 progress at a national level

PROGRESS RATING	CRITERIA
GOOD	≥ 5 (out of 20) performance indicators improved* AND Good and/or limited progress achieved for ≥ 8 (out of 15) strategic actions
FAIR	≥ 5 (out of 20) performance indicators improved* AND Good and/or limited progress achieved for < 8 (out of 15) strategic actions OR < 5 (out of 20) performance indicators improved* AND Good and/or limited progress achieved for ≥ 8 (out of 15) strategic actions
LIMITED	< 5 (out of 20) performance indicators improved* AND Good and/or limited progress achieved for < 8 (out of 15) strategic actions

*The low assessment threshold for performance indicators accounts for the data gaps that still exist across all PICTs.

[2] Assessment of national legislation was preliminary, and involved briefly examining whether different waste, chemicals and pollution categories are listed or broadly referred to under national laws or regulations. A detailed analysis of definitions, specific legislative provisions, state and local laws, and the extent to which laws are being enforced, was beyond the scope of the CP2025 mid-term review.

[3] IP 2016–2019 listed multiple activities under each strategic action, with some activities to be led by PICTs and some to be led by SPREP and its regional partners. The national level progress assessments focused on PICT-led activities only. The number of relevant, linked activities under each strategic action varied between PICTs, with some activities prioritised for all PICTs and others prioritised for a subset of PICTs. In a few instances some PICTs completed activities beyond their priority list. These non-priority activities were recorded, to capture all CP2025 implementation progress.

3.4 Sustainable Development Goals (SDGs) assessment

Following the regional and national level CP2025 progress assessments, progress towards the SDGs was assessed, based on a review of pertinent CP2025 performance indicators and relevant activities progressed under IP 2016–2019.

3.5 Data limitations

The latest and most comprehensive data available were collated and analysed for the CP2025 mid-term review. Some of the data and information originated from primary sources, but secondary sources were also used.[4] Limitations with the data include: varying methodologies for data collection and analysis; datasets from different time periods; partial or no data available for some of the indicators; inconsistent coverage of urban and rural areas; outdated data (especially in the case of national websites); and difficulties determining if some project-based activities and initiatives have continued, if they were ultimately successful, and what outcomes were achieved.

Notations have been used throughout this report for transparent data collation and analysis. In some cases, it is difficult to draw definitive conclusions about CP2025 progress, given the data limitations. Despite this, the report collates information from a range of sources across the region, provides a comprehensive assessment of CP2025 progress to date, and identifies clear recommendations for moving forward with CP2025 implementation. One of the recommendations (detailed below) relates to the need for standardised monitoring and reporting at both national and regional levels. This recommendation, if addressed, should help to overcome some of the data limitations outlined here. It is understood that both SPREP and JICA are currently developing methods and building capacity to facilitate improved data collection, monitoring and reporting at national and regional levels.

4 Results and discussion

4.1 Regional progress assessment

4.1.1 The 20 performance indicators and four strategic goals in CP2025

Detailed information for, and analyses of, the CP2025 performance indicators is provided in Appendix 2, including notes on data availability and data confidence, and recommendations for strengthening the indicators to support robust tracking of CP2025 performance across time.

Appendix 1 collates performance indicator data across the 21 Pacific island countries and territories. The data are summarised at a regional level in Table 2, below.

During assessment of the performance indicator data it was found that:

- Calculation and determination of two of the 2014 indicator baselines was unclear, so the baselines and their associated 2020, 2025 targets were recalculated using a clearly defined method;
- One additional 2014 indicator baseline and its associated 2020, 2025 targets needed to be recalculated using a revised method to allow for "like for like" comparisons with 2020 data;
- Calculation of one 2014 baseline was incorrect, so it was revised; and
- Three of the indicators were difficult to evaluate due to data limitations, uncertainties or ambiguities, so the indicators were rephrased to allow for meaningful analyses.

The revised indicators, baselines and targets are referred to throughout this report, where appropriate.

Table 2 provides a regional level overview of progress between 2014 and 2020, with regard to the four strategic goals and 20 performance indicators from CP2025. In summary:

- **Strategic goal 1**, *Prevent and minimise generation of wastes and pollution and their associated impacts*: one indicator exceeded the 2020 target (municipal solid waste generation per capita);[5] and two indicators did not meet their targets.
- **Strategic goal 2**, *Recover resources from waste and pollutants*: two indicators exceeded their 2020 targets (container deposit programmes, EPR programmes for used oil); one indicator met the target (waste recycling rate); and two indicators did not meet their targets.
- **Strategic goal 3**, *Improve life-cycle management of residuals*: one indicator exceeded the 2020 target (national waste collection coverage); two indicators did not meet their targets; six indicators had no or insufficient data; and a new baseline was established for one indicator.
- **Strategic goal 4**, *Improve monitoring of the receiving environment*: two indicators exceeded the 2020 target (water or environmental quality monitoring).

Overall, progress has been made towards achieving all four strategic goals, and in particular, strategic goal 4, with both indicators exceeding their targets. There is, however, considerable work to be done overall, given only seven of 20 performance indicators exceeded or met their 2020 targets. Efforts need to be made to improve data collection for the indicators related to strategic goal 3 – this is likely to be assisted by revising some of the indicators, as per recommendations detailed in Appendix 2 and discussed further, below.

TABLE 2 Performance indicators and targets for CP2025[1]

EXCEEDED TARGET | MET TARGET | DID NOT MEET TARGET | NO / INSUFFICIENT DATA | NEW BASELINE

VISION	**A cleaner Pacific environment**
MISSION	**To implement practical and sustainable solutions for the prevention and management of waste and pollution in the Pacific**

STRATEGIC GOALS	Performance indicators[1]	2014 baseline	2020 target	2020 actual	2025 target	Data confidence[6]
1 Prevent and minimise generation of wastes and pollution and their associated impacts	Per capita generation of municipal solid waste (kg/person/day)	1.3	1.3	1.2	1.2[A]	Low
	No. of marine pollution incidents	6	0	5[a]	0	Low
	No. of port waste reception facilities	5	10	5[b]	10[A]	High
2. Recover resources from wastes and pollutants	Waste recycling rate (=amount recycled, reused, returned/amount recyclable) (%)	32[A]	60	60	75	Low
	No. of PICTs with national, state or municipal composting programmes[2]	15[A]	17[A]	14[c]	18[A]	Medium
	No. of national or state container deposit programmes	4	7	8[d]	10	High
	No. of national Extended Producer Responsibility programmes for used oil	2	3	4[e]	10	Medium
	No. of national Extended Producer Responsibility programmes for e-waste	1	5	2[f]	8	Medium
3 Improve life-cycle management of residuals	No. of PICTs with national, state or municipal user-pays systems for waste collection[2]	9	14	13[g]	21	High
	Waste collection coverage (% of national population)[3]	68[A]	70[A]	74	75[A]	Medium
	Waste capture rate (= amount collected /amount generated) (%)	Insuff. data	Est. baseline & targets	46	50A	Low
	No. of temporary, unregulated and open dumps[4]	> 250 / 333B	237 / 316[B]	Insuff. data	225 / 300B	Low
	Quantity of asbestos stockpiles[4,5] (m^2)	> 187,891	159,700	Insuff. data	131,500	Low
	Quantity of healthcare waste stockpiles (tonnes)	> 76	< 20	ND	0	NA, updated data unavailable
	Quantity of e-waste stockpiles (tonnes)	Insuff. data	Est. baseline & targets	Insuff. data	Est. baseline	Low
	Quantity of used oil stockpiles (m^3)	2,961[A]	1,480	4,886	1,480[A]	Medium
	Quantity of pharmaceutical and chemical stockpiles (tonnes)[4]	Insuff. data	Est. baseline & targets	ND	Est. baseline & targets	NA, no data

STRATEGIC GOALS	Performance indicator[s1]	2014 baseline	2020 target	2020 actual	2025 target	Data confidence[6]
3 Improve life-cycle management of residuals	Urban sewage treated to secondary standards (%)[4]	65	Est. after regional assessment	ND	Est. after regional assessment	NA, no data
4 Improve monitoring of the receiving environment	No. of PICTs with water or environmental quality monitoring and reporting programmes[2]	~ 3	5	11[h]	14[A]	Medium
	No. of national chemicals and pollution inventories[4]	2	3	4i	6	Low

1 = performance indicators are colour-coded based on whether the 2020 target was exceeded, met, or not met; there was no/insufficient data for target assessment; or a new baseline was established in 2020; 2 = phrasing revised for the performance indicator; 3 = only national waste collection coverage is reported here, but Appendix 1 also has data for urban waste collection coverage – 88% coverage in 2020, which is below the target of 100%; 4 = it is recommended that this indicator be changed/removed from the next CP2025 implementation plan, due to data uncertainties or limitations (see Appendix 2 for details); 5 = it is inaccurate to use the term "stockpiles" for asbestos in the Pacific, as it is still very much a part of houses and buildings, and in some instances, occurs as large amounts of broken debris on the ground; 6 = data confidence is based on data availability and underlying data variability, refer to Appendix 2 for details; a = marine pollution incidents recorded for FJ (1), NC (1), PNG (2), SI (1); b = port waste reception facilities in FJ, FP, NC, PNG, SA; c = composting programmes identified in AS, FSM, FJ, FP, GU, NA, NI, PA, PNG, RMI, SA, SI, TV and VU; d = operational CDPs identified in FSM (Kosrae, Pohnpei, Yap), KI, PA, RMI, TV and WF; e = used oil EPR programmes identified in NC, PA, SA and TV; f = e-waste EPR programmes identified in NC and SA; g = user-pays waste collection systems identified in AS, FSM, FJ, GU, KI, NA, NC, PA, PNG, RMI, SI, TO and VU; h = monitoring programmes identified in AS, CNMI, CI, FSM, FP, GU, PA, RMI, SA, SI and TV; i = chemicals/pollution inventories identified in FSM, KI, PNG and SA; NA = not applicable; ND = no data; A = revised baseline or target; B = CP2025 reports two different sets of figures for the 2014 baseline and the 2020, 2025 targets.

Data confidence was evaluated for all performance indicators, based on data availability across all countries and territories, and an assessment of underlying data variability. Data confidence was deemed to be 'low', 'medium' and 'high' for eight, six and three indicators, respectively. Data confidence could not be determined for three indicators due to data limitations. Further work is required to improve data confidence, through (1) supporting and prioritising monitoring and reporting for WCP management (i.e. data collection, analysis and secure storage), across all Pacific island countries and territories; and (2) standardising data collection and analysis methodologies across countries and territories, regional partners and donors (especially for indicators like municipal solid waste generation per capita, waste recycling rate, waste collection coverage).

A detailed review of the performance indicators (Appendix 2) identified five indicators with considerable data limitations, i.e. incomplete or no data available, or uncertainties about data accuracy and calculation of baselines. Based on these findings, proposed performance indicator changes are summarised in Table 3 for the 2021–2025 Implementation Plan.

In line with the proposed changes to the performance indicators associated with strategic goal 4, it is proposed that the goal be revised to, "improve monitoring and reporting", so that it encompasses monitoring and reporting for the environment and also for WCP management activities. Strategic goals 1, 2 and 3 remain relevant and valid and do not require revision.

TABLE 3 Proposed changes to CP2025 performance indicators

Original indicator (linked strategic goal)	Revised indicator (linked strategic goal)	Justification
No. of temporary, unregulated and open dumps (SG 3)	No. of PICTs with regularly monitored and maintained, climate-proof waste disposal facilities (SG 3)	Uncertain 2014 baseline and incomplete 2020 dataset, with questionable data accuracy. Revised indicator will reveal how PICTs are progressing with improving or maintaining their SWM infrastructure facilities. It should be supported by a clear explanation and a set of criteria to facilitate consistent monitoring and reporting across all PICTs.
Quantity of asbestos stockpiles, m^2 (SG 3)	No. of national strategies for safe and effective asbestos management and remediation (SG 3)	Asbestos in the Pacific is mostly part of houses and buildings, or occurs as broken debris – stockpiles do not typically exist. Determination of the 2014 baseline is highly uncertain and cannot be easily compared with more recent data for quantities of asbestos removed from countries. Revised indicator is based on recommendations from the PacWaste asbestos surveys and will indicate how PICTs are progressing with asbestos management.
Quantity of pharmaceutical and chemical stockpiles, tonnes	No revision, remove from Implementation Plan	No data available for 2014 or 2020. Pharmaceutical waste is a category of healthcare waste, so it is effectively included under the indicator, "Quantity of healthcare waste stockpiles".
Urban sewage treated to secondary standards, % (SG 3)	No. of PICTs providing secondary or better wastewater treatment (SG 3)	It is unclear how the 2014 baseline was determined (no reference provided in CP2025). The Pacific Water and Wastewater Association does collate data for percentage of sewage treated to primary and secondary standards across PICTs, but reporting is inconsistent and does not appear to be entirely accurate. Revised indicator will reflect wastewater management capacity and quality, and infrastructure upgrades over time.
No. of national chemicals and pollution inventories (SG 3)	No. of PICTs with WCP monitoring and reporting programmes (SG 4)	It is unclear how the 2014 baseline was determined. Broader, more comprehensive WCP monitoring and reporting programmes should be implemented in line with the regional WCP monitoring system being developed by SPREP and partners. A broader programme could encompass WCP services, infrastructure, stockpiles, waste generation rates, recycling, compliance monitoring and enforcement activities.
–	No. of endorsed and current national strategies and policies for waste management, with monitoring and reporting frameworks (SG 4)	This is a new indicator. CP2025 and the IP 2016–2019 do not include an indicator that reflects the development and endorsement of national strategy/policy frameworks.

4.1.2 Fifteen strategic actions, 124 activities and 124 KPIs in IP 2016–2019

Appendix 3 details known progress for all 15 strategic actions, 124 activities and 124 KPIs in IP 2016–2019. Table 4 provides a regional level summary of activity progress and gaps, based on the information in Appendix 3.

At a regional level it was found that good progress was achieved for 30 activities (24%), limited progress was achieved for 55 activities (44%), and there was no progress with 39 activities (31%). For 11 activities that were not progressed, SPREP indicated that there were no resources or funding to support activity implementation (refer to Table 4, activities highlighted in blue). Arguably, many of these activities were not resourced or funded because they were not identified as being high priorities for the region, or for the 2016–2019 implementation period; or they were not practical to pursue, e.g. preparation of regional guidance for polluter-pays programmes, waste-to-energy systems, and WCP communications and education, may not provide the level of detail necessary or include appropriate contextualisation for effective implementation at a national level (which should be the ultimate end-goal).

Overall, some degree of progress was achieved across all strategic actions specified in IP 2016–2019, however, based on the activity assessments only strategic action 13 was effectively achieved: *SPREP,*

PICTs, and partners shall establish a regional Clean Pacific Roundtable (CPRT) to coordinate and facilitate waste management and pollution control dialogue and networking in the region. A detailed analysis of CPRT outcomes has not been completed, but it is nonetheless evident that the CPRT has been an effective mechanism for bringing together countries and territories, regional partners and donors to discuss and examine progress with CP2025 implementation, and to share experiences with WCP management more broadly.

Least progress was made with strategic action 5: *PICTs, supported by SPREP and partners, shall implement WCP prevention and reduction programmes*. This strategic action encompassed 14 wide-ranging activities, addressing a range of issues from polluter-pays programmes, to durable white goods, imported used products, perishable goods, UPOPs, fishing gear, chemicals and hazardous substances. Like other strategic actions with a high number of associated activities (e.g. strategic actions 1, 2, 9 and 11), it is arguable that the list of activities could have been reduced through focusing on priority issues. In addition, a number of activities seemed to be unnecessarily split, and this added to the activity total (e.g. 5.2 Review regional guidance to identify suitable options for national implementation of polluter-pays programmes; 5.3 Undertake a national cost-benefit analysis of options to implement polluter-pays programmes; 5.4 Prepare a Cabinet paper on implementation of the recommendations of the cost-benefit analysis). Another issue is that some activities were unclear, with uncertainty surrounding their scope and the priority outcome(s) to be pursued (e.g. 5.12 establish a taskforce of stakeholders from the public and private sectors and civil society to develop and implement voluntary WCP reduction schemes in the private sector).

Looking across IP 2016–2019 with its total of 124 activities, it is apparent that the plan was over-ambitious from the outset, and it is unsurprising that no progress was made with almost one-third of the listed activities. The Implementation Plan for the next phase of CP2025 should be based on the activity gaps that have been identified through the review of IP 2016–2019 (see Table 4), but it needs to focus on issues that are high-priorities for the region, to ensure the plan is feasible and can effectively direct and use limited resources. Based on the activity gaps listed in Table 4, some issues and areas for further work may include:

- Regular, consistent monitoring and reporting at regional and national levels for WCP management activities, waste generation, hazardous waste, contaminated sites, WCP stockpiles, and the status of the receiving environment;
- Regional assessments by SPREP of marine pollution risk, the status of liquid waste management, and air pollution management;
- Development of national disaster waste management plans;
- Updating of national oil-spill contingency plans;
- Development and finalisation of integrated WCP strategies, policies and action plans for remaining countries and territories;
- Further development of public-private partnerships to support waste management initiatives e.g. EPR, container deposit and recycling;
- Implementation of national measures to restrict and regulate the importation, handling, storage and sales of hazardous substances;
- Evaluation and scaling up of organic waste recycling at a national level;
- Implementation of national policies and legislation to support collection, removal and disposal of legacy wastes;
- Development of WCP equipment and maintenance capacity within Pacific island countries and territories;
- Improvement of national WCP infrastructure and services (e.g. for chemicals and hazardous waste, liquid waste, biosecurity waste, waste collection services), incorporating sustainable financing measures;
- Regional assessment by SPREP of soil, water and air quality to identify specific areas for strategic monitoring intervention;
- Regional and national training and capacity development (e.g. ODS, mercury, used oil, biosecurity waste, disaster waste management; compliance monitoring, enforcement, prosecution; delivery of WCP education and awareness-raising); and
- Establishment of national WCP steering committees to support coordination and monitoring of WCP activities across responsible agencies.

TABLE 4 Regional level summary of activity progress and gaps in the delivery of IP 2016–2019[6]

Theme[7]	Strategic actions and activity summary (good, limited, no progress)[8]	Examples of activity progress[9]	Activity gaps9, [10]
Strengthen institutional capacity	**1** SPREP, PICTs and partners shall undertake regular WCP data collection and management (including storage, interpretation, dissemination and sharing) **Good progress = three activities** **Limited progress = six activities** **No progress = four activities**	▪ WCP assessment & inventory methods developed and published by SPREP, JICA, PRIF ▪ Training on chemicals management and inventory development delivered to 441 individuals across 14 of 21 PICTs (CI, FSM, FJ, KI, NA, NI, PA, PNG, RMI, SA, SI, TO, TV, VU) ▪ Oil spill capabilities for all countries assessed in a regional score card ▪ WCP assessments completed by seven of 21 PICTs (CNMI, FSM, FJ, PA, RMI, SA, TV) ▪ Data collection, monitoring and reporting programmes for either the receiving environment and/or WCP management activities implemented by 12 of 21 PICTs (AS, CNMI, CI, FP, FSM, FJ, GU, PA, PNG, RMI, SI and TV)	▪ Regular, consistent monitoring and reporting at regional and national levels for WCP management activities, waste generation, hazardous waste (including chemical stockpiles), and the receiving environment ▪ Development and maintenance of a regional database by SPREP, including data for WCP management activities and the receiving environment ▪ Regional assessments by SPREP of marine pollution risk, the status of liquid waste management, and air pollution management ▪ Completion of port waste reception facility gap analyses (currently completed for six of 21 PICTs - Suva (FJ), Lautoka (FJ), Apia (SA), Port Moresby (PNG), Papeete (FP), Noumea (NC), Majuro (RMI)
	2 PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation, and strengthen institutional arrangements to support and promote best-practice WCP management **Good progress = two activities** **Limited progress = eight activities** **No progress = four activities**	▪ Six model guidelines and regulations prepared for the region addressing solid waste management, healthcare waste, e-waste, used oil, UPOPs, plastics ▪ Institutional arrangement reviews for WCP management completed by 10 of 21 PICTs (CI, FSM, KI, PA, PNG, RMI, SA, SI, TV, VU) ▪ New waste and WCP management policies, strategies, plans developed by 12 of 21 PICTs (CI, FSM, FJ, KI, NA, PA, PNG, RMI, SA, SI, TV, VU) ▪ New WCP legislation introduced, or WCP legislation amended in 15 of 21 PICTs (AS, CNMI, FSM, FJ, FP, GU, KI, NC, NI, PA, RMI, SA, TV, VU, WF)	▪ Preparation of a regional template by SPREP to guide the development of national pollution prevention strategies (NATPOLs) ▪ Development of national disaster waste management plans ▪ Updating of national oil-spill contingency plans ▪ Development and implementation of national licencing or certification programmes for WCP management service providers ▪ Development and finalisation of an integrated WCP strategy, policy and action plan by AS, CNMI, FJ, FP, KI, NC, NI, PNG, RMI, TK, TO, WF

[6] Refer to Appendix 3 for further details on progress achievements, progress gaps, and data sources, including details of the specific activities progressed under each of the 15 strategic actions.

[7] The strategic actions were grouped under themes in CP2025. During the mid-term review it was determined that analyses were more meaningful at the level of strategic actions and activities, rather than themes.

[8] Good progress: activity completed, or clear KPI-based evidence of progress, and/or ≥ half of the priority PICTs have progressed the activity; limited progress: activity progress has been made but cannot be easily assessed against the KPI, or < half of the priority PICTs have progressed the activity; no progress: no evidence for activity progress reported by lead agencies, or no evidence found during the desktop review.

[9] The progress examples and gaps are based on the activities listed under each strategic action in IP 2016–2019. Activity gaps are informed by 'limited' or 'no progress' activities.

[10] The activities highlighted in blue were not progressed between 2016 and 2019 due to resources being unavailable to support activity implementation.

Theme[7]	Strategic actions and activity summary (good, limited, no progress)[8]	Examples of activity progress[9]	Activity gaps9, [10]
Promote public-private partnerships	**3** SPREP, PICTs, and partners shall develop new public–private partnerships, including through strengthened frameworks **Good progress = one activity** **Limited progress = four activities** **No progress = one activity**	▪ Preparation of regional guidance by SPREP and JICA/J-PRISM II to support and enhance private sector participation in WCP management activities ▪ Partnerships developed with private sector organisations to support WCP management by nine of 21 PICTs (CI, FJ, FSM, RMI, SA, SI, TK, TV, VU) ▪ MoU signed between China Navigation Company (CNCo) and SPREP, known as the "Moana Taka Partnership", allowing for CNCo vessels to carry containers of recyclable waste from eligible Pacific island ports, pro bono	▪ Further development of public-private partnerships to support waste management initiatives in PICTs e.g. EPR, container deposit and recycling. Potential PICTs to focus on include AS, CNMI, CI, FSM, FJ, GU, NA, NI, PA, PNG, RMI, TO, WF
Implement sustainable best practices in WCP management	**4** SPREP, PICTs and partners shall implement best-practice occupational health and safety measures for formal and informal workers in the WCP management sectors **Good progress = one activity** **Limited progress = one activity** **No progress = one activity**	▪ Regional guidance for asbestos and healthcare waste completed and disseminated to 14 PICs during the PacWaste project (CI, FSM, FJ, KI, NA, NI, PA, PNG, RMI, SA, SI, TO, TV, VU)[11]	▪ Implementation of national monitoring regimes for asbestos-containing and radioactivity-emitting materials
	5 PICTs, supported by SPREP and partners, shall implement WCP prevention and reduction programmes **Good progress = two activities** **Limited progress = three activities** **No progress = nine activities**	▪ Draft Regional Scrap Metal Management Strategy developed by SPREP ▪ New measures and initiatives to reduce waste arising from imported used products implemented by 13 of 21 PICTs (CNMI, CI, FSM, FJ, GU, NC, NI, PA, RMI, SA, SI, TV, VU) ▪ At least 15 different forms of assistance provided by SPREP to PICs with UPOPs management, including investigation of used oil management issues, chemical management training, e-waste reviews, technical support and resourcing for national education and awareness-raising campaigns, baseline surveys of annual pesticide container importation rates	▪ Preparation of regional guidance by SPREP on options to implement polluter-pays programmes for sustainable WCP management ▪ Preparation of regional guidance by SPREP on importation standards for durable energy-efficient products ▪ Implementation of national measures to restrict and regulate importation, handling, storage and sales of hazardous substances

[11] PICs are referred to (rather than PICTs), for activities focused specifically on Pacific island countries.

Theme[7]	Strategic actions and activity summary (good, limited, no progress)[8]	Examples of activity progress[9]	Activity gaps9, [10]
Implement sustainable best practices in WCP management	**6** PICTs, supported by SPREP and partners, shall implement resource-recovery programmes **Good progress = one activity** **Limited progress = five activities** **No progress = one activity**	▪ Organic waste recycling initiatives progressed by six of 21 PICTs (GU, NI, PA, PNG, TV, VU) ▪ WCP and recycling education awareness programmes delivered in schools by 11 of 21 PICTs (AS, CNMI, FJ, KI, PA, RMI, SA, SI, TV, VU and WF)	▪ Evaluation of existing resource-recovery initiatives by SPREP, with development of recommendations for improvements and potential replication across the region ▪ Completion of a cost-benefit study of regional options for waste-to-energy systems ▪ Implementation of practical EPR programmes at a national level ▪ Evaluation and scaling up of organic waste recycling at a national level
	7 PICTs, supported by SPREP and partners, shall remediate contaminated sites and WCP stockpiles in accordance with best practices **Good progress = one activity** **Limited progress = two activities** **No progress = one activity**	▪ Healthcare and asbestos waste surveys completed during the PacWaste project for 14 PICs (CI, FSM, FJ, KI, NA, NI, PA, PNG, RMI, SA, SI, TO, TV, VU) ▪ > 27,183 m^2 of asbestos removed from 78 sites, across 11 PICs during the PacWaste project (CI, FSM, FJ, KI, NA, NI, RMI, SA, SI, TO, VU) ▪ 686 tonnes of waste (e.g. scrap metal, plastics, used oil, paper/cardboard) exported from PICs (FJ, PNG, RMI, SA) for treatment and recycling in suitable ports in the Asia-Pacific region through the Moana Taka Partnership ▪ 17 incinerators installed and commissioned during the PacWaste project for disposal of healthcare waste stockpiles in 10 PICs (CI, FSM, FJ, KI, NA, NI, SI, TO, TV, VU); 1 incinerator repaired in RMI	▪ Compilation and maintenance of national datasets on verified contaminated sites and WCP stockpiles ▪ Implementation of national policies and legislation to support collection, removal and disposal of legacy wastes
	8 PICTs, supported by SPREP and partners, will expand user-pay WCP collection services **Limited progress = three activities** **No progress = one activity**	▪ Options for user-pays waste collection services implemented by three of 21 PICTs (FSM – Kosrae, RMI, TO) and investigated by four of 21 PICTs (FSM – Yap, PA, SA, TV)	▪ Investigation of options for user-pays waste collection services by remaining priority PICTs (as identified in IP 2016–2019) – FP, NI, PNG
	9 PICTs, supported by SPREP and partners, shall improve WCP management infrastructure and support sustainable operation and maintenance **Good progress = four activities** **Limited progress = six activities** **No progress = four activities**	▪ Guidance on landfill management, 3R + Return disseminated by JICA/J-PRISM and SPREP ▪ WCP assets assessed by six of 21 PICTs during the development of waste management strategies (FSM, PA, RMI, SA, TV, VU) ▪ 13 dumps and landfills improved across 11 of 21 PICTs (CNMI, FSM, NC, PA, PNG, RMI, SA, SI, TO, TV, VU) ▪ See healthcare waste incinerators example under strategic action [7]	▪ Development of WCP equipment and maintenance capacity in PICTs ▪ Identification and dissemination of market information for recyclable commodities, and appropriate transboundary facilities for hazardous wastes ▪ Construction of national secure storage facilities for chemicals and hazardous waste management ▪ Improvement of WCP infrastructure and services (e.g. for chemicals and hazardous waste, liquid waste, biosecurity waste), incorporating sustainable financing measures

Theme[7]	Strategic actions and activity summary (good, limited, no progress)[8]	Examples of activity progress[9]	Activity gaps9, [10]
Implement sustainable best practices in WCP management	**10** PICTs, supported by SPREP and partners, shall implement best-practice environmental monitoring and reporting programmes **Good progress = one activity** **Limited progress = two activities** **No progress = one activity**	▪ Environmental monitoring (water quality) implemented by 11 of 21 PICTs (AS, CNMI, CI, FSM, FP, GU, PA, RMI, SA, SI, TV) ▪ Chemicals inventory training delivered for 14 PICs (CI, FSM, FJ, KI, NA, NI, PA, PNG, RMI, SA, SI, TO, TV, VU) ▪ Landfill operation and management training, incorporating monitoring and reporting, delivered for six of 21 PICTs (FJ, PNG, SA, SI, TV, VU)	▪ Regional assessment of soil, water and air quality (status, trends, monitoring capacity) to identify specific areas for strategic monitoring intervention ▪ Expansion of national level environmental monitoring and reporting (including waste disposal site, waste and chemical stockpile, marine-debris monitoring)
Develop human capacity	**11** SPREP, PICTs and partners shall implement sustainable human capacity development programmes for WCP management stakeholders **Good progress = six activities** **Limited progress = six activities** **No progress = four activities**	▪ More than 450 individuals trained in-country by USP, in national, regional and international obligations under the Stockholm, Rotterdam, Basel and Waigani Conventions ▪ Training delivered for PICs representatives on the London Dumping Convention/Protocol, MARPOL Annex V, Cape Town Agreement of 2012 ▪ Asbestos handling training delivered for 10 of 21 PICTs during the PacWaste project (CI, FSM, FJ, KI, NA, NI, SA, SI, TO, VA) ▪ More than 600 personnel from 32 hospitals and other agencies trained across 11 of 21 PICTs (SA, TO, VA, FJ, FSM, NA, PA, RMI, CI, PNG, SI) during the PacWaste project	▪ ODS capture and management training ▪ Mercury management training ▪ Used oil management training ▪ Biosecurity waste management training ▪ Disaster waste management training ▪ Training on litigation, enforcement, compliance, monitoring and prosecution of WCP legislation
Improve dissemination of outcomes and experiences in WCP management	**12** SPREP, PICTs and partners shall utilise project outcomes to implement regional and national WCP education and behavioural change programmes **Good progress = two activities** **Limited progress = four activities** **No progress = four activities**	▪ WCP communication and awareness-raising undertaken by eight of 21 PICTs (CI, FSM, KI, NI, PA, RMI, SA, TV) ▪ WCP best practice case studies developed by JICA/J-PRISM and SPREP with input from FJ, FSM, PA, PNG, SI, TO, VU ▪ Community-based marine litter demonstration projects supported by SPREP in FJ, SA, SI	▪ Training for WCP departments in the development and delivery of WCP awareness materials and programmes ▪ Development and dissemination of a model regional WCP communication plan ▪ Development and dissemination of regional WCP education tool kits for primary, secondary and tertiary schools, and the private sector

Theme[7]	Strategic actions and activity summary (good, limited, no progress)[8]	Examples of activity progress[9]	Activity gaps9, [10]
Promote regional and national cooperation	**13** SPREP, PICTs, and partners shall establish a regional Clean Pacific Roundtable to coordinate and facilitate waste management and pollution control dialogue and networking in the region **Good progress = four activities** **Limited progress = one activity**	▪ Two CPRTs successfully convened in 2016 (96 participants) and 2018 (170 participants) ▪ All PICTs except CNMI, NC, NI and WF attended the 2016 CPRT, and all PICTs except CNMI attended the 2018 CPRT	▪ Resource allocation at a national level to support CPRT attendance costs
	14 SPREP, PICTs, and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities **Good progress = two activities** **Limited progress = three activities** **No progress = three activities**	▪ 17 of 21 PICTs hosted, coordinated or participated in WCP forums to promote experience-sharing and dissemination of best practices (AS, CNMI, FSM, FJ, GU, KI, NA, NC, PA, PNG, RMI, SA, SI, TO, TV, VU, WF) ▪ Recycling associations established in SA, SI, TV, FJ and VU; and a Recycling Technical Working Group formed through the CPRT	▪ Establishment of national WCP steering committees to support coordination and monitoring of WCP activities across responsible agencies ▪ Engagement with other regional organisations in WCP-related areas such as water and sanitation, transport, energy, disaster risk reduction, agriculture, tourism
	15 SPREP, PICTs and partners shall cooperate to ensure timely monitoring of the *Integrated Regional Waste Management and Pollution Control Strategy 2016–2025* **Limited progress = one activity** **No progress = one activity**	▪ Regional monitoring form for solid waste management data developed by JICA (J-PRISM II), aligned with the performance indicators of J-PRISM II and CP2025, to support annual, national level monitoring and reporting in 9 PICs (FSM, FJ, PA, PNG, RMI, SA, SI, TO, VU)	▪ Preparation of annual national reports of WCP activities and outcomes, by PICTs (to be submitted to SPREP) ▪ Preparation of annual regional reports of WCP activities and outcomes, by SPREP

4.2 National progress assessments

Key findings are reported below for the national level progress assessments detailed in Appendix 4 (note that some progress achievements and gaps for countries and territories are included above, in the regional level assessment).

Across the 21 Pacific island countries and territories, three achieved a 'good' progress rating for CP2025 implementation, eight achieved a 'fair' rating, and ten were assigned a 'limited' rating (Table 5). Ratings were based on an analysis of performance across the CP2025 performance indicators, and the 15 strategic actions and linked activities in IP 2016–2019 (see section 3.3). The Federated States of Micronesia, Samoa and Tuvalu all made significant progress. Tuvalu's progress was particularly easy to measure and evaluate thanks to the monitoring and reporting that is now well-established under the *Tuvalu Integrated Waste Management Policy and Action Plan 2017–2026*.

TABLE 5 Overall CP2025 progress ratings for Pacific island countries and territories

CP2025 progress rating	Achieved by
GOOD	FSM, SA, TV
FAIR	CI, FJ, PA, PNG, RMI, SI, TO, VU
LIMITED	AS, CNMI, FP, GU, KI, NA, NC, NI, TK, WF

4.2.1 Waste, chemicals and pollution (WCP) legislation, policies, strategies, plans

During the 2016–2019 implementation period, Tuvalu and Vanuatu were the only countries that developed an integrated national policy and strategy with an implementation plan and supporting legislation, for WCP management. The Solomon Islands developed an integrated WCP strategy and implementation plan, but no new legislation. Nauru, Palau and Samoa developed and endorsed new national strategies or plans, but they were mainly focused on solid waste.

The Cook Islands, Federated States of Micronesia and Guam had existing, endorsed and current national policies or strategies, focused primarily on solid waste. Fiji and Kiribati are known to have draft waste management strategies prepared, with the Kiribati strategy being close to finalisation and endorsement.[12]

Most countries and territories were found to have legislation in place addressing various WCP categories (e.g. solid waste, healthcare waste, liquid waste, chemicals, air pollution, plastics, container deposit and litter), however, Nauru and Papua New Guinea were identified as lacking an effective regulatory framework for solid waste. Nauru was also found to be lacking legislation across all WCP categories except for litter.

Between 2016 and 2019 the Federated States of Micronesia, Fiji, Guam, Kiribati, New Caledonia, Niue, Palau, Republic of the Marshall Islands and Samoa introduced new laws addressing single-use plastics.

4.2.2 Twenty performance indicators in CP2025

Table 6 provides a high-level summary of the performance indicator assessments across all countries and territories, based on comparing the 2014 baseline data with 2020 data, where available. The best performers in terms of performance indicator improvements, and/or maintenance of good performance indicator status, were:

- **Tuvalu** (composting, container deposit programme, EPR for used oil and water quality monitoring operational; increased national waste collection coverage; decreased number of open dumps and used oil stockpile);
- **Federated States of Micronesia** (increased number of state container deposit programmes; increased national waste collection coverage; asbestos removed; decreased used oil stockpile; water quality monitoring, composting and user-pays waste collection operational);
- **Samoa** (port waste reception facilities maintained; increased recycling rate; EPR programmes operational for used oil and e-waste; asbestos removed; used oil stockpile reduced to zero);
- **Palau** (EPR programme for used oil, user-pays waste collection, water quality monitoring, composting and container deposit programme operational; urban waste collection coverage maintained at 100%);
- **Republic of the Marshall Islands** (user-pays waste collection, container deposit programme and composting operational; increased urban waste collection coverage; asbestos removed);
- **Vanuatu** (increased waste collection coverage; asbestos removed; composting and user-pays waste collection operational; zero used oil stockpile maintained).

Significant data gaps exist across all countries and territories, but particularly for the Commonwealth of the Northern Mariana Islands, French Polynesia, New Caledonia, Tokelau, Tonga, and Wallis and Futuna, who each had ≥ 15 performance indicators where no data was available, or progress was undetermined due to data being available for one year only. It should be noted, however, that these countries and territories did not provide direct input to the mid-term review, so this may partially explain their significant data gaps.

[12] It should be noted that the strategies and plans for the Federated States of Micronesia and Vanuatu reach the end of their implementation period in 2020, so they will need to be reviewed and re-developed to ensure there is appropriate national level guidance in place for the second implementation phase of CP2025.

TABLE 6 Summary of CP2025 performance indicator assessments across Pacific island countries and territories, based on comparing 2014 baseline and 2020 data

Pacific island countries and territories	No. performance indicators improved	No. performance indicators unchanged/ stable (No. of unchanged indicators reflecting positive progress)*	No. performance indicators deteriorated	No. of performance indicators, progress undetermined^	No. of performance indicators, no data available
American Samoa	2	6 (2)		4	8
Commonwealth of the Northern Mariana Islands	1	3		5	11
Cook Islands	2	7		6	5
Federated States of Micronesia	5	6 (2)		7	2
Fiji	1	5 (3)		10	4
French Polynesia	1	3 (2)		10	6
Guam		6 (4)		5	9
Kiribati	2	6 (2)	1	7	4
Nauru	3	6	1	3	7
New Caledonia		5 (4)		8	7
Niue	1	8 (2)	1	3	7
Palau	3	4 (3)	1	9	3
Papua New Guinea	1	8 (2)		7	4
Republic of the Marshall Islands	4	3 (1)	2	6	5
Samoa	5	4 (2)	1	3	7
Solomon Islands	3	5 (1)	1	6	5
Tokelau		4 (1)		9	7
Tonga	1	4 (1)		8	7
Tuvalu	7	4		7	2
Vanuatu	2	8 (3)	1	5	4
Wallis and Futuna	1	1		8	10

* In some cases unchanged/stable indicators actually reflect positive progress e.g. if an environmental monitoring, composting, container deposit or EPR programme was operating in 2014 and remains operational in 2020 (see Appendix 4 for further details).

^ Progress undetermined due to data being available for one year only.

4.2.3 Fifteen strategic actions and relevant, linked activities in IP 2016–2019

Table 7 summarises progress made by Pacific island countries and territories across the 15 strategic actions, based on the number of linked activities that were progressed under each strategic action (see Appendix 4 for detailed activity lists). Key findings:

- Tuvalu, Samoa and Papua New Guinea made relatively strong CP2025 implementation, achieving 'good progress' for 11, nine and eight strategic actions respectively; and
- French Polynesia, Kiribati, Nauru, New Caledonia, Niue, Tokelau, and Wallis and Futuna made the least advancement with progressing activities under the strategic actions.

TABLE 7 Summary of 15 strategic actions and activity progress across Pacific island countries and territories

Pacific island countries and territories	No. strategic actions, 'good progress' (≥ half of linked activities progressed)	No. strategic actions, 'limited progress' (< half of linked activities progressed)	No. strategic actions, 'no progress' (no linked activities progressed)
American Samoa	3 (resource recovery, environmental monitoring, CPRT participation)	4	8
CNMI*	2 (WCP data collection and management, environmental monitoring)	5	7
Cook Islands*	3 (development of WCP policies, environmental monitoring, CPRT participation)	5	6
Federated States of Micronesia*	5 (WCP data collection and management, WCP strategies and legislation development, environmental monitoring, human capacity development, CPRT participation)	5	4
Fiji*	2 (resource recovery, CPRT participation)	6	6
French Polynesia	2 (environmental monitoring, CPRT participation)	3	10
Guam*	3 (environmental monitoring, CPRT participation, national/regional cooperation)	4	7
Kiribati*	2 (CPRT participation, resource recovery)	5	7
Nauru*	1 (CPRT participation)	4	9
New Caledonia	1 (CPRT participation)	6	8
Niue	1 (CPRT participation)	5	9
Palau*	5 (WCP data collection and management, resource recovery, environmental monitoring, human capacity development, CPRT participation)	6	3
Papua New Guinea	8 (WCP data collection and management, WCP plans development, WCP stockpile management, environmental monitoring, human capacity development, WCP education, CPRT participation, national/regional cooperation)	2	5
Republic of the Marshall Islands*	5 (WCP data collection and management, resource recovery, environmental monitoring, human capacity development, CPRT participation)	6	3

Pacific island countries and territories	No. strategic actions, 'good progress' (≥ half of linked activities progressed)	No. strategic actions, 'limited progress' (< half of linked activities progressed)	No. strategic actions, 'no progress' (no linked activities progressed)
Samoa	9 (WCP data collection and management, WCP strategies and legislation development, public-private partnerships, resource recovery, user-pays waste collection, environmental monitoring, human capacity development, CPRT participation, national and regional cooperation)	2	4
Solomon Islands	5 (WCP data collection and management, public-private partnerships, environmental monitoring, human capacity development, CPRT participation)	6	4
Tokelau*	1 (CPRT participation)	2	11
Tonga	5 (WCP plans development, user-pays waste collection, environmental monitoring, human capacity development, CPRT participation)	3	7
Tuvalu	11 (WCP data collection and management, WCP plans and legislation development, best practice OH&S, resource recovery, improvement of WCP infrastructure, environmental monitoring, human capacity development, WCP education, CPRT participation, CP2025 monitoring)	3	1
Vanuatu*	5 (WCP strategies and legislation development, resource recovery, human capacity development, CPRT participation, CP2025 monitoring)	5	4
Wallis and Futuna*	1 (CPRT participation)	4	9

* Activities under strategic action 8 were not applicable to this country/territory.

The 'top five' strategic actions requiring further work were identified for each country or territory, based on overall CP2025 progress assessment results. Table 8 summarises this strategic action gap analysis, with eight main strategic actions being identified across all countries and territories. Strategic action 2 is split in the table to emphasise the different activities that need to be pursued by specific countries and territories. As might be expected, the strategic actions identified at a national level reflect the actions and activities identified in the regional level assessment of progress gaps (see section 4.1.2). Note that strategic actions 1, 5, 7 and 10 were identified as areas that should be further progressed by most countries and territories, and it is recommended that they be further progressed by all, as they cover important aspects of CP2025 implementation.

TABLE 8 Strategic actions identified as requiring further work for the second phase of CP2025 (2021–2025), based on country and territory progress assessments

Strategic actions[13]	Identified for PICTs
SA 1 and SA 10. Development and expansion of routine monitoring and reporting (e.g. for WCP management activities and the receiving environment)	AS, CI, FJ, FP, GU, KI, NA, NC, NI, PA, PNG, SA, SI, TK, TO, TV, VU, WF
SA 2. Development and finalisation of an integrated WCP strategy, policy and action plan that is aligned with CP2025, and includes a monitoring and reporting framework	AS, CNMI, FJ, FP, KI, NC, NI, PNG, RMI, TK, TO, WF
SA 2. Development of practical and enforceable WCP legislation	NA, PNG
SA 3. Development of public-private partnerships (e.g. for container deposit, EPR and recycling programmes)	AS, CNMI, CI, FSM, FJ, GU, NA, NI, PA, PNG, RMI, TO, WF
SA 5. Implementation of WCP prevention and reduction programmes	AS, CNMI, CI, FSM, FJ, FP, GU, KI, NA, NC, PA, PNG, RMI, SA, SI, TK, TO, TV, VU, WF
SA 7. Management of hazardous waste, including development of inventories	CNMI, CI, FSM, FJ, FP, GU, KI, NA, NC, NI, PA, RMI, SA, SI, TK, TO, TV, VU, WF
SA 9. Improvement of WCP management infrastructure, working towards sustainable operation and maintenance	AS, CNMI, CI, FSM, FP, GU, KI, NC, NI, PA, RMI, SA, SI, TV, VU
SA 12.Development and implementation of WCP education and behavioural-change programmes	FSM, SA, SI, TK, TV, VU

[13] The 'top five' strategic actions requiring further work were identified for each country or territory. Strategic actions are generically described in this table based on wording in IP 2016–2019, but phrasing is modified within individual country and territory progress assessments, depending on the specific areas that require further work (see Appendix 4).

4.3 Sustainable Development Goals assessment

Table 9 summarises progress towards achieving WCP-related Sustainable Development Goals (SDGs). At a regional level, limited data are available to measure progress against the SDG indicators. Evidence of progress is particularly limited for SDGs 3 and 6, although some progress has arguably been made. Clearer evidence of progress is available for SDGs 11, 12 and 14, particularly in terms of increased national waste collection coverage (SDG 11), an increased regional recycling rate (SDG 12), and new national level laws and initiatives to address marine litter (SDG 14).

TABLE 9 Summary of Sustainable Development Goals progress

SDG	Target	Indicators	Progress summary[14]
Goal 3: Ensure healthy lives and promote well-being for all at all ages	**3.9** By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	**3.9.1** Mortality rate attributed to household and ambient air pollution	**3.9.1**: Preparation of an air pollution regional assessment report was specified in IP 2016–2019, but the activity was not completed. Air quality studies have been progressed, but only in FJ, SI, NC[15]
		3.9.2 Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services)	**3.9.2**: Not directly addressed through CP2025
		3.9.3 Mortality rate attributed to unintentional poisoning	**3.9.3**: Not directly addressed, but at least 15 forms of assistance in UPOPs management were delivered, including chemicals training for 441 individuals across 14 of 21 PICTs (CI, FSM, FJ, KI, NA, NI, PA, PNG, RMI, SA, SI, TO, TV, VU). See Appendix 3, activities **1.1** and **5.8**, for details and data sources.
Goal 6: Ensure availability and sustainable management of water and sanitation for all	**6.3** By 2030, improve water quality by reducing pollution, eliminating dumping and minimising release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally	**6.3.1** Proportion of wastewater safely treated	**6.3.1**: 6 of 21 PICTs (CNMI, FJ, FP, GU, NC, SA) have some secondary wastewater treatment capacity.[16] See Appendix 4 for details and data sources.
		6.3.2 Proportion of bodies of water with good ambient water quality	**6.3.2**: Water quality monitoring done by 11 of 21 PICTs (AS, CNMI, CI, FSM, FP, GU, PA, RMI, SA, SI, TV). Results regularly updated online by AS, CNMI, and GU, but data are not readily available or published for other PICTs. See Appendix 4 for details and data sources.

[14] Some 2014 baseline data reported in this column have been revised from the CP2025 figures – refer to Appendix 2 for details/justification for the revisions.

[15] https://www.challeng.unsw.edu.au/challeng-pillars/humanitarian-engineering/global-impact-news/measuring-air-quality-south-pacific Isley C.F. and Taylor M.P. (2018) Air quality management in the Pacific islands: A review of past performance and implications for future directions, Environmental Science & Policy, Volume 84, pg 26–33, https://doi.org/10.1016/j.envsci.2018.02.013

[16] https://www.pwwa.ws/wp-content/uploads/2020/01/PWWA-Seven-Years-of-Benchmarking_2018-FINAL-DRAFT.pdf http://guamwaterworks.org/operations-maintenance/

SDG	Target	Indicators	Progress summary[14]
Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable	**11.6** By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	**11.6.1** Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities	**11.6.1**: The regional waste capture rate was estimated to be 46%, based on the unweighted average of capture rate data from seven of 21 PICTs (FSM, KI, PA, PNG, RMI, SI, VU). Insufficient data were available in 2014 to establish a baseline, so it is unknown if the waste capture rate has improved. Unweighted regional averages for waste collection coverage were determined to be 88% (urban) and 74% (national) in 2020. Urban waste collection coverage remains unchanged from 2014 (88%), but national waste collection coverage has improved since 2014, when it was estimated to be 68%. Urban waste collection coverage data were available for 10 of 21 PICTs (FJ, GU, NI, PA, PNG, RMI, SI, TV, VU). National waste collection coverage data was available for seven of 21 PICTs (FSM, GU, NC, NI, SA, TK, TV, VU). See Appendix 4 for details and data sources.
		11.6.2 Annual mean levels of fine particulate matter (e.g. PM**2.5** and PM10) in cities (population weighted)	**11.6.2**: See comments under **3.9.1**.
Goal 12: Ensure sustainable consumption and production patterns	**12.3** By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses	**12.3.1** Global food loss index	**12.3.1**: Not directly addressed through CP2025, but household-level organic waste generation was measured as part of waste audits (e.g. FSM, PA, SA, TO, VU), and it was noted that kitchen waste is typically used as livestock feed.
	12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimise their adverse impacts on human health and the environment	**12.4.1** Number of parties to international multilateral environmental agreements on hazardous waste, and other chemicals that meet their commitments and obligations in transmitting information as required by each relevant agreement	**12.4.1**: National Implementation Plans (NIPs) for the Stockholm Convention have been submitted by 13 PICs (CI, FSM, FJ, KI, NA, NI, PA, PNG, RMI, SA, TO, TV, VU), but KI, PNG, SA and VU are the only countries with up-to-date NIPs (i.e. their NIPs account for all COP amendments). See Appendix 4, national level CP2025 progress assessments, for details and data sources.

SDG	Target	Indicators	Progress summary[14]
Goal 12: Ensure sustainable consumption and production patterns	**12.4** By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimise their adverse impacts on human health and the environment	**12.4.2** Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment	**12.4.2** Improved hazardous waste management was supported by the PacWaste project (asbestos, healthcare waste, e-waste, used lead acid batteries). Updated stockpile data are generally unavailable, although the PacWaste project did record amounts of asbestos removed from targeted countries.[17] See Appendix 4, national level CP2025 progress assessments, for details and data sources. Available data indicate that the regional used oil stockpile increased from 2,961 m^3 to 4,881 m^3 between 2014 and 2018, despite used oil management assistance being provided to FJ, FSM, KI, NI, RMI and VU during the GEFPAS project, and 200 m^3 of used oil being exported from Wallis and Futuna during the INTEGRE project. See Appendix 3, activities **5.8** and **7.3**, for details and data sources.
	12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse	**12.5.1** National recycling rate, tons of material recycled	**12.5.1**: National recycling rates were typically calculated on the number of containers and items redeemed through CDPs. The regional recycling rate has improved from 47% (2014) to 60% (2020). The 2020 figure was calculated as the unweighted average of recycling rates across 6 of 21 PICTs (FSM, GU, KI, NC, PA, SA). See Appendix 4 for details and data sources.
Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development	**14.1** By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution	**14.1.1** Index of coastal eutrophication and floating plastic debris density	**14.1.1**: In 2018 SPREP published the Pacific Regional Action Plan: Marine Litter 2018–2025.[18] SPREP has also supported initiatives in Pacific island countries to raise awareness of the marine litter issue: ▪ FJ –plastic-free rugby tournament (RAKA 7s) ▪ SA – Greening of the (Pacific) Games initiative, involving litter clean-ups and banning of single-use plastics from Games venues, transport services and accommodation ▪ SI – Matanikau River marine debris demonstration project, including installation of new waste bins See Appendix 3, activity **12.9**, for details and data sources. Between 2016–2019 FSM, FJ, GU, KI, NC, NI, PA, RMI and SA introduced new laws addressing single-use plastics.

[17] It is inaccurate to use the term "stockpiles" for asbestos in the Pacific, as it is still very much a part of houses and buildings, and in some instances, occurs as large amounts of broken debris on the ground (John O'Grady pers. comm. 3 June 2020).

[18] SPREP (2018) Pacific Regional Action Plan: Marine Litter 2018–2025, https://www.sprep.org/attachments/Circulars/prap_marine_litter.pdf

5 Conclusions and recommendations

Cleaner Pacific 2025 provides a broad framework and guidance for addressing the significant challenge of sustainable waste management and pollution control across the Pacific region. The CP2025 mid-term review has identified a number of implementation successes, but also barriers and challenges, and gaps and opportunities that can be addressed during the second implementation phase of the strategy. Key conclusions and recommendations are summarised below.

CP2025 implementation successes

At a regional level, seven (of 20) CP2025 performance indicators were found to have exceeded or met their 2020 targets. The seven indicators that demonstrated good progress showed that from 2016 to 2019, the Pacific region achieved:

- **Reduced (average) municipal solid waste generation per capita**
  (2014 baseline of 1.3 kg/person/day; 1.2 kg/person/day estimated for 2020);
- **An increased number of container deposit programmes**
  (2014 baseline of four programmes, eight recorded for 2020);
- **An increased number of EPR programmes for used oil**
  (2014 baseline of two programmes, four recorded for 2020);
- **Increased (average) national waste collection coverage**
  (2014 baseline of 68%, 74% recorded for 2020);
- **An increased (average) waste recycling rate**
  (2014 baseline of 32%, 60% recorded for 2020);
- **An increased number of national environmental monitoring programmes**
  (2014 baseline of three programmes, 11 recorded for 2020); and
- **An increased number of national chemicals and pollution inventories**
  (2014 baseline of two inventories, four recorded for 2020).

Based on these performance indicator results it was evident that some progress was made towards achieving all four CP2025 strategic goals: (1) prevent and minimise generation of wastes and pollution, (2) recover resources from wastes and pollution, (3) improve life-cycle management of residuals, and (4) improve monitoring of the receiving environment. However, with six (of 20) performance indicators not meeting their 2020 targets (see below for further details), it is clear that further progress in some areas is required.

Pacific island countries benefited from leadership, technical support and capacity-building provided, or facilitated by, SPREP and JICA/J-PRISM I and II, in areas such as development of waste and WCP management strategies and plans; waste surveys and audits; port waste reception facility gap analyses; Container Deposit Programmes; establishment of national recycling associations; user-pays waste collection systems; landfill design, operation and/or management training and workshops; and disaster waste management training and workshops.

SPREP and JICA/J-PRISM also made significant progress in establishing regional partnerships and developing collaborative initiatives and coordination mechanisms through the Clean Pacific Roundtable and SPREP-led projects (e.g. PacWaste, GEFPAS). The good networks that have been established should be further used to promote the sharing of WCP management information and experiences, particularly with countries and territories that are lagging in CP2025 implementation.

Other notable successes were SPREP's publication of *Regulating Plastics in Pacific Island Countries: a guide for policymakers and legislative drafters*, and the *Pacific Regional Action Plan: Marine Litter 2018–2025*. Complementary to these publications, new or amended national laws addressing single-use plastics were introduced in FSM, FJ, GU, KI, NC, NI, PA, RMI and SA.

Some alignment was apparent between CP2025 implementation and the Sustainable Development Goals, with reasonable progress being made towards SDGs 11 (make cities and settlements inclusive, safe, resilient, sustainable), 12 (ensure sustainable consumption and production), and 14 (conserve and sustainably use the oceans, seas and marine resources), particularly in terms of increased national waste collection coverage (SDG 11), an increased regional recycling rate (SDG 12), and new national level laws and initiatives to address marine litter, particularly single-use plastics (SDG 14).

CP2025 implementation challenges and barriers

Countries and territories without a WCP and waste management strategy or plan aligned with CP2025, typically made limited progress with CP2025 implementation. While these countries and territories may have pursued WCP initiatives, they were not necessarily linked to the strategic actions and activities of CP2025, and hence, they were difficult to identify and evaluate.

Another implementation barrier for some countries and territories was the absence of a national steering or coordinating committee for WCP management, to provide effective oversight and ensure that WCP management activities were regularly monitored and reported. In combination, WCP and waste management strategies or plans and national steering or coordinating committees are important for helping countries and territories to identify progress gaps and to prioritise resourcing. They also encourage implementation accountability to national governments, regional partners and donors.

Limited dedicated WCP resources at a national level is an ongoing issue for most countries and territories, and this has implications for CP2025 implementation between 2016 and 2019. With limited national level capacity, the focus was sometimes more on short-term donor-funded projects (e.g. PacWaste, GEFPAS, Ridge to Reef, INTEGRE), rather than on CP2025 more broadly.

Resourcing shortfalls for some countries were partly addressed through the technical support provided by SPREP and JICA/J-PRISM, and through financial support from donors such as UNEP, European Union, Australia, New Zealand, Japan and France. Countries and territories that did not receive dedicated support from the two main regional implementation partners, SPREP and JICA/J-PRISM, typically lagged in implementation.

Another challenge for countries and territories was related to the political nature of some activities, e.g. establishment of new legislation and/or mechanisms for CDP and EPR systems. Activities such as this cannot always be implemented quickly, even where clear technical guidance has been provided, as they tend to require high-level government deliberation and sometimes extensive consultation with the private sector, before implementation support can be secured.

Effective monitoring and reporting was a big challenge during the 2016 to 2019 implementation period, at both regional and national levels, largely due to limited availability of human and financial resources. SPREP staff were juggling country assistance requests and project-related activities (including project-specific monitoring and reporting), and found it difficult to prioritise CP2025 monitoring and reporting. Without regional guidance from SPREP, there was no routine CP2025 monitoring and reporting at a national level. It should be noted, however, that Tuvalu and Vanuatu both completed regular monitoring and reporting against their national WCP strategies and plans.

In the absence of a formal monitoring and reporting mechanism for CP2025, neither SPREP nor the countries and territories were really held accountable for implementation between 2016 and 2019. In turn, this meant that there was no evidence-based means for identifying corrective actions that needed to be taken, or additional support mechanisms required, to improve CP2025 implementation during the first phase of the strategy. The lack of a monitoring and reporting system resulted in significant data gaps at the time of the CP2025 mid-term review, and also some of the available data being of poor quality due to the application of inconsistent monitoring methods across the region. Data confidence was deemed to be ‘low’ for almost half (eight) of the twenty performance indicators, and there was no, or insufficient, data for evaluating the performance of six indicators.

Limited resources and funding hampered the progression of a number of activities under IP 2016–2019 e.g. ODS capture and management, used oil management and biosecurity waste management; and a regional assessment of the status of liquid waste management. Liquid waste and wastewater management is not typically a priority area for SPREP, and many activities in this area (e.g. infrastructure improvements) tend to require significant financial investment. There is, nonetheless, a recognised need to improve liquid waste and wastewater management as part of working towards the CP2025 vision of “A cleaner Pacific environment”, but this area will require specific attention and support from donors to progress.

CP2025 implementation gaps and opportunities

At a regional level, six (of 20) performance indicators did not meet their 2020 targets, these were:

- **No. of marine pollution incidents**
  (target of zero, five incidents recorded);
- **No. of port waste reception facilities**
  (target of 10, five facilities recorded);
- **No. of PICTs with national, state or municipal composting programmes**
  (target of 17, 14 recorded);
- **No. of national EPR programmes for e-waste**
  (target of five, two programmes recorded);
- **No. of PICTs with national, state or municipal user-pays systems for waste collection**
  (target of 14, 13 user-pays systems recorded); and
- **Quantity of used oil stockpiles**
  (target of 1480 m^3, 4866 m^3 recorded).

The above suggests that there is further work to be done in the areas of marine pollution prevention and control; organic waste, e-waste and used oil management; and establishment of user-pays systems for waste collection.

Based on progress results from the national level CP2025 assessments, some of the broad areas requiring further work include:

- Development and expansion of routine monitoring and reporting, e.g. for WCP management activities and the receiving environment – relevant to all countries and territories;
- Development and finalisation of integrated WCP strategies, policies and action plans aligned with CP2025 – particularly relevant to AS, CNMI, FJ, FP, KI (current draft very close to finalisation), NC, NI, PNG, RMI, TK, TO, WF, but also to FSM and VU, as their current strategies/plans end in 2020;
- Development of practical and enforceable WCP legislation – particularly relevant to Nauru and Papua New Guinea;
- Development of public-private partnerships (e.g. for container deposit, EPR and recycling programmes) – particularly relevant to AS, CNMI, CI, FSM, FJ, GU, NA, NI, PA, PNG, RMI, TO, WF;
- Implementation of WCP prevention and reduction programmes – relevant to all countries and territories;
- Management of hazardous waste, including development of inventories – relevant to all countries and territories;
- Improvement of WCP management infrastructure, working towards sustainable operation and maintenance – particularly relevant to AS, CNMI, CI, FSM, FP, GU, KI, NC, NI, PA, RMI, SA, SI, TV, VU; and
- Development and implementation of WCP education and behavioural-change programmes – particularly relevant to FSM, SA, SI, TK, TV, VU.

The importance of national WCP steering or coordinating committees was referred to under implementation challenges and barriers. Further consultation should take place with countries and territories (except with GU, PNG, SA, TV, who have active national committees), to confirm if committees are in place, if they need to be established, and if establishment assistance is required.

A number of specific activity gaps were identified as part of assessing progress against the 124 activities in IP 2016–2019. Key activities that should be considered for the second implementation phase of CP2025, especially in light of the CP2025 performance indicator results and the broad areas for further work referred to above, include: development of national disaster waste management plans; updating of national oil spill contingency plans; development of public-private partnerships to support waste management initiatives (e.g. EPR, container deposit, recycling); implementation of national measures to restrict and regulate the importation, handling, storage and sales of hazardous substances; evaluation and scaling up of organic waste recycling programmes; and development of WCP equipment and maintenance capacity.

Recognising the significant data gaps that exist across all countries and territories, and the low data confidence for eight (of 20) CP2025 performance indicators, there is a clear need to support and prioritise CP2025 monitoring and reporting. This can be done through establishing mechanisms and guidelines for the collection, analysis and storage of relevant data (e.g. templates, databases); through standardising data collection and analysis methodologies across all countries and territories, as well as regional partners and donors (especially for indicators like municipal solid waste generation per capita, waste recycling rate, waste collection coverage); and through providing national level capacity-building for monitoring and reporting, where it is needed. It is understood that SPREP and JICA/J-PRISM II are doing work to help countries and territories undertake regular and consistent monitoring and reporting – this should definitely be continued and may benefit from additional donor support.

In terms of CP2025 and linkages with WCP-related SDGs, further consideration needs to be given to addressing SDGs 3 (ensure healthy lives and promote wellbeing) and 6 (ensure availability and sustainable management of water and sanitation), in terms of implementation of relevant activities and also SDG-focused monitoring and reporting, to clearly demonstrate progress is being made. Evidence of progress is currently limited for SDGs 3 and 6, although relevant work is certainly being done (e.g. SDG 3: air quality studies in FJ, SI, NC; SDG 6: regular water quality monitoring in AS, CNMI, CI, FSM, FP, GU, PA, RMI, SA, SI, TV).

IP 2016–2019 assessment, and recommendations for IP 2021–2025

IP 2016–2019 was ambitious in its scope (124 activities), and did not include a practical framework for progress monitoring and assessment (20 overarching performance indicators linked to the CP2025 strategic goals, plus 124 activity-linked KPIs not linked to the strategic goals). It is thus unsurprising that no progress was made with almost one-third (39 or 31%) of the activities listed in IP 2016–2019. Good progress was achieved for 30 activities (24%), and limited progress was achieved for 55 (44%) of activities. On the basis of these latter figures, 30 to 40 activities is deemed to be a reasonable estimate of the number of activities that can be feasibly implemented with full effect, within a four-year period.

It is strongly recommended that a streamlined approach be adopted for IP 2021–2025. The over-arching CP2025 performance indicators should be the primary means for assessing implementation progress, as they are clearly linked to CP2025's strategic goals and allow for focused and achievable performance evaluation at both regional and national levels. The effectiveness and validity of some of the current performance indicators is, however, reduced by unclear or incorrectly calculated baselines, data analysis variability, and limited data availability. Some indicators will benefit from revision to support more robust monitoring and reporting (see Table 3 in section 4.1.1 and Appendix 2 for further details and suggestions). Revised (or new) performance indicators must be clear and meaningful, with realistic targets.

IP 2021–2025 should focus on a limited number of high-priority activities that address key implementation gaps, as well as current priority issues for Pacific island countries and territories (i.e. activities which countries and territories are progressing, or are keen to progress over the next few years). Some starting points for identifying high-priority activities are the activity gaps listed in Table 4, section 4.1.2, and the strategic actions requiring further work listed in Table 8, section 4.2.3, (also referred to in the previous section, implementation gaps and opportunities). It will be important to ensure that all activities are logically linked to CP2025's performance indicators and strategic goals, so they can effectively advance progress towards these. This linkage will also allow for more straightforward progress monitoring and assessment.

Given the complexity that exists across the region there will always be a degree of tension between developing a regional implementation plan with appropriately detailed activities while ensuring that there is sufficient scope for activities to be tailored at a national level to address the specific needs of different countries and territories. A mix of prescriptive, detailed activities for a sub-set of Pacific island countries and territories, and broader activities applicable to all, with sufficient scope for national level tailoring, is likely to be required.

CP2025 strategic goals 1 (prevent and minimise generation of wastes and pollution), 2 (recover resources from wastes and pollutants), and 3 (improve life-cycle management of residuals) remain relevant and valid for IP 2021–2025. Strategic goal 4 (improve monitoring of the receiving environment) is limited in scope. Strategic goal 4 should be revised to "improve monitoring and reporting", to encompass monitoring and reporting for both WCP management activities and the receiving environment.

APPENDIX 1 CP2025 performance indicators, complete dataset

The table below collates performance indicator data across the 21 Pacific island countries and territories.

Refer to Appendices 2 and 4 for additional background information and data sources.

Yellow-highlighted cells = no data available; ND = no data; PW = PacWaste project

CP2025 Performance Indicators	2014 baseline	2020 target	2020 (actual or estimate)	American Samoa	Commonwealth of the Northern Mariana Islands	Cook Islands	FSM	Fiji	French Polynesia	Guam	Kiribati	Nauru	New Caledonia	Niue	Palau	Papua New Guinea	Republic of the Marshall Islands	Samoa	Solomon Islands	Tokelau	Tonga	Tuvalu	Vanuatu	Wallis and Futuna
Per capita generation of municipalsolid waste (kg/person/day)	1.3	1.3	1.2	0.94	2.6	1.14	1.12	0.63	1.36	2.39	0.86	1.3	1.07	1.14	2	1.1	1.3	1.06	0.88	0.69	1.4	0.49	1.46	0.69
No. of marine pollution incidents	6 (2 PICTs)	0	5				0	1					1			2			1			0		
No. of port waste reception facilities	5	10	5	0	0	0	0	1	1	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0
Waste recycling rate (= amt recycled, reused, returned /amount recyclable) (%)	47%	60%	60				68			39	89		41		78			44						
No. of national or municipal composting programmes	18	30	14	1	0		1	1	1	1		1		1	1	1	1	1	1	0		1	1	
No. of national or state container deposit programmes	4 (KI, PA, Kosrae, Yap)	7	8	0	0	0	3	0	0	0	1	0	0	0	1	0	1	0	0			1	0	1
No. of national EPR programmes for used oil	2 (NC, FP)	3	4			0	0	0			0	0	1	0	1	0					0	1	0	
No. of national EPR programmes for e-waste	1 (NC)	5	2			0	0				0	0	1	0		0		1				0	0	
No. of national or state user-pays systems for waste collection	9	14	13	1		0	1	1		1	1	1	1	0	1	1	1	0	1		1	0	1	
Waste collection coverage (% of urban population)	88	100	88					100		100			75	100	100	67	91		51			100	100	
Waste collection coverage (% of national population)	68	70	74				29			100				100				61		99		80	50	
Waste capture rate (= amount collected/ amount generated) (%)	Insufficient data	Establish baseline & targets	46	18	76	24	55	56	41	50	46	18	76		24	55	56		41				50	
No. of temporary, unregulated and open dumps	2 figures in CP2025, > 250 / 333	2 figures in CP2025, 237 / 316	Insuff. data		2	10					2	1			7	>21						8		
Quantity of asbestos stockpiles (m^2) *removed during PW project*	>187,891m^2	159,700m^2	Insuff. data			3,310	53	6,250			280	3,400		3 x 20 ft			160	100	500		6,880		6,250	
Quantity of healthcare waste stockpiles (tonnes)	>76 tonnes	<20 tonnes	ND																					
Quantity of e-waste stockpiles (tonnes)	Insufficient data	Establish baseline & targets	Insuff. data																				4.54	
Quantity of used oil stockpiles (m^3)	2,960 m^3	1,480 m^3	4885.9				937				64	100		10	1,135	4.5	2,633	0			0	2.4	0	
Quantity of pharmaceutical and chemical stockpiles (tonnes)	Insufficient data	Establish baseline & targets	ND																					
Urban sewage treated to secondary standards (%)	65%	Establish after regional assessment	ND for PICTs with secondary treatment	0		0	0				0	0		0	0	0	0		0	0	0	0	0	
No. of water and environmental quality monitoring programmes)	~ 3 (AS, CI, GU	5	11	1	1	1	1	1	1	1	0	1	1	1	1							1		
No. of national chemicals and pollution inventories	2 (SA, PA)	3	4				1				1					1		1						

APPENDIX 2 CP2025 performance indicators, detailed review

*REVISIONS IN RED

Performance indicators	2014 baselines	2020 targets	2020 actuals[19]	2025 targets	Comments	Retain indicator "as is" in IP 2021–2025?
Per capita generation of municipal solid waste (kg/person/day)	1.3	1.3	1.2	1.3 **(1.2)**	**Data available for:** 5/21 PICTs (2014); 21/21 PICTs (2020). **Data confidence:** low. **Data/indicator considerations and recommendations:** ▪ Globally, this is a standard indicator[20] for tracking waste generation trends nationally and regionally. MSW is typically defined as residential (household), commercial, and institutional waste, or residential and commercial waste. Industrial, medical, hazardous, electronic, and construction and demolition waste are usually reported separately. ▪ The 2014 regional baseline is an average value for urban MSW (kg/p/day)[21] for five PICTs only [Tutuila Island (American Samoa), Nadi & Lautoka (Fiji), Majuro (RMI), Luganville (Vanuatu)], with data years ranging from 2008 to 2014. The 2020 regional average reflects a mix of urban only and urban plus rural estimates for MSW generation (kg/p/day), with data years ranging from 2011 to 2018, and varying methods used for determining MSW generation per capita as per sources and notes included in Appendix 4. Some MSW (kg/p/day) estimates were derived from secondary sources, which makes validation difficult. ▪ Despite low data confidence, this is an important indicator as it reflects consumption patterns across the region and has wide-ranging implications for national waste management systems, infrastructure and budgets; environmental and community health; demand for natural resources; and greenhouse gas emissions (from the waste sector, but also during the production, transportation and distribution of goods). ▪ JICA has published guidance on the methodology that it has applied with countries across the region, to determine per capita generation of municipal solid waste.[22] Another waste audit methodology has been published by PRIF.[23] It is recommended that a standardised data collection and analysis methodology be decided upon and used consistently by PICTs, partners and donors, to increase data confidence. ▪ Aim to improve data collection through the establishment of WCP audit/monitoring systems in PICTs. It is noted that JICA, through J-PRISM II, has developed a regional monitoring form for solid waste management data, which has been distributed to FSM, FJ, PA, PNG, RMI, SA, SI, TO, VU.[24]	Yes

[19] Calculated on new data collated during the CP2025 mid-term review. No weightings were applied for the calculation of regional averages (i.e. for per capita generation of municipal solid waste, waste recycling rate, waste collection coverage etc.).

[20] http://datatopics.worldbank.org/what-a-waste/

[21] Estimates identified for Samoa and Tonga account for household waste generation only, so they are under-estimates of daily municipal solid waste generation per capita.

[22] JICA and SPREP (2018) Practical Guide to Solid Waste Management in Pacific Island Countries and Territories, https://www.sprep.org/attachments/j-prism-2/SWM_GUIDEBOOK_.pdf

[23] Wander A. (2019) Waste Audit Methodology: A Common Approach. A step-by-step manual for conducting comprehensive waste audits in SIDs. Pacific Region Infrastructure Facility (PRIF), Sydney, https://www.theprif.org/documents/regional/waste-management/waste-audit-methodology-common-approach

[24] Yoshida A., Regional Cooperation/Project Coordinator, J-PRISM II, pers. comm., 5 June 2020

Performance indicators	2014 baselines	2020 targets	2020 actuals[19]	2025 targets	Comments	Retain indicator "as is" in IP 2021–2025?
No. of marine pollution incidents	6 (2 PICTs)	0	5	0	**Data available for:** 2/21 PICTs (2014) – unpublished WMPC documents refer to incidents in FP (1) and PA (5), with ND available for other PICTs; 6/21 PICTs (2020), with incidents reported for FJ (1), NC (1), PNG (2), SI (1). **Data confidence:** low. **Data/indicator considerations and recommendations:** ▪ To date, limited data have been reported for verified marine pollution incidents. Consideration should be given to ways of encouraging improved reporting from PICTs to SPREP. If improved reporting is unlikely, then this indicator may need to be removed from the next implementation plan. ▪ Aim to improve data collection through establishment of WCP audit/monitoring systems in PICTs.	Yes
No. of port waste reception facilities	5	10	5	20 **(10)**	**Data available for:** 21/21 PICTs (2014); 21/21 PICTs (2020). **Data confidence:** high. **Data/indicator considerations and recommendations:** ▪ The measure is based on whether the facility (port) is included in the Pacific Regional Reception Facilities Plan 2015 (PRRFP 2015). The current PRFFP 2015 has five facilities listed, in FJ, FP, NC, PNG, SA. ▪ It is recommended that the 2025 target be revised downwards, given there was no progress between 2014 and 2020.	Yes, but revise the 2025 target

Performance indicators	2014 baselines	2020 targets	2020 actuals[19]	2025 targets	Comments	Retain indicator "as is" in IP 2021–2025?
Waste recycling rate (= amount recycled, reused, returned / amount recyclable) (%)	47 **(32)**	60	60	75	**Data available for:** 6/21 PICTs (2014); 6/21 PICTs (2020). **Data confidence:** low. **Data/indicator considerations and recommendations:** ▪ The 2014 baseline (47%) was calculated across six PICTs based on total tonnes of recyclable waste exported or recycled/reused locally. Recyclable waste tonnages were not available in 2020 but recycling rate estimates (%) were available for six PICTs. The 2020 recycling rate was thus calculated as the average recycling rate across six PICTs – this is deemed to be a reasonable approach for estimating the regional recycling rate, given the data available. ▪ If the 2014 baseline is recalculated in the same way as the 2020 estimate it drops to 32%. It is recommended that this value be used as the baseline to allow for like-for-like comparison at the mid-way point of CP2025. ▪ The recalculated 2014 baseline is ~30% less than the tonnages-based baseline, but it is not recommended that the 2020 and 2025 targets be adjusted, as they seem reasonable based on the rate calculated across 6 PICTs for 2020. ▪ Different PICTs account for different waste recycling streams, depending on the recycling programmes they have operational. ▪ Recycling rates can be determined on a weight or number of containers/items basis. For the 2014 baseline, all rates were determined on a weight basis. For 2020, the recycling rate calculation method was not always specified, which means there is likely to be underlying data variability. ▪ Sometimes recycling rates are calculated during waste audits as: (amount recycled, reused, returned / amount of waste generated) x 100, which leads to lower rates. Any countries that had a recycling rate based on this formula were excluded from the analysis, to ensure data consistency. ▪ Additional PICTs may start tracking their progress against this indicator upon commencement of new container deposit/EPR programmes or through the strengthening of existing programmes, and this will help to increase data confidence. ▪ Aim to improve data collection through establishment of WCP audit/monitoring systems in PICTs.	Yes, but use recalculated baseline

Performance indicators	2014 baselines	2020 targets	2020 actuals[19]	2025 targets	Comments	Retain indicator "as is" in IP 2021–2025?
No. of national or municipal composting programmes **No. of PICTs with national, state or municipal composting programmes**	18 **(15)**	30 **(17)**	14	40 **(18)**	**Data available for:** 21/21 PICTs (2014); 16/21 PICTs (2020). **Data confidence:** medium. **Data/indicator considerations and recommendations:** ▪ CP2025 (pg 22, Table 6) identifies a total of 27 composting programmes across 15 PICTs, but the 2014 baseline figure reported for this indicator is 18. It is unclear which composting programmes were included in the baseline count. It is recommended that the indicator phrasing be revised to "No. of PICTs with national, state or municipal composting programmes", to allow for more consistent measures and assessments across years, at both national and regional levels. The baseline figure should be revised to 15 in line with the revised indicator phrasing, and the 2020 and 2025 targets can be revised to 17 (~10% improvement on the baseline) and 18 (~20% improvement on the baseline), respectively. ▪ 2020 composting programme information was unavailable for all PICTs, and there is uncertainty about the status of some programmes. ▪ Aim to improve data collection through establishment of WCP audit/monitoring systems in PICTs.	No, revise the indicator description, baseline and targets
No. of national or state container deposit programmes	4 (KI, PA, Kosrae, Yap)	7	8	10	**Data available for:** unreported (2014), but it is assumed the baseline reflects a region-wide assessment given the status of CDPs is well-publicised/reported; 19/21 PICTs (2020). **Data confidence:** high. **Data/indicator considerations and recommendations:** N/A.	Yes
No. of national EPR programmes for used oil	2 (NC, FP)	3	4	10	**Data available for:** unreported (2014); 15/21 PICTs (2020). **Data confidence:** medium. **Data/indicator considerations and recommendations:** ▪ The 2020 figure only includes programmes that are based on government initiative, involvement and/or support. EPR programmes were not accounted for if they were solely private sector driven and of limited scope.	Yes
No. of national EPR programmes for e-waste	1 (NC)	5	2	8	**Data available for:** unreported (2014); 10/21 PICTs (2020) **Data confidence:** medium. **Data/indicator considerations and recommendations:** ▪ Aim to improve data collection through establishment of WCP audit/monitoring systems in PICTs.	Yes

Performance indicators	2014 baselines	2020 targets	2020 actuals[19]	2025 targets	Comments	Retain indicator "as is" in IP 2021–2025?
No. of national or state user-pays systems for waste collection **No. of PICTs with national, state or municipal user-pays systems for waste collection**	9	14	13	21	**Data available for:** 18/21 PICTs (2014); 17/21 PICTs (2020). **Data confidence:** high. **Data/indicator considerations and recommendations:** ▪ The 2014 baseline did not account for multiple user-pays systems within individual PICTs (e.g. within FSM, Fiji), it simply included a PICT as '1' in the baseline count if one or more user-pays systems were operational. It is recommended that the indicator phrasing be revised to "No. of PICTs with national, state or municipal user-pays systems for waste collection". The new phrasing reduces ambiguity; provides for a simpler, less error-prone assessment; and reflects the fact that in some PICTs, numerous states or municipalities charge separate waste collection fees. ▪ The 2020 and 2025 targets do not require revision.	No, revise the indicator description

Waste collection coverage (% of population)	88 (urban)
	[68 (national)]
		100 (urban)
		[70 (national)]
			88 (urban)
			74 (national)
				100 (urban)
				60 (national)
				[75] (national)]
					Data available for: 18/21 PICTs (2014); 10/21 PICTs (urban 2020), 7/21 PICTs (national 2020).
					Data confidence: medium.
					Data/indicator considerations and recommendations:
					▪ CP2025 reports two different estimates for the 2014 baseline for (average) national waste collection coverage – 35% (pg 6 and pg 43) and 47% (pg 23, pg 66). To reconcile these differences the source data in Table E2 (pg 65) was examined and the baseline was calculated as the average of collection service access rates across 18 PICTs – it was determined to be 68%, which is significantly higher than either 35% or 47%. This calculation approach is reasonable given all recent collection coverage data is reported as % of population. Accordingly, it is recommended the baseline and targets for national waste collection coverage be revised as follows:
					  ▪ 68% – revised baseline,
					  ▪ 70% – new 2020 target (~ 3% improvement on corrected 2014 baseline), and
					  ▪ 75% – new 2025 target (~ 10% improvement on corrected 2014 baseline).
					▪ The source data in Table E2 (pg 65) was also examined to check the 2014 baseline for (average) urban waste collection coverage, reported as 88% throughout CP2025. It was calculated as 89.5%, not too dissimilar to 88%, and the difference could possibly be due to rounding. On this basis it is recommended the baseline and targets for urban waste collection coverage be retained as they are.
					▪ Waste collection coverage data are reported according to multiple definitions (e.g. population served, geographic area covered, collection route driven), which means there is some underlying data variability.
					▪ Aim to improve and standardise data collection through establishment of a WCP audit/monitoring systems in PICTs.
						Yes, but revise the baseline and 2020, 2025 targets for national waste collection coverage

Performance indicators	2014 baselines	2020 targets	2020 actuals[19]	2025 targets	Comments	Retain indicator "as is" in IP 2021–2025?
Waste capture rate (= amount collected / amount generated) (%)	Insufficient data	Establish baseline & targets	46	50	**Data available for:** 0/21 PICTs (2014); 7/21 PICTs (2020). **Data confidence:** low. **Data/indicator considerations and recommendations:** ▪ 50% is recommended as the 2025 target, which is (approximately) a 10% improvement on the 2020 baseline (46%). ▪ Limited data currently available, and it is based on varying methodologies. Aim to improve and standardise data collection through establishment of WCP audit/monitoring systems in PICTs.	Yes, use 2020 data to establish a baseline and set a 2025 target

No. of temporary, unregulated and open dumps
No. of PICTs with well-managed, climate-proofed waste disposal facilities
	> 250 / 333	237 / 316
		(tba)
			Insufficient data	225 / 300
				(tba)
					Data available for: 15/21 PICTs (2014); 7/21 PICTs (2020).
					Data confidence: low.
					Data/indicator considerations and recommendations:
					▪ CP2025 reports two different sets of figures for the 2014 baseline and the 2020, 2025 targets:
					  ▪ > 250 for the 2014 baseline, and targets of 237 (2020) and 225 (2025) (pg 6)
					  ▪ > 333 for the 2014 baseline, and targets of 316 (2020) and 300 (2025) (pg 43).
					▪ According to the source data in Table 8 (pg 24), the regional total for temporary unregulated dumps plus authorised open dumps is > 429 (= >333 + > 96), which is greater than both baselines reported above.
					▪ The 2020 dataset is incomplete, with data available for open dumps only. Data accuracy is also uncertain in some cases.
					▪ It is recommended that the performance indicator be revised to: "No. of PICTs with well-managed, climate-proofed waste disposal facilities". The revised indicator will provide an indication of how countries are progressing with improving or maintaining their solid waste management infrastructure/ facilities. The 2020 baseline and a 2025 target need to be determined for the new indicator. The new indicator should also be supported by a clear explanation and a set of criteria, to support consistent monitoring and reporting across all PICTs.
						No, revise the indicator and establish a new baseline and 2025 target

Performance indicators	2014 baselines	2020 targets	2020 actuals[19]	2025 targets	Comments	Retain indicator "as is" in IP 2021–2025?
Quantity of asbestos stockpiles (m^2) **No. of national strategies for safe and effective asbestos management and remediation**	> 187,891 **(NA)**	159,700 **(1)**	Insufficient data **(1)**	131,500 **(5)**	**Data available for:** 13/21 PICTs (2014); 11/21 PICTs – asbestos quantities removed during the PacWaste project (2020). **Data confidence:** low. **Data/indicator considerations and recommendations:** ▪ The 2014 PacWaste project asbestos surveys were focused on developing an inventory of the distribution of asbestos containing materials (ACMs) in 13 PICs, assessing the risks posed to human health, and identifying remediation options.[25] The surveys were limited in scope and focused on ACMs in public buildings, residences and any other obvious sources. They did not include a comprehensive survey of commercial and industrial buildings, except in Nauru.[26] ▪ With reference to data from the 2014 PacWaste asbestos surveys, pg 28 of the CP2025 Strategy reports that > 285,784 square metres and 267 cubic metres of ACMs are estimated to be distributed across the Pacific, and then pg 29 (Table 10) presents a different regional estimate for quantities of confirmed ACMs – 187, 891 m^2, which is then used as the 2014 baseline for "Quantity of asbestos stockpiles" (>187, 891 m^2). The pg 29 estimate may refer to public buildings only, rather than public buildings and residences, but this is not clearly indicated. Either way, it is difficult to see how the quantities in Table 10 were arrived at, as they are not entirely aligned with estimates presented in the PacWaste project survey reports prepared for each PIC.[27] Another issue is that it is inaccurate to use the term "stockpiles" for asbestos in the Pacific, as it is still very much a part of houses and buildings, and in some instances, occurs as large amounts of broken debris on the ground.[28] ▪ In terms of more recent data, information is available from PacWaste project reports for quantities of asbestos removed from Pacific island countries after the initial surveys, however, this data cannot be easily compared with or assessed against the ambiguous 2014 baseline. ▪ In summary, it is not feasible to evaluate progress in terms of the CP2025 performance indicator: "Quantity of asbestos stockpiles". ▪ At the mid-term point of the CP2025 Strategy it is recommended that the asbestos performance indicator be revised to: "No. of national strategies for safe and effective asbestos management and remediation". The revised indicator is a coarser measure yet it is relatively easy to evaluate; it is based on recommendations from the PacWaste asbestos surveys[29]; and it will provide an indication of how countries are progressing with asbestos management. Currently, Niue is the only country known to have an asbestos management strategy in place (out of the 13 PICs included in the PacWaste project[30]). The status of asbestos management in the Pacific territories is unknown and needs to be determined. ▪ The recommended 2025 target is five (national strategies developed for safe and effective asbestos management and remediation).	No, revise the indicator and establish a new baseline and 2025 target

[25] https://www.sprep.org/pacwaste/resources/reports

[26] John O'Grady pers. comm. 30 May 2020.

[27] This discrepancy has been checked with, and confirmed by, John O'Grady.

[28] John O'Grady pers. comm. 3 June 2020.

[29] O'Grady J. (2018) Regional Distribution and Status of Asbestos-Contaminated Construction Materials and Best Practice Options for its Management in Pacific Island Countries. Status Report Prepared for the Secretariat of the Pacific Regional Environment Programme (SPREP), unpublished.

[30] Ibid.

Performance indicators	2014 baselines	2020 targets	2020 actuals[19]	2025 targets	Comments	Retain indicator "as is" in IP 2021–2025?
Quantity of healthcare waste stockpiles (tonnes)	> 76	< 20	ND	0	**Data available for:** 12/21 PICTs (2014); 0/21 PICTs (2020). **Data confidence:** N/A, updated data unavailable. **Data/indicator considerations and recommendations:** ▪ Baseline data were established during the PacWaste project, however, updated data are unavailable. ▪ It is recommended that this indicator be retained as a means of assessing whether the hospital incinerators installed during the PacWaste project are functional, and being effectively used. ▪ Aim to improve healthcare waste stockpile monitoring through establishment of WCP audit/monitoring systems in PICTs.	Yes
Quantity of e-waste stockpiles (tonnes)	Insufficient data	Establish baseline & targets	Insufficient data	Establish baseline	**Data available for:** 0/21 PICTs (2014); 1/21 PICTs (2020). **Data confidence:** low. **Data/indicator considerations and recommendations:** ▪ No baseline data and insufficient 2020 data. ▪ It is recommended that this indicator be retained as there is an increasing focus on e-waste management across the region. ▪ Aim to improve e-waste stockpile monitoring through establishment of WCP audit/monitoring systems in PICTs, and establish a baseline by 2025.	Yes
Quantity of used oil stockpiles (m^3)	2,956 **(2,961)**	1,480	4,886	0 **(1,480)**	**Data available for:** 17/21 PICTs (2014); 11/21 PICTs (2020). **Data confidence:** medium. **Data/indicator considerations and recommendations:** ▪ The 2020 data is based on 2018 stockpile estimates for a limited number of PICTs. Data is, however, available for most of the PICTs that recorded large stockpiles in 2014, which means the more recent data provides a relatively good indication of how stockpiles are tracking, despite being incomplete. ▪ In CP2025 (pg 30, Table 11), 2013/14 national stockpile estimates for Nauru and Tuvalu are 30,000 L (30 m^3) and 14,500 L (14.5 m^3) respectively, but according to another source[31] they were estimated as being 46,000 L (46 m^3) and 2,500 L (2.5 m^3), respectively. The latter figures are likely to be more accurate as they align better with the 2018 stockpile estimates. It is recommended that the 2014 national baselines be adjusted to 46,000 L (Nauru) and 2,500 L (Tuvalu), and that the regional baseline be similarly adjusted. ▪ SPREP WMPC has suggested that a target of 'zero' for 2025 is probably unreasonable, and recommended that it be revised to the 2020 target of 1,480".[32] ▪ Aim to improve used oil stockpile monitoring through establishment of WCP audit/monitoring systems in PICTs.	Yes, but correct/ revise 2014 baselines for Nauru and Tuvalu, and revise the 2025 target

[31] Haynes D, Leney A. and O'Grady J. (2018) Report Two: Country Missions and Consultations, https://www.sprep.org/gefpaspops/gefpas-reports

[32] Talouli A., Pollution Adviser, SPREP, pers. comm., 25 June 2020

Performance indicators	2014 baselines	2020 targets	2020 actuals[19]	2025 targets	Comments	Retain indicator "as is" in IP 2021–2025?
Quantity of pharmaceutical and chemical stockpiles (tonnes)	Insufficient data	Establish baseline & targets	ND	Establish baseline & targets	**Data available for:** 0/21 PICTs (2014); 0/21 PICTs (2020). **Data confidence:** N/A **Data/indicator considerations and recommendations:** ▪ Given there is no baseline or 2020 data, it is recommended that this indicator be removed from IP 2021–2025. ▪ Pharmaceutical stockpiles should be included as part of healthcare waste stockpiles.	No, remove
Urban sewage treated to secondary standards (%) No. of PICTs providing secondary or better wastewater treatment	65%	Establish after regional assessment	6 **(new baseline)**	7	**Data available for:** unreported (2014); 14/21 PICTs (2020), but ND available for PICTs with secondary treatment capacity. **Data confidence:** N/A **Data/indicator considerations and recommendations:** It is unclear how the 2014 baseline was determined, as a reference was not provided in CP2025. It is noted that most Pacific wastewater systems were built during 1970–1990, with only relatively small investments made after 2000. As a result, many systems require urgent upgrades.[33] For easier monitoring and reporting it is recommended that the indicator be revised to: "No. of PICTs providing secondary or better wastewater treatment". This is a coarser measure yet still provides an indication of wastewater management capacity and quality, as well as infrastructure upgrades over time. The 2020 baseline for the new indicator is six (CNMI, FJ, FP, GU, NC, SA all have some secondary treatment capacity).[12,34] The recommended 2025 target is seven (PICTs providing secondary or better wastewater treatment).	No, revise the indicator and establish a new baseline and 2025 target
No. of water and environmental quality monitoring programmes No. of PICTs with water or environmental quality monitoring and reporting programmes	~ 3 **(AS, CI, GU)**	5	11	7 **(14)**	**Data available for:** at least 3/21 PICTs (2014); 12/21 PICTs (2020) **Data confidence:** medium. **Data/indicator considerations and recommendations:** The 2014 baseline did not seem to account for multiple monitoring programmes within individual PICTs, it simply included a PICT as '1' in the baseline count if at least one monitoring programme was operational. Accordingly, it is recommended that the indicator phrasing be revised to: "No. of PICTs with water or environmental quality monitoring and reporting programmes". The new phrasing reduces ambiguity and provides for a simpler, less error-prone assessment. It is recommended that the 2025 target be revised to 14, given the revised indicator description. Some monitoring programmes identified during the mid-term review were project-based (e.g. Ridge to Reef national projects), so there is uncertainty about their current status/continuation. This indicator could be refined for the next regional WCP strategy, to reflect the parameters of the proposed regional monitoring system.	No, revise the indicator description and 2025 target

[33] https://www.pwwa.ws/wp-content/uploads/2020/01/PWWA-Seven-Years-of-Benchmarking_2018-FINAL-DRAFT.pdf

[34] http://guamwaterworks.org/operations-maintenance/

Performance indicators	2014 baselines	2020 targets	2020 actuals[19]	2025 targets	Comments	Retain indicator "as is" in IP 2021–2025?
No. of national chemicals and pollution inventories No. of PICTs with WCP monitoring and reporting programmes	2 **(SA, PA)**	3	4	6 **(tba)**	**Data available for:** at least 2/21 PICTs (2014); 4/21 PICTs (2020). **Data confidence:** low. **Data/indicator considerations and recommendations:** It is unclear how the 2014 baseline was determined, as a reference was not provided in CP2025. Ideally, broader WCP monitoring and reporting programmes should be implemented in line with the proposed regional monitoring system. It is recommended that the indicator be revised to: "No. of PICTs with WCP monitoring and reporting programmes (including WCP services, infrastructure, stockpiles, generation rates, recycling, compliance and enforcement). The 2020 baseline and a 2025 target need to be determined for the new indicator. Aim to improve data collection through establishment of WCP audit/monitoring systems in PICTs.	No, revise the indicator and establish a new 2020 baseline and 2025 target

APPENDIX 3 Implementation Plan 2016–2019, assessment of activities and KPIs

GOOD PROGRESS | LIMITED PROGRESS | NO PROGRESS

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
A. Strengthen institutional capacity					
1 SPREP, PICTs and partners shall undertake regular WCP data collection and management (including storage, interpretation, dissemination and sharing).	1.1 Develop, disseminate and provide training in WCP assessment and inventory methods, particularly for solid waste, chemicals, hazardous waste (such as e-waste), and healthcare waste	SPREP (Secretariat)	All	No. of assessment methods developed	Three methods developed and development of one ongoing: ▪ Waste survey methodology published by JICA/J-PRISM and SPREP[36] ▪ Waste audit methodology published by PRIF[37] ▪ Regional monitoring form for solid waste management data developed by JICA – J-PRISM II, aligned with the performance indicators of J-PRISM II and CP2025, to support and enhance national monitoring and reporting in nine PICs (FSM, FJ, PA, PNG, RMI, SA, SI, TO, VU).[38] The form was distributed to PICs in early 2020 ▪ Regional monitoring system for waste management and the receiving environment under development by SPREP[39]
				No. of persons trained in assessment	441 individuals received chemicals training across 14 of 21 PICTs:[40] ▪ CI, FSM, FJ, KI, NA, NI, PA, PNG, RMI, SA, SI, TO, TV, VU ▪ Training delivered by USP through the GEFPAS UPOPs project, covering chemicals inventory development and sound management Seven of 21 PICTs (CI, KI, PA, RMI, SI, TO and VU) received training on safe e-waste extraction and processing during the PacWaste project (no. of individuals trained unknown)[41] 10 staff trained in TV on waste assessment[42]

[35] **Good progress**: activity completed, or clear KPI-based evidence of progress, and/or ≥ half of the priority PICTs progressed the activity; **limited progress**: activity progress was made but cannot be easily assessed against the KPI, or < half of the priority PICTs have progressed the activity; **no progress**: no evidence for activity progress reported by lead agencies, or no evidence found during the desktop review

[36] JICA and SPREP (2018) Practical Guide to Solid Waste Management in Pacific Island Countries and Territories, https://www.sprep.org/attachments/j-prism-2/SWM_GUIDEBOOK_.pdf

[37] Wander A. (2019) Waste Audit Methodology: A Common Approach. A step-by-step manual for conducting comprehensive waste audits in SIDs. Pacific Region Infrastructure Facility, Sydney, https://www.theprif.org/documents/regional/waste-management/waste-audit-methodology-common-approach

[38] Yoshida A., Regional Cooperation/Project Coordinator, J-PRISM II, pers. comm., 5 June 2020

[39] SPREP WMPC Programme (2020) CP2025 Implementation Plan – Reporting Spreadsheet, unpublished

[40] No author (2017) Mid-term review of the GEF ID 4066: Pacific POPs Release Reduction Through Improved Management of Solid and Hazardous Waste, A project funded by the GEF, implemented by UNEP and executed by SPREP, Findings and Recommendations, unpublished

[41] SPREP (2018) Pacific Hazardous Waste Management (PacWaste). Volume 1: Final Report, unpublished

[42] Sagapolutele F., Assistant Chief Advisor, J-PRISM II, pers. comm., 26 June 2020

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
1 SPREP, PICTs and partners shall undertake regular WCP data collection and management (including storage, interpretation, dissemination and sharing).	**1.2** Develop and maintain a regional WCP database including water quality and relevant environmental data to support informed decision-making	SPREP (Sec)/ SPC	All	Completed database available for data input	Draft indicators developed by SPREP as part of a regional monitoring system for waste management and the receiving environment[43]
	1.3 Develop regional country-profile templates to disseminate information on the status and priorities for WCP, including marine pollution and marine litter	SPREP (Sec)	All	Country profile templates for WCP developed and disseminated	No progress – pending completion and endorsement of the regional waste monitoring system
	1.4 Complete comprehensive country profiles on the status and priorities for WCP, including marine pollution and marine litter	WCP departments	All	No. of country profiles submitted to SPREP (Sec)	No progress, dependent on 1.3
	1.5 Assess capability of national marine and terrestrial oil spill response and salvage resources, and integrate results into the regional WCP database	SPREP (Sec)	All	No. of national capability assessments completed	Review of oil spill capabilities for all countries assessed in a regional score card. Detailed assessment of oil spill response capability completed for six of 21 PICTs (KI, NA, PNG, SI, TV, VU)[44]
	1.6 Complete national WCP assessments of, and inventories for, solid waste, hazardous chemicals and hazardous waste, including e-waste and healthcare waste	WCP departments	All	No. of national WCP assessments completed	10 of 21 PICTs completed assessments of varying geographic scope and/or data coverage: ▪ CNMI – data recorded for amount of MSW and recyclables collected and processed ▪ FSM (all states), PA, RMI (Kwajalein), SA – waste amount and composition, waste disposal, and recycling surveys completed with the support of JICA/J-PRISM II ▪ FJ – Solid Waste Management Tracking System implemented by Lautoka City Council ▪ PNG (Goroka), SI (Tulagi), VU (Port Vila) – waste audits conducted with the support of JICA/J-PRISM II ▪ SA – inventories completed as part of the Minamata Initial Assessment on Mercury and the updating of the National Implementation Plan on POPs ▪ TV – data recorded for used oil shipped to Fiji [Refer to PICTs' progress assessments for sources][45]

[43] SPREP WMPC Programme (2020) CP2025 Implementation Plan – Reporting Spreadsheet, unpublished

[44] Talouli A., Pollution Adviser, SPREP, pers. comm., 25 June 2020

[45] Sources are not provided where more than 1 PICT is listed for a KPI assessment – refer to individual PICTs' progress assessments for sources and details

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
1 SPREP, PICTs and partners shall undertake regular WCP data collection and management (including storage, interpretation, dissemination and sharing).	**1.7** Complete a regional marine pollution risk assessment to prioritise potential point source pollution risk	SPREP (Sec)	All	Regional marine-pollution risk assessment completed	No progress
	1.8 Prepare a regional strategic assessment of the status of liquid-waste management to identify priority areas for intervention	SPREP (Sec)/ SPC	All	Liquid-waste regional assessment report completed	No progress – no funding available
	1.9 Prepare a regional strategic assessment of air-pollution management to identify priority areas for intervention	SPREP (Sec)	All	Air pollution regional assessment report completed	Report not prepared, but relevant air quality studies conducted[46]
	1.10 Develop and disseminate a research agenda to promote practical research in WCP issues and to develop appropriate environmental standards	SPREP (Sec)	All	Research agenda published and disseminated	Research agenda not published but PacWaste Plus has established a Research Advisory group and research is being progressed to (1) consolidate literature on impacts of managed landfills compared to dumps, (2) develop a waste intervention decision support tool, and (3) review small scale waste infrastructure opportunities. Ongoing waste-related research is also being pursued through the University of Newcastle's PhD scholarships program with SPREP's WMPC Programme[47]
	1.11 Assess greenhouse-gas footprint of WCP activities (e.g., emissions from WCP collection, disposal and port operations)	WCP departments	CI, RMI, PA, TV, SI, NC, FSM	No. of greenhouse-gas assessments completed	One assessment completed for a non-priority PICT: ▪ TK – greenhouse gas emissions estimated for the waste sector and reported as part of New Zealand's greenhouse gas emissions inventory[48] No regional funding available to support this activity
	1.12 Undertake port-waste reception facility gap analyses in accordance with IMO procedures	SPREP (Sec)	All	No. of port-waste reception facility gap analyses completed	Gap analyses completed for six of 21 PICTs: ▪ Suva (FJ), Lautoka (FJ), Apia (SA), Port Moresby (PNG), Papeete (FP), Noumea (NC), Majuro (RMI)[49]

[46] https://www.challeng.unsw.edu.au/challeng-pillars/humanitarian-engineering/global-impact-news/measuring-air-quality-south-pacific Isley C.F. and Taylor M.P. (2018) Air quality management in the Pacific islands: A review of past performance and implications for future directions, Environmental Science & Policy, Volume 84, pg 26–33, https://doi.org/10.1016/j.envsci.2018.02.013

[47] SPREP WMPC Programme (2020) CP2025 Implementation Plan – Reporting Spreadsheet, unpublished

[48] Ministry for the Environment, New Zealand Government (2020) New Zealand's Greenhouse Gas Inventory 1990–2018, Vol. 1, Chapter 8 https://www.mfe.govt.nz/sites/default/files/media/Climate%20Change/new-zealands-greenhouse-gas-inventory-1990–2018-vol-1.pdf

[49] SPREP WMPC Programme (2020) CP2025 Implementation Plan – Reporting Spreadsheet, unpublished

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
1 SPREP, PICTs and partners shall undertake regular WCP data collection and management (including storage, interpretation, dissemination and sharing).	**1.13** Implement routine data collection in the following priority areas: coastal and marine water quality status; ecological surveys of lagoon environments; percentage of population with routine waste management collection services; per capita waste diversion rates from landfill; waste composition; and per capita waste generation rates	WCP departments	All	No. of data collection programmes implemented	13 of 21 PICTs implemented data collection: ▪ AS, CNMI, CI, FP, FSM, FJ, GU, PA, PNG, RMI, SA, SI and TV have all implemented data collection, monitoring and reporting programmes for either the receiving environment and/or WCP management activities. Programmes are led by different departments/agencies, not necessarily WCP departments, and some are project-based so they may not be long-term. [Refer to PICTs' progress assessments for details and sources]
2 PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation, and strengthen institutional arrangements to support and promote best-practice WCP management.	**2.1**. Conduct a cost-benefit analysis of PICTs becoming Parties to relevant conventions and protocols	Ministries in charge of MEA ratification	Non-Parties; FSM for removal of wrecks	Cost-benefit analysis disseminated to PICTs	No progress

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
2 PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation, and strengthen institutional arrangements to support and promote best-practice WCP management.	**2.2** Develop model integrated policies with supporting legislation for solid waste (including 3R + Return), healthcare waste, hazardous waste (including e-waste, used oil and radioactive waste), and chemicals management	SPREP (Sec)	All	No. of model policies and supporting legislation completed	Six model guidelines/regulations prepared: ▪ Guidance for development of Solid Waste Management Plans published by JICA/J-PRISM and SPREP[50] ▪ Regional Healthcare Waste Management Policy developed during the PacWaste project[51] ▪ Model e-waste regulation developed through the GEFPAS project[52] ▪ Draft model used oil regulations developed through the GEFPAS project[53] ▪ Drafting instructions for a law to regulate UPOPs developed through the GEFPAS project[54] ▪ Regional guidelines for regulating plastics produced by SPREP with the Environmental Defenders Office NSW[55]
	2.3 Update regional port-waste reception facilities plans	SPREP (Sec)	All	No. of regional port-waste reception plans updated	No progress with this activity, but refer to related progress under activity 1.12
	2.4 Prepare a regional template to guide development of national pollution prevention strategies (NATPOLs)	SPREP (Sec)	All	Regional template disseminated	No progress
	2.5 Develop a regional insurance arrangement (including associated model regulations) for vessels not covered by existing IMO liability and compensation regimes	SPREP (Sec)	All	Regional insurance arrangement developed No. of subscriptions to regional insurance arrangement	Unable to measure progress against the KPIs, but SPREP is finalising arrangements for all 21 PICTs to become members of Oil Spill Response Limited (OSRL) which will provide additional response capability to PACPLAN (Pacific Islands Marine Spill Contingency Plan)[56] No progress

[50] JICA and SPREP (2018) Practical Guide to Solid Waste Management in Pacific Island Countries and Territories, https://www.sprep.org/attachments/j-prism-2/SWM_GUIDEBOOK_.pdf

[51] SPREP (2018) Pacific Hazardous Waste Management (PacWaste). Volume 1: Final Report, unpublished

[52] Haynes D., Leney A. and O'Grady J. (2018) Report 4: Review of E-waste Related Activities in the Pacific Islands, https://www.sprep.org/gefpaspops/gefpas-reports

[53] Powell G. B. (2019) Consultancy for the review of used oil regulations. Final report – re-drafted model regulations, https://www.sprep.org/gefpaspops/gefpas-reports

[54] Powell G. B. (2019) Consultancy for the completion of drafting instructions for model legislation for UPOPs project. Final report – revised drafting instructions, https://www.sprep.org/gefpaspops/gefpas-reports

[55] SPREP (2018) Regulating Plastics in Pacific Island Countries: a guide for policymakers and legislative drafters, https://d3n8a8pro7vhmx.cloudfront.net/edonsw/pages/5992/attachments/original/1540865644/Regulating_Plastics_in_Pacific_Island_Countries_SPREP_and_EDO_oct_2018.pdf?1540865644

[56] Talouli A., Pollution Adviser, SPREP, pers. comm., 25 June 2020

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
2 PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation, and strengthen institutional arrangements to support and promote best-practice WCP management.	**2.6** Develop a regional insurance arrangement for transboundary movement of hazardous wastes under the Waigani and Basel Conventions	SPREP (Sec)	All Parties	Regional insurance arrangement developed No. of PICT subscriptions to regional insurance	The Moana Taka Partnership is exploring options for a regional insurance arrangement for the transboundary movement of hazardous waste[57] No progress
	2.7 Review institutional arrangements for WCP management with a view to improving WCP service delivery, private sector engagement and cost recovery	WCP departments	CI, PNG, SA, SI, TV	No. of national institutional reviews completed	Five priority and five non-priority PICTs completed institutional reviews: ▪ PNG – with support from JICA/J-PRISM II, reviewed institutional arrangements for waste management and reached agreement among all relevant ministries about implementation responsibilities at provincial and local government levels ▪ CI, FSM, KI, PA, RMI (Kwajalein), SA, SI, TV, VU – institutional arrangements reviewed and recommendations for improvement developed, as part of new waste management strategies/policies [Refer to PICTs' progress assessments for details and sources]

[57] Ibid.

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
2 PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation, and strengthen institutional arrangements to support and promote best-practice WCP management.	**2.8** Develop integrated national policies with supporting legislation and implementation strategies for WCP management to include solid waste, 3R + Return, hazardous waste (including healthcare waste, e-waste and used oil) and chemicals	WCP departments	All	No. of integrated national policies with supporting legislation and strategies developed and endorsed	Two of 21 PICTs effectively addressed the KPI: ▪ TV: Integrated Waste Policy and Action Plan developed and aligned with CP2025; UPOPs National Action Plan developed; Waste Management Act 2017, Waste Management (Litter and Waste Control) Regulation 2018, Waste Management (Prohibition on the Importation of Single-Use Plastic) Regulation 2019 and Waste Management (Levy Deposit) Regulation 2019 enacted ▪ VU: National Waste Management and Pollution Control Strategy and Implementation Plan 2016–2020 revised and aligned with CP2025; UPOPs National Action Plan developed; NIP submitted to the Stockholm Convention Secretariat; three orders made under the *Waste Management Act No. 24 of 2014* for single use plastics, littering and licensing of private waste operators 19 of 21 PICTs developed various WCP policies, strategies, plans and/or legislation: ▪ New waste management policies, strategies, plans developed by CI (sanitation/wastewater management, single-use plastics), FSM (Chuuk, Kosrae, Pohnpei, Yap – solid waste management [SWM]), FJ (Suva City Council SWM); KI (National Implementation Plan [NIP], Stockholm Convention), NA (SWM), PA (SWM), PNG (Port Moresby SWM; Kokopo-Vunamami local govt; NIP, Stockholm Convention), RMI (Kwajalein Atoll SWM), SA (WM, water and sanitation, NIP Stockholm Convention), SI (national waste management and pollution control [WMPC], Honiara City Council SWM), TO (Combined Utilities Business Plan, incl. waste) ▪ New WCP legislation introduced, or WCP legislation amended in AS (litter enforcement), CNMI (air pollution control), FSM (single-use plastics), FJ (plastic bags), FP (marine pollution), GU (plastic bags), KI (single-use plastics, toxic and hazardous substances, dumping/littering), NC (air quality, single-use plastics), NI (plastic bags), PA (plastic bags), RMI (single-use plastics, container deposit programme), SA (single-use plastics), WF (imported beverages tax) [Refer to PICTs' progress assessments for details and sources]

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
2 PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation, and strengthen institutional arrangements to support and promote best-practice WCP management.	**2.9** Develop or update, endorse and implement healthcare-waste management plans for each healthcare facility	Healthcare facilities	All	No. of facility healthcare waste management plans developed	▪ Healthcare waste strategies developed during the PacWaste project for CI, FSM, FJ, KI, NA, PA, SI, TO, TV and VU, but it is unclear if they were finalised and endorsed[58] ▪ SA – healthcare waste management plan reviewed and implemented ▪ PNG – National Healthcare Waste Management Policy and Guideline for Medical and Health Facilities in PNG is in draft form [Refer to PICTs' progress assessments for details and sources]
	2.10 Develop national disaster waste-management plans	NDMOs/WCP departments	All	No. of disaster waste management plans endorsed	Two of 21 PICTs commenced development of a plan: ▪ TV – Department of Waste Management and the Disaster Management Agency initiated the development of a national disaster waste management plan ▪ VU – draft disaster waste management plan developed with JICA/J-PRISM II [Refer to PICTs' progress assessments for details and sources]
	2.11 Update national oil-spill contingency plans	Maritime agencies	FSM, FJ, KI, RMI, NA, NI, PA, PNG, SA, SI, TK, TV, VU	No. of updated national oil spill contingency plans endorsed	Three of 13 priority PICTs and two non-priority PICTs updated their NATPLANs (National Marine Spill Contingency Plans) (CI, NI, PNG, SA, TO)[59]
	2.12 Adopt tools to support marine environmental protection, such as designation of particularly sensitive sea areas (PSSA)	Maritime departments	CI, FJ, PA, PNG	Submissions to IMO in accordance with IMO PSSA Guidelines	One of four priority PICTs declared a PSSA: ▪ PNG – Jomard passage declared as a PSSA; a first for Pacific islands[60]
	2.13 Develop and implement national licencing or certification programmes for WCP management service providers	WCP departments	All	No. of licencing or certification programmes implemented	Two of 21 PICTs implemented licencing programmes: ▪ FJ – permits required for operation of landfills or recycling facilities ▪ VU – licences required for operation of waste management services e.g. waste transfer stations, composting, waste incineration and collection [Refer to PICTs' progress assessments for details and sources]

[58] SPREP (2018) Pacific Hazardous Waste Management (PacWaste). Volume 2: Country Reports, unpublished

[59] Talouli A., Pollution Adviser, SPREP, pers. comm., 25 June 2020; Conservation and Environment Protection Authority, Papua New Guinea, pers. comm., 25 June 2020

[60] SPREP Secretariat (2017) Report of work performed in the period July 2015 to June 2017, fourteenth meeting of the Noumea Convention, https://www.sprep.org/attachments/2017SM28/Noumea%20Convention/English/14NC_WP.4.1%20Report%20by%20Secretariat%20(Final%20Draft).pdf

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
2 PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation, and strengthen institutional arrangements to support and promote best-practice WCP management.	**2.14** Adopt the World Customs Organisation Harmonised System (HS) codes for WCP including for ODS and other chemicals	Customs departments/ WCP departments	CI, KI, RMI, FSM, NA, NI, PA, SA, SI, TO, TV, VU, FJ	No. of PICTs that adopt HS codes for WCP	No progress
B. Promote public-private partnerships					
3 SPREP, PICTs, and partners shall develop new public–private partnerships, including through strengthened frameworks.	**3.1** Prepare regional guidance on private sector participation in WCP management activities (linked to 5.2.1)	SPREP (Sec)	All	Regional guidance on private sector participation in WCP published	Two forms of guidance provided: ▪ JICA/J-PRISM and SPREP published guidance on contract management[61] ▪ JICA/J-PRISM II and SPREP supported establishment of national recycling associations in SA, SI, VU, FJ, TV [Refer to PICTs' progress assessments for sources]

[61] JICA and SPREP (2018) Practical Guide to Solid Waste Management in Pacific Island Countries and Territories, https://www.sprep.org/attachments/j-prism-2/SWM_GUIDEBOOK_.pdf

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
3 SPREP, PICTs, and partners shall develop new public–private partnerships, including through strengthened frameworks.	**3.2** Apply regional guidance in developing and implementing incentives to encourage private sector participation in WCP management	WCP and Finance departments	All	No. of private sector organisations participating in national WCP management	Nine of 21 PICTs developed WCP management partnerships with the private sector: ▪ CI – collaboration developed between Infrastructure Cook Islands and General Transport to export recyclables from Rarotonga ▪ FJ, SA, SI, TV, VU – national recycling associations established in partnership with the private sector ▪ FSM – private company contracted by Pohnpei state government to manage the landfill; private waste and recycling companies contracted by Yap Public Works and EPA to manage waste collection and recycling; collaboration developed between recycling company and KIRMA ▪ RMI – collaboration developed with Majuro Atoll Waste Company, supported by government, to implement a cost-effective waste management programme for residential waste collection, disposal and recycling; launch of ULAB collection and international export systems, in partnership with the private sector and State-owned Enterprises; partnership agreement established between MEC and RMI Government through the PacWaste project for a buy-back scheme enabling compliant transboundary movement of ULABs ▪ SA – PPP established between MNRE, Samoa Stationery and Books, and HP New Zealand for collection and export of HP toners and ink cartridges; PPP for a Waste Oil Management Program developed between Samoa Recycling and Waste Management Association, local suppliers, lubricant oil consumers, MNRE, JPRISM II, SPREP, SWIRE Shipping Company and Blue Scope Fiji ▪ SI – public-private partnership (PPP) established between Sol Power Solomon Islands Ltd (SPSIL) and the Environment and Conservation Division (ECD) of the Solomon Islands Government to recover household solar batteries ▪ TK – Memorandum of Understanding signed between the Department of Economic Development, Natural Resources and Environment and the Pacific Recycle Co. Ltd Samoa to cooperate on metal waste collection and export [Refer to PICTs' progress assessments for sources]

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
3 SPREP, PICTs, and partners shall develop new public–private partnerships, including through strengthened frameworks.	**3.3** Develop agreements with private sector organisations to facilitate cooperation in planning, consultation and implementation of WCP management activities, and in the dissemination of relevant best practices	SPREP (Sec)	All	No. of agreements signed (and active) with private-sector organisations	One agreement signed: ▪ Memorandum of Understanding signed between China Navigation Company (CNCo) and SPREP, known as the "Moana Taka Partnership", allowing for CNCo vessels to carry containers of recyclable waste from eligible Pacific island ports, pro bono, to be sustainably treated and recycled in suitable ports in Asia Pacific[62]
	3.4 Develop an agreement with the Chamber of Commerce or other appropriate national organisations to facilitate cooperation in planning, consultation and implementation of WCP management activities, and in the dissemination of relevant best practices	WCP departments	All	No. of agreements signed (and active) with private-sector organisations	▪ Five of 21 PICTs established national recycling associations (SA, SI, VU, FJ, TV), with the support of JICA/J-PRISM II and SPREP [Refer to PICTs' progress assessments for sources]
	3.5 Maintain an updated national focal point list of private sector organisations involved in WCP management and provide relevant details to SPREP (Sec) for the regional focal point list	WCP departments	All	No. of PICTs that provide details of WCP private-sector organisations	No progress
	3.6 Maintain a regional focal point list of private-sector organisations involved in WCP management	SPREP (Sec)	All	SPREP focal point list of national private-sector organisations published	Pacific recycling companies published on J-PRISM 3R+return webpage[63]

[62] https://www.sprep.org/news/moana-taka-partnership-unfolds-exciting-recycling-possibilities-pacific-islands

[63] https://www.sprep.org/j-prism-2/3rreturn

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
C. Implement sustainable best practices in WCP management					
4 SPREP, PICTs and partners shall implement best-practice occupational health and safety measures for formal and informal workers in the WCP management sectors.	**4.1** Prepare regional guidance on the identification, assessment and management of occupational health and safety risks associated with WCP management	SPREP (Sec)	All	Regional guidance on the identification, assessment and management of occupational health and safety risks published and disseminated	Regional guidance for asbestos and healthcare waste completed and disseminated during the PacWaste project[64]
	4.2 Enforce the use of appropriate personal protective equipment in all WCP management activities	Labour departments	All	No KPI listed	One of 21 PICTs focused on PPE: ▪ TV – training and enforcement for PPE use led by the Department of Waste Management[65]
	4.3 Implement monitoring regimes for asbestos-containing and radioactivity-emitting materials	Health/ Environment and WCP departments	CI, RMI, PNG, SA, SI, TV, NC, FJ, FSM	No. of monitoring regimes implemented	No progress
5 PICTs, supported by SPREP and partners, shall implement WCP prevention and reduction programmes.	**5.1** Prepare regional guidance on options to implement polluter-pays programmes to address proper management of problematic waste streams and encourage sustainable WCP management	SPREP (Sec)	All	Regional guidance on waste-reduction options for disposable nappies and packaging waste disseminated	No progress – no available resources to support the options study
	5.2 Review regional guidance to identify suitable options for national implementation of polluter-pays programmes	WCP departments	All	No. of polluter-pays programmes implemented	No progress, linked to 5.1
	5.3 Undertake a national cost-benefit analysis of options to implement polluter-pays programmes	WCP departments	All	No. of PICTs that complete cost-benefit analyses	No progress, linked to 5.1 and 5.2
	5.4 Prepare a Cabinet paper on implementation of the recommendations of the cost-benefit analysis	WCP departments	All	No. of PICTs that present cost-benefit analysis outcomes to Cabinet	No progress, linked to 5.1, 5.2 and 5.3

64 SPREP (2018) Pacific Hazardous Waste Management (PacWaste). Volume 1: Final Report, unpublished

65 Government of Tuvalu (2019) The 2nd Annual Review of the Implementation Status of Tuvalu's Integrated Waste Policy and Action Plan 2017–2026

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
5 PICTs, supported by SPREP and partners, shall implement WCP prevention and reduction programmes.	**5.5** Prepare regional guidance on importation standards for durable energy-efficient products (e.g., white goods)	SPREP (Sec)	All	Regional guidance on energy-efficient products disseminated	No progress – no available resources to develop the regional guidance
	5.6 Prepare guidance on best practices to minimise waste arising from imported used products (tyres, vehicles and computers) and from donated pharmaceuticals and disaster-relief supplies	SPREP (Sec)	All	Regional guidance on reducing waste from imported used goods disseminated	Draft guidance developed for one waste stream only: ▪ Draft Regional Scrap Metal Management Strategy developed by SPREP[66]
	5.7 Adopt best practices to minimise waste arising from imported used products	WCP departments	All	No. of PICTs that adopt best practices to reduce waste from imported used products	13 of 21 PICTs implemented new measures/ initiatives to reduce waste arising from imported used products: ▪ CNMI – Nine recycling centres operational for paper, glass, plastic, metals ▪ CI – recycling centre operational ▪ FSM – container deposit programmes (CDPs) operational (Kosrae, Pohnpei, Yap); CDP preparing to commence (Chuuk); transfer facility built for used oil ▪ FJ – 3R projects led by City and Town Councils (Suva, Lautoka, Nadi, Sigatoka) ▪ GU – used lead acid batteries, used oil and used paint collected for safe disposal ▪ NC – EPR schemes for single-use batteries, lead acid batteries, end of life vehicles, used oil, tyres, electrical equipment ▪ NI – recycling facility built so waste from imported goods can be collected and exported for recycling ▪ PA – tyre shredding, plastic conversion to fuel, Waste Segregation Stations programme and CDP operational ▪ RMI – buy-back scheme established for used lead acid batteries; new law enacted establishing a CDP ▪ SA – e-waste (HP toners and ink cartridges) collected and exported ▪ SI – CDP feasibility study conducted by JICA/J-PRISM II, collection and export system for used lead acid batteries ▪ TV – Waste Management (Levy Deposit) Regulation enacted ▪ VU – CDP pre-feasibility study conducted by JICA/J-PRISM II [Refer to PICTs' progress assessments for sources]

[66] SPREP (2018) Performance Monitoring and Evaluation Report on the 2017 Work Programme and Budget, https://www.sprep.org/sites/default/files/documents/executive_board/2018/WP.5.3.Att.1%20-%20Final%20Draft%20Report%20on%20the%202017%20PMER%20ME%20Final.pdf

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
5 PICTs, supported by SPREP and partners, shall implement WCP prevention and reduction programmes.	**5.8** Assist PICTs with the reduction, management and monitoring of unintentional persistent organic pollutants (UPOP)	SPREP (Sec)	All	No. of instances of assistance in UPOP management delivered	At least 15 forms of assistance provided:[67], [68], [69] ▪ UPOPs National Action Plans developed for Tuvalu and Vanuatu ▪ Guideline developed – UPOPs Prevention and Chemical Awareness: Considerations for Awareness-Raising Campaigns ▪ Drafting instructions prepared for model national legislation to regulate UPOPs ▪ Draft model used oil regulations developed ▪ Used oil management issues and priorities investigated for FJ, FSM, KI, NI, RMI, VU ▪ E-waste review conducted for CI, FJ, FSM, KI, NA, NI, PA, PNG, RMI, SA, SI, TO, TV, VU ▪ Across the 14 PICs, National Guidelines and Best Practice Training Manuals developed for chemical management ▪ Technical support and resourcing provided for national UPOPs education and awareness-raising campaigns in FSM, NA and TV ▪ In-depth feasibility studies completed on used pesticide container management programmes for SA, TO and FJ ▪ Across the 14 PICs, baseline surveys completed, and estimates obtained of annual pesticide container importation rates ▪ Regional Pesticide Container Management Strategy completed ▪ Technical and financial support provided to PNG in the implementation of a pilot used oil management project ▪ TV and FSM assisted with improved used oil management practices ▪ Used oil storage tanks procured for TV ▪ "Oil leakage countermeasures project for World War II Wrecks in Truk Lagoon Marine Area, Federated States of Micronesia (Phase 1)" conducted by Japan Mine Action Service (JMAS) under the Japanese Government

[67] https://www.sprep.org/gefpaspops/gefpas-reports

[68] SPREP (2019) Progress towards achievement of the 2018/19 PIP strategic outcomes, https://www.sprep.org/sites/default/files/29-SPREP-Meeting/New/Eng/WP%205.3.%20Att.1%20-%20Progress%20towards%20achievement%20of%20the%202018_19_PIP%20Strategic%20Outcomes.pdf

[69] https://www.micronesia.emb-japan.go.jp/itpr_en/grantceremonyforprofectforoilleakge_en.html

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
5 PICTs, supported by SPREP and partners, shall implement WCP prevention and reduction programmes.	**5.9** Evaluate options to identify lost fishing gear in order to allocate clean-up costs	Fisheries departments/ Coastal management agencies	All	Evaluation report published and disseminated	Unable to measure progress against the KPI, but relevant initiatives progressed:[70] ▪ SPREP partnered with the Global Ghost Gear Initiative and FAO to address abandoned discarded lost fishing gear (ALDFG). A workshop on best practice fishing gear guidelines held in VU in February 2019 ▪ Western and Central Pacific Fisheries Commission adopted the Conservation and Management Measure on Marine Pollution, CMM 2017–04, which addresses ALDFG
	5.10 Convene a regional workshop to consider options to reduce the amount of abandoned and lost fishing gear, such as through-tagging of fishing gear	SPREP (Sec)	All	No KPI listed	No progress, but SPREP participated in an IMO/ FAO expert technical working group for the global initiative of marking of fishing gear, which allowed for advocacy of Pacific SIDS' special requirements[71]
	5.11 Increase observer coverage of active fishing vessels in the region	Fisheries departments	All	Percentage expansion in observer coverage	No progress
	5.12 Establish a taskforce of stakeholders from the public and private sectors and civil society (or used established groups) to develop and implement voluntary WCP reduction schemes in the private sector	WCP departments	All	No. of voluntary WCP reduction schemes implemented	No progress
	5.13 Enforce recognised standards for prohibiting the sale of perishable goods beyond their expiry date	Health departments, EPAs	CI, SA, SI, TV, FSM	No. of PICTs implementing enforcement initiatives	One of 21 PICTs progressed enforcement initiatives: ▪ TV – discussions held between DWM and relevant government agencies about enforcing legal provisions to prolong the lifespan of goods, and about options for shops when products are close to expiry dates[72]
	5.14 Implement measures to restrict and regulate importation, handling, storage and sales of chemicals and hazardous substances	WCP departments	All	No. of different chemicals and hazardous substances regulated per PICT	No progress

[70] Talouli A., Pollution Adviser, SPREP, pers. comm., 25 June 2020

[71] SPREP (2017) Performance Monitoring and Evaluation Report on the 2016 Work Programme and Budget, https://www.sprep.org/attachments/2017SM28/Officials/English/WP%205.2.Att.1.rev.1–2016%20PMER%20final.pdf

[72] Government of Tuvalu (2019) The 2nd Annual Review of the Implementation Status of Tuvalu's Integrated Waste Policy and Action Plan 2017–2026

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
6 PICTs, supported by SPREP and partners, shall implement resource-recovery programmes.	**6.1** Evaluate existing resource-recovery initiatives and make recommendations for improvements and potential replication (regionally and nationally)	SPREP (Sec)	CI, NC, PNG, SA, SI, TV	No. of resource-recovery initiatives evaluated	No specific evaluations completed but relevant initiatives progressed: ▪ Used lead acid batteries collection and international export systems launched in RMI and SI, in partnership with the private sector[73] ▪ PacWaste study investigated emissions from recycled paper briquettes and found them to be an eco-friendly alternative to commercially available stove fuel[74]
	6.2 Seek funding to implement resource-recovery recommendations in partnership with the private sector	SPREP (Sec)	CI, NC, PNG, SA, SI, TV, FSM	No. of funding proposals submitted	Funding sourced through PacWaste, GEFPAS, AFD, J-PRISM[75]
	6.3 Complete a cost-benefit study of regional options for waste-to-energy systems	SPREP (Sec)	All	Regional cost-benefit analysis of waste-to-energy published	No progress – no funding to support the study
	6.4 Explore and implement practical options for extended producer-responsibility programmes (including compliance options) for the product life cycle of imported products, packaging waste and bulky waste	WCP departments	All	No. of extended producer-responsibility programmes for packaging and bulky waste implemented	Two of 21 PICTs progressed EPR: ▪ NC – EPR schemes well-established across NC for single-use batteries, lead-acid batteries, end-of-life vehicles, used oil, tyres and electrical/electronic equipment ▪ SA – EPR programme established between HP New Zealand, MNRE, Samoa Stationery and Books for e-waste (HP toners and ink cartridges) collection and export [Refer to PICTs' progress assessments for sources]
	6.5 Evaluate existing pilot and full-scale organic waste-recycling activities (production of compost, mulch, charcoal and biochar, and biogas), and scale up where appropriate	WCP departments	CI, NC, SA, TV	Evaluation report with concrete recommendations published and disseminated	One of four priority PICTs and three non-priority PICTs evaluated or investigated organic waste recycling: ▪ FJ – compost sales regularly monitored by Lautoka City Council ▪ FP – solutions studied by Technival, with government support, for recovering biodegradable organic waste and for bioconversions with production of renewable energy ▪ NA – options for scaling up composting investigated ▪ TV – cost-benefit analysis and M&E tools used to improve green waste management [Refer to PICTs' progress assessments for sources]

[73] Ibid.

[74] Thai, P. et al. (2016) Comparative investigations of combustion emissions from paper briquettes, Apia, Samoa: SPREP, https://www.sprep.org/attachments/Publications/WMPC/PacWaste-technical-report-briquettes.pdf

[75] SPREP WMPC Programme (2020) CP2025 Implementation Plan – Reporting Spreadsheet, unpublished

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
6 PICTs, supported by SPREP and partners, shall implement resource-recovery programmes.	**6.6** Implement pilot projects at the community level for the integrated management of organic waste streams (household organic waste, market and animal waste)	WCP departments	CI, PNG, SA, SI, TV, NC	No. of community-level pilot projects for organic-waste recycling successfully implemented	Two of six priority PICTs and four non-priority PICTs progressed organic waste recycling initiatives: ▪ GU – demonstration/pilot project composting wastewater solids with locally produced wood chips ▪ NI – green waste shredding machine trialled at landfill site ▪ PA – composting bins provided to 40 households for participation in a food waste composting project ▪ PNG – market waste compost pilot project implemented in Kokopo with support from JICA/J-PRISM II ▪ TV – green waste collection being introduced to the outer islands ▪ VU – large-scale organics waste bin installed at the main market house in Luganville for composting [Refer to PICTs' progress assessments for details and sources]
	6.7 Develop and implement 'Clean Schools' and 'Clean Campus' programmes to encourage adoption of waste reduction and recycling best practices in schools and educational institutions	WCP departments, Education departments	All	No. of 'Clean Schools' and 'Clean Campus' programmes implemented	11 of 21 PICTs delivered WCP education and awareness in schools (AS, CNMI, FJ, KI, PA, RMI, SA, SI, TV, VU and WF) [Refer to PICTs' progress assessments for details and sources]
7 PICTs, supported by SPREP and partners, shall remediate contaminated sites and WCP stockpiles in accordance with best practices.	**7.1** Undertake a comprehensive national survey (including geo-location) and risk assessment of WCP stockpiles and contaminated sites (to be implemented with 9.8)	WCP departments	All	No. of national surveys and risk assessments completed	14 of 21 PICTs supported the completion of healthcare and asbestos waste surveys during the PacWaste project[76] (CI, FSM, FJ, KI, NA, NI, PA, PNG,[77] RMI, SA, SI, TO, TV, VU) PNG (Kokopo): DDT stockpiles identified and safeguarded, with support from SPREP and UNEP[78]
	7.2 Compile, maintain and share data with SPREP (Sec) and other PICTs on verified contaminated sites and WCP stockpiles	WCP departments	All	No. of PICTs that provide data on verified contaminated sites and stockpiles to SPREP	No progress

[76] SPREP (2018) Pacific Hazardous Waste Management (PacWaste). Volume 2: Country Reports, unpublished

[77] An asbestos survey was not done in PNG

[78] Conservation and Environment Protection Authority, Papua New Guinea, pers. comm., 25 June 2020

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
7 PICTs, supported by SPREP and partners, shall remediate contaminated sites and WCP stockpiles in accordance with best practices.	**7.3** Develop programmes to collect, remove and dispose of legacy wastes, in particular asbestos, vessels and wrecks, end-of-life vehicles, tyres, shipping containers, e-waste (including from construction and demolition activities), obsolete chemicals, radioactive waste, and healthcare-waste stockpiles	SPREP (Sec)	All	Quantity of legacy wastes removed No. of supporting national policies and legislation implemented	Legacy wastes removed but supporting national policies/legislation yet to be implemented: ▪ > 27,183 m^2 asbestos removed from CI (3,310 m^2), FSM (53 m^2), FJ (6,250 m^2), KI (280), NA, (3,400), NI (3 x 20 ft containers), RMI (160), SA (100), SI (5000), TO (6,880), VU (6,250) during the PacWaste project[79] ▪ 200,000 L used oil and 300 tonnes batteries exported from WF during INTEGRE project[80] ▪ 200 end-of-life vehicles removed from NC (Poindimié) during INTEGRE project[81] ▪ 17 incinerators installed and commissioned during the PacWaste project to dispose of healthcare waste stockpiles – CI (1), FSM (1), FJ (1), KI (1), NA (1), NI (1), SI (3), TO (3), TV (1), VU (4); 1 incinerator repaired in RMI[82] ▪ 4 x 40 ft containers of scrap metal removed from RMI during PacWaste project[83] ▪ 686 tonnes of waste (e.g. scrap metal, plastics, used oil, paper/cardboard) exported from PICs (FJ, PNG, RMI, SA) for treatment and recycling in suitable ports in the Asia-Pacific region through the Moana Taka Partnership[84] In addition: ▪ Regional strategy addressing WWII wrecks completed, to be presented for endorsement by SPREP members[85]
	7.4 Develop programmes to remediate contaminated sites, in particular, disused dumpsites, abandoned sites, petroleum-contaminated sites (including sites contaminated from accidental spills), and hazardous waste and chemicals storage sites	SPREP (Sec)	All	No. of contaminated sites remediated	Asbestos removed from 78 sites during the PacWaste project[86]

79 SPREP (2018) Pacific Hazardous Waste Management (PacWaste). Volume 2: Country Reports, unpublished

80 https://integre.spc.int/en/regional-actions/waste-management#territories-declinaisons

81 Ibid.

82 SPREP (2018) Pacific Hazardous Waste Management (PacWaste). Volume 1: Final Report, unpublished

83 SPREP (2018) Pacific Hazardous Waste Management (PacWaste). Volume 2: Country Reports, unpublished

84 https://sdg.iisd.org/commentary/policy-briefs/shipping-partnership-advances-waste-management-in-pacific-islands/

85 SPREP (2019) Progress towards achievement of the 2018/19 PIP strategic outcomes, https://www.sprep.org/sites/default/files/29-SPREP-Meeting/New/Eng/WP%205.3.%20Att.1%20-%20Progress%20towards%20achievement%20of%20the%202018_19_PIP%20Strategic%20Outcomes.pdf

86 SPREP (2018) Pacific Hazardous Waste Management (PacWaste). Volume 1: Final Report, unpublished

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
8 PICTs, supported by SPREP and partners, will expand user-pay WCP collection services.	**8.1** Prepare regional guidance on options for sustainable financing of WCP collection services	SPREP (Sec)	All	Regional guidance on sustainable financing of WCP collection disseminated	Regional guidance not prepared but six of 21 PICTs supported in the implementation (FSM – Kosrae, RMI, TO), and investigation (FSM – Yap, PA, SA, TO, TV), of sustainable financing options for WCP collection services [Refer to PICTs' progress assessments for details and sources. Note that the FSM (Kosrae, Yap) and PA examples are captured under Strategic Action 9 in their respective progress assessments]
	8.2 Undertake a cost-benefit analysis of options to increase national coverage and financing of WCP collection services	WCP departments	AS, FP, NC, NI, PNG, SI, TO, TV	No. of PICTs that complete a cost-benefit analysis	Two of eight priority PICTs and one non-priority PICT progressed the investigation of user-pays waste collection systems: ▪ SA – with the support of JICA/J-PRISM II, user-pays systems analysed in Tonga, Vanuatu and New Zealand; user-pays legal frameworks and stakeholder profiles investigated; study tour conducted to Vanuatu, Tonga and Fiji; and options prepared to introduce a user-pays waste collection system ▪ TV – Waste User Pay Feasibility Study completed and prepaid bag system recommended (but TV has actually opted for a waste levy instead) ▪ TO – with support from JICA/J-PRISM II, expansion of user-pays waste management services to Vava'u investigated and implemented [Refer to PICTs' progress assessments for details and sources]
	8.3 Prepare a Cabinet paper on implementation of the recommendations of the cost-benefit analysis	WCP departments	AS, FP, NC, NI, PNG, SI, TO, TV	No. of PICTs that present cost-benefit analysis outcomes to Cabinet	No information found on CBA outcomes being presented to Cabinet for increasing national coverage and financing of WCP collection services
	8.4 Undertake ongoing government and community-awareness programmes on outcomes of the cost-benefit analysis	WCP departments	AS, FP, NC, NI, PNG, SI, TO, TV	No. of awareness initiatives implemented	One of eight priority PICTs progressed awareness-raising: ▪ TO – stakeholder meetings conducted to build support and awareness for expansion of user-pays waste management services to Vava'u[87]
9 PICTs, supported by SPREP and partners, shall improve WCP management infrastructure and support sustainable operation and maintenance.	**9.1** Develop funding proposals in partnership with PICTs to address priority areas identified by the strategic assessments and gap analyses conducted under Strategic Action 1	SPREP (Sec)/ SPC	All	No. of funding proposals submitted No. of facilities improved	No progress; relevant activities under Strategic Action 1 not progressed

[87] JICA (2020) Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries Phase II (J-PRISM II) (Group 2), Project Completion Report (2nd Term), Kokusai Kogyo Co., Ltd. Yachiyo Engineering Co., Ltd.

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
9 PICTs, supported by SPREP and partners, shall improve WCP management infrastructure and support sustainable operation and maintenance.	**9.2** Update and disseminate guidance on landfill improvement, operation, and maintenance (including climate-change adaptation and greenhouse-gas mitigation considerations) based on methods such as the Fukuoka semi-aerobic landfill method and the atoll landfill method used in Kiribati	SPREP (Sec)	All	Landfill management guidance disseminated	Guidance disseminated by JICA/J-PRISM and SPREP, *Practical Guide to Solid Waste Management in Pacific Island Countries and Territories* [88]
	9.3 Identify and disseminate market information for recyclable commodities, and appropriate transboundary disposal facilities for hazardous waste	SPREP (Sec)	All	Information on commodity markets disseminated Information on transboundary disposal facilities disseminated	Transboundary disposal and treatment facilities identified for used oil[89]
	9.4 Submit information on national WCP equipment to SPREP and other PICTs	WCP departments	All	No. of PICTs that submit information on WCP equipment to SPREP (Sec)	Six of 21 PICTs assessed and reported on their WCP assets during the development of national waste management strategies: ▪ FSM (Chuuk, Kosrae, Pohnpei, Yap), PA, RMI (Kwajalein Atoll), SA, TV, VU [Refer to PICTs' progress assessments for sources]
	9.5 Compile and disseminate information on suitable national WCP equipment and provide advice on request to encourage equipment standardisation across PICTs	SPREP (Sec)	All	Regional WCP equipment inventory disseminated	No progress
	9.6 Develop WCP equipment maintenance capacity in PICTs	WCP departments	All	No. of relevant capacity-building initiatives implemented	One of 21 PICTs progressed capacity-building: TV – infrastructure management and maintenance plan developed and constant equipment maintenance promoted[90]

[88] JICA and SPREP (2018) Practical Guide to Solid Waste Management in Pacific Island Countries and Territories, https://www.sprep.org/attachments/j-prism-2/SWM_GUIDEBOOK_.pdf

[89] Araspring Ltd. (2018) Used Oil Report – Fiji, Niue, Kiribati, Vanuatu, SCL, https://www.sprep.org/attachments/used-oil-mission-report-fiji-kiribati-niue-vanuatu-scl.pdf

[90] Government of Tuvalu (2019) The 2nd Annual Review of the Implementation Status of Tuvalu's Integrated Waste Policy and Action Plan 2017–2026

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
9 PICTs, supported by SPREP and partners, shall improve WCP management infrastructure and support sustainable operation and maintenance.	**9.7** Prepare and disseminate a regional 3R + Return and other waste-management guidelines	SPREP (Sec)	All	Guidelines for 3R + Return and management of other priority WCP issues developed and disseminated	Guidance disseminated by JICA/J-PRISM and SPREP, *Practical Guide to Solid Waste Management in Pacific Island Countries and Territories* [91]
	9.8 Complete inventories of existing national WCP facilities, particularly near coastal and riverine areas (to be implemented with 7.1)	WCP departments	All	No. of inventories completed	No progress
	9.9 Improve national dumpsites (when appropriate) according to regional and existing guidance, and incorporate best-practice sustainable financing measures	WCP departments	All	No. of national dumps and landfills improved	13 dumps and landfills improved across 11 of 21 PICTs: ▪ CNMI, FSM (Pohnpei, Yap), NC, PA, PNG, RMI (Ebeye, Majuro), SA, SI[92], TO, TV, VU Funds approved to improve one dump: ▪ CNMI (Rota dumpsite) Options investigated/plans developed to improve > six dumps and landfills across six of 21 PICTs: ▪ CNMI (Saipan), NA, PA (M-Dock landfill), PNG, TV (Funafuti and outer islands), VU [Refer to PICTs' progress assessments for details and sources]
	9.10 Construct national secure storage facilities (including provision of relevant equipment) to support effective chemical and hazardous waste management	WCP departments	All	No. of national secure-storage facilities available for use	Three of 21 PICTs organised secure storage facilities for used oil: ▪ FSM – two containment facilities completed ▪ SA – intermediate bulk containers procured ▪ TV – storage containers procured [Refer to PICTs' progress assessments for details and sources]
	9.11 Develop pilot decentralised liquid-waste management programmes and construct sludge-treatment facilities	WCP departments	SA, TV, SI, NC	No. and capacity of best-practice sludge-treatment facilities available	One non-priority PICT, VU, built a new septage treatment facility[93]

[91] JICA and SPREP (2018) Practical Guide to Solid Waste Management in Pacific Island Countries and Territories, https://www.sprep.org/attachments/j-prism-2/SWM_GUIDEBOOK_.pdf

[92] Improvement involved development of a landfill operation manual

[93] https://www.gov.vu/en/public-information/302-new-septage-treatment-plant

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
9 PICTs, supported by SPREP and partners, shall improve WCP management infrastructure and support sustainable operation and maintenance.	**9.12** Improve healthcare-waste treatment and disposal facilities and incorporate best-practice sustainable financing measures	Health departments	AS, CI, FJ, FP, KI, RMI, NA, NI, PA, PNG, SA, SI, TO, TV, VU	No. and capacity of best-practice healthcare-waste treatment and disposal facilities available	17 healthcare waste incinerators installed and commissioned across nine of 15 priority PICTs during the PacWaste project – CI (1), FSM (1), FJ (1), KI (1), NA (1), NI (1), SI (3), TO (3), TV (1), VU (4); one incinerator repaired in RMI [94]
	9.13 Improve bio-security waste treatment facilities and incorporate best-practice sustainable financing measures	Bio-security authorities	AS, FP, NI, SI, TO, TV	No. and capacity of best-practice bio-security waste treatment facilities available	No progress
	9.14 Commit human and financial resources to the stepwise improvement of WCP infrastructure and services that incorporate best-practice sustainable financing measures	WCP departments	All	Amount of national and local waste-management budgets	Unable to measure the KPI, but progress made to improve WCP services in four of 21 PICTs: ▪ FSM – new waste collection system trialled in Tomil municipality (Yap) and new inter-municipal waste collection system developed in Kosrae ▪ PA – 10 state-wide waste collection plan under development with the support of JICA/J-PRISM II ▪ SI – new "Waste Management & Control Division" established by Honiara City Council ▪ TO – new manager appointed at Tonga Waste Authority Ltd to address accounts, public relations, disposal sites operation, and to assist with outer islands service provision; Waste Management Service Plans developed for and Ha'apai and Eua to support expansion of services [Refer to PICTs' progress assessments for details and sources]
10 PICTs, supported by SPREP and partners, shall implement best-practice environmental monitoring and reporting programmes.	**10.1** Undertake a regional assessment of soil, air and water quality status, trends and monitoring capacity to identify specific areas for strategic monitoring intervention	SPREP (Sec)/ SPC	All	Regional assessment of water-quality status disseminated	No progress – no funding to support this activity
	10.2 Prepare regional water, soil and air quality standards	SPREP (Sec)/ SPC	All	Regional water-quality standards published and disseminated	Regional water quality monitoring guidelines completed by SPREP with funding assistance from USAID[95]

[94] SPREP (2018) Pacific Hazardous Waste Management (PacWaste). Volume 1: Final Report, unpublished

[95] SPREP (2017) Performance Monitoring and Evaluation Report on the 2016 Work Programme and Budget, https://www.sprep.org/attachments/2017SM28/Officials/English/WP%205.2.Att.1.rev.1–2016%20PMER%20final.pdf

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
10 PICTs, supported by SPREP and partners, shall implement best-practice environmental monitoring and reporting programmes.	**10.3** Provide national training in environmental monitoring and reporting (including waste disposal site, waste and chemical stockpile, and marine-debris monitoring)	SPREP (Sec)	All	No. of persons trained in environmental monitoring	Unable to accurately measure the KPI but training delivered for: ▪ Six of 21 PICTs (FJ, PNG, SA, SI, TV, VU) on landfill operation and management, incorporating monitoring and reporting. Training delivered by JICA/J-PRISM II in collaboration with SPREP [96] ▪ Three of 21 PICTs (PA, FSM and RMI) in 2018, focusing on sanitary landfill design and operation following the Fukuoka method (follow-up training). Training delivered by JICA Kyushu, Fukuoka University, NPO SWAN-Fukuoka and JICA/J-PRISM II in Palau[97] ▪ PICTs on marine litter and plastics monitoring at the 2018 Clean Pacific Roundtable (through Tangaroa Blue) and the 29th SPREP Meeting 2019 (through Sustainable Coastlines)[98] ▪ 14 of 21 PICTs, 441 individuals, on chemicals inventory development (CI, FSM, FJ, KI, NA, NI, PA, PNG, RMI, SA, SI, TO, TV, VU)[99]
	10.4 Implement national environmental monitoring, compliance and reporting programmes (including procurement and installation of equipment when possible), with a particular focus on point source monitoring	WCP departments	All	No. of national environmental monitoring reports published	Unable to accurately measure the KPI but water quality monitoring implemented by 11 of 21 PICTs: ▪ AS, CNMI, CI, FSM, FP, GU, PA, RMI, SA, SI, TV – recreational marine waters, coastal waters, freshwater rivers, streams, estuaries, lagoons One of 21 PICTs (CNMI) monitored coral reefs and seagrass beds Plans to implement environmental monitoring developed by one of 21 PICTs ▪ PNG – initial discussions held to use the SPREP Inform project for monitoring and reporting [Refer to PICTs' progress assessments for details and sources]

[96] SPREP WMPC Programme (2020) CP2025 Implementation Plan – Reporting Spreadsheet, unpublished; JICA (2020) Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries Phase II (J-PRISM II), Group 2, Project Completion Report (2nd Term), Kokusai Kogyo Co., Ltd. Yachiyo Engineering Co., Ltd.

[97] JICA (2020) Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries Phase II (J-PRISM II), Group 1, Project Completion Report 2 (Phase 2), Kokusai Kogyo Co., Ltd. EX Research Institute Ltd., unpublished

[98] Talouli A., Pollution Adviser, SPREP, pers. comm., 25 June 2020

[99] No author (2017) Mid-term review of the GEF ID 4066: Pacific POPs Release Reduction Through Improved Management of Solid and Hazardous Waste, A project funded by the GEF, implemented by UNEP and executed by SPREP, Findings and Recommendations, unpublished

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
D. Develop human capacity					
11 SPREP, PICTs and partners shall implement sustainable human capacity development programmes for WCP management stakeholders.	**11.1** Conduct national and regional training in the implementation of obligations and accessing other opportunities under the Basel, Waigani, Noumea, Rotterdam, Stockholm and Minamata Conventions, and the Montreal Protocol	SPREP (Sec)	Relevant Parties	No. of persons trained in applicable conventions	More than 450 individuals trained. Training delivered by: SPREP ▪ SI – covered various components of the Waigani Convention e.g. national reporting, notification and movement forms, legislation[100] ▪ TV – technical advice and training on the Waigani Convention process and national reporting, delivered in collaboration with the Fiji Customs Authority[101] ▪ Technical advice and support delivered to PICs (FJ, KI, PNG, RMI, SI, TV) and French Territories (NC, WF) to support collaboration under the Waigani and Basel Conventions and achieve smooth and efficient transboundary movement of hazardous waste[102] USP ▪ CI, FSM, FJ, KI, NA, NI, PA, PNG, RMI, SA, SI, TO, TV, VU – more than 450 individuals trained in-country, in national, regional and international obligations under the Stockholm, Rotterdam, Basel and Waigani Conventions[103]
	11.2 Conduct national and regional training in the implementation of marine pollution conventions in accordance with the IMO ITCP	SPREP (Sec)	Relevant Parties	No. of persons trained in applicable conventions	Unable to accurately measure the KPI due to potential overlap between participants attending the training workshops. Training delivered for: ▪ Representatives from the 14 PICs, who attended a 2016 workshop on the London Dumping Convention/Protocol in Suva, Fiji[104] ▪ 31 representatives from eight PICs, who attended the 2017 regional MARPOL Annex V and Port Reception Facilities Workshop in Majuro, RMI[105] ▪ 30 representatives from 10 PICs, who attended the 2017 regional Cape Town Agreement 2012 workshop in Rarotonga, Cook Islands

[100] SPREP (2019) Report of the Sixth Meeting of the Steering Committee of the Pacific Regional Centre for Training and Technology Transfer for the Joint Implementation of the Basel and the Waigani Conventions in the South Pacific Region, https://www.sprep.org/sites/default/files/29-SPREP-Meeting/Waigani%20Convention/WP%204.1.%20Att.%202%20-%20Draft%20Report%20of%20the%20SCPRC-6%20meeting.pdf

[101] SPREP (2017) Performance Monitoring and Evaluation Report on the 2016 Work Programme and Budget, https://www.sprep.org/attachments/2017SM28/Officials/English/WP%205.2.Att.1.rev.1–2016%20PMER%20final.pdf

[102] Ibid.

[103] USP (2018) Capacity building through regional institutions. Chemical Management Training for PICs, Clean Pacific Roundtable presentation, Suva, 2018, https://www.sprep.org/attachments/Publications/Presentation/cprt-2018/2-jpoinapen-capacity-building.pdf

[104] SPREP (2017) Performance Monitoring and Evaluation Report on the 2016 Work Programme and Budget, https://www.sprep.org/attachments/2017SM28/Officials/English/WP%205.2.Att.1.rev.1–2016%20PMER%20final.pdf

[105] SPREP (2019) Report of Secretariat of work performed July 2017 – June 2019 in relation to the Noumea Convention and its protocols, https://www.sprep.org/sites/default/files/29-SPREP-Meeting/Noumea%20Convention/WP%204.1%20-%20SPREP-SM-Noumea%20Convention%202019%20-%20Sec%20report%20final.pdf

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
11 SPREP, PICTs and partners shall implement sustainable human capacity development programmes for WCP management stakeholders.	**11.3** Update and support further delivery of the regional waste-management training course, with inclusion of competency-based assessments and hands-on modules	SPREP (Sec)	All	No. of persons trained through the regional waste-management training course	Unable to assess against the KPI, but relevant training progressed for 28 individuals across 15 of 21 PICTs (CI, FSM, FJ, KI, NA, NI, PA, PNG, RMI, SA, SI, TO, TV, VU, WF): ▪ Training delivered by Griffith University and Fiji National University in 2016 through the GEFPAS UPOPs project, covering solid and hazardous waste management including landfill management and waste management techniques[106]
	11.4 Conduct national and regional training in waste disposal site improvement, operation and maintenance in accordance with best practices (such as the Fukuoka semi-aerobic landfill method and the atoll method utilised in Kiribati) as appropriate	SPREP (Sec)	CI, FSM, FJ, KI, NA, NI, RMI, PA, PNG, SA, SI, TO, TV, VU, WF, NC	No. of persons trained in management of waste-disposal sites	Unable to accurately measure the KPI but training delivered for: ▪ Five of 21 PICTs, focusing on landfill management and operation (FSM, PA, RMI, SA, TV)[107] ▪ Government officers from PA, FSM and RMI, in 2018, focusing on sanitary landfill design and operation following the Fukuoka method (follow-up training). Training delivered by JICA Kyushu, Fukuoka University, NPO SWAN-Fukuoka and JICA/J-PRISM II in Palau[108] ▪ PNG, SI, VU in 2017 focusing on landfill operation and management. Training delivered by JICA/J-PRISM II in collaboration with SPREP[109]
	11.5 Conduct national training in asbestos management and radioactivity monitoring for waste-handlers, managers and emergency responders	SPREP (Sec)	All	No. of persons trained in asbestos monitoring and radioactivity monitoring	Unable to accurately measure the KPI but asbestos handling training delivered for 10 of 21 PICTs during the PacWaste project (CI, FSM, FJ, KI, NA, NI, SA, SI, TO, VA)[110]
	11.6 Conduct national and regional training in ODS capture and management for recyclers, equipment-repair technicians and others involved in ODS management	SPREP (Sec)	All	No. of persons trained in ODS capture and management	No progress – no funding to support this activity
	11.7 Conduct national and regional training in chemical life-cycle management	SPREP (Sec)	All	No. of persons trained in chemical life-cycle management	More than 450 individuals trained in-country by USP across 14 of 21 PICTs, in national, regional and international obligations under the Stockholm, Rotterdam, Basel and Waigani Conventions[111]

[106] Guinto M B., Solid Waste Management Adviser, SPREP, pers. comm., 29 June 2020

[107] SPREP (2019) Progress towards achievement of the 2018/19 PIP strategic outcomes, https://www.sprep.org/sites/default/files/29-SPREP-Meeting/New/Eng/WP%205.3.%20Att.1%20-%20Progress%20towards%20achievement%20of%20the%202018_19_PIP%20Strategic%20Outcomes.pdf

[108] JICA (2020) Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries Phase II (J-PRISM II), Group 1, Project Completion Report 2 (Phase 2), Kokusai Kogyo Co., Ltd. EX Research Institute Ltd., unpublished

[109] JICA (2020) Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries Phase II (J-PRISM II), Group 2, Project Completion Report (2nd Term), Kokusai Kogyo Co., Ltd. Yachiyo Engineering Co., Ltd.

[110] SPREP (2018) Pacific Hazardous Waste Management (PacWaste). Volume 1: Final Report, unpublished

[111] https://www.sprep.org/attachments/Publications/Presentation/cprt-2018/2-jpoinapen-capacity-building.pdf

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
11 SPREP, PICTs and partners shall implement sustainable human capacity development programmes for WCP management stakeholders.	**11.8** Conduct national and regional training in mercury management	SPREP (Sec)	All	No. of persons trained in mercury management	No progress
	11.9 Conduct national and regional training in used-oil management	SPREP (Sec)	All	No. of persons trained in used-oil management	No progress – no funding to support this activity
	11.10 Conduct national and regional training in healthcare-waste management	SPREP (Sec)	All	No. of persons trained in healthcare-waste management	More than 600 personnel from 32 hospitals and other agencies trained across 11 of 21 PICTs (SA, TO, VA, FJ, FSM, NA, PA, RMI, CI, PNG, SI) during the PacWaste project, following a train-the-trainer model[112]
	11.11 Conduct national and regional training in bio-security waste management	SPREP (Sec)	All	No. of persons trained in bio-security waste management	No progress – no funding to support this activity
	11.12 Conduct national and regional training in e-waste management	SPREP (Sec)	All	No. of persons trained in e-waste management	Unable to accurately measure the KPI but training on safe e-waste extraction and processing completed in seven of 21 PICTs (CI, KI, PA, RMI, SI, TO and VU) during the PacWaste project[113]
	11.13 Conduct national and regional disaster-waste management training	SPREP (Sec)	All	No. of persons trained in disaster-waste management	Unable to accurately measure the KPI but disaster waste management training/workshops held in: ▪ VU – more than 20 staff from government and non-government agencies and the private sector attended a workshop to trial the use of the draft DWM Training Handbook that will be used by SPREP in the promotion of DWM[114] ▪ SA – participants were staff from Waste Management divisions and Disaster Management offices from FJ, SA, SI, TO and VA, workshop delivered by JICA/J-PRISM II in collaboration with SPREP, and UNDP[115] ▪ PA – participants were staff from Waste Management divisions and Disaster Management offices from FSM, PA, RMI, workshop delivered by JICA/J-PRISM II in collaboration with SPREP, IOM and ILO[116]

[112] SPREP (2018) Pacific Hazardous Waste Management (PacWaste). Volume 1: Final Report, unpublished

[113] Ibid.

[114] JICA (2019) J-PRISM Flash Newsletter, No. 7, https://www.sprep.org/j-prism-2/report-and-materials

[115] Yoshida A., Regional Cooperation/Project Coordinator, J-PRISM II, pers. comm., 26 June 2020

[116] Ibid.

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
11 SPREP, PICTs and partners shall implement sustainable human capacity development programmes for WCP management stakeholders.	**11.14** Promote WCP capacity-building exchanges among all SPREP members (PICTs and metropolitan members) in the public and private sectors	SPREP (Sec)	All	No. of capacity development exchange programmes implemented	Seven capacity development exchange programmes implemented through: ▪ The PacWaste project – exchanges organised between (1) RMI, TV and KI on integrated atoll waste management, (2) FJ and NA on landfill rehabilitation and operations, and (3) VU, FJ and TV on disaster waste management[117] ▪ The INTEGRE project – exchange missions organised between NC and NZ in (1) hazardous waste management, and (2) glass waste recovery; and between WF and FJ in climate-proofing for landfills[118] ▪ JICA/J-PRISM II – (1) exchange organised in Port Moresby between PNG, SI and VU for landfill operation and management[119]; and (2) SA visited FJ, TO and VU to learn about waste management and financing[120]
	11.15 Conduct a national training-needs assessment (against required competency levels) for integrated WCP management and enforcement (including redundancy to cope with high staff turnovers)	WCP departments	All	No. of national training needs assessments completed and communicated to Cabinet	Nine of 21 PICTs (FSM, PA, PNG, RMI, SA, SI, TO, TV, VU) completed capacity-building needs assessments with JICA/J-PRISM II between 2017 to 2019, to identify training and human resource exchange needs[121]
	11.16 Conduct national training on litigation, enforcement, compliance, monitoring and prosecution of WCP legislation, including marine pollution	WCP departments	AS, FP, GU, NI, PNG, TO, TV, VU, SI, FJ	No. of persons trained in WCP legislation enforcement	Unable to measure the KPI but one of 10 priority PICTs progressed legislation enforcement: ▪ VU – authorised enforcement officers trained to enforce waste management regulations; and two other training workshops held for a police officer, 12 municipal wardens, provincial compliance officer, planner, and the area secretary within the Shefa province[122]

[117] SPREP (2017) Twenty Eighth SPREP Meeting of Officials, Agenda Item 12.3.1: PacWaste Achievements, Evaluation and Legacy, https://www.sprep.org/attachments/2017SM28/Officials/English/WP%2012.3.1-PACWASTE.pdf

[118] https://integre.spc.int/en/regional-actions/waste-management#bilateral-exchange

[119] JICA (2017) J-PRISM Flash Newsletter, No. 1, https://www.sprep.org/j-prism-2/report-and-materials

[120] JICA (2019) J-PRISM Flash Newsletter, No. 7, https://www.sprep.org/j-prism-2/report-and-materials

[121] Nomura M., JICA Expert on Solid Waste Management Training/Monitoring, J-PRISM II, pers. comm., 26 June 2020

[122] https://depc.gov.vu/images/Waste.Management/Public_Version_NWMPCS_Action_Plan_in_2019.pdf

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
E. Improve dissemination of outcomes and experiences in WCP management					
12 SPREP, PICTs and partners shall use project outcomes to implement regional and national WCP education and behavioural change programmes.	**12.1** Develop and disseminate a model regional WCP communication plan	SPREP (Sec)	All	Model WCP communication plan disseminated	No progress – no funding to support this activity
	12.2 Develop and implement national WCP communication action plans	WCP departments	All	No. of national WCP communication action plans developed and implemented	Unable to assess against the KPI (due to no progress with 12.1), but WCP communication and awareness-raising undertaken by eight of 21 PICTs (CI – asbestos, FSM – new waste collection system, KI – clean Pacific programme, NI – asbestos, PA – solid waste management, RMI – asbestos, pre-paid bag scheme, SA – marine litter, TV – solid waste management) [Refer to PICTs' progress assessments for details and sources]
	12.3 Develop a regional WCP tool kit (including teaching methods) for primary, secondary and tertiary schools	SPREP (Sec)	All	Regional tool kit for school WCP education disseminated	No progress – limited resources available to support this activity
	12.4 Apply regional tool kits at the national level to deliver WCP education programmes in primary, secondary and tertiary schools	WCP departments	All	No. of PICTs delivering WCP awareness programmes based on regional tool kit	Unable to assess against the KPI (due to no progress with 12.3), but five of 21 PICTs progressed WCP education programmes in schools (AS, CNMI, FJ, KI, PNG) [Refer to PICTs' progress assessments for details and sources]
	12.5 Develop a regional WCP education tool kit (including teaching methods) for the private sector	SPREP (Sec)	All	Regional tool kit for private sector WCP education disseminated	No progress – limited resources available to support this activity
	12.6 Apply regional tool kit at the national level to deliver WCP awareness programmes in the private sector	WCP departments	All	No. of PICTs delivering WCP awareness programmes based on regional tool kit	Unable to assess against the KPI (due to no progress with 12.5), but four of 21 PICTs progressed WCP education programmes with the private sector (CNMI, NC, PNG, TV) [Refer to PICTs' progress assessments for details and sources]
	12.7 Provide training to WCP departments in the development and delivery of WCP awareness materials and programmes	SPREP (Sec)	All	No. of persons trained in development and delivery of WCP awareness programmes	Unable to measure the KPI but two training sessions delivered by PacWaste Plus for the 14 PICs (CI, FSM, FJ, KI, NA, NI, PA, PNG, RMI, SA, SI, TO, TV, VU), on the development and implementation of National Education and Awareness Plans[123]

[123] Nolan B., Programme Manager PacWaste Plus, pers. comm., 24 June 2020

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
12 SPREP, PICTs and partners shall use project outcomes to implement regional and national WCP education and behavioural change programmes.	**12.8** Develop and disseminate case studies of WCP best practices	SPREP (Sec)	All	No. of case studies of WCP best practices published	Numerous best practice case studies/information presented as part of: ▪ *Practical Guide to Solid Waste Management in Pacific Island Countries and Territories*, developed by JICA/J-PRISM and SPREP with contributions from FJ, FSM, PA, PNG, SI, TO, VU[124] ▪ PacWaste project – best practice information presented for management of asbestos, e-waste, healthcare waste[125] ▪ University of Samoa Science Conference – four papers presented on good waste management practices in Samoa[126]
	12.9 Implement community-based demonstration projects (such as installation of litter booms and litter bins, and assessment of the collected litter) to raise awareness of marine litter	SPREP (Sec)	AS, PNG, SA, SI, TV	No. of community-based demonstration projects implemented	Community-based demonstration projects implemented/supported by SPREP in two of five priority PICTs and one non-priority PICT: ▪ FJ – supported a plastic-free rugby tournament (RAKA 7s)[127] ▪ SA – Greening of the (Pacific) Games initiative led by MNRE and SPREP involved three Apia-wide litter clean-ups, including assessment and recording of collected litter types; and banning of single-use plastics from Games venues, transport services and accommodation[128] ▪ SI – Matanikau River marine debris demonstration project included installation of waste management collection bins for communities[129]
	12.10 Prepare annual briefing notes for ministers and heads of governments seeking the inclusion of priority WCP issues into leaders' forums such as MSG, MCES, PIFS, PIDF, and ministerial forums on climate change, economy, transport, energy and education	WCP departments	All	No. of PICTs preparing annual briefing notes	No progress

[124] JICA and SPREP (2018) Practical Guide to Solid Waste Management in Pacific Island Countries and Territories, https://www.sprep.org/attachments/j-prism-2/SWM_GUIDEBOOK_.pdf

[125] SPREP (2018) Pacific Hazardous Waste Management (PacWaste). Volume 1: Final Report, unpublished

[126] SPREP (2018) Performance Monitoring and Evaluation Report on the 2017 Work Programme and Budget, https://www.sprep.org/sites/default/files/documents/executive_board/2018/WP.5.3.Att.1%20-%20Final%20Draft%20Report%20on%20the%202017%20PMER%20ME%20Final.pdf

[127] Ibid.

[128] https://www.sprep.org/news/samoas-leaves-a-legacy-for-the-greening-of-future-pacific-games

[129] SPREP (2017) Performance Monitoring and Evaluation Report on the 2016 Work Programme and Budget, https://www.sprep.org/attachments/2017SM28/Officials/English/WP%205.2.Att.1.rev.1–2016%20PMER%20final.pdf

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
F. Promote regional and national cooperation					
13 SPREP, PICTs, and partners shall establish a regional Clean Pacific Roundtable to coordinate and facilitate waste management and pollution control dialogue and networking in the region.	**13.1** Prepare a detailed concept note on the Clean Pacific Roundtable and obtain views from members, donors, partners and others	SPREP (Sec)	All	Clean Pacific Roundtable concept note disseminated	Concept notes prepared and disseminated for CPRT sessions, and two CPRTs successfully convened in 2016 and 2018 (see 13.5)[130]
	13.2 Convene an in-house committee to progress planning for the first Clean Pacific Roundtable meeting	SPREP (Sec)	All	In-house committee meetings conducted	Organising committee convened within SPREP WMPC, and meetings conducted, ahead of the 2016 CPRT[131]
	13.3 Participate fully in the establishment and implementation of the Clean Pacific Roundtable (for example, by providing timely input and feedback on the Clean Pacific Roundtable concept note)	WCP departments	All	No. of PICTs providing feedback during the process No of PICTs participating in roundtable meeting(s)	Unable to measure the KPI but the 2018 CPRT organising committee comprised PICT representatives from each sub-region, who provided input during the preparation and conduct of the event.[132] ▪ 17 of 21 PICTs attended the 2016 CPRT (AS, CI, FSM, FJ, FP, GU, KI, NA, PA, PNG, RMI, SA, SI, TK, TO, TV, VU) ▪ 20 of 21 PICTs attended the 2018 CPRT (AS, CI, FSM, FJ, FP, GU, KI, NA, NC, NI, PA, PNG, RMI, SA, SI, TK, TO, TV, VU, WF)[133]
	13.4 Allocate resources through national budgeting process (where possible) to support attendance costs to the first Clean Pacific Roundtable (to be held tentatively in early 2016)	WCP departments	All	No. of self-funded PICT representatives participating in the Clean Pacific Roundtable meeting	Five of 21 PICTs self-funded representatives to attend the 2018 CPRT (AS, FJ, FP, VU, TV)[134]
	13.5 Conduct the first Clean Pacific Roundtable meeting	SPREP (Sec)	All	Clean Pacific Roundtable meeting convened	Two CPRTs convened: ▪ 2016 – successful launch of Inaugural Clean Pacific Roundtable in Suva, Fiji, with 96 participants from 17 SPREP Member countries and territories[135] ▪ 2018 – second CPRT, with 170 participants, including the private sector[136]

[130] Guinto M B., Solid Waste Management Adviser, SPREP, pers. comm., 29 June 2020

[131] Ibid.

[132] Guinto M B., Solid Waste Management Adviser, SPREP, pers. comm., 29 June 2020

[133] Ibid.

[134] Yoshida A., Regional Cooperation/Project Coordinator, J-PRISM II, pers. comm., 26 June 2020

[135] SPREP (2017) Performance Monitoring and Evaluation Report on the 2016 Work Programme and Budget, https://www.sprep.org/attachments/2017SM28/Officials/English/WP%205.2.Att.1.rev.1–2016%20PMER%20final.pdf

[136] SPREP (2018) Executive Board Meeting 2018, WP 10.3, Att. 1, Clean Pacific Roundtable 2018 Executive Summary https://www.sprep.org/sites/default/files/documents/executive_board/2018/WP.10.3.1.Att.1%20-%20CPR%20Report%202018_Executive%20Summary_FINAL.pdf

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
14 SPREP, PICTs, and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities.	**14.1** Develop database of PICTs' and metropolitan members' WCP capacity (WCP expertise, main contacts, WCP stakeholders, WCP case studies, and so on).	SPREP (Sec)	All	Database developed and populated	Pacific Islands Database of Capacity Development Initiatives under development through J-PRISM II, to be turned over to SPREP for input of information[137]
	14.2 Increase the profile of WCP issues and best practices through existing forums such as the CROP Marine Sector Working Group, PACMA, PMTA, AOSIS, MSG, MCES, PALM	SPREP (Sec)	All	No. of forums with priority WCP issues on the agenda	WCP issues featured in seven forums:[138] ▪ 2017, 2018, 2019 Pacific Islands Forum meeting, WCP issues included in communique ▪ 2017, 2019 Transport and Energy Ministers Meeting, WCP issues included in outcomes statement ▪ 2018 Pacific Islands Leaders Meeting (PALM8), WCP issues included in outcomes statement ▪ 2019 Sports Ministers Meeting, WCP issues included in outcomes statement ▪ 2019 Pacific Maritime Transport Alliance

[137] Yoshida A., Regional Cooperation/Project Coordinator, J-PRISM II, pers. comm., 26 June 2020; Guinto M B., Solid Waste Management Adviser, SPREP, pers. comm., 29 June 2020

[138] Talouli A., Pollution Adviser, SPREP, pers. comm., 25 June 2020

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
14 SPREP, PICTs, and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities.	**14.3** Conduct an annual national WCP forum, or participate in existing forums to support and promote experience-sharing and dissemination of best practices	WCP departments	All	No. of national annual WCP forums conducted	17 of 21 PICTs hosted, coordinated or participated in WCP forums: ▪ AS – hosted a Dry Litter Piggery Workshop attended by representatives from CI, FSM, KI, TV ▪ CNMI – hosted the 29th Pacific Islands Environment Conference, which included sessions on water quality ▪ FSM – two national SWM workshops held (under J-PRISM II's JCC), for the four states to share baseline waste survey results and efforts to improve waste collection services ▪ FSM, PA, RMI – participated in a sub-regional workshop on disaster waste management (DWM) ▪ FJ, NA – shared landfill rehabilitation experience ▪ FJ, TV, VU – collaborated on DWM ▪ FJ, SA, SI, TO, TV, VU – participated in a sub-regional workshop on DWM ▪ GU – hosted the 30th Pacific Islands Environment Conference, which included waste management workshops and presentations ▪ KI – convened the "Kiribati Boboto Technical Dialogue" on waste management issues with representatives from government, Church groups, NGOs, communities, State Owned Enterprises and the private sector ▪ NC – hosted the 11th Pacific Water and Wastewater Conference ▪ PA – shared experiences with representatives from TV at a SWM workshop; presented on SWM and 3R activities during J-PRISM II Steering Committee meetings ▪ PNG – city-city cooperation, technical training and capacity development programme between NCDC-Goroka and NCDC-Kokopo with the support of J-PRISM II ▪ RMI, KI, TV – exchanged knowledge of atoll waste management practices ▪ SA – Greening the Games campaign promoted alternatives to single-use plastics; hosted the 10th Pacific Water and Wastewater Conference ▪ SI – Honiara City Council, in cooperation with MECDM and Provincial Centres, led human and institutional capacity development initiatives targeting towns/cities, to share good practices and strengthen capacity nation-wide (e.g. with waste audits); attended disaster waste management training in Japan ▪ VU – DEPC supported Municipal Councils and Provincial Government Councils with development of their annual Waste Management Plans through a process of information sharing and consultation ▪ WF – 'Recycling waste for zero waste' side event hosted at the 29th SPREP Meeting ▪ Also, J-PRISM II Steering Committee Meetings held annually, attended by representatives from the nine member countries (FSM, PA, PNG, RMI, SA, SI, TO, TV, VU) as a regional platform to share their practices and project progress. At the national level, Joint-Coordination-Committee Meetings held annually with all stakeholders to share project progress and good practices [Refer to PICTs' progress assessments for details and sources]

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
14 SPREP, PICTs, and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities.	**14.4** Seek opportunities to engage with regional organisations in WCP-related areas of water and sanitation, transport, energy, disaster risk reduction, agriculture, tourism, health, forestry and fisheries	SPREP (Sec)	All	No. of WCP activities involving other regional organisations	No progress or unable to measure the KPI in relation to the specified activity
14 SPREP, PICTs, and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities.	SPREP, PICTs, and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities.	SPREP (Sec)	All	WCP recycling network established No. of members of WCP recycling network	Several initiatives contributed to establishment of a recycling network: ▪ J-PRISM II and SPREP supported the creation and functioning of recycling associations in SA, SI, TV, FJ and VU[139] ▪ J-PRISM II held the third Steering Committee meeting in 2019, attended by recycling associations from FJ, SA, SI, VU, and government officials from FSM, PA, PNG, RMI, SA, SI, TO, TV, VU, to discuss the need for establishing a regional recycling network[140] ▪ Recycling Technical Working Group formed through the CPRT[141] Unable to accurately measure the KPI
	14.6 Develop a directory of endorsed WCP professional bodies for potential member participation	SPREP (Sec)	All	Directory of endorsed WCP professional bodies disseminated to PICTs	No progress
	14.7 Encourage employees to participate in endorsed WCP professional bodies	WCP departments	All	No. of persons participating in WCP professional bodies	No progress, linked to 14.6

[139] Ibid.

[140] Yoko, O., JICA Expert / Monitoring 3R+Return J-PRISM II, pers. comm., 26 June 2020

[141] Guinto M B., Solid Waste Management Adviser, SPREP, pers. comm., 29 June 2020

Strategic Actions	Activities[35]	Lead Agency	Priority PICTs	Key Performance Indicators	KPI assessment
14 SPREP, PICTs, and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities.	**14.8** Establish a national WCP Steering Committee to support coordination and monitoring of WCP activities across responsible agencies	WCP departments	All	No. of functional national WCP steering committees	Four of 21 PICTs established WCP steering committees: ▪ GU – established the multi-agency Zero Waste Working Group Guam, to develop and make recommendations for adoption and implementation of the Guam Zero Waste Master Plan ▪ PNG – ToR developed for the National Waste Management Committee and first meeting held ▪ SA – steering committee established to monitor the implementation of the National Solid Waste Management Strategy and coordinate technical working groups ▪ TV – Waste Management Coordinating, Waste Levy, and Used Lubricating Oil committees established [Refer to PICTs' progress assessments for details and sources]
15 SPREP, PICTs and partners shall cooperate to ensure timely monitoring of the *Integrated Regional Waste Management and Pollution Control Strategy 2016–2025*.	**15.1** Prepare annual national reports of WCP activities and outcomes	WCP departments	All	No. of annual national reports of WCP activities prepared and submitted to SPREP (Sec)	Three of 21 PICTs completed WCP activity reports: ▪ PA – annual report published on beverage container recycling programme by the Bureau of Public Works[142] ▪ VU – progress monitoring of National Waste Management and Pollution Control Strategy evaluated and summarised by DEPC in 2017, 2018 and 2019[143], [144] ▪ TV – two reviews completed of Tuvalu's Integrated Waste Policy and Action Plan 2017–2026[145] Regional monitoring form for solid waste management data developed by JICA/J-PRISM II and distributed in 2020. The form is aligned with the performance indicators of J-PRISM II and CP2025, and supports annual, national level monitoring and reporting in nine PICs (FSM, FJ, PA, PNG, RMI, SA, SI, TO, VU)[146]
	15.2 Prepare an annual regional report of WCP activities and outcomes (with support for online national reporting)	SPREP (Sec)	All	No. of annual regional reports of WCP activities prepared	No progress – dependent on the development of the regional waste monitoring system (refer to activities 1.2, 1.3)

[142] Nomura M., JICA Expert on Solid Waste Management Training/Monitoring, J-PRISM II, pers. comm., 26 June 2020

[143] JICA (2020) Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries Phase II (J-PRISM II) (Group 2), Project Completion Report (2nd Term), Kokusai Kogyo Co., Ltd. Yachiyo Engineering Co., Ltd.

[144] https://depc.gov.vu/images/Waste.Management/Public_Version_NWMPCS_Action_Plan_in_2019.pdf

[145] Government of Tuvalu (2019) The 2nd Annual Review of the Implementation Status of Tuvalu's Integrated Waste Policy and Action Plan 2017–2026

[146] Yoshida A., Regional Cooperation/Project Coordinator, J-PRISM II, pers. comm., 5 June 2020

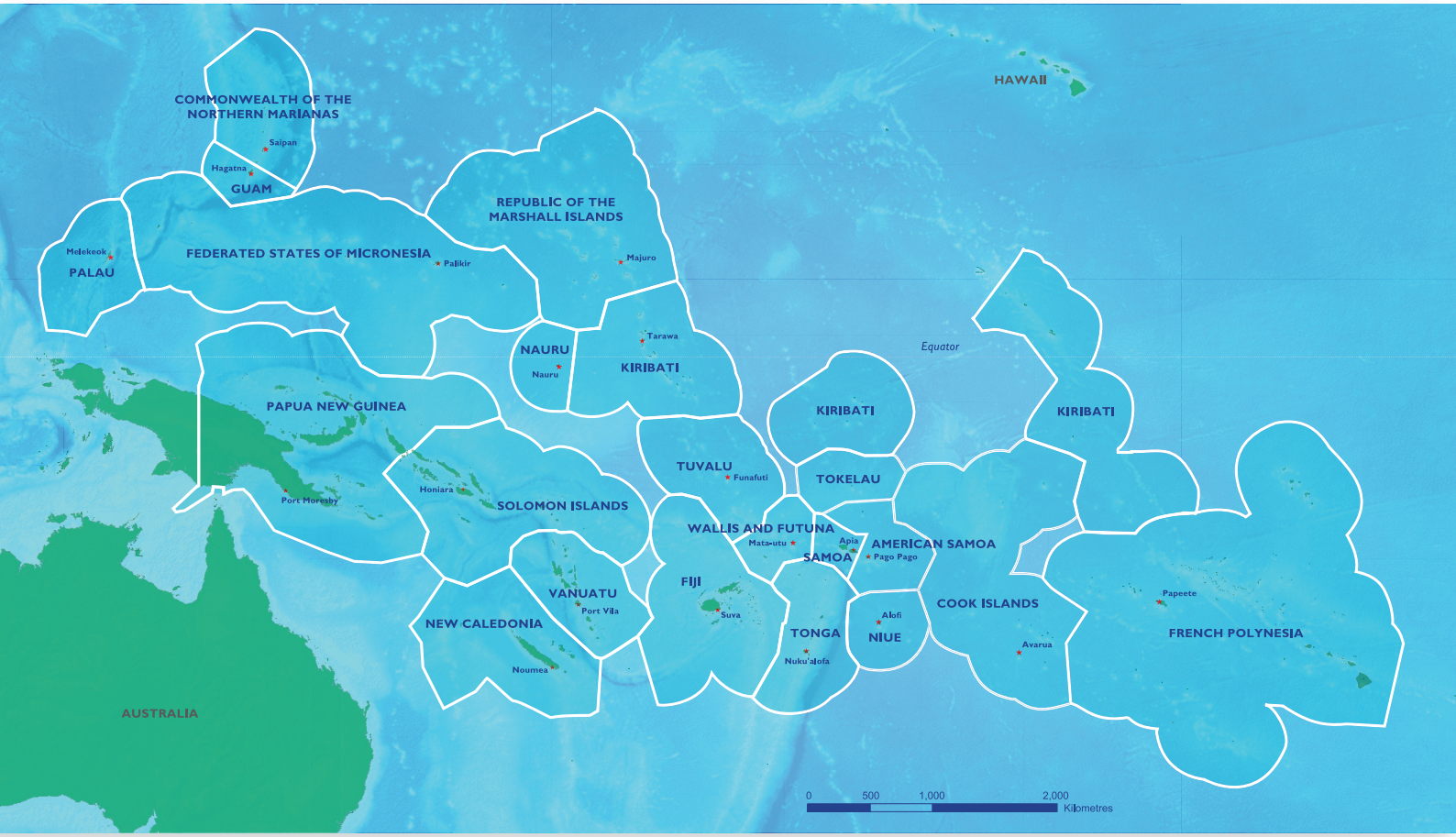
APPENDIX 4 Pacific island country and territory progress assessments

Individual progress assessments are detailed below for each of the 21 Pacific island countries and territories, for the initial implementation phase of CP2025, 2016–2019. Assessment comprehensiveness varied between countries and territories depending on data and information available at the time of the CP2025 mid-term review (April–July 2020). A few progress assessments were reviewed and validated by countries, but most were not (indicated in footnotes).

Each country or territory was assigned a rating based on their overall CP2025 progress:

GOOD	≥ 5 (out of 20) performance indicators improved and good and/or limited progress achieved for ≥ 8 (out of 15) strategic actions;
FAIR	≥ 5 (out of 20) performance indicators improved and good and/or limited progress achieved for < 8 (out of 15) strategic actions, OR < 5 (out of 20) performance indicators improved and good and/or limited progress achieved for ≥ 8 (out of 15) strategic actions;
LIMITED	< 5 (out of 20) performance indicators improved and good and/or limited progress achieved for < 8 (out of 15) strategic actions.

The low assessment threshold for performance indicators accounts for the data gaps that still exist across all countries and territories.



AMERICAN SAMOA: CLEANER PACIFIC 2025 (CP2025) PROGRESS ASSESSMENT, 2016–2019[147]

OVERVIEW

Based on available data and information, American Samoa's overall CP2025 progress is rated as LIMITED:

- *National legislation, policies, strategies, plans for waste, chemicals and pollution (WCP)*: Litter enforcement law updated, Keep American Samoa Beautiful Act 2016 (Table 1).
- *Twenty CP2025 performance indicators*: with reference to very limited 2014 baseline information, two indicators have improved (per capita municipal solid waste generation decreased, composting operational); six remain unchanged/stable; progress is undetermined for four indicators due to data being available for one year only; and eight indicators have no data for assessing progress (Table 2). Note, two of the unchanged/stable indicators reflect positive progress, given their good 2014 baselines.
- *Implementation Plan 2016–2019, 15 strategic actions*: good progress achieved for three (resource recovery, environmental monitoring and reporting, Clean Pacific Roundtable participation); limited progress achieved for four; and no progress for eight strategic actions (Table 3).

Based on the progress assessment results, five activity areas that require further work are:

- Development of an integrated WCP strategy and action plan that is aligned with CP2025, and includes a monitoring and reporting framework;
- Development of public-private partnerships, especially for container deposit, EPR and recycling programmes;
- Implementation of WCP prevention and reduction programmes;
- Expansion of routine monitoring and reporting, especially for WCP management activities; and
- Improvement of WCP management infrastructure, working towards sustainable operation and maintenance.

RESULTS

Tables 1, 2 and 3, below, document key findings from the CP2025 progress assessment for American Samoa. Where appropriate and feasible, progress has been assessed with reference to baselines recorded in CP2025.

TABLE 1 Status of waste, chemicals and pollution (WCP) legislation, policies, strategies, plans

	Legislation (L)[a]		Policies, strategies, plans (PSP)		Sources[b]
	2016	2020	2016	2020	
Solid waste	X	X	X	ND	13, 14 (L)
Healthcare waste	X	X		ND	13, 14 (L)
Other hazardous waste	X	X	X	ND	13 (L)
Liquid waste	X	X		ND	2, 13, 14 (L)
Chemicals	X	X		ND	13, 14 (L)
Oil spill contingency	N/A	N/A	X	X	2 (PSP)
Air pollution	X	X		ND	13, 14 (L)
Plastics (including single-use)[c]	X	X		ND	13 (L)
Container deposit[c]					
Litter[c]	X	X1		ND	13, 14 (L)

a = some of the WCP categories do not have specific laws, but are covered under general laws to varying degrees; b = information/data sources for 2016 L, 2020 L and 2020 PSP only, 2016 PSP data from source 1; c = new category, not referred to in CP2025; N/A = not applicable; ND = no data; X = enacted (L) or endorsed (PSP) and current; blank cells indicate WCP categories not addressed in L or PSP; 1 = updated law, *Keep American Samoa Beautiful Act 2016*.

[147] Progress assessment not reviewed and validated by American Samoa.

TABLE 2 Progress assessment, CP2025 performance indicators

IMPROVED | UNCHANGED/STABLE | DETERIORATED | UNDETERMINED | NO DATA

Performance indicators	2014	2020	Sources[A]
Per capita generation of municipal solid waste (kg/person/ day)	1.0 (Tutuila Island)	0.94b	15
No. of marine pollution incidents	ND	ND	
No. of port waste reception facilities	0	0	10
Waste recycling rate (= amt recycled, reused, returned/amt recyclable) (%)	ND	ND	
No. of national or municipal composting programmes	0	1c	3
No. of national or state container deposit programmes	0	0d	12
No. of national EPR programmes for used oil	0	0e	4
No. of national EPR programmes for e-waste	0	ND	
No. of national or state user-pays systems for waste collectiona	1f	1f	11
Waste collection coverage (% of population)	100% (urban) 100% (national)	ND	
Waste capture rate (= amount collected/amount generated) (%)	ND	ND	
No. of temporary, unregulated and open dumps	3g	ND	
Quantity of asbestos stockpiles (m^2)	ND	ND	
Quantity of healthcare waste stockpiles (tonnes)	ND	ND	
Quantity of e-waste stockpiles (tonnes)	ND	ND	
Quantity of used oil stockpiles (m^3)	ND	ND	
Quantity of pharmaceutical and chemical stockpiles (tonnes)	ND	ND	
Urban sewage treated to secondary standards (%)	0	0h	16
No. of water and environmental quality monitoring programmesa	1i	1i	5
No. of national chemicals and pollution inventories	0	ND	

A = 2020 data sources only, 2014 data from source 1; EPR = Extended Producer Responsibility; ND = no data; a = unchanged/stable indicator actually reflects good progress, given the 2014 baseline; b = 2016 adjusted urban and rural estimate; c = '1' indicates a composting programme is operational; d = no CDP but a private enterprise pays customers for the return of used beverage aluminium cans and bottles; e = EPR scheme run by one supplier for its products only; f = '1' indicates user-pays waste collection is in place; g = open dumps only; h = primary treatment only; i = '1' indicates a number of EPA monitoring programmes are operational.

TABLE 3 Progress assessment, CP2025 Implementation Plan 2016–2019 strategic actions and linked activities

GOOD PROGRESS (≥ half of linked activities progressed) | LIMITED PROGRESS (< half of linked activities progressed) | NO PROGRESS (no linked activities progressed)

Strategic actions	Summary of activities	Sources
A. Strengthen institutional capacity		
SPREP, PICTs and partners shall undertake regular WCP data collection and management, including storage, interpretation, dissemination and sharing	One of three activities progressed: recreational marine waters analysed weekly for microbiological quality and public advisories issued; freshwater rivers, streams and estuaries monitored regularly by AS-EPA.	5

Strategic actions	Summary of activities	Sources
PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation and strengthen institutional arrangements to support and promote best practice WCP management	One of five activities progressed: litter enforcement law updated and in force (Keep American Samoa Beautiful Act 2016).	6
B. Promote public-private partnerships		
SPREP, PICTs and partners shall strengthen existing and develop new public-private partnerships including through strengthened public-private partnership frameworks	Zero of three activities progressed.	
C. Implement sustainable best practices in WCP management		
SPREP, PICTs and partners shall implement best practice occupational health and safety measures for formal and informal workers in the WCP management sectors	Zero of one activity progressed.	
PICTs, supported by SPREP and partners, shall implement WCP prevention and reduction programmes	Zero of eight activities progressed.	
PICTs, supported by SPREP and partners, shall implement resource recovery programmes	One of two activities progressed: WCP education/ environmental awareness delivered in schools by AS-EPA.	8
PICTs, supported by SPREP and partners, shall remediate contaminated sites and WCP stockpiles in accordance with best practices	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, will expand user-pays WCP collection services	Zero of three activities progressed, however, AS has an existing monthly household waste collection fee billed by the AS Power Authority.	1
PICTs, supported by SPREP and partners, shall improve WCP management infrastructure and support sustainable operation and maintenance	Zero of eight activities progressed.	
PICTs, supported by SPREP and partners, shall implement best practice environmental monitoring and reporting programmes	One of one activity progressed: recreational marine waters analysed weekly for microbiological quality and public advisories issued; freshwater rivers, streams and estuaries monitored regularly by AS-EPA.	5
D. Develop human capacity		
SPREP, PICTs and partners shall implement sustainable human capacity development programmes for WCP management stakeholders	Zero of two activities progressed.	
E. Improve dissemination of outcomes and experiences in WCP management		
SPREP, PICTs and partners shall use project outcomes to implement regional and national WCP education and behavioural-change programmes	One of four activities progressed: WCP education/ environmental awareness delivered in schools by AS-EPA.	8
F. Promote regional and national cooperation		
SPREP, PICTs and partners shall establish a regional Clean Pacific Roundtable to coordinate and facilitate waste management and pollution-control dialogue and networking in the region	Two of two activities progressed: participated in CPRTs 2016 and 2018; self-funded a delegate in 2018.	7
SPREP, PICTs and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities	One of three activities progressed: AS-EPA, in partnership with the Interagency Piggery Management Group, hosted a Dry Litter Piggery workshop attended by representatives from TV, KI, FSM and CI.	9
SPREP, PICTs and partners shall cooperate to ensure timely monitoring of the Pacific Regional Waste and Pollution Management Strategy 2016–2025	Zero of one activity progressed.	

SOURCES:

1 SPREP (2016) Cleaner Pacific 2025: Pacific Regional Waste and Pollution Management Strategy 2016–2025 https://www.sprep.org/publications/cleaner-pacific-2025-pacific-regional-waste-and-pollution-management-strategy

2 https://americansamoaport.as.gov/about-us/general-rules-regulations.html

3 https://www.epa.as.gov/piggeries

4 Araspring Ltd. (2018) Used Oil Report – Fiji, Niue, Kiribati, Vanuatu, SCL, https://www.sprep.org/attachments/used-oil-mission-report-fiji-kiribati-niue-vanuatu-scl.pdf

5 https://www.epa.as.gov/water-quality

6 https://www.epa.as.gov/sites/default/files/documents/regulations/Litter%20Enforcement.pdf

7 Guinto M B., Solid Waste Management Adviser, SPREP, pers. comm., 29 June 2020

8 https://www.epa.as.gov/outreach

9 https://www.epa.as.gov/asepa-hosts-dry-litter-piggery-program-workshop

10 Talouli A., Pollution Adviser, SPREP, pers. comm., 25 June 2020

11 https://aspower.com/rates.html

12 https://www.ghcreid.com/recycling

13 https://www.epa.as.gov/laws-and-regulations

14 http://www.paclii.org/as/legis/consol_act/

15 Kaza S., Yao L., Bhada-Tata P., Woerden F. (2018) What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050. Urban Development Series. Washington, DC: World Bank, https://openknowledge.worldbank.org/handle/10986/30317

16 https://www.pwwa.ws/wp-content/uploads/2020/01/PWWA-Seven-Years-of-Benchmarking_2018-FINAL-DRAFT.pdf

COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS (CNMI): CLEANER PACIFIC 2025 (CP2025) PROGRESS ASSESSMENT, 2016–2019[148]

OVERVIEW

Based on available data/information, CNMI's overall CP2025 progress is rated as LIMITED:

- *National legislation, policies, strategies, plans for waste, chemicals and pollution (WCP)*: Air Pollution Control Regulations updated (Table 1).
- *Twenty CP2025 performance indicators*: with reference to very limited 2014 baseline information, one indicator has improved (water quality monitoring operational), three remain unchanged/stable, progress is undetermined for five indicators due to data being available for one year only, and 11 indicators have no data for assessing progress (Table 2).
- *Implementation Plan 2016–2019, 15 strategic actions*: good progress achieved for two (WCP data collection and management, environmental monitoring), limited progress achieved for five, and no progress for seven strategic actions. Activities under one strategic action were not applicable to CNMI (Table 3).

Based on the progress assessment results, five activity areas that require further work are:

- Development of an integrated WCP strategy and action plan that is aligned with CP2025 and includes a monitoring and reporting framework;
- Development of public-private partnerships, especially for container deposit, EPR and recycling programmes;
- Implementation of WCP prevention and reduction programmes;
- Remediation of contaminated sites and management of hazardous waste, including development of inventories; and
- Improvement of WCP management infrastructure, working towards sustainable operation and maintenance.

RESULTS

Tables 1, 2 and 3, below, document key findings from the CP2025 progress assessment for CNMI. Where appropriate and feasible, progress has been assessed with reference to baselines recorded in CP2025.

TABLE 1 Status of waste, chemicals and pollution (WCP) legislation, policies, strategies, plans

	Legislation (L)[a]		Policies, strategies, plans (PSP)		
	2016	2020	2016	2020	Sources
Solid waste	X	X	ND	ND	11 (L)
Healthcare waste	ND	ND	ND	ND	
Other hazardous waste	X	X	ND	ND	11 (L)
Liquid waste	X	X	ND	ND	11 (L)
Chemicals	X	X	ND	ND	11 (L)
Oil spill contingency	N/A	N/A	ND	ND	
Air pollution	X	X[1]	ND	ND	11 (L)
Plastics (including single-use)[c,d]				ND	
Container deposit[c]				ND	
Litter[c]	X	X		ND	11 (L)

a = 2020 information/data sources only, 2016 data from source 1; c = new category, not referred to in CP2025; d = in 2019 the CNMI Legislature introduced a bill to ban the importation, production, distribution and use of single-use plastic bags (source 2); N/A = not applicable; ND = no data; X = enacted (L) or endorsed (PSP) and current; blank cells indicate WCP categories not addressed in L or PSP; 1 = Air Pollution Control Regulations updated in 2017.

[148] Progress assessment not reviewed and validated by the Commonwealth of the Northern Mariana Islands.

TABLE 2 Progress assessment, CP2025 performance indicators

IMPROVED | UNCHANGED/STABLE | DETERIORATED | UNDETERMINED | NO DATA

Performance indicators	2014	2020	Sources[A]
Per capita generation of municipal solid waste (kg/person/ day)	ND	2.6[b]	3
No. of marine pollution incidents	ND	ND	
No. of port waste reception facilities	0	0	4
Waste recycling rate (= amt recycled, reused, returned/amt recyclable) (%)	ND	ND	
No. of national or municipal composting programmes	0	0	9
No. of national or state container deposit programmes	0	0[c]	12
No. of national EPR programmes for used oil	0	ND	
No. of national EPR programmes for e-waste	0	ND	
No. of national or state user-pays systems for waste collection	ND	ND	
Waste collection coverage (% of population)	ND	ND	
Waste capture rate (= amount collected/amount generated) (%)	ND	ND	
No. of temporary, unregulated and open dumps	ND	2[d]	9
Quantity of asbestos stockpiles (m^2)	ND	ND	
Quantity of healthcare waste stockpiles (tonnes)	ND	ND	
Quantity of e-waste stockpiles (tonnes)	ND	ND	
Quantity of used oil stockpiles (m^3)	ND	ND	
Quantity of pharmaceutical and chemical stockpiles (tonnes)	ND	ND	
Urban sewage treated to secondary standards (%)	ND	ND[e]	9
No. of water and environmental quality monitoring programmes	0	1[f]	5, 6
No. of national chemicals and pollution inventories	0	ND	

A = 2020 data sources only, 2014 data from source 1; EPR = Extended Producer Responsibility; ND = no data; a = unchanged/stable indicator actually reflects good progress, given the 2014 baseline; b = estimate for Saipan only (approx. population 50,000), based on MSW tonnages received at solid waste facilities during the 2018 fiscal year (FY). FY2019 MSW tonnages are available, however, Super Typhoon Yutu resulted in a significant increase in MSW generation during that year, so FY2018 figures were deemed to be better for the purpose of this assessment; c = no container deposit programme but recycling is available, with some private operators offering a buyback programme for recyclables; d = open dumps only; e = Saipan has two wastewater treatment plants that treat sewage to secondary standards, however, no data is available for % treated; f = '1' indicates water quality monitoring is occurring, a number of monitoring programmes are operational.

TABLE 3 Progress assessment, CP2025 Implementation Plan 2016–2019 strategic actions and linked activities

GOOD PROGRESS (≥ half of linked activities progressed)	LIMITED PROGRESS (< half of linked activities progressed)	NO PROGRESS (no linked activities progressed)

Strategic actions	Summary of activities	Sources
A. Strengthen institutional capacity		
SPREP, PICTs and partners shall undertake regular WCP data collection and management, including storage, interpretation, dissemination and sharing	Two of three activities progressed: MSW and recyclables data recorded (amount collected and processed) by the Public Works Department; marine water quality sampled weekly by Division of Environmental Quality (DEQ) to monitor chemical, physical and microbial quality of nearshore waters (Tinian, Rota, Managaha, Saipan islands); health of CNMI waters evaluated biannually by DEQ, analysing water quality monitoring data, the health of coral reefs and seagrass beds, and interpreting the impacts of mapped pollution sources; stream water monitored and watersheds assessed regularly for pollution sources by DEQ.	3, 5, 6
PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation and strengthen institutional arrangements to support and promote best practice WCP management	One of five activities progressed: Air Pollution Control Regulations updated.	11
B. Promote public-private partnerships		
SPREP, PICTs and partners shall strengthen existing and develop new public-private partnerships including through strengthened public-private partnership frameworks	Zero of three activities progressed.	
C. Implement sustainable best practices in WCP management		
SPREP, PICTs and partners shall implement best practice occupational health and safety measures for formal and informal workers in the WCP management sectors	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, shall implement WCP prevention and reduction programmes	One of eight activities progressed: eight recycling centres on Saipan, one on Tinian for paper, glass, plastic, metals.	7
PICTs, supported by SPREP and partners, shall implement resource recovery programmes	Zero of two activities progressed.	8
PICTs, supported by SPREP and partners, shall remediate contaminated sites and WCP stockpiles in accordance with best practices	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, will expand user-pays WCP collection services	N/A to CNMI.	
PICTs, supported by SPREP and partners, shall improve WCP management infrastructure and support sustainable operation and maintenance	One of six activities progressed: new solid waste transfer facility built for Tinian, feasibility studies underway for solid waste management options for Saipan, funds approved to modify and improve Rota dumpsite.	9

Strategic actions	Summary of activities	Sources
PICTs, supported by SPREP and partners, shall implement best practice environmental monitoring and reporting programmes	One of one activity progressed: marine water quality sampled weekly by DEQ to monitor chemical, physical and microbial quality of nearshore waters (Tinian, Rota, Managaha, Saipan islands); health of CNMI waters evaluated biannually by DEQ, analysing water quality monitoring data, the health of coral reefs and seagrass beds, and interpreting the impacts of mapped pollution sources; stream water monitored and watersheds assessed regularly for pollution sources by DEQ.	5, 6
D. Develop human capacity		
SPREP, PICTs and partners shall implement sustainable human capacity development programmes for WCP management stakeholders	Zero of one activity progressed.	
E. Improve dissemination of outcomes and experiences in WCP management		
SPREP, PICTs and partners shall use project outcomes to implement regional and national WCP education and behavioural-change programmes	One of five activities progressed: education programmes delivered by DCRM to schools, businesses and general community about the impacts of single-use plastics and benefits of a zero-waste lifestyle.	8
F. Promote regional and national cooperation		
SPREP, PICTs and partners shall establish a regional Clean Pacific Roundtable to coordinate and facilitate waste management and pollution-control dialogue and networking in the region	Zero of two activities progressed.	
SPREP, PICTs and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities	One of three activities progressed: Bureau of Environmental and Coastal Quality hosted the 29th Pacific Islands Environment Conference in 2017, which included water quality training sessions.	10
SPREP, PICTs and partners shall cooperate to ensure timely monitoring of the Pacific Regional Waste and Pollution Management Strategy 2016–2025	Zero of one activity progressed.	

SOURCES:

1 SPREP (2016) Cleaner Pacific 2025: Pacific Regional Waste and Pollution Management Strategy 2016–2025 https://www.sprep.org/publications/cleaner-pacific-2025-pacific-regional-waste-and-pollution-management-strategy

2 http://www.cnmileg.gov.mp/documents/senate/sen_bills/21/SB21–37.pdf

3 https://opd.gov.mp/library/ccr/2019-department-of-public-works-citizen-centric-report/

4 Talouli A., Pollution Adviser, SPREP, pers. comm., 25 June 2020

5 http://www.deq.gov.mp/sec.asp?secID=66

6 http://www.deq.gov.mp/sec.asp?secID=68

7 http://www.deq.gov.mp/article.asp?secID=11&artID=31

8 https://dcrm.gov.mp/our-programs/education-and-outreach/

9 Office of Planning and Development, CNMI (2019) Resources Report: Planning for Sustainability in the Commonwealth of the Northern Mariana Islands (Working draft) https://opd.gov.mp/wp-content/uploads/opd/ResourcesReport_workingdraft0901.pdf

10 http://www.deq.gov.mp/sec.asp?secID=73

11 http://www.deq.gov.mp/sec.asp?secID=15

12 http://deq.gov.mp/article.asp?secID=11&artID=99

COOK ISLANDS: CLEANER PACIFIC 2025 (CP2025) PROGRESS ASSESSMENT, 2016–2019[149]

OVERVIEW

Based on available data/information, the Cook Islands' overall CP2025 progress is rated as FAIR :

- *National legislation, policies, strategies, plans for waste, chemicals and pollution (WCP)*: Solid Waste Management Policy 2016–2026 remains current; Sanitation (Wastewater Management) Policy 2016 endorsed by Cabinet; NATPLAN (National Marine Spill Contingency Plan) updated; and a new Single-use Plastic Ban Policy 2018–2023 prepared and endorsed (Table 1).
- *Twenty CP2025 performance indicators*: with reference to 2014 baseline information, two indicators have improved (asbestos removed, water quality monitoring operational), seven indicators remain unchanged/stable, progress for six is undetermined due to data being available for one year only, and five indicators have no data for assessing progress (Table 2).
- *Implementation Plan 2016–2019, 15 strategic actions*: good progress achieved for three (development of WCP policies, strategies, plans; environmental monitoring; Clean Pacific Roundtable participation); limited progress achieved for five; and no progress for six strategic actions. Activities under one strategic action were not applicable to the Cook Islands (Table 3).

Based on the progress assessment results, five activity areas that require further work are:

- Development of public-private partnerships, especially for container deposit, EPR and recycling programmes;
- Implementation of WCP prevention and reduction programmes;
- Management of hazardous waste, including development of inventories;
- Expansion of monitoring and reporting, especially for WCP management activities; and
- Improvement of WCP management infrastructure, working towards sustainable operation and maintenance.

RESULTS

Tables 1, 2 and 3, below, document key findings from the CP2025 progress assessment for the Cook Islands. Where appropriate and feasible, progress has been assessed with reference to baselines recorded in CP2025.

TABLE 1 Status of waste, chemicals and pollution (WCP) legislation, policies, strategies, plans

	Legislation (L)[a]		Policies, strategies, plans (PSP)		
	2016	2020	2016	2020	Sources[b]
Solid waste	X	X	X*	X*	17 (L), 2 (PSP)
Healthcare waste			X*	X*	2 (PSP)
Other hazardous waste	X	X	X*	X*	17 (L), 2 (PSP)
Liquid waste	X	X	D*	X	17, 18 (L), 2 (PSP)
Chemicals	X	X	C1^	C1^	17 (L), 16 (PSP)
Oil spill contingency	N/A	N/A	X	X	20 (PSP)
Air pollution					
Plastics (including single-use)[c]				X	3 (PSP)
Container deposit[c]					
Litter[c]					

a = some of the WCP categories do not have specific laws, but are covered under general laws to varying degrees; b = information/data sources for 2016 L, 2020 L and 2020 PSP only, 2016 PSP data from source 1; c = new category, not referred to in CP2025; N/A = not applicable; ND = no data; X = enacted (L) or endorsed (PSP) and current; D = prepared but not endorsed (PSP); C = preparation has commenced; blank cells indicate WCP categories not addressed in L or PSP; * = part of an integrated policy, strategy or plan; 1 = for POPs only; ^ = National Implementation Plan (Stockholm Convention) is yet to be updated to account for COP amendments.

[149] Progress assessment not reviewed and validated by the Cook Islands.

TABLE 2 Progress assessment, CP2025 performance indicators

IMPROVED | UNCHANGED/STABLE | DETERIORATED | UNDETERMINED | NO DATA

Performance indicators	2014	2020	Sources[A]
Per capita generation of municipal solid waste (kg/person/ day)	ND	1.14[a]	4
No. of marine pollution incidents	ND	ND	
No. of port waste reception facilities	0	0	20
Waste recycling rate (= amt recycled, reused, returned/amt recyclable) (%)	ND	ND	
No. of national or municipal composting programmes	1	ND	
No. of national or state container deposit programmes	0	0b	6
No. of national EPR programmes for used oil	0	0c	7
No. of national EPR programmes for e-waste	0	0d	15
No. of national or state user-pays systems for waste collection	0	0e	2
Waste collection coverage (% of population)	100% (urban) 74% (national)[f]	ND	
Waste capture rate (= amount collected/amount generated) (%)	ND	ND	
No. of temporary, unregulated and open dumps	10[g]	10[g]	8
Quantity of asbestos stockpiles (m^2)	6,520	3,310 removed during PacWaste project[h]	11
Quantity of healthcare waste stockpiles (tonnes)	0	ND	
Quantity of e-waste stockpiles (tonnes)	ND	ND	
Quantity of used oil stockpiles (m^3)	0	ND	
Quantity of pharmaceutical and chemical stockpiles (tonnes)	ND	ND	
Urban sewage treated to secondary standards (%)	0	0	19
No. of water and environmental quality monitoring programmes	0	1[i]	10
No. of national chemicals and pollution inventories	0	ND	

A = 2020 data sources only, 2014 data from source 1; EPR = Extended Producer Responsibility; ND = no data; a = 2016 estimate based on income groups in source 4 (Fig. 2.6, pg 27), and calculation of the average value across upper-middle and high-income countries; b = recycling available but no container deposit programme; c = EPR scheme run by one supplier for its products only; d = no EPR programmes but a pilot e-waste collection scheme was organised during the PacWaste project; e = Solid Waste Management Policy 2016–2026 includes a policy to introduce user-pay for collection of household waste; f = Rarotonga only; g = open dumps only; h = this indicator is rated as 'improved' based on the removal of asbestos; i = '1' indicates monitoring of stream, lagoon and groundwater resources by the Ministry of Marine Resources in collaboration with the National Environment Service, Infrastructure Cook Islands and the Ministry of Health.

TABLE 3 Progress assessment, CP2025 Implementation Plan 2016–2019 strategic actions and linked activities

GOOD PROGRESS (≥ half of linked activities progressed)	LIMITED PROGRESS (< half of linked activities progressed)	NO PROGRESS (no linked activities progressed)

Strategic actions	Summary of activities	Sources
A. Strengthen institutional capacity		
SPREP, PICTs and partners shall undertake regular WCP data collection and management, including storage, interpretation, dissemination and sharing	One of four activities progressed: stream, lagoon and groundwater water quality monitored by the Ministry of Marine Resources in collaboration with the National Environment Service (NES), Infrastructure Cook Islands (ICI) and the Ministry of Health.	10
PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation and strengthen institutional arrangements to support and promote best practice WCP management	Four of eight activities progressed: integrated policies developed for WCP management and institutional arrangements reviewed; marine spill contingency plan (NATPLAN) updated; development of a national healthcare waste strategy supported by the PacWaste project.	2, 3, 9, 15, 20
B. Promote public-private partnerships		
SPREP, PICTs and partners shall strengthen existing and develop new public-private partnerships including through strengthened public-private partnership frameworks	One of three activities progressed: collaborative arrangement made between ICI and General Transport to export recyclables off Rarotonga; list of Pacific recycling companies posted on Pacific Recycling Technical Working Group (RWG) webpage.	12, 14
C. Implement sustainable best practices in WCP management		
SPREP, PICTs and partners shall implement best practice occupational health and safety measures for formal and informal workers in the WCP management sectors	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, shall implement WCP prevention and reduction programmes	One of nine activities progressed: recycling centre managed by Infrastructure Cook Islands at the Rarotonga Waste Facility.	9, 13
PICTs, supported by SPREP and partners, shall implement resource recovery programmes	Zero of four activities progressed.	
PICTs, supported by SPREP and partners, shall remediate contaminated sites and WCP stockpiles in accordance with best practices	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, will expand user-pays WCP collection services	N/A to the Cook Islands.	
PICTs, supported by SPREP and partners, shall improve WCP management infrastructure and support sustainable operation and maintenance	One of seven activities progressed: high temperature incinerator installed to address medical waste disposal through the PacWaste project; Healthcare Waste Management Committee formalised to monitor outcomes, maintain standards and deliver staff education.	11
PICTs, supported by SPREP and partners, shall implement best practice environmental monitoring and reporting programmes	One of one activity progressed: stream, lagoon and groundwater water quality monitored by the Ministry of Marine Resources in collaboration with the NES, ICI and the Ministry of Health.	10
D. Develop human capacity		
SPREP, PICTs and partners shall implement sustainable human capacity development programmes for WCP management stakeholders	Zero of one activity progressed.	

Strategic actions	Summary of activities	Sources
E. Improve dissemination of outcomes and experiences in WCP management		
SPREP, PICTs and partners shall use project outcomes to implement regional and national WCP education and behavioural-change programmes	One of four activities progressed: education, awareness and engagement activities delivered through the PacWaste project, including an asbestos awareness-raising campaign.	15
F. Promote regional and national cooperation		
SPREP, PICTs and partners shall establish a regional Clean Pacific Roundtable to coordinate and facilitate waste management and pollution-control dialogue and networking in the region	One of two activities progressed: participated in CPRTs 2016 and 2018.	5
SPREP, PICTs and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities	Zero of three activities progressed.	
SPREP, PICTs and partners shall cooperate to ensure timely monitoring of the Pacific Regional Waste and Pollution Management Strategy 2016–2025	Zero of one activity progressed.	

SOURCES:

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8 https://www.theprif.org/documents/regional/urban-development-waste-management/pacific-region-solid-waste-management-and

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10 https://www.mmr.gov.ck/water-quality-monitoring/

11 SPREP (2018) Pacific Hazardous Waste Management (PacWaste). Volume 1: Final Report, unpublished

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16 http://chm.pops.int/Implementation/NationalImplementationPlans/NIPTransmission/tabid/253/Default.aspx

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FEDERATED STATES OF MICRONESIA (FSM): CLEANER PACIFIC 2025 (CP2025) PROGRESS ASSESSMENT, 2016–2019[150]

OVERVIEW

Based on available data/information, FSM's overall CP2025 progress is rated as GOOD:

- *National legislation, policies, strategies and plans for waste, chemicals and pollution (WCP)*: Solid Waste Management Strategies aligned with CP2025, developed and endorsed for Chuuk, Kosrae, Pohnpei and Yap, to support the National Solid Waste Management Strategy; and new laws banning single-use plastics enacted at a national level and for Chuuk and Kosrae (Tables 1a, 1b).
- *Twenty CP2025 performance indicators*: with reference to 2014 baseline information, five indicators have improved (increased number of state container deposit programmes, increased national waste collection coverage, asbestos removed, used oil stockpile decreased, water quality monitoring operational); six indicators remain unchanged/stable; progress for seven is undetermined due to data being available for one year only; and two have no data for assessing progress (Table 2). Note, two of the unchanged/stable indicators reflect positive progress, given their good 2014 baselines.
- *Implementation Plan 2016–2019, 15 strategic actions*: good progress achieved for five (WCP data collection and management; development of WCP policies, strategies, plans; environmental monitoring; human capacity development; Clean Pacific Roundtable participation); limited progress achieved for five; and no progress for four strategic actions. Activities under one strategic action were not applicable to FSM (Table 3).

Based on the progress assessment results, five activity areas that require further work are:

- Development of public-private partnerships, especially for EPR and recycling programmes;
- Implementation of WCP prevention and reduction programmes;
- Management of hazardous waste, including development of inventories;
- Improvement of WCP management infrastructure, working towards sustainable operation and maintenance; and
- Implementation of WCP education and behavioural-change programmes.

RESULTS

Tables 1a, 1b, 2 and 3, below, document key findings from the CP2025 progress assessment for FSM. Where appropriate and feasible, progress has been assessed with reference to baselines recorded in CP2025.

Table 1a: Status of waste, chemicals and pollution (WCP) legislationa

	2016					2020					
	National	Chuuk	Kosrae	Pohnpei	Yap	National	Chuuk	Kosrae	Pohnpei	Yap	Sources[b]
Solid waste		X	X	X	X		X	X	X	X	16, 19
Healthcare waste											
Other hazardous waste	X		X	X	X	X		X	X	X	16
Liquid waste	X	X	X	X	X	X	X	X	X	X	16, 19
Chemicals	X		X		X	X		X		X	16, 19, 21
Air pollution	X	X	X	X	X	X	X	X	X	X	16, 19
Single-use plastics				X	X	X	X	X	X	X	17, 18, 20, 22
Container deposit		X[c]	X	X	X		Xc	X	X	X	2, 16
Litter	X	X	X	X	X	X	X	X	X	X	16

a = some of the WCP categories do not have specific laws, but are covered under general laws to varying degrees; b = information/data sources for 2016 and 2020; c = CDL legislation enacted but system last functioned around 2002 (source 2); X = enacted; blank cells indicate WCP categories not addressed in legislation.

[150] Progress assessment reviewed and validated by the Federated States of Micronesia.

Table 1b: Status of WCP policies, strategies, plans (PSP)

		2020					
	2016	National	Chuuk	Kosrae	Pohnpei	Yap	Sources[a]
Solid waste	X	X	X	X	X	X	2, 13
Healthcare waste	X*	X*					3, 13
Other hazardous waste	X*	X*					13
Liquid waste	X	X		X[c]		X[c]	2
Chemicals	X[1]	X[1^]					15
Oil spill contingency	D					X	24
Air pollution	X						2
Plastics (including single-use)[b]							
Container deposit[b]							
Litter[b]							

a = 2020 information/data sources only, 2016 data is from source 1 and it was not disaggregated in terms of national and state PSP; b = new category, not referred to in CP2025; c = waste oil included in state Solid Waste Management Strategy; ND = no data; X = document endorsed and current; C = preparation has commenced; D = document prepared but not endorsed; blank cells indicate WCP categories not addressed in PSP; * = part of an integrated PSP; 1 = for POPs only; ^ = National Implementation Plan (Stockholm Convention) is yet to be updated to account for COP amendments.

TABLE 2 Progress assessment, CP2025 performance indicators

IMPROVED | UNCHANGED/STABLE | DETERIORATED | UNDETERMINED | NO DATA

		2020					
Performance indicators	2014	National	Chuuk	Kosrae	Pohnpei	Yap	Sources[A]
Per capita generation of municipal solid waste (kg/person/day)	ND	1.12[b]	0.92[c]	1.13[c]	1.15[c]	1.29[c]	2
No. of marine pollution incidents	ND	0	0	0	0	0	24
No. of port waste reception facilities	0	0	0	0	0	0	6
Waste recycling rate (= amt recycled, reused, returned/ amt recyclable) (%)	ND	68[d]	ND	86[e]	57[e]	96[e]	2
No. of national or municipal composting programmesa	1f	1[f]	1	1	1	1	2, 24
No. of national or state container deposit programmes	2	3[g]	0	1	1	1	2, 7
No. of national EPR programmes for used oil	0	0	0	0	0	0	24
No. of national EPR programmes for e-waste	0	0	0	0	0	0	24
No. of national or state user-pays systems for waste collectiona	1	1[h]	0	1	1	1	2
Waste collection coverage (% of population)	35 (urban) 8 (national)	29 (national)[b,i]	48	36	17	16	2
Waste capture rate (= amount collected/amount generated) (%)	ND	18	28	17	13	14	2
No. of temporary, unregulated and open dumps	34	ND	ND	ND	ND	ND	
Quantity of asbestos stockpiles (m^2)	3,557	53 removed during PacWaste[j]	ND	ND	ND	ND	3
Quantity of healthcare waste stockpiles (tonnes)	0	ND	ND	ND	ND	ND	
Quantity of e-waste stockpiles (tonnes)	ND	ND	ND	ND	ND	ND	
Quantity of used oil stockpiles (m^3)	1,027[k]	937[l]	ND	ND	ND	ND	8
Quantity of pharmaceutical and chemical stockpiles (tonnes)	ND	ND	ND	ND	ND	ND	
Urban sewage treated to secondary standards (%)	0	0	0	0	0	0	9
No. of water and environmental quality monitoring programmes	0	1[m]	1	1	1	1	10, 24
No. of national chemicals and pollution inventories	ND	1[n]	1	1	1	1	24

A = 2020 data sources only, 2014 data from source 1; EPR = Extended Producer Responsibility; ND = no data; a = unchanged/stable indicator actually reflects good progress, given the 2014 baseline; b = national value is the unweighted average of the state values; c = MSW (kg/person/day) estimates from 2017; d = national recycling rate calculated on the basis of total number of containers/items redeemed across CDPs in Pohnpei, Yap and Kosrae (i.e. national value is not the unweighted average of the state values); e = Kosrae and Pohnpei CDP recycling rates from 2017 and Yap recycling rate from 2016, based on the number of containers/items redeemed; f = '1' indicates composting programmes operational across the four states; g = national value is the sum of the 4 state values; h = '1' indicates municipal user-pays waste collection systems are operational across Kosrae, Pohnpei and Yap (to be counted as '1' for the regional assessment); i = note that waste from the outer islands is transported to the main islands on a monthly basis or when transport is available; j = this indicator is rated as 'improved' based on the removal of asbestos; k = sum of Chuuk, Kosrae, Pohnpei, Yap stockpiles; l = 2018 estimate for Pohnpei only (largest stockpile of all states), note, used oil has been exported since estimate made; m = '1' indicates monitoring programme operational, water quality testing by Pohnpei EPA; n = '1' indicates chemical inventories completed for all four states.

TABLE 3 Progress assessment, CP2025 Implementation Plan 2016–2019 strategic actions and linked activities

GOOD PROGRESS (≥ half of linked activities progressed)	LIMITED PROGRESS (< half of linked activities progressed)	NO PROGRESS (no linked activities progressed)

Strategic actions	Summary of activities	Sources
A. Strengthen institutional capacity		
SPREP, PICTs and partners shall undertake regular WCP data collection and management, including storage, interpretation, dissemination and sharing	Two of four activities progressed: waste amount and composition, waste disposal, and recycling surveys completed for all states with the support of JICA (J-PRISM II); fresh and marine water quality testing by Pohnpei EPA Water Lab.	2, 10
PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation and strengthen institutional arrangements to support and promote best practice WCP management	Four of eight activities progressed: comprehensive solid waste management strategies, aligned with CP2025, developed for Chuuk, Kosrae, Pohnpei and Yap with the support of JICA (J-PRISM II); National Solid Waste Management Strategy under review; institutional arrangements reviewed and recommendations for improvement developed, as part of new waste management strategies; healthcare waste management guide reviewed through PacWaste project; new waste collection system trialled in Tomil municipality (Yap) and new inter-municipal collection system developed (Kosrae) with the support of JICA (J-PRISM II); Recycling Law reviewed in Chuuk with the support of JICA (J-PRISM II).	2, 3, 12, 24
B. Promote public-private partnerships		
SPREP, PICTs and partners shall strengthen existing and develop new public-private partnerships including through strengthened public-private partnership frameworks	One of three activities progressed: private company contracted by Pohnpei state government to manage the landfill; private waste company and a recycling company contracted by Yap Public Works and EPA to manage waste collection and recycling, respectively; collaboration developed between recycling company and Kosrae Island Resource Management Authority (KIRMA).	24
C. Implement sustainable best practices in WCP management		
SPREP, PICTs and partners shall implement best practice occupational health and safety measures for formal and informal workers in the WCP management sectors	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, shall implement WCP prevention and reduction programmes	Three of nine activities progressed: container deposit programmes (CDP)/recycling centres currently operating in Kosrae, Pohnpei and Yap; through J-PRISM II, recommendations developed for improving CDP in Pohnpei, and container deposit legislation amended by EPA in Chuuk, with CDP soon to commence; used oil transfer facility built through the GEFPAS UPOPs project, with used oil stockpiles transferred into this facility and exported to NZ through Socadis assistance; crushed glass used in Kosrae to cover pathways.	2, 6, 11, 12, 24
PICTs, supported by SPREP and partners, shall implement resource recovery programmes	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, shall remediate contaminated sites and WCP stockpiles in accordance with best practices	Zero of two activities progressed.	

Strategic actions	Summary of activities	Sources
PICTs, supported by SPREP and partners, will expand user-pays WCP collection services	N/A to FSM – but a new user-pays waste collection system was trialled in Tomil municipality (Yap) and a new inter-municipal collection system was implemented in Kosrae with the support of JICA (J-PRISM II).	12
PICTs, supported by SPREP and partners, shall improve WCP management infrastructure and support sustainable operation and maintenance	Two of six activities progressed: two waste oil containment facilities completed (Pohnpei); second cell constructed for Dekehtik Landfill Site (Pohnpei); new waste collection system trialled in Tomil municipality (Yap) with the support of (J-PRISM II); new inter-municipal waste collection system developed in Kosrae with the support of (J-PRISM II), with the service cost shared by Kosrae State Government and the four municipalities; inappropriately managed community dumpsites closed by EPA (Yap).	2, 10, 12, 23
PICTs, supported by SPREP and partners, shall implement best practice environmental monitoring and reporting programmes	One of one activity progressed: fresh and marine water quality testing and monitoring conducted by all states (EPA/KIRMA surveillance labs).	10, 24
D. Develop human capacity		
SPREP, PICTs and partners shall implement sustainable human capacity development programmes for WCP management stakeholders	One of one activity progressed: capacity building needs assessment completed with JICA/J-PRISM II between 2017 to 2019, to identify training and human resource exchange needs.	23
E. Improve dissemination of outcomes and experiences in WCP management		
SPREP, PICTs and partners shall use project outcomes to implement regional and national WCP education and behavioural-change programmes	One of four activities progressed: public awareness programme implemented in Kosrae to encourage participation in the new inter-municipal waste collection system.	12
F. Promote regional and national cooperation		
SPREP, PICTs and partners shall establish a regional Clean Pacific Roundtable to coordinate and facilitate waste management and pollution-control dialogue and networking in the region	One of two activities progressed: attended the CPRTs in 2016 and 2018 with JICA/J-PRISM assistance.	24
SPREP, PICTs and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities	One of three activities progressed: attended annual J-PRISM II Steering Committee Meetings, as a regional platform to share practices and project progress; held annual national J-PRISM II Joint Coordination Committee Meetings, which brought together all states EPA/KIRMA Directors and Public Works Directors to share project progress and good practices, including SWM baseline survey results and efforts to improve waste collection services; participated in sub-regional workshops (JICA/J-PRISM II) on sanitary landfill design and operation, and disaster waste management.	6, 12, 23, 24
SPREP, PICTs and partners shall cooperate to ensure timely monitoring of the Pacific Regional Waste and Pollution Management Strategy 2016–2025	Zero of one activity progressed.	

SOURCES:

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2 Chuuk State Solid Waste Management Strategy 2019–2028 (Action Plan: 2019–2023), Kosrae State Solid Waste Management Strategy 2018–2027 (Action Plan: 2018–2022), Pohnpei State Solid Waste Management Strategy 2020–2029 (Action Plan: 2020–2024), Yap

State Solid Waste Management Strategy 2018–2027 (Action Plan: 2018–2022) https://www.sprep.org/j-prism-2/report-and-materials

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6 SPREP Waste Management and Pollution Control programme, pers. comm.

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12 JICA (2020) Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries Phase II (J-PRISM II), Group 1, Project Completion Report 2 (Phase 2), Kokusai Kogyo Co., Ltd. EX Research Institute Ltd., unpublished

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15 http://chm.pops.int/Implementation/NationalImplementationPlans/NIPTransmission/tabid/253/Default.aspx

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18 https://www.cfsm.gov.fm/ifile/21%20congress/LAWS/PUBLIC_LAW_NO__21–76.pdf

19 https://pohnpeistate.gov.fm/agency_protect.html

20 http://www.micronesiaforum.org/index.php?p=/discussion/12259/yap-environmental-protection-agency-bans-plastic-bags

21 https://fsm-data.sprep.org/dataset/yap-state-epa-regulations/resource/e1ae85aa-f89f-4b43–8961-478a1bab67fe

22 http://fsmlaw.org/kosrae/Law/pdf/11law/state%20law%20no.%2011–174.pdf

23 JICA, J-PRISM II team, pers. comm., 26 June 2020

24 Pedrus P., Deputy Assistant Secretary, Waste Management & Pollution Control Unit, Division of ES&D, Department of Environment, Climate Change, & Emergency Management, National Government, FSM, pers. comm., 28 June 2020

FIJI: CLEANER PACIFIC 2025 (CP2025) PROGRESS ASSESSMENT, 2016–2019[151]

OVERVIEW

Based on available data and information, Fiji's overall CP2025 progress is rated as FAIR :

- *National legislation, policies, strategies, plans for waste, chemicals and pollution (WCP)*: new law passed banning the manufacture, sale, supply and distribution of thin plastic bags; Solid Waste Management Master Plan 2018–2027 published by Suva City Council (Table 1).
- *Twenty CP2025 performance indicators*: with reference to 2014 baseline information, one indicator has improved (asbestos removed); five indicators remain unchanged/stable, progress is undetermined for 10 indicators due to data being available for one year only, and four indicators have no data for assessing progress (Table 2). Note, three of the unchanged/stable indicators actually reflect positive progress, given their good 2014 baselines.
- *Implementation Plan 2016–2019,15 strategic actions*: good progress achieved for two (resource recovery, Clean Pacific Roundtable participation), limited progress achieved for six, and no progress for six strategic actions. Activities under one strategic action were not applicable to Fiji (Table 3).

Based on the progress assessment results, five activity areas that require further work are:

- Finalisation of a national WCP strategy and action plan that is aligned with CP2025, and includes a monitoring and reporting framework;
- Development of public-private partnerships, especially for container deposit and EPR programmes;
- Implementation of WCP prevention and reduction programmes;
- Management of hazardous waste, including development of inventories; and
- Development and implementation of routine monitoring and reporting, especially for WCP management activities and the receiving environment.

RESULTS

Tables 1, 2 and 3, below, document key findings from the CP2025 progress assessment for Fiji. Where appropriate and feasible, progress has been assessed with reference to baselines recorded in CP2025.

TABLE 1 Status of waste, chemicals and pollution (WCP) legislation, policies, strategies, plans

	Legislation (L)[a]		Policies, strategies, plans (PSP)		
	2016	2020	2016	2020	Sources[b]
Solid waste	X	X	O	D#	9 (L), 2, 21 (PSP)
Healthcare waste	X	X	D	O	9 (L), 2 (PSP)
Other hazardous waste	X	X	O	O*	9 (L), 2 (PSP)
Liquid waste	X	X	O	O	9 (L), 3 (PSP)
Chemicals	X	X	C1^	C1^	9 (L), 6 (PSP)
Oil spill contingency	N/A	N/A	D	D	4 (PSP)
Air pollution	X	X	O	O	9 (L), 5 (PSP)
Plastics (including single-use)[c]		X	O	O*	9 (L), 2 (PSP)
Container deposit[c, d]	X	X	O	O*	7 (L), 2 (PSP)
Litter[c]	X	X	O	O*	9 (L), 2 (PSP)

a = some of the WCP categories do not have specific laws, but are covered under general laws to varying degrees; b = information/data sources for 2016 L, 2020 L and 2020 PSP only, 2016 PSP data from source 1; c = new category, not referred to in CP2025; d = container deposit scheme has not commenced; e = national 5R policy drafted; N/A = not applicable; C = preparation has commenced; D = document prepared but not endorsed; O = endorsed document no longer current; X = enacted (L) or endorsed (PSP) and current; blank cells indicate WCP categories not addressed in L or PSP; # = national strategy under development, a Solid Waste Management Master Plan 2018–2027 was published by Suva City Council; * = part of an integrated policy, strategy or plan; 1 = for POPs only; ^ = National Implementation Plan (Stockholm Convention) is yet to be updated to account for COP amendments.

[151] Progress assessment not reviewed and validated by Fiji.

TABLE 2 Progress assessment, CP2025 performance indicators

IMPROVED | UNCHANGED/STABLE | DETERIORATED | UNDETERMINED | NO DATA

Performance indicators	2014	2020	Sources[A]
Per capita generation of municipal solid waste (kg/person/day)	ND	0.63[b]	10
No. of marine pollution incidents	ND	1	11
No. of port waste reception facilitiesa	1	1	
Waste recycling rate (= amt recycled, reused, returned/amt recyclable) (%)	57	ND	
No. of national or municipal composting programmesa	1[c]	1[c]	13, 14, 16
No. of national or state container deposit programmes	0	0[d]	7
No. of national EPR programmes for used oil	0	0[e]	17
No. of national EPR programmes for e-waste	0	ND	
No. of national or state user-pays systems for waste collectiona	1[f]	1[f]	18
Waste collection coverage (% of population)	ND	100[g] (urban)	10
Waste capture rate (= amount collected/amount generated) (%)	ND	ND	
No. of temporary, unregulated and open dumps	5[h]	ND	
Quantity of asbestos stockpiles (m^2)	2305	6,250 removed during PacWaste project[i]	
Quantity of healthcare waste stockpiles (tonnes)	0	ND	
Quantity of e-waste stockpiles (tonnes)	ND	ND	
Quantity of used oil stockpiles (m^3)	100	ND	
Quantity of pharmaceutical and chemical stockpiles (tonnes)	ND	ND	
Urban sewage treated to secondary standards (%)	ND	ND[j]	20
No. of water and environmental quality monitoring programmes	0	ND	
No. of national chemicals and pollution inventories	0	ND	

A = 2020 data sources only, 2014 data from source 1; EPR = Extended Producer Responsibility; ND = no data; a = unchanged/stable indicator actually reflects good progress, given the 2014 baseline; b = 2016 adjusted urban and rural estimate; c = '1' indicates composting programmes operational, in municipal (city/town council) areas – Suva, Lautoka, Sigatoka; d = legal framework for container deposit exists but a scheme is not yet in place; e = EPR scheme run by one supplier for its products only; f = '1' indicates user-pays systems in place – levies included within city/town council rates; g = Suva only; h = one temporary unregulated dump, four authorised open dumps; i = this indicator is rated as 'improved' based on the removal of asbestos; j = Fiji has wastewater treatment plants that treat sewage to secondary standards, but % treated is unknown.

TABLE 3 Progress assessment, CP2025 Implementation Plan 2016–2019 strategic actions and linked activities

GOOD PROGRESS (≥ half of linked activities progressed)	LIMITED PROGRESS (< half of linked activities progressed)	NO PROGRESS (no linked activities progressed)

Strategic actions	Summary of activities	Sources
A. Strengthen institutional capacity		
SPREP, PICTs and partners shall undertake regular WCP data collection and management, including storage, interpretation, dissemination and sharing	One of three activities progressed: Solid Waste Management Tracking System implemented by Lautoka City Council.	14
PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation and strengthen institutional arrangements to support and promote best practice WCP management.	Three of seven activities progressed: Environment Management (Budget Amendment) Act 2019 passed, banning the manufacture, sale, supply and distribution of thin plastic bags (less than 50 microns); development of national healthcare and asbestos waste strategies supported by the PacWaste project; national 5R policy drafted; Solid Waste Management Master Plan 2018–2027 published by Suva City Council; development of municipal waste management master plan (13 Councils) underway, with the support of JICA (J-PRISM II), to result in each municipality having their own plan including an extension of their waste collection service to rural areas outside of their municipal boundaries; permits required for operation of landfills or recycling facilities, under the Environment Management (Waste Disposal and Recycling) Regulations 2007.	9, 12, 19, 21, 23
B. Promote public-private partnerships		
SPREP, PICTs and partners shall strengthen existing and develop new public-private partnerships including through strengthened public-private partnership frameworks	One of three activities progressed: national recycling association established in partnership with the private sector, supported by SPREP and JICA/J-PRISM II.	22
C. Implement sustainable best practices in WCP management		
SPREP, PICTs and partners shall implement best practice occupational health and safety measures for formal and informal workers in the WCP management sectors	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, shall implement WCP prevention and reduction programmes	One of eight activities progressed: 3R projects led by Suva City, Lautoka City, Nadi Town, Sigatoka Town Councils, in partnership with the Department of Environment and JICA/J-PRISM.	13, 14, 15, 16
PICTs, supported by SPREP and partners, shall implement resource recovery programmes	Two of three activities progressed: Clean Schools programmes run by Suva City, Lautoka City, Nadi Town and Sigatoka Town Councils, in partnership with the Ministry of Education, Department of Environment and JICA/J-PRISM; compost sales regularly monitored by Lautoka City Council.	13, 14, 15, 16, 21
PICTs, supported by SPREP and partners, shall remediate contaminated sites and WCP stockpiles in accordance with best practices	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, will expand user-pays WCP collection services	N/A to Fiji.	

Strategic actions	Summary of activities	Sources
PICTs, supported by SPREP and partners, shall improve WCP management infrastructure and support sustainable operation and maintenance	One of seven activities progressed: high temperature incinerator installed and commissioned for Lautoka District Hospital during the PacWaste project.	19
PICTs, supported by SPREP and partners, shall implement best practice environmental monitoring and reporting programmes	Zero of one activity progressed.	
D. Develop human capacity		
SPREP, PICTs and partners shall implement sustainable human capacity development programmes for WCP management stakeholders	Zero of two activities progressed.	
E. Improve dissemination of outcomes and experiences in WCP management		
SPREP, PICTs and partners shall use project outcomes to implement regional and national WCP education and behavioural-change programmes	One of four activities progressed: Clean Schools programmes run by Suva City, Lautoka City, Nadi Town and Sigatoka Town Councils, in partnership with the Ministry of Education, Department of Environment and JICA/J-PRISM.	13, 14, 15, 16
F. Promote regional and national cooperation		
SPREP, PICTs and partners shall establish a regional Clean Pacific Roundtable to coordinate and facilitate waste management and pollution-control dialogue and networking in the region	Two of two activities progressed: participated in CPRTs 2016 and 2018 with JICA/J-PRISM assistance. One officer self-funded attendance to CPRT 2018.	21
SPREP, PICTs and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities	One of three activities progressed: participated in Pacific-to-Pacific twinning arrangements during the PacWaste project – Fiji and Nauru collaborated on landfill rehabilitation and Vanuatu, Fiji and Tuvalu collaborated on disaster waste management; participated in a sub-regional workshop on disaster waste management.	19, 22
SPREP, PICTs and partners shall cooperate to ensure timely monitoring of the Pacific Regional Waste and Pollution Management Strategy 2016–2025	Zero of one activity progressed.	

SOURCES:

1 SPREP (2016) Cleaner Pacific 2025: Pacific Regional Waste and Pollution Management Strategy 2016–2025 https://www.sprep.org/publications/cleaner-pacific-2025-pacific-regional-waste-and-pollution-management-strategy

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3 https://www.sprep.org/att/publication/000556_IWP_PTR48.pdf

4 https://www.sprep.org/attachments/Fiji_Draft_NATPLAN_Feb_2001.pdf

5 https://www.fiji.gov.fj/Media-Centre/News/ENVIRONMENT-STAKEHOLDERS-MEET-TO-DISCUSS-AIR-POLLUTION

6 http://chm.pops.int/Implementation/NationalImplementationPlans/NIPTransmission/tabid/253/Default.aspx

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12 JICA (2020) Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries Phase II (J-PRISM II) (Group 2), Project Completion Report (2nd Term), Kokusai Kogyo Co., Ltd. Yachiyo Engineering Co., Ltd.

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16 https://www.sigatokatown.com.fj/

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18 Pacific Region Infrastructure Facility (2018) Pacific Region Solid Waste Management and Recycling. Pacific Country and Territory Profiles, https://www.theprif.org/documents/regional/urban-development-waste-management/pacific-region-solid-waste-management-and

19 SPREP (2018) Pacific Hazardous Waste Management (PacWaste). Volume 2: Country Reports, unpublished

20 https://www.pwwa.ws/wp-content/uploads/2020/01/PWWA-Seven-Years-of-Benchmarking_2018-FINAL-DRAFT.pdf

21 JICA, J-PRISM II team, pers. comm., 26 June 2020

22 Guinto, M B., Solid Waste Management Adviser, SPREP, pers. comm., 4 June 2020

23 https://www.sprep.org/attachments/Publications/Newsletters/j-prism-buzz-issue7.pdf

FRENCH POLYNESIA: CLEANER PACIFIC 2025 (CP2025) PROGRESS ASSESSMENT, 2016–2019[152]

OVERVIEW

SPREP has had limited engagement with French Polynesia during the first implementation phase of CP2025 (2016–2019). Consequently, it has been difficult to determine the extent to which French Polynesia has adopted the strategy.

Based on available data and information, French Polynesia's overall CP2025 progress is rated as LIMITED:

- *National legislation, policies, strategies, plans for waste, chemicals and pollution (WCP)*: new regulation introduced to prevent pollution at sea (Table 1).
- *Twenty CP2025 performance indicators*: with reference to 2014 baseline information, one indicator has improved (water quality monitoring operational), three remain unchanged/stable, progress is undetermined for 10 indicators due to data being available for one year only, and six indicators have no data for assessing progress (Table 2). Note, two of the unchanged/stable indicators actually reflect positive progress, given their good 2014 baselines.
- *Implementation Plan 2016–2019, 15 strategic actions*: good progress achieved for two (environmental monitoring, Clean Pacific Roundtable participation); limited progress achieved for three; and no progress for 10 strategic actions (Table 3).

Based on the progress assessment results, five activity areas that require further work are:

- Development of an integrated WCP strategy and action plan that is aligned with CP2025, and includes a reporting framework;
- Implementation of WCP prevention and reduction programmes;
- Improvement of WCP management infrastructure, working towards sustainable operation and maintenance;
- Management of hazardous waste, including development of inventories; and
- Development and implementation of routine monitoring and reporting, especially for WCP management activities.

RESULTS

Tables 1, 2 and 3, below, document key findings from the CP2025 progress assessment for French Polynesia. Where appropriate and feasible, progress has been assessed with reference to baselines recorded in CP2025.

TABLE 1 Status of waste, chemicals and pollution (WCP) legislation, policies, strategies, plans

	Legislation (L)[a]		Policies, strategies, plans (PSP)		
	2016	2020	2016	2020	Sources[b]
Solid waste	ND	ND		ND	
Healthcare waste	ND	ND		ND	
Other hazardous waste	ND	X[1]		ND	2 (L)
Liquid waste	ND	X[1]		ND	2 (L)
Chemicals	ND	ND		ND	
Oil spill contingency	N/A	N/A	X	ND	
Air pollution	ND	ND		ND	
Plastics (including single-use)[c]	ND	ND		ND	
Container deposit[c]	ND	ND		ND	
Litter[c]	ND	ND		ND	

a = some of the WCP categories do not have specific laws, but are covered under general laws to varying degrees; b = information/data sources for 2020 L, 2016 PSP data from source 1; c = new category, not referred to in CP2025; N/A = not applicable; ND = no data; X = enacted (L) or endorsed (PSP) and current; blank cells indicate WCP categories not addressed in L or PSP; 1 = waste categories covered under new regulation to prevent pollution at sea, Decree N°684 of 18 November 2019.

[152] Progress assessment not reviewed and validated by French Polynesia.

TABLE 2 Progress assessment, CP2025 performance indicators

IMPROVED | UNCHANGED/STABLE | DETERIORATED | UNDETERMINED | NO DATA

Performance indicators	2014	2020	Sources[A]
Per capita generation of municipal solid waste (kg/person/day)	ND	1.36[b]	3
No. of marine pollution incidents	1	ND	
No. of port waste reception facilitiesa	1	1	10
Waste recycling rate (= amt recycled, reused, returned/amt recyclable) (%)	39	ND	
No. of national or municipal composting programmesa	1	1[c]	4, 5
No. of national or state container deposit programmes	0	0[d]	6
No. of national EPR programmes for used oil	1	ND	
No. of national EPR programmes for e-waste	0	ND	
No. of national or state user-pays systems for waste collection	1	ND	
Waste collection coverage (% of population)	100 (urban) 51 (national)	ND	
Waste capture rate (= amount collected/amount generated) (%)	ND	ND	
No. of temporary, unregulated and open dumps	88[e]	ND	
Quantity of asbestos stockpiles (m^2)	ND	ND	
Quantity of healthcare waste stockpiles (tonnes)	0	ND	
Quantity of e-waste stockpiles (tonnes)	ND	ND	
Quantity of used oil stockpiles (m^3)	ND	ND	
Quantity of pharmaceutical and chemical stockpiles (tonnes)	ND	ND	
Urban sewage treated to secondary standards (%)	ND	ND[f]	4, 5
No. of water and environmental quality monitoring programmes	0	1[g]	7
No. of national chemicals and pollution inventories	0	ND	

A = 2020 data sources only, 2014 data from source 1; EPR = Extended Producer Responsibility; ND = no data; a = unchanged/stable indicator actually reflects good progress, given the 2014 baseline; b = 2016 adjusted estimate, and value represents total solid waste generated, not only MSW; c = '1' indicates composting programmes operational – sludge and grease from wastewater treatment recycled into compost (source 4), municipal green waste collected and composted (source 5); d = deposit-refund scheme in place for locally produced beer but there is no formal container deposit programme; e = includes temporary, unregulated and open dumps; f = two companies are involved with secondary wastewater treatment, but % of treated water is unknown; g = '1' indicates water quality monitoring in the Opunohu lagoon, Moorea.

TABLE 3 Progress assessment, CP2025 Implementation Plan 2016–2019 strategic actions and linked activities

GOOD PROGRESS (≥ half of linked activities progressed)	LIMITED PROGRESS (< half of linked activities progressed)	NO PROGRESS (no linked activities progressed)

Strategic actions	Summary of activities	Sources
A. Strengthen institutional capacity		
SPREP, PICTs and partners shall undertake regular WCP data collection and management, including storage, interpretation, dissemination and sharing	One of three activities progressed: water quality monitored in the Opunohu lagoon, Moorea, by the Centre de Recherches Insulaires et Observatoire de l'Environnement (CRIOBE).	7
PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation and strengthen institutional arrangements to support and promote best practice WCP management	Zero of four activities progressed.	
B. Promote public-private partnerships		
SPREP, PICTs and partners shall strengthen existing and develop new public-private partnerships including through strengthened public-private partnership frameworks	One of three activities progressed: pilot project for waste management by professionals (garages and careening workshops) developed on the islands of Raiatea and Tahaa during the INTEGRE project, in collaboration with the French Polynesian Chamber of Commerce, Industry, Services and Crafts.	8
C. Implement sustainable best practices in WCP management		
SPREP, PICTs and partners shall implement best practice occupational health and safety measures for formal and informal workers in the WCP management sectors	Zero of one activity progressed.	
PICTs, supported by SPREP and partners, shall implement WCP prevention and reduction programmes	Zero of eight activities progressed.	
PICTs, supported by SPREP and partners, shall implement resource recovery programmes	One of three activities progressed: solutions for recovering biodegradable organic waste and for bioconversions with production of renewable energy (methanation) studied by Technival, with government support.	5
PICTs, supported by SPREP and partners, shall remediate contaminated sites and WCP stockpiles in accordance with best practices	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, will expand user-pays WCP collection services	Zero of three activities progressed.	
PICTs, supported by SPREP and partners, shall improve WCP management infrastructure and support sustainable operation and maintenance	Zero of eight activities progressed.	
PICTs, supported by SPREP and partners, shall implement best practice environmental monitoring and reporting programmes	One of one activity progressed: water quality monitored in the Opunohu lagoon, Moorea, by the Centre de Recherches Insulaires et Observatoire de l'Environnement (CRIOBE).	7
D. Develop human capacity		
SPREP, PICTs and partners shall implement sustainable human capacity development programmes for WCP management stakeholders	Zero of two activities progressed.	

Strategic actions	Summary of activities	Sources
E. Improve dissemination of outcomes and experiences in WCP management		
SPREP, PICTs and partners shall use project outcomes to implement regional and national WCP education and behavioural-change programmes	Zero of four activities progressed.	
F. Promote regional and national cooperation		
SPREP, PICTs and partners shall establish a regional Clean Pacific Roundtable to coordinate and facilitate waste management and pollution-control dialogue and networking in the region	Two of two activities progressed: participated in CPRTs 2016 and 2018; self-funded a delegate in 2018.	9
SPREP, PICTs and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities	Zero of three	
SPREP, PICTs and partners shall cooperate to ensure timely monitoring of the Pacific Regional Waste and Pollution Management Strategy 2016–2025	Zero of one activity progressed.	

SOURCES:

1 SPREP (2016) Cleaner Pacific 2025: Pacific Regional Waste and Pollution Management Strategy 2016–2025 https://www.sprep.org/publications/cleaner-pacific-2025-pacific-regional-waste-and-pollution-management-strategy

2 http://www.jrcc.pf/wp-content/uploads/2020/01/20191118-decree-surnav-pf-clipperton.pdf

3 Kaza S., Yao L., Bhada-Tata P., Woerden F. (2018) What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050. Urban Development Series. Washington, DC: World Bank, https://openknowledge.worldbank.org/handle/10986/30317

4 https://www.polynesienne-des-eaux.pf/

5 http://www.technival.pf/

6 Watkins E. et al. (2018) Towards greener taxes and subsidies in Pacific Island Countries and Territories (PICTs), SPC, https://ieep.eu/uploads/articles/attachments/bd2711c8-b5e5–40ea-b2c4-a2e6b0705db6/Greener%20taxes%20and%20subsidies%20in%20PICTs%20final.pdf?v=63690680677

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9 Guinto M B., Solid Waste Management Adviser, SPREP, pers. comm., 29 June 2020

10 Talouli A., Pollution Adviser, SPREP, pers. comm., 25 June 2020

GUAM: CLEANER PACIFIC 2025 (CP2025) PROGRESS ASSESSMENT, 2016–2019[153]

OVERVIEW

Based on available data and information, Guam's overall CP2025 progress is rated as LIMITED:

- *National legislation, policies, strategies, plans for waste, chemicals and pollution (WCP)*: new law passed in 2018 banning the distribution and use of disposable plastic bags (Table 1).
- *Twenty CP2025 performance indicators*: with reference to 2014 baseline information, six indicators remain unchanged/stable, progress is undetermined for five indicators due to data being available for one year only, and nine indicators have no data for assessing progress (Table 2). Note, four of the unchanged/stable indicators actually reflect positive progress, given their good 2014 baselines.
- *Implementation Plan 2016–2019, 15 strategic actions*: good progress achieved for three (environmental monitoring and reporting, Clean Pacific Roundtable participation, national and regional cooperation and coordination); limited progress achieved for four; and no progress for seven strategic actions. Activities under one strategic action were not applicable to Guam (Table 3).

Based on the progress assessment results, five activity areas that require further work are:

- Development of public-private partnerships, especially for container deposit and EPR programmes;
- Implementation of WCP prevention and reduction programmes;
- Management of hazardous waste, including development of inventories;
- Expansion of routine monitoring and reporting, especially for WCP management activities; and
- Improvement of WCP management infrastructure, working towards sustainable operation and maintenance.

RESULTS

Tables 1, 2 and 3, below, document key findings from the CP2025 progress assessment for Guam. Where appropriate and feasible, progress has been assessed with reference to baselines recorded in CP2025.

TABLE 1 Status of waste, chemicals and pollution (WCP) legislation, policies, strategies, plans

	Legislation (L)[a]		Policies, strategies, plans (PSP)		
	2016	2020	2016	2020	Sources[b]
Solid waste	X	X	X	X	2, 3 (L), 5 (PSP)
Healthcare waste	X	X		ND	
Other hazardous waste	X	X		ND	2, 3 (L)
Liquid waste	X	X		ND	2, 3 (L)
Chemicals	X	X		ND	2, 3 (L)
Oil spill contingency	N/A	N/A	X	ND	
Air pollution	X	X		ND	2, 3 (L)
Plastics (including single-use)[c,d]		X		X*	2, 3 (L), 5 (PSP)
Container deposit[c,e]	X	X		X*	2, 4 (L), 5 (PSP)
Litter[c]	X	X		X*	2, 3 (L), 5 (PSP)

a = some of the WCP categories do not have specific laws, but are covered under general laws to varying degrees; b = information and data sources for 2016 L, 2020 L and 2020 PSP only, 2016 PSP data from source 1; c = new category, not referred to in CP2025; d = law passed in 2018 banning the distribution and use of disposable plastic bags, to come into effect 1 January 2021; e = enacted in 2010, amended in 2013, but not yet implemented; N/A = not applicable; ND = no data; X = enacted (L) or endorsed (PSP) and current; blank cells indicate WCP categories not addressed in L or PSP; * = part of the Guam Zero Waste Plan (solid waste plan).

[153] Progress assessment not reviewed and validated by Guam.

TABLE 2 Progress assessment, CP2025 performance indicators

IMPROVED | UNCHANGED/STABLE | DETERIORATED | UNDETERMINED | NO DATA

Performance indicators	2014	2020	Sources[A]
Per capita generation of municipal solid waste (kg/person/ day)	ND	2.39[b]	5
No. of marine pollution incidents	ND	ND	
No. of port waste reception facilities	0	0	14
Waste recycling rate (= amt recycled, reused, returned/amt recyclable) (%)	ND	39[c]	7
No. of national or municipal composting programmesa	1[d]	1[e]	8
No. of national or state container deposit programmes	0[f]	0[f]	2, 4
No. of national EPR programme for used oil	0	ND	
No. of national EPR programme for e-waste	0	ND	
No. of national or state user-pays systems for waste collection	1[g]	1[g]	9
Waste collection coverage (% of population)a	100	100[h]	9
Waste capture rate (= amount collected/amount generated) (%)	ND	ND	
No. of temporary, unregulated and open dumps	ND	ND	
Quantity of asbestos stockpiles (m^2)	ND	ND	
Quantity of healthcare waste stockpiles (tonnes)	ND	ND	
Quantity of e-waste stockpiles (tonnes)	ND	ND	
Quantity of used oil stockpiles (m^3)	ND	ND	
Quantity of pharmaceutical and chemical stockpiles (tonnes)	ND	ND	
Urban sewage treated to secondary standards (%)	0	ND[i]	10
No. of water and environmental quality monitoring programmesa	1[j]	1[j]	3
No. of national chemicals and pollution inventories	ND	ND	

A = 2020 data sources only, 2014 data from source 1; EPR = Extended Producer Responsibility; ND = no data; a = unchanged/stable indicator actually reflects good progress, given the 2014 baseline; b = Guam EPA data, no date indicated but data is pre-2014. For comparison, 2016 adjusted figure in source 6 is 2.26 kg/person/day; c = rate for 2017, for all eligible waste (aluminium cans, cardboard, mixed paper, e-waste, ferrous and nonferrous metals, tires, automotive batteries, plastics, mulched composted material and food waste); d = composting programme operational at the University of Guam; e = '1' indicates government composting programme operational, biosolids composting demonstration project; f = legislation in place, CDP not yet implemented; g = '1' indicates user-pays waste collection is in place; h = 100% coverage assumed, with the Guam Solid Waste Authority providing curb-side collection services plus residential transfer stations for those who do not pay for curb-side collection; i = one wastewater treatment plant (WWTP) upgraded to secondary treatment in 2019, other WWTPs provide primary treatment; j = '1' indicates a number of EPA monitoring programmes are operational.

TABLE 3 Progress assessment, CP2025 Implementation Plan 2016–2019 strategic actions and linked activities

GOOD PROGRESS (≥ half of linked activities progressed)	LIMITED PROGRESS (< half of linked activities progressed)	NO PROGRESS (no linked activities progressed)

Strategic actions	Summary of activities	Sources
A. Strengthen institutional capacity		
SPREP, PICTs and partners shall undertake regular WCP data collection and management, including storage, interpretation, dissemination and sharing	One of three activities progressed: recreational marine waters analysed weekly for microbiological quality and public advisories issued by the EPA; freshwater rivers, streams and estuaries monitored regularly by the EPA to determine the microbiological, physical and chemical quality of the water.	3
PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation and strengthen institutional arrangements to support and promote best practice WCP management	One of four activities progressed: new law passed banning the distribution and use of disposable plastic bags.	2, 3
B. Promote public-private partnerships		
SPREP, PICTs and partners shall strengthen existing and develop new public-private partnerships including through strengthened public-private partnership frameworks	Zero of three activities progressed.	
C. Implement sustainable best practices in WCP management		
SPREP, PICTs and partners shall implement best practice occupational health and safety measures for formal and informal workers in the WCP management sectors	Zero of one activity progressed.	
PICTs, supported by SPREP and partners, shall implement WCP prevention and reduction programmes	One of eight activities progressed: household hazardous waste collection program operated by EPA, collecting used lead acid batteries, used paint and used oil for safe disposal.	3
PICTs, supported by SPREP and partners, shall implement resource recovery programmes	One of three activities progressed: demonstration/pilot project conducted by Guam EPA, Port Authority Guam and Landscape Management Systems Guam to show that Guam's wastewater solids can be composted with locally produced wood chips to generate high quality compost.	8
PICTs, supported by SPREP and partners, shall remediate contaminated sites and WCP stockpiles in accordance with best practices	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, will expand user-pays WCP collection services	N/A to Guam.	
PICTs, supported by SPREP and partners, shall improve WCP management infrastructure and support sustainable operation and maintenance	Zero of six activities progressed.	
PICTs, supported by SPREP and partners, shall implement best practice environmental monitoring and reporting programmes	One of one activity progressed: recreational marine waters analysed weekly for microbiological quality and public advisories issued by the EPA; freshwater rivers, streams and estuaries monitored regularly by the EPA to determine the microbiological, physical and chemical quality of the water.	3

Strategic actions	Summary of activities	Sources
D. Develop human capacity		
SPREP, PICTs and partners shall implement sustainable human capacity development programmes for WCP management stakeholders	Zero of two activities progressed.	
E. Improve dissemination of outcomes and experiences in WCP management		
SPREP, PICTs and partners shall use project outcomes to implement regional and national WCP education and behavioural-change programmes	Zero of four activities progressed.	
F. Promote regional and national cooperation		
SPREP, PICTs and partners shall establish a regional Clean Pacific Roundtable to coordinate and facilitate waste management and pollution-control dialogue and networking in the region	One of two activities progressed: participated in CPRTs 2016 and 2018.	13
SPREP, PICTs and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities	Two of three activities progressed: Guam EPA hosted the 2019 Pacific Islands Environment Conference, including workshops and presentations on waste management; Zero Waste Guam Working Group established with representatives from the EPA, Bureau of Statistics and Plans, Port Authority of Guam and Department of Public Works, to develop and make recommendations for the adoption and implementation of the Guam Zero Waste Master Plan.	11, 12
SPREP, PICTs and partners shall cooperate to ensure timely monitoring of the Pacific Regional Waste and Pollution Management Strategy 2016–2025	Zero of one activity progressed.	

SOURCES:

1 SPREP (2016) Cleaner Pacific 2025: Pacific Regional Waste and Pollution Management Strategy 2016–2025 https://www.sprep.org/publications/cleaner-pacific-2025-pacific-regional-waste-and-pollution-management-strategy

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7 http://epa.guam.gov/guam-recycles-day-to-celebrate-america-recycles-day-on-november-14/

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10 https://guamwaterworks.org/operations-maintenance/

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13 Guinto M B., Solid Waste Management Adviser, SPREP, pers. comm., 29 June 2020

14 Talouli A., Pollution Adviser, SPREP, pers. comm., 25 June 2020

KIRIBATI: CLEANER PACIFIC 2025 (CP2025) PROGRESS ASSESSMENT, 2016–2019[154]

OVERVIEW

Based on available data and information, Kiribati's overall CP2025 progress is rated as 'limited':

- *National legislation, policies, strategies, plans for waste, chemicals and pollution (WCP)*: National Implementation Plan submitted to the Stockholm Convention Secretariat; and new laws passed banning single-use plastics (shopping bags, ice bags, nappies), and addressing toxic and hazardous substances for internal and marine waters, and littering and rubbish dumping on public highways (Table 1).
- *Twenty CP2025 performance indicators*: with reference to 2014 baseline information, two indicators have improved (asbestos removed, national chemicals inventory prepared); one indicator has deteriorated (used oil stockpile increased); six indicators remain unchanged/stable; progress is undetermined for seven indicators due to data being available for one year only; and four indicators have no data for assessing progress (Table 2). Note, two of the unchanged/stable indicators actually reflect positive progress, given their good 2014 baselines.
- *Implementation Plan 2016–2019, 15 strategic actions*: good progress achieved for two (Clean Pacific Roundtable participation), limited progress achieved for five, and no progress for seven strategic actions. Activities under one strategic action were not applicable to Kiribati (Table 3).

Based on the progress assessment results, five activity areas that require further work are:

- Finalisation of an integrated national WCP strategy and action plan that is aligned with CP2025, and includes a reporting framework;
- Implementation of WCP prevention and reduction programmes;
- Management of hazardous waste, including development of inventories;
- Development and implementation of routine monitoring and reporting, especially for WCP management activities and the receiving environment; and
- Improvement of WCP management infrastructure, working towards sustainable operation and maintenance.

RESULTS

Tables 1, 2 and 3, below, document key findings from the CP2025 progress assessment for Kiribati. Where appropriate and feasible, progress has been assessed with reference to baselines recorded in CP2025.

TABLE 1 Status of waste, chemicals and pollution (WCP) legislation, policies, strategies, plans

	Legislation (L)[a]		Policies, strategies, plans (PSP)		
	2016	2020	2016	2020	Sources[b]
Solid waste	X	X	D*	D*	3 (L), 2 (PSP)
Healthcare waste			D*	D*	2 (PSP)
Other hazardous waste			D*	D*	2 (PSP)
Liquid waste	X	X	X*	X	3 (L), 2 (PSP)
Chemicals			C[1]	X[1^]	2, 15 (PSP)
Oil spill contingency	N/A	N/A	D	D	18 (PSP)
Air pollution	X	X			3 (L)
Plastics (including single-use)[c]		X		D*	2 (L), 2 (PSP)
Container deposit[c]	X	X		D*	4 (L), 2 (PSP)
Litter[c]	X	X		D*	3 (L), 2 (PSP)

[154] Progress assessment not reviewed and validated by Kiribati.

a = some of the WCP categories do not have specific laws, but are covered under general laws to varying degrees; b = information and data sources for 2016 L, 2020 L and 2020 PSP only, 2016 PSP data from source 1; c = new category, not referred to in CP2025; N/A = not applicable; X = enacted (L) or endorsed (PSP) and current; C = preparation has commenced; D = document prepared but not endorsed (PSP); blank cells indicate WCP categories not addressed in L or PSP; * = part of an integrated PSP; 1 = for POPs only; ^ = chemical waste is also addressed in the draft Kiribati Waste Management Resource Recovery Strategy 2020–2029.

TABLE 2 Progress assessment, CP2025 performance indicators

IMPROVED | UNCHANGED/STABLE | DETERIORATED | UNDETERMINED | NO DATA

Performance indicators	2014	2020	Sources[A]
Per capita generation of municipal solid waste (kg/person/ day)	ND	0.86[b]	2, 5, 20
No. of marine pollution incidents	ND	ND	
No. of port waste reception facilities	0	0	6
Waste recycling rate (= amt recycled, reused, returned/amt recyclable) (%)	ND	89[c]	7
No. of national or municipal composting programmes	1[d]	ND	
No. of national or state container deposit programmesa	1	1	2, 7
No. of national EPR programmes for used oil	0	0[e]	17
No. of national EPR programmes for e-waste	0	0	2
No. of national or state user-pays systems for waste collectiona	1[f]	1[f]	2, 7
Waste collection coverage (% of population)	100% (urban) 54% (national)	ND	
Waste capture rate (= amount collected/amount generated) (%)	ND	76	2
No. of temporary, unregulated and open dumps	ND	2 (open dumps)	2
Quantity of asbestos stockpiles (m^2)	39,992	280 removed during PacWaste[g]	9
Quantity of healthcare waste stockpiles (tonnes)	ND	ND	
Quantity of e-waste stockpiles (tonnes)	ND	ND	
Quantity of used oil stockpiles (m^3)	8	64	8
Quantity of pharmaceutical and chemical stockpiles (tonnes)	ND	ND	
Urban sewage treated to secondary standards (%)	0	0	17
No. of water and environmental quality monitoring programmes	0	ND	
No. of national chemicals and pollution inventories	0	1[h]	2

A = 2020 data sources only, 2014 data from source 1; EPR = Extended Producer Responsibility; ND = no data; a = unchanged/stable indicator actually reflects good progress, given the 2014 baseline; b = 2016 adjusted estimate, calculated based on an urban regional per capita average of 1.3 kg/person/day and rural regional per capita average of 0.5 kg/person/day. For comparison, a 2017 survey conducted at a community area in Bikenibeu, South Tarawa, estimated a household only waste generation rate of 0.4 kg/person/day; c = recycling rate for container deposit/advance disposal scheme covering aluminium cans, PET bottles, lead-acid batteries – source data year unknown; d = '1' indicates a composting programme is operational through the J-PRISM I project; e = EPR scheme run by one supplier for its products only; f = '1' indicates user-pays systems are in place – service charges levied by Councils and Green Bag programme, however, recovery of service charges is very low; g = this indicator is rated as 'improved' based on the removal of asbestos; h = chemicals inventory prepared for the National Implementation Plan submitted under the Stockholm Convention.

TABLE 3 Progress assessment, CP2025 Implementation Plan 2016–2019 strategic actions and linked activities

GOOD PROGRESS (≥ half of linked activities progressed)	LIMITED PROGRESS (< half of linked activities progressed)	NO PROGRESS (no linked activities progressed)

Strategic actions	Summary of activities	Sources
A. Strengthen institutional capacity		
SPREP, PICTs and partners shall undertake regular WCP data collection and management, including storage, interpretation, dissemination and sharing	Zero of three activities progressed.	
PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation and strengthen institutional arrangements to support and promote best practice WCP management	Two of seven activities progressed: Kiribati Waste Management Resource Recovery Strategy 2020–2029 drafted (WMRRS), in alignment with CP2025, with the support of NZ MFAT, SPREP and UNEP; institutional arrangements for WCP management reviewed during development of WMRRS; national healthcare and asbestos waste strategies developed with the support of the PacWaste project; National Implementation Plan finalised and submitted to the Stockholm Convention Secretariat; Kiribati Customs Act 2019 enacted, banning single-use plastics (shopping bags, ice bags, nappies) – ban to be effective from 1 October 2020; Maritime Act 2017 enacted, addressing toxic and hazardous substances for internal and marine waters; Public Highways Protection Act 2018 enacted, addressing littering and rubbish dumping on public highways.	2, 9, 15, 20
B. Promote public-private partnerships		
SPREP, PICTs and partners shall strengthen existing and develop new public-private partnerships including through strengthened public-private partnership frameworks	One of three activities progressed: workshop with private sector representatives hosted by the Environment and Conservation Division to identify pathways and solutions for addressing waste and chemicals pollution.	10
C. Implement sustainable best practices in WCP management		
SPREP, PICTs and partners shall implement best practice occupational health and safety measures for formal and informal workers in the WCP management sectors	Zero of one activity progressed.	
PICTs, supported by SPREP and partners, shall implement WCP prevention and reduction programmes	Zero of eight activities progressed.	
PICTs, supported by SPREP and partners, shall implement resource recovery programmes	One of two activities progressed: 3R+Return programme implemented in some primary schools, South Tarawa.	2
PICTs, supported by SPREP and partners, shall remediate contaminated sites and WCP stockpiles in accordance with best practices	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, will expand user-pays WCP collection services	N/A to Kiribati.	
PICTs, supported by SPREP and partners, shall improve WCP management infrastructure and support sustainable operation and maintenance	One of seven activities progressed: in conjunction with the installation of a new high temperature waste incinerator, healthcare pilot developed to support HCWM officer to improve healthcare hazardous waste management during the PacWaste project.	11
PICTs, supported by SPREP and partners, shall implement best practice environmental monitoring and reporting programmes	Zero of one activity progressed.	

Strategic actions	Summary of activities	Sources
D. Develop human capacity		
SPREP, PICTs and partners shall implement sustainable human capacity development programmes for WCP management stakeholders	Zero of one activity progressed.	
E. Improve dissemination of outcomes and experiences in WCP management		
SPREP, PICTs and partners shall use project outcomes to implement regional and national WCP education and behavioural-change programmes	One of four activities progressed: public/schools/community awareness programmes delivered by the Environment Outreach Unit to support the Regional Clean Pacific Programme; 3R+Return programme implemented in some primary schools, South Tarawa.	2, 12
F. Promote regional and national cooperation		
SPREP, PICTs and partners shall establish a regional Clean Pacific Roundtable to coordinate and facilitate waste management and pollution-control dialogue and networking in the region	One of two activities progressed: participated in CPRTs 2016 and 2018.	19
SPREP, PICTs and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities	One of three activities progressed (in multiple ways): participated in a Pacific-to-Pacific twinning arrangement with RMI and Tuvalu for knowledge exchange on atoll waste management under the PacWaste project; presented progress with KAOKI MAANGE (Return Rubbish) SYSTEM at 2018 CPRT; convened the first "Kiribati Boboto Technical Dialogue" on waste management issues with representatives from different govt agencies, church groups, NGOs, communities, state owned enterprises and the private sector.	9, 13, 14
SPREP, PICTs and partners shall cooperate to ensure timely monitoring of the Pacific Regional Waste and Pollution Management Strategy 2016–2025	Zero of one activity progressed.	

SOURCES:

1 SPREP (2016) Cleaner Pacific 2025: Pacific Regional Waste and Pollution Management Strategy 2016–2025 https://www.sprep.org/publications/cleaner-pacific-2025-pacific-regional-waste-and-pollution-management-strategy
2 Government of Kiribati (2020) DRAFT Kiribati Waste Management Resource Recovery Strategy 2020–2029
3 http://www.environment.gov.ki/wp-content/uploads/2016/09/Environment-Act-assented-14-Sept-.pdf
4 https://www.parliament.gov.ki/docs/acts/2004/SpecialFund(WasteMaterialRecovery)Act2004.pdf
5 Kaza S., Yao L., Bhada-Tata P., Woerden F. (2018) What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050. Urban Development Series. Washington, DC: World Bank, https://openknowledge.worldbank.org/handle/10986/30317
6 Talouli A., Pollution Adviser, SPREP, pers. comm., 25 June 2020
7 Pacific Region Infrastructure Facility (2018) Pacific Region Solid Waste Management and Recycling. Pacific Country and Territory Profiles, https://www.theprif.org/documents/regional/urban-development-waste-management/pacific-region-solid-waste-management-and
8 Haynes D., Leney A. and O'Grady J. (2018) Report Two: Country Missions and Consultations, https://www.sprep.org/gefpaspops/gefpas-reports
9 SPREP (2018) Pacific Hazardous Waste Management (PacWaste). Volume 2: Country Reports, unpublished
10 http://www.environment.gov.ki/?page_id=50
11 SPREP (2017) Performance Monitoring and Evaluation Report on the 2016 Annual Work Programme and Budget, https://www.sprep.org/sprep-meeting/28th-sprep-meeting-of-officials
12 http://www.environment.gov.ki/?page_id=46
13 https://www.sprep.org/attachments/Publications/Presentation/cprt-2018/2-kaoki-maange.pdf
14 https://kiribati-data.sprep.org/story/national-solid-waste-management-dialogue-kiribati
15 http://chm.pops.int/Implementation/NationalImplementationPlans/NIPTransmission/tabid/253/Default.aspx
16 Araspring Ltd. (2018) Used Oil Report – Fiji, Niue, Kiribati, Vanuatu, SCL, https://www.sprep.org/attachments/used-oil-mission-report-fiji-kiribati-niue-vanuatu-scl.pdf
17 https://www.pwwa.ws/wp-content/uploads/2020/01/PWWA-Seven-Years-of-Benchmarking_2018-FINAL-DRAFT.pdf
18 Talouli A., Pollution Adviser, SPREP, pers. comm., 25 June 2020
19 Guinto M B., Solid Waste Management Adviser, SPREP, pers. comm., 29 June 2020
20 Pulefou, T., Environment and Conservation Division - Ministry of Environment, Lands and Agriculture, pers. comm., 25 July 2020

NAURU: CLEANER PACIFIC 2025 (CP2025) PROGRESS ASSESSMENT, 2016–2019[155]

OVERVIEW

Based on available data and information, Nauru's overall CP2025 progress is rated as LIMITED:

- *National legislation, policies, strategies, plans for waste, chemicals and pollution (WCP)*: National Solid Waste Management Strategy 2017–2026 finalised (Table 1).
- *Twenty CP2025 performance indicators*: with reference to 2014 baseline information, three indicators have improved (composting and user-pays waste collection operational; asbestos removed); one has deteriorated (used oil stockpile increased); six remain unchanged/stable; progress is undetermined for three indicators due to data being available for one year only; and seven indicators have no data for assessing progress (Table 2).
- *Implementation Plan 2016–2019, 15 strategic actions*: good progress achieved for one (Clean Pacific Roundtable participation), limited progress achieved for four, and no progress for nine strategic actions. Activities under one strategic action were not applicable to Nauru (Table 3).

Based on the progress assessment results, five activity areas that require further work are:

- Development of practical and enforceable WCP legislation;
- Development of public-private partnerships, especially for container deposit, EPR and recycling programmes;
- Implementation of WCP prevention and reduction programmes;
- Management of hazardous waste, including development of inventories; and
- Development and implementation of routine monitoring and reporting, especially for WCP management activities and the receiving environment.

RESULTS

Tables 1, 2 and 3, below, document key findings from the CP2025 progress assessment for Nauru. Where appropriate and feasible, progress has been assessed with reference to baselines recorded in CP2025.

TABLE 1 Status of waste, chemicals and pollution (WCP) legislation, policies, strategies, plans

	Legislation (L)[a]		Policies, strategies, plans (PSP)		
	2016	2020	2016	2020	Sources[b]
Solid waste			D	X	2 (PSP)
Healthcare waste					
Other hazardous waste					
Liquid waste			D*	ND	
Chemicals			C1^	C1^	3 (PSP)
Oil spill contingency	N/A	N/A	D	D	9 (PSP)
Air pollution					
Plastics (including single-use)[c]					
Container deposit[c]					
Litter[c]	X	X			2 (L)

a = some of the WCP categories do not have specific laws, but are covered under general laws to varying degrees; b = information/data sources for 2016 L, 2020 L and 2020 PSP only, 2016 PSP data from source 1; c = new category, not referred to in CP2025; N/A = not applicable; C = preparation has commenced; D = document prepared but not endorsed; X = enacted (L) or endorsed (PSP) and current; blank cells indicate WCP categories not addressed in L or PSP; * = part of an integrated policy, strategy or plan; 1 = for POPs only; ^ = National Implementation Plan (Stockholm Convention) is yet to be updated to account for COP amendments.

[155] Progress assessment not reviewed and validated by Nauru.

TABLE 2 Progress assessment, CP2025 performance indicators

IMPROVED | UNCHANGED/STABLE | DETERIORATED | UNDETERMINED | NO DATA

Performance indicators	2014	2020	Sources[A]
Per capita generation of municipal solid waste (kg/person/day)	ND	1.3[b]	6
No. of marine pollution incidents	ND	ND	
No. of port waste reception facilities	0	0	9
Waste recycling rate (= amt recycled, reused, returned/amt recyclable) (%)	ND	ND	
No. of national or municipal composting programmes	0	1[c]	4
No. of national or state container deposit programmes	0	0	2
No. of national EPR programmes for used oil	0	0	2
No. of national EPR programmes for e-waste	0	0	2
No. of national or state user-pays systems for waste collection	0	1[d]	4
Waste collection coverage (% of population)	ND	ND	
Waste capture rate (= amount collected/amount generated) (%)	ND	ND	
No. of temporary, unregulated and open dumps	1[e]	1[e]	2, 4
Quantity of asbestos stockpiles (m^2)	52,874	3,400 removed under PacWaste[f]	5
Quantity of healthcare waste stockpiles (tonnes)	0	ND	
Quantity of e-waste stockpiles (tonnes)	ND	ND	
Quantity of used oil stockpiles (m^3)	30[g]	100	8
Quantity of pharmaceutical and chemical stockpiles (tonnes)	ND	ND	
Urban sewage treated to secondary standards (%)	0	0	7
No. of water and environmental quality monitoring programmes	0	ND	
No. of national chemicals and pollution inventories	ND	ND	

A = 2020 data sources only, 2014 data from source 1; EPR = Extended Producer Responsibility; ND = no data; a = unchanged/stable indicator actually reflects good progress, given the 2014 baseline; b = 2016 adjusted estimate, based on an urban regional per capita average of 1.3 kg/person/day; c = '1' indicates composting programme operational; d = waste entering the dumpsite from community or business collections is recorded and billed each month; e = open dump; f = this indicator is rated as 'improved' based on the removal of asbestos; g = this is the CP2025 Table 11 figure, but according to source 8 the 2014 national stockpile for Nauru was 46 m^3.

TABLE 3 Progress assessment, CP2025 Implementation Plan 2016–2019 strategic actions and linked activities

GOOD PROGRESS (≥ half of linked activities progressed)	LIMITED PROGRESS (< half of linked activities progressed)	NO PROGRESS (no linked activities progressed)

Strategic actions	Summary of activities	Sources
A. Strengthen institutional capacity		
SPREP, PICTs and partners shall undertake regular WCP data collection and management, including storage, interpretation, dissemination and sharing	Zero of three activities progressed.	
PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation and strengthen institutional arrangements to support and promote best practice WCP management	One of seven activities progressed: National Solid Waste Management Strategy 2017–2026 finalised and endorsed, with technical support from SPREP; development of asbestos and healthcare waste strategies supported by the PacWaste project.	2, 5
B. Promote public-private partnerships		
SPREP, PICTs and partners shall strengthen existing and develop new public-private partnerships including through strengthened public-private partnership frameworks	Zero of three activities progressed.	
C. Implement sustainable best practices in WCP management		
SPREP, PICTs and partners shall implement best practice occupational health and safety measures for formal and informal workers in the WCP management sectors	Zero of one activity progressed.	
PICTs, supported by SPREP and partners, shall implement WCP prevention and reduction programmes	Zero of eight activities progressed.	
PICTs, supported by SPREP and partners, shall implement resource recovery programmes	One of three activities progressed: options for scaling up composting investigated, and new composting site layout proposed.	4
PICTs, supported by SPREP and partners, shall remediate contaminated sites and WCP stockpiles in accordance with best practices	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, will expand user-pays WCP collection services	N/A to Nauru.	
PICTs, supported by SPREP and partners, shall improve WCP management infrastructure and support sustainable operation and maintenance	Two of seven activities progressed: options investigated and actions proposed to improve the design of the Nauru dumpsite; expansion of resource recovery activities investigated; new high temperature incinerator for proper healthcare waste disposal installed and commissioned during the PacWaste project.	4, 5
PICTs, supported by SPREP and partners, shall implement best practice environmental monitoring and reporting programmes	Zero of one activity progressed.	
D. Develop human capacity		
SPREP, PICTs and partners shall implement sustainable human capacity development programmes for WCP management stakeholders	Zero of one activity progressed.	
E. Improve dissemination of outcomes and experiences in WCP management		
SPREP, PICTs and partners shall utilise project outcomes to implement regional and national WCP education and behavioural-change programmes	Zero of four activities progressed.	

Strategic actions	Summary of activities	Sources
F. Promote regional and national cooperation		
SPREP, PICTs and partners shall establish a regional Clean Pacific Roundtable to coordinate and facilitate waste management and pollution-control dialogue and networking in the region	One of two activities progressed: participated in CPRTs 2016 and 2018.	10
SPREP, PICTs and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities	One of three activities progressed: participated in landfill rehabilitation knowledge exchange through a Pacific-to-Pacific twinning initiative with Fiji.	5
SPREP, PICTs and partners shall cooperate to ensure timely monitoring of the Pacific Regional Waste and Pollution Management Strategy 2016–2025	Zero of one activity progressed.	

SOURCES:

1 SPREP (2016) Cleaner Pacific 2025: Pacific Regional Waste and Pollution Management Strategy 2016–2025 https://www.sprep.org/publications/cleaner-pacific-2025-pacific-regional-waste-and-pollution-management-strategy

2 Republic of Nauru (2017) National Solid Waste Management Strategy 2017–2026

3 http://chm.pops.int/Implementation/NationalImplementationPlans/NIPTransmission/tabid/253/Default.aspx

4 Tonkin & Taylor Ltd (2018) Waste Management System Operations and Policy - Preliminary Advice. Nauru Department of Industry, Commerce and the Environment

5 SPREP (2018) Pacific Hazardous Waste Management (PacWaste). Volume 2: Country Reports, unpublished

6 Kaza S., Yao L., Bhada-Tata P., Woerden F. (2018) What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050. Urban Development Series. Washington, DC: World Bank, https://openknowledge.worldbank.org/handle/10986/30317

7 https://www.pwwa.ws/wp-content/uploads/2020/01/PWWA-Seven-Years-of-Benchmarking_2018-FINAL-DRAFT.pdf

8 Haynes D, Leney A. and O'Grady J. (2018) Report Two: Country Missions and Consultations, https://www.sprep.org/gefpaspops/gefpas-reports

9 Talouli A., Pollution Adviser, SPREP, pers. comm., 25 June 2020

10 Guinto M B., Solid Waste Management Adviser, SPREP, pers. comm., 29 June 2020

NEW CALEDONIA: CLEANER PACIFIC 2025 (CP2025) PROGRESS ASSESSMENT, 2016–2019[156]

OVERVIEW

SPREP has had limited engagement with New Caledonia during the first implementation phase of CP2025 (2016–2019). Consequently, it has been difficult to determine the extent to which New Caledonia has adopted the strategy.

Based on available data and information, New Caledonia's overall CP2025 progress is rated as LIMITED:

- *National legislation, policies, strategies, plans for waste, chemicals and pollution (WCP)*: territory-wide air quality controls and a ban on single-use plastics introduced (Table 1).
- *Twenty CP2025 performance indicators*: with reference to 2014 baseline information, five indicators remain unchanged/stable, progress is undetermined for eight indicators due to data being available for one year only, and seven indicators have no data for assessing progress (Table 2). Note, four of the unchanged/stable indicators actually reflect positive progress, given their good 2014 baselines.
- *Implementation Plan 2016–2019, 15 strategic actions*: good progress achieved for one (Clean Pacific Roundtable participation), limited progress achieved for six, and no progress for eight strategic actions (Table 3).

Based on the progress assessment results, five activity areas that require further work are:

- Development of an integrated national WCP strategy and action plan that is aligned with CP2025, and includes a reporting framework;
- Management of hazardous waste, including development of inventories;
- Development and implementation of routine monitoring and reporting, especially for WCP management activities and the receiving environment;
- Implementation of WCP prevention and reduction programmes; and
- Improvement of WCP management infrastructure, working towards sustainable operation and maintenance.

RESULTS

Tables 1, 2 and 3, below, document key findings from the CP2025 progress assessment for New Caledonia. Where appropriate and feasible, progress has been assessed with reference to baselines recorded in CP2025.

TABLE 1 Status of waste, chemicals and pollution (WCP) legislation, policies, strategies, plans

	Legislation (L)[a]		Policies, strategies, plans (PSP)		
	2016	2020	2016	2020	Sources[b]
Solid waste	X	X	X	X1	2, 3, 4 (L), 2 (PSP)
Healthcare waste	X	X	0	ND	15 (L)
Other hazardous waste	X	X	X	ND	2, 3, 4 (L)
Liquid waste	X	X			
Chemicals	X	X			2, 15 (L)
Oil spill contingency	N/A	N/A	X	ND	
Air pollution		X			8 (L)
Plastics (including single-use)[c]		X			9 (L)
Container deposit[c]					
Litter[c]					

a = some of the WCP categories do not have specific laws, but are covered under general laws to varying degrees; b = information/data sources for 2016 L, 2020 L and 2020 PSP only, 2016 PSP data from source 1; c = new category, not referred to in CP2025; N/A = not applicable; ND = no data; X = enacted (L) or endorsed (PSP) and current; 0 = endorsed document no longer current; blank cells indicate WCP categories not addressed in L or PSP; 1 = separate plans for the Southern and Northern Provinces.

[156] Progress assessment not reviewed and validated by New Caledonia.

TABLE 2 Progress assessment, CP2025 performance indicators

IMPROVED | UNCHANGED/STABLE | DETERIORATED | UNDETERMINED | NO DATA

Performance indicators	2014	2020	Sources[A]
Per capita generation of municipal solid waste (kg/person/day)	ND	1.07[b]	11
No. of marine pollution incidents	ND	1	6
No. of port waste reception facilitiesa	1	1	18
Waste recycling rate (= amt recycled, reused, returned/amt recyclable) (%)	ND	41[c]	7
No. of national or municipal composting programmes	1[d]	ND	
No. of national or state container deposit programmes	0	0	
No. of national EPR programmes for used oila	1	1	10
No. of national EPR programmes for e-wastea	1	1	10
No. of national or state user-pays systems for waste collectiona	1	1[e]	7
Waste collection coverage (% of population)	100 (urban) 67 (national)	75 (urban)[f]	3
Waste capture rate (= amount collected/amount generated) (%)	ND	ND	
No. of temporary, unregulated and open dumps	> 211[g,h]	ND	7
Quantity of asbestos stockpiles (m^2)	ND	ND	
Quantity of healthcare waste stockpiles (tonnes)	ND	ND	
Quantity of e-waste stockpiles (tonnes)	ND	ND	
Quantity of used oil stockpiles (m^3)	ND	ND	
Quantity of pharmaceutical and chemical stockpiles (tonnes)	ND	ND	
Urban sewage treated to secondary standards (%)	ND	ND[i]	16
No. of water and environmental quality monitoring programmes	0	ND	
No. of national chemicals and pollution inventories	0	ND	

A = 2020 data sources only, 2014 data from source 1; EPR = Extended Producer Responsibility; ND = no data; a = unchanged/stable indicator actually reflects good progress, given the 2014 baseline; b = 2016 adjusted estimate, based on an urban regional per capita average of 1.3kg/person/day and a rural regional per capita average of 0.5 kg/person/day; c = average rate for 2016 for five EPR sectors in the Southern Province (batteries, oils, tyres, vehicles, electrical/electronic equipment); d = '1' indicates composting programme operational; e = user-pays system in the Southern Province; f = coverage rate for the Northern Province only; g = includes temporary unregulated and open dumps; h = in 2008, 100 illegal dumps and irregular deposits identified in the Southern Province, seven open dumpsites fully or partially rehabilitated between 2015–2019; i = NC does treat wastewater to secondary standards, but no data available for % treated.

TABLE 3 Progress assessment, CP2025 Implementation Plan 2016–2019 strategic actions and linked activities

GOOD PROGRESS (≥ half of linked activities progressed)	LIMITED PROGRESS (< half of linked activities progressed)	NO PROGRESS (no linked activities progressed)

Strategic actions	Summary of activities	Sources
A. Strengthen institutional capacity		
SPREP, PICTs and partners shall undertake regular WCP data collection and management, including storage, interpretation, dissemination and sharing	Zero of four activities progressed.	
PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation and strengthen institutional arrangements to support and promote best practice WCP management	One of four activities progressed: Provincial Scheme for Waste Prevention and Management 2018–2022 developed by the Southern Province; territory-wide air quality controls and a ban on single-use plastics introduced; shared water policy (PEP) developed and adopted by Congress including objectives to protect catchment areas, move towards zero discharge of untreated water by 2045, and improve environmental monitoring of aquatic environments.	8, 9, 12, 13, 14
B. Promote public-private partnerships		
SPREP, PICTs and partners shall strengthen existing and develop new public-private partnerships including through strengthened public-private partnership frameworks	Zero of three activities progressed.	
C. Implement sustainable best practices in WCP management		
SPREP, PICTs and partners shall implement best practice occupational health and safety measures for formal and informal workers in the WCP management sectors	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, shall implement WCP prevention and reduction programmes	One of eight activities progressed: EPR schemes well-established across New Caledonia for single-use batteries, lead-acid batteries, end-of-life vehicles, used oil, tyres and electrical/electronic equipment.	10
PICTs, supported by SPREP and partners, shall implement resource recovery programmes	One of four activities progressed: EPR schemes well-established across New Caledonia for single-use batteries, lead-acid batteries, end-of-life vehicles, used oil, tyres and electrical/electronic equipment.	10
PICTs, supported by SPREP and partners, shall remediate contaminated sites and WCP stockpiles in accordance with best practices	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, will expand user-pays WCP collection services	Zero of three activities progressed.	
PICTs, supported by SPREP and partners, shall improve WCP management infrastructure and support sustainable operation and maintenance	One of seven activities progressed: five open dumpsites in the Southern Province fully or partially rehabilitated between 2016–2019, and Dumbéa Rivière recycling centre constructed and opened.	7
PICTs, supported by SPREP and partners, shall implement best practice environmental monitoring and reporting programmes	Zero of one activity progressed.	
D. Develop human capacity		
SPREP, PICTs and partners shall implement sustainable human capacity development programmes for WCP management stakeholders	Zero of one activity progressed.	

Strategic actions	Summary of activities	Sources
E. Improve dissemination of outcomes and experiences in WCP management		
SPREP, PICTs and partners shall use project outcomes to implement regional and national WCP education and behavioural-change programmes	One of four activities progressed: guide developed for managing business waste in the Southern Province.	7
F. Promote regional and national cooperation		
SPREP, PICTs and partners shall establish a regional Clean Pacific Roundtable to coordinate and facilitate waste management and pollution-control dialogue and networking in the region	One of two activities progressed: participated in CPRT 2018.	17
SPREP, PICTs and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities	One of three activities progressed: 11th Pacific Water and Wastewater Conference hosted in 2018.	5
SPREP, PICTs and partners shall cooperate to ensure timely monitoring of the Pacific Regional Waste and Pollution Management Strategy 2016–2025	Zero of one activity progressed.	

SOURCES:

1 SPREP (2016) Cleaner Pacific 2025: Pacific Regional Waste and Pollution Management Strategy 2016–2025 https://www.sprep.org/publications/cleaner-pacific-2025-pacific-regional-waste-and-pollution-management-strategy

2 https://www.province-sud.nc/codenv#_8a8186916e916e53016e91a2d7720bf6

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4 https://www.province-iles.nc/engagement/developpement-durable-et-recherche-appliquee

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6 https://www.sprep.org/sites/default/files/29-SPREP-Meeting/New/Eng/WP%2012.3.2_rev.1%20-%20Review%20of%20PACPLAN.pdf

7 https://www.province-sud.nc/element-thematique/gestion-dechets#page-content

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NIUE: CLEANER PACIFIC 2025 (CP2025) PROGRESS ASSESSMENT, 2016–2019[157]

OVERVIEW

Based on available data and information, Niue's overall CP2025 progress is rated as LIMITED:

- *National legislation, policies, strategies, plans for waste, chemicals and pollution (WCP)*: NATPLAN (National Marine Spill Contingency Plan) updated; Customs Import Prohibition (Plastic Shopping Bags) Order approved by Cabinet under the authority of the Niue Customs Act 1966 (Table 1).
- *Twenty CP2025 performance indicators*: with reference to 2014 baseline information, one indicator has improved (asbestos removed); one has deteriorated (used oil stockpile increased); eight remain unchanged/stable; progress is undetermined for three indicators due to data being available for one year only; and seven indicators have no data for assessing progress (Table 2). Note, two of the unchanged/stable indicators reflect positive progress, given their good 2014 baselines.
- *Implementation Plan 2016–2019, 15 strategic actions*: good progress achieved for one (Clean Pacific Roundtable participation), limited progress achieved for five, and no progress for nine strategic actions (Table 3).

Based on the progress assessment results, five key activity areas that require further work are:

- Development of an integrated national WCP strategy and action plan that is aligned with CP2025, and includes a reporting framework;
- Development of public-private partnerships, especially for container deposit, EPR and recycling programmes;
- Management of hazardous waste, including development of inventories;
- Development and implementation of routine monitoring and reporting, especially for WCP management activities and the receiving environment; and
- Improvement of WCP management infrastructure, working towards sustainable operation and maintenance.

RESULTS

Tables 1, 2 and 3, below, document key findings from the CP2025 progress assessment for Niue. Where appropriate and feasible, progress has been assessed with reference to baselines recorded in CP2025.

TABLE 1 Status of waste, chemicals and pollution (WCP) legislation, policies, strategies, plans

	Legislation (L)[a]		Policies, strategies, plans (PSP)		
	2016	2020	2016	2020	Sources[b]
Solid waste	X	X	D*	O*	3 (L), 2 (PSP)
Healthcare waste			D*	O*	2 (PSP)
Other hazardous waste	X	X	D*	O*	3 (L), 2 (PSP)
Liquid waste	X	X	-	O*	3, 6 (L), 2 (PSP)
Chemicals	X	X	C[1^]	C[1^]	4 (L), 5 (PSP)
Oil spill contingency	N/A	N/A	D	X	16 (PSP)
Air pollution					
Plastics (including single-use)[c]		X[2]			13 (L)
Container deposit[c]					
Litter[c]					

a = the WCP categories do not have specific laws, but are covered under general laws to varying degrees; b = information and data sources for 2016 L, 2020 L and 2020 PSP only, 2016 PSP data from source 1; c = new category, not referred to in CP2025; N/A = not applicable; C = preparation has commenced; D = document prepared but not endorsed; O = document no longer current; X = enacted (L) or endorsed (PSP) and current; blank cells indicate WCP categories not addressed in L or PSP; * = part of an integrated policy, strategy or plan; 1 = for POPs only; 2 = plastic shopping bags prohibition order; ^ = National Implementation Plan (Stockholm Convention) is yet to be updated to

[157] Progress assessment not reviewed and validated by Niue.

account for recent COP amendments.

TABLE 2 Progress assessment, CP2025 performance indicators

IMPROVED | UNCHANGED/STABLE | DETERIORATED | UNDETERMINED | NO DATA

Performance indicators	2014	2020	Sources[A]
Per capita generation of municipal solid waste (kg/person/day)	ND	1.14[b]	9
No. of marine pollution incidents	ND	ND	
No. of port waste reception facilities	0	0	16
Waste recycling rate (= amt recycled, reused, returned/amt recyclable) (%)	ND	ND	
No. of national or municipal composting programmes[a]	1[c]	1d	14
No. of national or state container deposit programmes	0	0	17
No. of national EPR programmes for used oil	0	0	10
No. of national EPR programmes for e-waste	0	0	17
No. of national or state user-pays systems for waste collection	0	0	17
Waste collection coverage (% of population)[a]	100	100	17
Waste capture rate (= amount collected/amount generated) (%)	ND	ND	
No. of temporary, unregulated and open dumps	3[f]	ND	
Quantity of asbestos stockpiles (m^2)	46,428	3 x 20 ft containers removed during PacWaste project[g]	11
Quantity of healthcare waste stockpiles (tonnes)	0.02	ND	
Quantity of e-waste stockpiles (tonnes)	ND	ND	
Quantity of used oil stockpiles (m^3)	4	~10	12
Quantity of pharmaceutical and chemical stockpiles (tonnes)	ND	ND	
Urban sewage treated to secondary standards (%)	0	0	15
No. of water and environmental quality monitoring programmes	ND	ND	
No. of national chemicals and pollution inventories	ND	ND	

A = 2020 data sources only, 2014 data from source 1; EPR = Extended Producer Responsibility; ND = no data; a = unchanged/stable indicator actually reflects good progress, given the 2014 baseline; b = 2016 estimate based on income groups in source 9 (Fig. 2.6, pg 27), and calculation of the average value across upper-middle and high-income countries; c = demonstration composting programme launched in 2015 through the Pacific POPs Release Reduction project (source 7), but no details available to determine if it has continued beyond the initial three years; d = green waste shredding machine being trialled; f = authorised open dumps only; g = this indicator is rated as 'improved' based on the removal of asbestos.

TABLE 3 Progress assessment, CP2025 Implementation Plan 2016–2019 strategic actions and linked activities

GOOD PROGRESS (≥ half of linked activities progressed)	LIMITED PROGRESS (< half of linked activities progressed)	NO PROGRESS (no linked activities progressed)

Strategic actions	Summary of activities	Sources
A. Strengthen institutional capacity		
SPREP, PICTs and partners shall undertake regular WCP data collection and management, including storage, interpretation, dissemination and sharing	Zero of three activities progressed.	
PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation and strengthen institutional arrangements to support and promote best practice WCP management	Two of seven activities progressed: Customs Import Prohibition (Plastic Shopping Bags) Order approved by Cabinet under the authority of the Niue Customs Act 1966; development of a national asbestos waste strategy supported by the PacWaste project; NATPLAN (National Marine Spill Contingency Plan) updated.	11, 13, 16
B. Promote public-private partnerships		
SPREP, PICTs and partners shall strengthen existing and develop new public-private partnerships including through strengthened public-private partnership frameworks	Zero of three activities progressed.	
C. Implement sustainable best practices in WCP management		
SPREP, PICTs and partners shall implement best practice occupational health and safety measures for formal and informal workers in the WCP management sectors	Zero of one activity progressed.	
PICTs, supported by SPREP and partners, shall implement WCP prevention and reduction programmes	One of eight activities progressed: Niue Recycling Facility built so waste from imported goods can be collected and exported for recycling offshore.	8, 14
PICTs, supported by SPREP and partners, shall implement resource recovery programmes	One of three activities progressed: green waste shredding machine trialled at landfill site to reduce the volume of green waste and transform it for composting.	8, 14
PICTs, supported by SPREP and partners, shall remediate contaminated sites and WCP stockpiles in accordance with best practices	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, will expand user-pays WCP collection services	Zero of three activities progressed.	
PICTs, supported by SPREP and partners, shall improve WCP management infrastructure and support sustainable operation and maintenance	One of eight activities progressed: new high temperature incinerator installed for the proper disposal of healthcare waste (Niue Foou Hospital) during the PacWaste project.	11
PICTs, supported by SPREP and partners, shall implement best practice environmental monitoring and reporting programmes	Zero of one activity progressed.	
D. Develop human capacity		
SPREP, PICTs and partners shall implement sustainable human capacity development programmes for WCP management stakeholders	Zero of two activities progressed.	

Strategic actions	Summary of activities	Sources
E. Improve dissemination of outcomes and experiences in WCP management		
SPREP, PICTs and partners shall use project outcomes to implement regional and national WCP education and behavioural-change programmes	One of four activities progressed: PacWaste collaborated with and supported the Government of Niue's asbestos programme and launched a national public asbestos awareness-raising campaign.	11
F. Promote regional and national cooperation		
SPREP, PICTs and partners shall establish a regional Clean Pacific Roundtable to coordinate and facilitate waste management and pollution-control dialogue and networking in the region	One of two activities progressed: participated in CPRT 2018.	17
SPREP, PICTs and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities	Zero of three activities progressed.	
SPREP, PICTs and partners shall cooperate to ensure timely monitoring of the Pacific Regional Waste and Pollution Management Strategy 2016–2025	Zero of one activity progressed.	

SOURCES:

1 SPREP (2016) Cleaner Pacific 2025: Pacific Regional Waste and Pollution Management Strategy 2016–2025 https://www.sprep.org/publications/cleaner-pacific-2025-pacific-regional-waste-and-pollution-management-strategy

2 https://www.sprep.org/attachments/Niue_Waste_Management_Strategy_4Mar2011-low_res_2.pdf

3 http://extwprlegs1.fao.org/docs/pdf/niu181112.pdf

4 http://www.gov.nu/wb/media/Volume%203.pdf

5 http://chm.pops.int/Implementation/NationalImplementationPlans/NIPTransmission/tabid/253/Default.aspx

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8 https://www.rnz.co.nz/international/pacific-news/364704/niue-recycling-plant-to-be-ready-at-end-of-2019

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16 Talouli A., Pollution Adviser, SPREP, pers. comm., 25 June 2020

17 Guinto M B., Solid Waste Management Adviser, SPREP, pers. comm., 29 June 2020

PALAU: CLEANER PACIFIC 2025 (CP2025) PROGRESS ASSESSMENT, 2016–2019[158]

OVERVIEW

Based on available data/information, Palau's overall CP2025 progress is rated as FAIR :

- *National legislation, policies, strategies, plans for waste, chemicals and pollution (WCP)*: a new National Solid Waste Management Strategy developed and aligned with CP2025, and a Plastic Bag Use Reduction law enacted (Table 1).
- *Twenty CP2025 performance indicators*: with reference to 2014 baseline information, three indicators have improved (EPR programme for used oil, user-pays system for waste collection, and water quality monitoring operational); one indicator has deteriorated (used oil stockpile increased); four remain unchanged/stable; progress is undetermined for nine indicators due to data being available for one year only; and three indicators have no data for assessing progress (Table 2). Note, three of the unchanged/stable indicators actually reflect positive progress, given their good 2014 baselines.
- *Implementation Plan 2016–2019, 15 strategic actions*: good progress achieved for five (WCP data collection and management, resource recovery, environmental monitoring, human capacity development, Clean Pacific Roundtable participation); limited progress achieved for six; and no progress for three strategic actions. Activities under one strategic action were not applicable to Palau (Table 3).

Based on the progress assessment results, five activity areas that require further work are:

- Development of public-private partnerships, especially for EPR programmes (e.g. e-waste);
- Implementation of WCP prevention and reduction programmes;
- Management of hazardous waste, including development of inventories;
- Expansion of routine monitoring and reporting, especially for WCP management activities and the receiving environment; and
- Improvement of WCP management infrastructure, working towards sustainable operation and maintenance.

RESULTS

Tables 1, 2 and 3, below, document key findings from the CP2025 progress assessment for Palau. Where appropriate and feasible, progress has been assessed with reference to baselines recorded in CP2025.

TABLE 1 Status of waste, chemicals and pollution (WCP) legislation, policies, strategies, plans

	Legislation (L)[a]		Policies, strategies, plans (PSP)		Sources[b]
	2016	2020	2016	2020	
Solid waste	X	X	X*	X*	3, 8 (L), 2 (PSP)
Healthcare waste			X*	X*	2 (PSP)
Other hazardous waste	X	X	X*	X*	4 (L), 2 (PSP)
Liquid waste	X	X	X*		3, 8 (L)
Chemicals	X	X	C[1^]	C[1^]	3, 8 (L), 11 (PSP)
Oil spill contingency	N/A	N/A	D	D	15 (PSP)
Air pollution	X	X			3, 8 (L)
Plastics (including single-use)[c]		X		X*	3 (L), 2 (PSP)
Container deposit[c]	X	X		X*	3 (L), 2 (PSP)
Litter[c]	X	X		X*[2]	3, 8 (L), 2 (PSP)

a = some of the waste/pollution categories do not have specific laws, but are covered under general laws to varying degrees; b = information/data sources for 2016 & 2020 L and 2020 PSP only, 2016 PSP data from source 1; c = new category, not referred to in CP2025; N/A = not applicable; X = enacted (L) or endorsed (PSP) and current; C = preparation has commenced; D = prepared but not yet endorsed; blank cells indicate WCP categories not addressed in L or PSP; * = part of an integrated policy, strategy or plan; 1 = POPs only; 2 = marine litter; ^ = National Implementation Plan (Stockholm Convention) is yet to be updated to account for recent COP amendments.

[158] Progress assessment not reviewed and validated by Palau.

TABLE 2 Progress assessment, CP2025 performance indicators

IMPROVED | UNCHANGED/STABLE | DETERIORATED | UNDETERMINED | NO DATA

Performance indicators	2014	2020	Sources[A]
Per capita generation of municipal solid waste (kg/person/ day)	ND	2.0[b,c]	2, 3
No. of marine pollution incidents	5[d]	ND	
No. of port waste reception facilities	0	0	15
Waste recycling rate (= amt recycled, reused, returned/amt recyclable) (%)	ND	78[e]	2
No. of national or municipal composting programmesa	1[f]	1[f]	3
No. of national or state container deposit programmesa	1	1	3
No. of national EPR programmes for used oil	0	1	3
No. of national EPR programmes for e-waste	0	ND	
No. of national or state user-pays systems for waste collection	0	1[g]	3
Waste collection coverage (% of population)a	100 (urban) 77 (national)	100 (urban)	2
Waste capture rate (= amount collected/amount generated) (%)	ND	24[h]	2
No. of temporary, unregulated and open dumps	12[i]	7[j]	3
Quantity of asbestos stockpiles (m^2)	2,514	ND	
Quantity of healthcare waste stockpiles (tonnes)	ND	ND	
Quantity of e-waste stockpiles (tonnes)	ND	ND	
Quantity of used oil stockpiles (m^3)	551	1,135[k]	3
Quantity of pharmaceutical and chemical stockpiles (tonnes)	ND	ND	
Urban sewage treated to secondary standards (%)	0	0	12
No. of water and environmental quality monitoring programmes	0	1[l]	5
No. of national chemicals and pollution inventories	1	ND	

A = 2020 data sources only, 2014 data from source 1; EPR = Extended Producer Responsibility; ND = no data; a = unchanged/stable indicator actually reflects good progress, given the 2014 baseline; b = 2017 estimate for Koror and Babeldaob only; c = for comparison, 2019 estimate for 11 states in Palau using projected population figure of 18,196 and waste collection (not generation) figure of 34,236 kg/day is 1.89 kg/person/day (source 3, Table 6); d = 5 verified ship-sourced marine pollution incidents recorded by SPREP; e = 2016 recycling rate covering PET bottles, aluminium and steel cans, and glass bottles; f = '1' indicates composting programme is operational at Koror State Recycling Center; g = '1' indicates a user-pays waste collection system is in place, but for Ngatpang state only; h = rate for Koror and Babeldaob; i = temporary, unregulated and open dumps; j = open dumpsites only; j = this stockpile includes all forms of waste oil (i.e. it also includes used cooking oil, not just petroleum oils and hydraulic fluids), mixed and stored in large concrete tanks; k = mixed waste oil (includes lubricating and cooking oils); l = '1' indicates EQPB monitoring of marine water quality in limited locations and river water quality monitoring under R2R project.

TABLE 3 Progress assessment, CP2025 Implementation Plan 2016–2019 strategic actions and linked activities

GOOD PROGRESS (≥ half of linked activities progressed)	LIMITED PROGRESS (< half of linked activities progressed)	NO PROGRESS (no linked activities progressed)

Strategic actions	Summary of activities	Sources
A. Strengthen institutional capacity		
SPREP, PICTs and partners shall undertake regular WCP data collection and management, including storage, interpretation, dissemination and sharing	Two of four activities progressed: waste amount and composition, waste disposal, and recycling surveys completed with the support of JICA (J-PRISM II); marine water quality monitored by EQPB; river water quality monitored in Melekeok through the Palau Ridge-to-Reef Integrated Waters (R2R IW) project in partnership with the Belau Watershed Alliance (BWA); surveys, monitoring and evaluation of waste segregation stations conducted by the Solid Waste Management Office (SWMO), Koror State Government.	5, 13
PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation and strengthen institutional arrangements to support and promote best practice WCP management	Three of eight activities progressed: comprehensive solid waste management strategy developed, aligned with CP2025, with the support of SPREP and JICA (J-PRISM II); Plastic Bag Use Reduction law enacted; institutional arrangements reviewed and recommendations for improvement developed, as part of new waste management strategy; development of a national healthcare waste strategy supported by the PacWaste project.	2, 3, 7
B. Promote public-private partnerships		
SPREP, PICTs and partners shall strengthen existing and develop new public-private partnerships including through strengthened public-private partnership frameworks	Zero of three activities progressed.	
C. Implement sustainable best practices in WCP management		
SPREP, PICTs and partners shall implement best practice occupational health and safety measures for formal and informal workers in the WCP management sectors	Zero of one activity progressed.	
PICTs, supported by SPREP and partners, shall implement WCP prevention and reduction programmes	One of eight activities progressed: tire shredding operation commenced; plastics converted to fuel at Koror State Recycling Center; Waste Segregation Stations program operated by SWMO, Koror State Government; Container Deposit Programme operational.	3, 13
PICTs, supported by SPREP and partners, shall implement resource recovery programmes	Two of three activities progressed: composting bins provided to 40 households for participation in a food waste composting project, conducted by Koror State Government; WCP education/environmental awareness delivered in schools.	3
PICTs, supported by SPREP and partners, shall remediate contaminated sites and WCP stockpiles in accordance with best practices	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, will expand user-pays WCP collection services	N/A to Palau.	

Strategic actions	Summary of activities	Sources
PICTs, supported by SPREP and partners, shall improve WCP management infrastructure and support sustainable operation and maintenance	Two of seven activities progressed: new Aimeliik landfill site being constructed under JICA's grant assistance; concept paper prepared for developing a 'Transportation Station' at the M-Dock landfill site that will provide for waste segregation; 10 state-wide waste collection plan under development with the support of JICA (J-PRISM II).	2, 14
PICTs, supported by SPREP and partners, shall implement best practice environmental monitoring and reporting programmes	One of one activity progressed: marine water quality monitored by EQPB; river water quality monitored in Melekeok through the Palau Ridge-to-Reef Integrated Waters (R2R IW) project in partnership with the Belau Watershed Alliance (BWA).	5
D. Develop human capacity		
SPREP, PICTs and partners shall implement sustainable human capacity development programmes for WCP management stakeholders	One of one activity progressed: capacity building needs assessment completed with JICA/J-PRISM II between 2017 to 2019, to identify training and human resource exchange needs.	9, 14
E. Improve dissemination of outcomes and experiences in WCP management		
SPREP, PICTs and partners shall use project outcomes to implement regional and national WCP education and behavioural-change programmes	One of four activities progressed: public awareness campaigns relating to solid waste management issues delivered by the national government and Koror state government.	3
F. Promote regional and national cooperation		
SPREP, PICTs and partners shall establish a regional Clean Pacific Roundtable to coordinate and facilitate waste management and pollution-control dialogue and networking in the region	One of two activities progressed: participated in CPRTs 2016 and 2018 with JICA (J-PRISM) assistance.	6
SPREP, PICTs and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities	One of three activities progressed: government officers from Tuvalu invited to a SWM workshop organised by Palauan government officials; government officers presented on SWM and 3R activities during the second and third J-PRISM II steering committee meetings; held annual national J-PRISM II Joint-Coordination-Committee Meetings to share project progress and good practices with all stakeholders; participated in sub-regional workshops (JICA/J-PRISM II) on sanitary landfill design and operation, and disaster waste management.	6, 10, 14
SPREP, PICTs and partners shall cooperate to ensure timely monitoring of the Pacific Regional Waste and Pollution Management Strategy 2016–2025	One of one activity progressed: annual report published on beverage container recycling programme by the Bureau of Public Works (N.B. strategic action is rated as "limited progress" due to the limited nature of the reporting, i.e. it does not capture progress across all areas of WCP management)	14

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2 Republic of Palau (2017) National Solid Waste Management Strategy: The Roadmap Towards a Clean and Safe Palau, 2017 to 2026, https://www.sprep.org/j-prism-2/report-and-materials

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4 https://www.palaugov.pw/eqpb

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11 http://chm.pops.int/Implementation/NationalImplementationPlans/NIPTransmission/tabid/253/Default.aspx

12 https://www.pwwa.ws/wp-content/uploads/2020/01/PWWA-Seven-Years-of-Benchmarking_2018-FINAL-DRAFT.pdf

13 http://kororstategov.com/swmo/index.html

14 JICA, J-PRISM II team, pers. comm., 26 June 2020

15 Talouli A., Pollution Adviser, SPREP, pers. comm., 25 June 2020

PAPUA NEW GUINEA: CLEANER PACIFIC 2025 (CP2025) PROGRESS ASSESSMENT, 2016–2019[159]

OVERVIEW

Based on available data and information, Papua New Guinea's overall CP2025 progress is rated as FAIR :

- *National legislation, policies, strategies, plans for waste, chemicals and pollution (WCP)*: National Capital District Waste Management Plan 2016–2025 completed; Kokopo Waste Management Strategy and Action Plan 2019–2024 completed; NATPLAN (National Marine Spill Contingency Plan) updated (Table 1).
- *Twenty CP2025 performance indicators*: with reference to 2014 baseline information, one indicator has improved (chemical inventories in place), eight indicators remain unchanged/stable, progress is undetermined for seven indicators due to data being available for one year only, and four indicators have no data for assessing progress (Table 2). Note, two of the unchanged/stable indicators actually reflect positive progress, given their good 2014 baselines.
- *Implementation Plan 2016–2019, 15 strategic actions*: good progress achieved for eight (WCP data collection and management; development of WCP policies, plans; WCP stockpiles management; environmental monitoring; human capacity development; WCP education; Clean Pacific Roundtable participation; national and regional cooperation); limited progress achieved for two; and no progress for five strategic actions (Table 3).

Based on the progress assessment results, five activity areas that require further work are:

- Finalisation of an integrated national WCP policy and action plan that is aligned with CP2025, and includes a reporting framework;
- Development of practical and enforceable WCP legislation;
- Development of public-private partnerships, especially for container deposit, EPR and recycling programmes;
- Implementation of WCP prevention and reduction programmes; and
- Development and expansion of routine monitoring and reporting, especially for the receiving environment.

RESULTS

Tables 1, 2 and 3, below, document key findings from the CP2025 progress assessment for Papua New Guinea. Where appropriate and feasible, progress has been assessed with reference to baselines recorded in CP2025.

TABLE 1 Status of waste, chemicals and pollution (WCP) legislation, policies, strategies, plans

	Legislation (L)[a]		Policies, strategies, plans (PSP)		Sources[b]
	2016	2020	2016	2020	
Solid waste	Xd	Xd		Cd, e	2, 3 (L), 4, 11, 17, 18 (PSP)
Healthcare waste	X	X	X*f	X*f	3 (L), 8 (PSP)
Other hazardous waste	X	X			2 (L)
Liquid waste	X	X	X*	X*, g	2, 5 (L), 18 (PSP)
Chemicals	X	X	C1	D1^	2, 5 (L), 18 (PSP)
Oil spill contingency	N/A	N/A	D	X	18 (PSP)
Air pollution	X	X	X*	X*	3 (L), 18 (PSP)
Plastics (including single-use)[c]	Xh	Xh	X	C	6, 7 (L), 18 (PSP)
Container deposit[c]					
Litter[c]	X	X	X*	X*	3 (L), 18 (PSP)

[159] Progress assessment reviewed and validated by Papua New Guinea.

a = some of the WCP categories do not have specific laws, but are covered under general laws to varying degrees; b = information/data sources for 2016 L, 2020 L and 2020 PSP only, 2016 PSP data from source 1, except where indicated otherwise; c = new category, not referred to in CP2025; d = PNG does not have a specific regulatory framework for solid waste management, but a National Waste and Chemical Management Policy and a National Waste Management Strategy have been drafted; e = "Guide to Develop Municipal Solid Waste Management Plan for urban local levels governments (ULLGs), Papua New Guinea", 2nd edition under revision. First SWM Plan prepared by Kokopo-Vunamami ULLG, and National Capital District Waste Management Plan 2016–2025 published for Port Moresby; f = National Health Service Standards for Papua New Guinea 2011–2020 covers healthcare waste. This was not noted in CP2025; g = Trade Waste Policy, Eda Ranu/Water PNG Ltd; h = regulations are in place to ban plastic bags but they have been ineffective and new legislation is being drafted; C = preparation has commenced; D = document prepared but not endorsed; X = enacted (L) or endorsed (PSP) and current; blank cells indicate WCP categories not addressed in L or PSP; * = part of an integrated policy, strategy or plan; 1 = for POPs only; ^ = National Implementation Plan (Stockholm Convention) updated and should be transmitted by end of 2020.

TABLE 2 Progress assessment, CP2025 performance indicators

IMPROVED | UNCHANGED/STABLE | DETERIORATED | UNDETERMINED | NO DATA

Performance indicators	2014	2020	Sources[A]
Per capita generation of municipal solid waste (kg/person/day)	ND	1.1[b]	17
No. of marine pollution incidents	ND	2	18
No. of port waste reception facilities[a]	1	1	19
Waste recycling rate (= amt recycled, reused, returned/amt recyclable) (%)	ND	ND[c]	17
No. of national or municipal composting programmes[a]	1[d]	1e	11
No. of national or state container deposit programmes	0	0	18
No. of national EPR programmes for used oil	0	0[f]	13
No. of national EPR programmes for e-waste	0	0	18
No. of national or state user-pays systems for waste collection	ND	1[g]	18
Waste collection coverage (% of population)	ND	67[h]	11
Waste capture rate (= amount collected/amount generated) (%)	ND	55[i]	17
No. of temporary, unregulated and open dumps	> 21[j]	> 21[j]	18
Quantity of asbestos stockpiles (m^2)	ND	ND	
Quantity of healthcare waste stockpiles (tonnes)	ND	ND	
Quantity of e-waste stockpiles (tonnes)	ND	ND	
Quantity of used oil stockpiles (m^3)	ND	4.5[k]	20
Quantity of pharmaceutical and chemical stockpiles (tonnes)	ND	ND	
Urban sewage treated to secondary standards (%)	0	0	16
No. of water and environmental quality monitoring programmes	0	0[l]	18
No. of national chemicals and pollution inventories	0	1[m]	18

A = 2020 data sources only, 2014 data from source 1; EPR = Extended Producer Responsibility; ND = no data; a = unchanged/stable indicator actually reflects good progress, given the 2014 baseline; b = this estimate was calculated as the average of per capita MSW generation values across five areas in PNG – NCDC 0.70 kg/p/day, Alotau ULLG 1.28 kg/p/day, Goroka ULLG 1.33 kg/p/day, Kokopo-Vunamami ULLG 1.15 kg/p/day, Lae ULLG 1.04 kg/p/day. All data are from 2018 J-PRISM II waste flow surveys; c = 2018 J-PRISM II waste flow surveys determined a recycling rate of 3.1% for PNG based on the formula: (amt recycled, reused, returned/amt waste generated) x 100; d = pilot-scale composting, for Port Moresby market waste (J-PRISM I project); e = pilot-scale composting, for Kokopo market waste (J-PRISM II project); f = EPR scheme run by one supplier for its products only; g = '1' indicates user-pays systems in place – tipping fee, sticker and salary deduction systems; h = estimate for Port Moresby only; i = this estimate was calculated as the average of waste capture rate values across 5 areas in PNG – NCDC 66.8%, Alotau ULLG 65.3%, Goroka ULLG 45.3%, Kokopo-Vunamami ULLG 49.1%, Lae ULLG 49.4%. All data are from 2018 J-PRISM II waste flow surveys; j = temporary unregulated dumps only; k = 2015 stockpile estimate; l = no government monitoring programmes identified but water and environmental quality monitoring is conducted by large companies in the mining, oil and gas industries, as required under their environment permit conditions; m = '1' indicates inventories are in place, for POPs and mercury.

TABLE 3 Progress assessment, CP2025 Implementation Plan 2016–2019 strategic actions and linked activities

GOOD PROGRESS (≥ half of linked activities progressed)	LIMITED PROGRESS (< half of linked activities progressed)	NO PROGRESS (no linked activities progressed)

Strategic actions	Summary of activities	Sources
A. Strengthen institutional capacity		
SPREP, PICTs and partners shall undertake regular WCP data collection and management, including storage, interpretation, dissemination and sharing	Two of three activities progressed: with support from JICA (J-PRISM II), a task-force team within the Waste Management Division (WMD) of the National Capital District Commission (NCDC), built a waste data management system to share data among related NCDC departments; waste audit conducted under the initiative of the Goroka ULLG with the support of JICA (J-PRISM II).	11, 17
PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation and strengthen institutional arrangements to support and promote best practice WCP management	Five of eight activities progressed: NATPLAN (National Marine Spill Contingency Plans) updated by National Maritime Safety Authority in 2017; draft National Healthcare Waste Management Policy and Guideline for Medical and Health Facilities in PNG developed; with support from JICA (J-PRISM II), institutional arrangements for waste management reviewed and agreement reached among all relevant ministries about implementation responsibilities at provincial and local government levels; "Guide to Develop Municipal Solid Waste Management (SWM) Plan for urban local levels governments (ULLGs), Papua New Guinea" developed by the Conservation and Environment Protection Authority (CEPA); National Capital District Waste Management Plan 2016–2025 completed for Port Moresby; Kokopo Waste Management Strategy and Action Plan 2019–2024 completed; baseline analysis for SWM Plan completed by Goroka ULLG; draft and roadmap developed by CEPA for a National Waste Management Strategy (NWMS), and first national and regional consultation workshops held; discussions held between CEPA and the National Department of Health on implementation, enforcement and monitoring for the NWMS through cross-sectoral collaboration; protection mechanisms improved for Jomard Passage, now declared a Particularly Sensitive Sea Area (PSSA); National Implementation Plan (Stockholm Convention) updated.	11, 12, 14, 17, 18
B. Promote public-private partnerships		
SPREP, PICTs and partners shall strengthen existing and develop new public-private partnerships including through strengthened public-private partnership frameworks	Zero of eight activities progressed.	
C. Implement sustainable best practices in WCP management		
SPREP, PICTs and partners shall implement best practice occupational health and safety measures for formal and informal workers in the WCP management sectors	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, shall implement WCP prevention and reduction programmes	Zero of seven activities progressed.	

Strategic actions	Summary of activities	Sources
PICTs, supported by SPREP and partners, shall implement resource recovery programmes	One of three activities progressed: market waste composting pilot project implemented in Kokopo/Vunamani ULLG, in partnership with the ENBP market authority and the St. Francis Takubar Primary school and with support from JICA (J-PRISM II).	11
PICTs, supported by SPREP and partners, shall remediate contaminated sites and WCP stockpiles in accordance with best practices	One of two activities progressed: DDT stockpiles in Kokopo identified and safeguarded, with support from SPREP and UNEP.	18
PICTs, supported by SPREP and partners, will expand user-pays WCP collection services	Zero of three activities progressed.	
PICTs, supported by SPREP and partners, shall improve WCP management infrastructure and support sustainable operation and maintenance	One of eight activities progressed: Kokopo disposal site rehabilitation plan developed and endorsed by Kokopo Vunamami ULLG; weighbridge installed at Baruni Disposal Site and Materials Recovery Facility plan in progress, Port Moresby, with the support of JICA/J-PRISM II.	11, 18
PICTs, supported by SPREP and partners, shall implement best practice environmental monitoring and reporting programmes	One of one activity progressed: initial discussions held to utilise the SPREP Inform project for monitoring and reporting.	18
D. Develop human capacity		
SPREP, PICTs and partners shall implement sustainable human capacity development programmes for WCP management stakeholders	One of two activities progressed: capacity building needs assessment completed with JICA/J-PRISM II between 2017 to 2019, to identify training and human resource exchange needs.	17
E. Improve dissemination of outcomes and experiences in WCP management		
SPREP, PICTs and partners shall use project outcomes to implement regional and national WCP education and behavioural-change programmes	Two of four activities progressed: environment education awareness programmes supported by JICA/J-PRISM II, especially in Kokopo and Alotau; other programmes including the Coastal Clean-up Campaign and annual World Environment Day led by CEPA.	18
F. Promote regional and national cooperation		
SPREP, PICTs and partners shall establish a regional Clean Pacific Roundtable to coordinate and facilitate waste management and pollution-control dialogue and networking in the region	One of two activities progressed: participated in CPRTs 2016 and 2018 with JICA (J-PRISM) assistance.	21
SPREP, PICTs and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities	Two of three activities progressed: city-city cooperation programme signed between NCDC-Goroka, and NCDC-Kokopo, and capacity development programme initiated with support from JICA (J-PRISM II), including data collection and analysis; attended annual J-PRISM II Steering Committee Meetings, as a regional platform to share practices and project progress; held annual national J-PRISM II Joint-Coordination-Committee Meetings to share project progress and good practices with all stakeholders; establishment of technical working group led by CEPA for development of the NWCMP; ToR developed for the National Coordination Committee (NWMC) and first meeting held; participated in training (JICA/J-PRISM II) on landfill management.	11, 17, 18
SPREP, PICTs and partners shall cooperate to ensure timely monitoring of the Pacific Regional Waste and Pollution Management Strategy 2016–2025	Zero of one activity progressed.	

SOURCES:

1 SPREP (2016) Cleaner Pacific 2025: Pacific Regional Waste and Pollution Management Strategy 2016–2025 https://www.sprep.org/publications/cleaner-pacific-2025-pacific-regional-waste-and-pollution-management-strategy

2 http://www.pngcepa.com/wp-content/uploads/2018/07/Env-Prescribed-Activities-Regulation-2002.pdf

3 http://www.paclii.org/pg/legis/num_act/

4 https://www.thenational.com.pg/policy-on-waste-needed/

5 http://www.pngcepa.com/wp-content/uploads/2018/07/Env-Water-Quality-Criteria-Regulation-2002.pdf

6 https://postcourier.com.pg/environment-levy-imposed-plastic-bags/

7 http://www.pngcepa.com/2019/02/13/efforts-to-impose-complete-ban-on-plastic-bags-progressing-well-cepa/

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9 http://chm.pops.int/Implementation/NationalImplementationPlans/NIPTransmission/tabid/253/Default.aspx

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11 JICA (2020) Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries Phase II (J-PRISM II) (Group 2), Project Completion Report (2nd Term), Kokusai Kogyo Co., Ltd. Yachiyo Engineering Co., Ltd.

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13 https://www.sprep.org/attachments/used-oil-mission-report-fiji-kiribati-niue-vanuatu-scl.pdf

14 https://www.sprep.org/attachments/2017SM28/Noumea%20Convention/English/14NC_WP.4.1%20Report%20by%20Secretariat%20(Final%20Draft).pdf

15 https://www.sprep.org/sites/default/files/29-SPREP-Meeting/New/Eng/WP%205.3.%20Att.1%20-%20Progress%20towards%20achievement%20of%20the%202018_19_PIP%20Strategic%20Outcomes.pdf

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REPUBLIC OF THE MARSHALL ISLANDS (RMI): CLEANER PACIFIC 2025 (CP2025) PROGRESS ASSESSMENT, 2016–2019[160]

OVERVIEW

Based on available data and information, RMI's overall CP2025 progress is rated as FAIR :

- *National legislation, policies, strategies, plans for waste, chemicals and pollution (WCP)*: Solid Waste Management Plan aligned with CP2025 endorsed for Kwajalein Atoll, and a new law enacted establishing a container deposit system and banning single-use plastics (Styrofoam cups and plates, disposable plastic cups and plates, and plastic shopping bags) (Table 1).
- *Twenty CP2025 performance indicators*: with reference to 2014 baseline information, four indicators have improved (container deposit programme and user-pays waste collection system operational, urban waste collection coverage increased, asbestos removed); two have deteriorated (per capita municipal solid waste generation increased, used oil stockpile increased); three remain unchanged/stable; progress is undetermined for six indicators due to data being available for one year only; and five indicators have no data for assessing progress (Table 2). Note, one of the unchanged/stable indicators actually reflects positive progress, given its good 2014 baseline.
- *Implementation Plan 2016–2019, 15 strategic actions*: good progress achieved for five (WCP data collection and management, resource recovery, environmental monitoring, human capacity development, Clean Pacific Roundtable participation); limited progress achieved for six; and no progress for three strategic actions. Activities under one strategic action were not applicable to RMI (Table 3).

Based on the progress assessment results, five activity areas that require further work are:

- Finalisation of an integrated national WCP strategy and action plan that is aligned with CP2025, and includes a reporting framework;
- Development of public-private partnerships, especially for EPR programmes;
- Implementation of WCP prevention and reduction programmes;
- Management of hazardous waste, including development of inventories; and
- Improvement of WCP management infrastructure, working towards sustainable operation and maintenance.

RESULTS

Tables 1, 2 and 3, below, document key findings from the CP2025 progress assessment for RMI. Where appropriate and feasible, progress has been assessed with reference to baselines recorded in CP2025.

TABLE 1 Status of national waste, chemicals and pollution (WCP) legislation, policies, strategies, plans

	Legislation (L)[a]		Policies, strategies, plans (PSP)		
	2016	2020	2016	2020	Sources[b]
Solid waste	X	X	D*	C#	4 (L), 2, 13, 19 (PSP)
Healthcare waste	X	X	D*	C#*	4 (L), 19 (PSP)
Other hazardous waste	X	X	D*	C#*	4 (L), 19 (PSP)
Liquid waste	X	X	X*	X*	4 (L), 8 (PSP)
Chemicals	X	X	C1^	C1^	4 (L), 3 (PSP)
Oil spill contingency	N/A	N/A	D	D	20 (PSP)
Air pollution	X	X			5 (L)
Plastics (including (single-use)[c]		X		C#*	6 (L), 19 (PSP)
Container deposit[c]		X		C#*	6 (L), 2, 19 (PSP)
Litter[c]	X	X		C#*	7 (L), 19 (PSP)

[160] Progress assessment not reviewed and validated by the Republic of the Marshall Islands.

a = some of the WCP categories do not have specific laws, but are covered under general laws to varying degrees; b = information/data sources for 2016 L, 2020 L and 2020 PSP only, 2016 PSP data from source 1; c = new category, not referred to in CP2025; N/A = not applicable; ND = no data; C = preparation has commenced; D = document prepared but not endorsed; X = enacted (L) or endorsed (PSP) and current; blank cells indicate WCP categories not addressed in L or PSP; 1 = for POPs only; * = part of an integrated policy, strategy or plan; # = development of a National Waste Management Strategy is underway. A Solid Waste Management (SWM) Plan has been endorsed for Kwajalein Atoll, and a SWM Plan for Majuro has been drafted; ^ = National Implementation Plan (Stockholm Convention) is yet to be updated to account for COP amendments.

TABLE 2 Progress assessment, CP2025 performance indicators

IMPROVED | UNCHANGED/STABLE | DETERIORATED | UNDETERMINED | NO DATA

Performance indicators	2014	2020	Sources[A]
Per capita generation of municipal solid waste (kg/person/ day)	1.1[b]	1.3[c]	2, 9
No. of marine pollution incidents	ND	ND	
No. of port waste reception facilities	0	0	20
Waste recycling rate (= amt recycled, reused, returned/amt recyclable) (%)	ND	ND[d]	2, 9
No. of national or municipal composting programmesa	1	1	10
No. of national or state container deposit programmes	0	1	6
No. of national EPR programmes for used oil	0	ND	
No. of national EPR programmes for e-waste	0	ND	
No. of national or state user-pays systems for waste collection	0	1[e]	10
Waste collection coverage (% of population)	66 (urban) 49 (national)	91 (urban)[f]	2, 9
Waste capture rate (= amount collected/amount generated) (%)	ND	56[g]	2, 9
No. of temporary, unregulated and open dumps	25	ND	
Quantity of asbestos stockpiles (m^2)	860	160 removed during PacWaste project[h]	10
Quantity of healthcare waste stockpiles (tonnes)	76	ND	
Quantity of e-waste stockpiles (tonnes)	ND	ND	
Quantity of used oil stockpiles (m^3)	1108	2,633[i]	11
Quantity of pharmaceutical and chemical stockpiles (tonnes)	ND	ND	
Urban sewage treated to secondary standards (%)	0	0	17
No. of water and environmental quality monitoring programmes	ND	1[j]	12
No. of national chemicals and pollution inventories	ND	ND	

A = 2020 data sources only, 2014 data from source 1; EPR = Extended Producer Responsibility; ND = no data; a = unchanged/stable indicator actually reflects good progress, given the 2014 baseline; b = Majuro only; c = 2017 estimate based on an average of the estimated generation rates for Majuro (1.4 kg/person/day) and Ebeye 1.2 (kg/person/day); d = 2017 waste recycling rates available for Majuro (8.7%) and Ebeye (7.8%) based on a different formula: (amt recycled, reused, returned/amt generated waste) x 100; e = pre-paid garbage bag system, Majuro; f = 2017 estimate based on an average of the collection coverage rates for Majuro (82%) and Ebeye (100%); g = 2017 estimate based on an average of the capture rates for Majuro (50.8%) and Ebeye (60.8%); h = this indicator is rated as 'improved' based on the removal of asbestos; i = 2018 estimate, based on stockpiles recorded in Majuro (2,433) and Kwajalein (200); j = water quality monitoring of Laura Village coastal sites under R2R project.

TABLE 3 Progress assessment, CP2025 Implementation Plan 2016–2019 strategic actions and linked activities

GOOD PROGRESS (≥ half of linked activities progressed)	LIMITED PROGRESS (< half of linked activities progressed)	NO PROGRESS (no linked activities progressed)

Strategic actions	Summary of activities	Sources
A. Strengthen institutional capacity		
SPREP, PICTs and partners shall undertake regular WCP data collection and management, including storage, interpretation, dissemination and sharing	Two of three activities progressed: waste amount and composition, waste disposal, and recycling surveys completed for Majuro and Kwajalein with the support of JICA/J-PRISM; water quality monitored for Laura Village coastal sites (pathogens and physical parameters) under R2R project.	12
PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation and strengthen institutional arrangements to support and promote best practice WCP management	Three of seven activities progressed: Solid Waste Management Plan aligned with CP2025 developed and endorsed for Kwajalein Atoll with the support of JICA (J-PRISM II); institutional arrangements reviewed and recommendations for improvement developed, as part of Solid Waste Management Plan for Kwajalein Atoll; new law enacted, banning single-use plastics (Styrofoam cups and plates, disposable plastic cups and plates, and plastic shopping bags) and establishing a container deposit system, with the support of JICA (J-PRISM II); draft Pacific Medical Waste Management Strategy reviewed during PacWaste training.	6, 10, 13
B. Promote public-private partnerships		
SPREP, PICTs and partners shall strengthen existing and develop new public-private partnerships including through strengthened public-private partnership frameworks	One of three activities progressed: collaboration developed with Majuro Atoll Waste Company (MAWC), supported by government, to implement a cost effective waste management programme for management of residential collection, disposal and recycling; launch of ULAB collection and international export system, in partnership with the private sector and State-owned Enterprises; the MEC established a partnership agreement with the RMI Government through the PacWaste project for a buy-back scheme enabling compliant transboundary movement of ULABs.	10, 18, 22
C. Implement sustainable best practices in WCP management		
SPREP, PICTs and partners shall implement best practice occupational health and safety measures for formal and informal workers in the WCP management sectors	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, shall implement WCP prevention and reduction programmes	One of eight activities progressed: ULAB Buy-Back Scheme established by Majuro Energy Company MEC and overseen by Majuro Atoll Waste Company MAWC; new law enacted, banning single-use plastics (Styrofoam cups and plates, disposable plastic cups and plates, and plastic shopping bags) and establishing a container deposit system, with the support of JICA (J-PRISM II).	10, 13

Strategic actions	Summary of activities	Sources
PICTs, supported by SPREP and partners, shall implement resource recovery programmes	One of two activities progressed: successful education platform for best practice in waste management established through the Clean Schools Program led by MAWC, Majuro Atoll Local Governments, the Environmental Protection Agency (EPA) and the Public School Service (supported by PacWaste through WUTMI); information about the Iokwe Bag incorporated into school-based outreach activities delivered by the EPA.	14, 15
PICTs, supported by SPREP and partners, shall remediate contaminated sites and WCP stockpiles in accordance with best practices	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, will expand user-pays WCP collection services	N/A to RMI.	
PICTs, supported by SPREP and partners, shall improve WCP management infrastructure and support sustainable operation and maintenance	Two of seven activities progressed: healthcare waste practices improved through a training programme delivered during the PacWaste project; Mediburn incinerator at Ebeye repaired during the PacWaste project; disposal systems introduced to manage healthcare waste generated by Majuro Hospital and Ebeye Hospital; improvement works undertaken at the Public Final Disposal Site, Ebeye, for segregation of recyclables; a variety of landfill rehabilitation measures implemented in Majuro, including scrap metal export, green waste diversion, use of equipment to assist in waste processing/diversion.	2, 10
PICTs, supported by SPREP and partners, shall implement best practice environmental monitoring and reporting programmes	One of one activity progressed: water quality monitored for Laura Village coastal sites (pathogens and physical parameters) under R2R project.	12
D. Develop human capacity		
SPREP, PICTs and partners shall implement sustainable human capacity development programmes for WCP management stakeholders	One of one activity progressed: capacity building needs assessment completed with JICA/J-PRISM II between 2017 to 2019, to identify training and human resource exchange needs.	16, 21
E. Improve dissemination of outcomes and experiences in WCP management		
SPREP, PICTs and partners shall utilise project outcomes to implement regional and national WCP education and behavioural-change programmes	One of four activities progressed: education, awareness and engagement activities delivered through the PacWaste project, including an asbestos awareness-raising campaign.	10
F. Promote regional and national cooperation		
SPREP, PICTs and partners shall establish a regional Clean Pacific Roundtable to coordinate and facilitate waste management and pollution-control dialogue and networking in the region	Two of two activities progressed: participated in CPRTs 2016 and 2018 with JICA (J-PRISM) assistance; self-funded a delegate in 2018.	21, 22

Strategic actions	Summary of activities	Sources
SPREP, PICTs and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities	One of three activities progressed: knowledge and atoll waste management practices exchanged through a Pacific-to-Pacific twinning arrangement between the Republic of the Marshall Islands, Tuvalu and Kiribati during the PacWaste project; attended annual J-PRISM II Steering Committee Meetings, as a regional platform to share practices and project progress; held annual national J-PRISM II Joint-Coordination-Committee Meetings to share project progress and good practices with all stakeholders; participated in sub-regional workshops (JICA/J-PRISM II) on sanitary landfill design and operation, and disaster waste management.	15, 21, 22
SPREP, PICTs and partners shall cooperate to ensure timely monitoring of the Pacific Regional Waste and Pollution Management Strategy 2016–2025	Zero of one activity progressed.	

SOURCES:

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SAMOA: CLEANER PACIFIC 2025 (CP2025) PROGRESS ASSESSMENT, 2016–2019[161]

OVERVIEW

Based on available data/information, Samoa's overall CP2025 progress is rated as GOOD:

- *National legislation, policies, strategies, plans for waste, chemicals and pollution (WCP)*: National Waste Management Strategy (2019–2023) developed and aligned with CP2025; Water for Life: Water and Sanitation Sector Plan 2016–2020 developed; NATPLAN (National Marine Spill Contingency Plan) updated; healthcare waste management plan reviewed and implemented; National Implementation Plan for POPs reviewed and updated; and a new law passed banning plastic shopping and packing bags, and plastic straws (Table 1).
- *Twenty CP2025 performance indicators*: with reference to 2014 baseline information, five indicators have improved (recycling rate increased, EPR programmes operational for used oil and e-waste, asbestos removed, used oil stockpile reduced to zero); one has deteriorated (national waste collection coverage decreased); four remain unchanged/stable; progress is undetermined for three indicators due to data being available for one year only; and seven indicators have no data for assessing progress (Table 2). Note, two of the unchanged/stable indicators actually reflect positive progress, given their good 2014 baselines.
- *Implementation Plan 2016–2019, 15 strategic actions*: good progress achieved for nine (WCP data collection and management; development of WCP strategies, plans and legislation; public-private partnerships; resource recovery; user-pays waste collection; environmental monitoring and reporting; human capacity development; Clean Pacific Roundtable participation; national and regional cooperation); limited progress achieved for two; and no progress for four strategic actions (Table 3).

Based on the progress assessment results, five activity areas that require further work are:

- Implementation of WCP prevention and reduction programmes;
- Management of hazardous waste, including development of inventories;
- Further development and expansion of routine monitoring and reporting, especially for WCP management activities and the receiving environment;
- Improvement of WCP management infrastructure, working towards sustainable operation and maintenance; and
- Further development and expansion of WCP education and behavioural-change programmes.

RESULTS

Tables 1, 2 and 3, below, document key findings from the CP2025 progress assessment for Samoa. Where appropriate and feasible, progress has been assessed with reference to baselines recorded in CP2025.

TABLE 1 Status of waste, chemicals and pollution (WCP) legislation, policies, strategies, plans

	Legislation (L)[a]		Policies, strategies, plans (PSP)		
	2016	2020	2016	2020	Sources[b]
Solid waste	X	X	D*	X	2 (L), 7 (PSP)
Healthcare waste			X	X	21 (PSP)
Other hazardous waste	X	X	D*	X*#	2 (L), 7, 21 (PSP)
Liquid waste	X	X	X	X	2 (L), 2 (PSP)
Chemicals	X	X	C[1]	X[1]	2 (L), 4, 7 (PSP)
Oil spill contingency	N/A	N/A	D	X	18 (PSP)
Air pollution					
Plastics (including single-use)[c]	X[d]	X[e]		X*	5, 6 (L), 7 (PSP)
Container deposit[c]				X*	7 (PSP)
Litter[c]	X	X		X*	2 (L), 7 (PSP)

[161] Progress assessment reviewed and validated by Samoa.

a = some of the WCP categories do not have specific laws, but are covered under general laws to varying degrees; b = information/data sources for 2016 L, 2020 L and 2020 PSP only, 2016 PSP data from source 1; c = new category, not referred to in CP2025; d = *Plastic Bag Prohibition on Importation Regulation 2006* prohibited the importation of non-biodegradable plastic bags; e = *Waste (Plastic Bag) Management Regulations 2018* repealed the 2006 regulations and now prohibit the import, manufacture, export, sale and distribution of plastic shopping and packing bags (irrespective of biodegradability) and plastic straws; N/A = not applicable; C = preparation has commenced; D = document prepared but not endorsed; X = enacted (L) or endorsed (PSP) and current; blank cells indicate WCP categories not addressed in L or PSP; * = part of an integrated policy, strategy or plan; 1 = for POPs only; # = Minamata Initial Assessment Report on Mercury developed in 2018.

TABLE 2 Progress assessment, CP2025 performance indicators

IMPROVED | UNCHANGED/STABLE | DETERIORATED | UNDETERMINED | NO DATA

Performance indicators	2014	2020	Sources[A]
Per capita generation of municipal solid waste (kg/person/day)	ND	1.06[b]	7
No. of marine pollution incidents	ND	ND	
No. of port waste reception facilities[a]	1	1	18
Waste recycling rate (= amt recycled, reused, returned/amt recyclable) (%)	36	44[c]	7
No. of national or municipal composting programmesa	1[d]	1[e]	21
No. of national or state container deposit programmes	0	0[f]	9
No. of national EPR programmes for used oil	0	1	13, 21
No. of national EPR programmes for e-waste	0	1	12
No. of national or state user-pays systems for waste collection	0	0	8
Waste collection coverage (% of population)	100	61 (national)[g]	7
Waste capture rate (= amount collected/amount generated) (%)	ND	ND	
No. of temporary, unregulated and open dumps	ND	ND	
Quantity of asbestos stockpiles (m^2)	5,260	100 removed during PacWaste project[h]	11
Quantity of healthcare waste stockpiles (tonnes)[a]	0.2	ND	
Quantity of e-waste stockpiles (tonnes)	ND	ND	
Quantity of used oil stockpiles (m^3)	8.4	0	10
Quantity of pharmaceutical and chemical stockpiles (tonnes)	ND	ND	
Urban sewage treated to secondary standards (%)	ND	ND[i]	17
No. of water and environmental quality monitoring programmes	ND	1[j]	21
No. of national chemicals and pollution inventories	ND	1[k]	21

A = 2020 data sources only, 2014 data from source 1; EPR = Extended Producer Responsibility; ND = no data; a = unchanged/stable indicator actually reflects good progress, given the 2014 baseline; b = this figure is an underestimate as it is a 2017 household (not municipal) waste generation estimate; c = recycling ratio for aluminium cans for households in Upolu; d = '1' indicates small-scale composting programme operational through the Ministry of Natural Resources and Environment; e = MNRE working in partnership with a private company for composting at Tafaigata Landfill; f = one private sector CDS; g = 2017 estimated collection coverage for Upolu based on track taken by waste collection contractor; h = this indicator is rated as 'improved' based on the removal of asbestos; i = some wastewater is treated to secondary standards but % treated is unknown; j = water quality monitoring conducted at landfills; k = '1' indicates inventory completed for Minamata Initial Assessment Report on Mercury, and inventory updated for NIP for POPs.

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TABLE 3 Progress assessment, CP2025 Implementation Plan 2016–2019 strategic actions and linked activities

GOOD PROGRESS (≥ half of linked activities progressed)	LIMITED PROGRESS (< half of linked activities progressed)	NO PROGRESS (no linked activities progressed)

Strategic actions	Summary of activities	Sources
A. Strengthen institutional capacity		
SPREP, PICTs and partners shall undertake regular WCP data collection and management, including storage, interpretation, dissemination and sharing	Two of three activities progressed: waste amount and composition, waste disposal, and recycling surveys completed with the support of JICA (J-PRISM II); framework for waste collection monitoring system designed with the support of JICA (J-PRISM II); inventory completed for Minamata Initial Assessment on Mercury; inventory updated for the review and update of the National Implementation Plan for POPs; water quality testing conducted at landfills by the Water Resources Division, MNRE.	8, 21
PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation and strengthen institutional arrangements to support and promote best practice WCP management	Four of eight activities progressed: National Waste Management Strategy (2019–2023) developed in alignment with CP2025, with the support of SPREP and JICA (J-PRISM II); institutional arrangements for waste management reviewed during the development of the NWMS; Water for Life: Water and Sanitation Sector Plan 2016–2020 developed; new law passed banning plastic shopping and packing bags and plastic straws; NATPLAN (National Marine Spill Contingency Plan) updated; healthcare waste management plan reviewed and implemented; National Implementation Plan for POPs reviewed and updated.	2, 7, 11, 18, 21
B. Promote public-private partnerships		
SPREP, PICTs and partners shall strengthen existing and develop new public-private partnerships including through strengthened public-private partnership frameworks	Two of three activities progressed: public-private partnership developed between Ministry of Natural Resources and Environment (MNRE), Samoa Stationery and Books, and HP New Zealand for e-waste (HP toners and ink cartridges) collection and export for proper disposal and recycling; Samoa Recycling and Waste Management Association (SRWMA) launched and SRWMA Strategic Plan 2018–2023 developed with the support of SPREP and JICA (J-PRISM II); public-private partnership for a Waste Oil Management Program developed between SRWMA and MNRE with support from J-PRISM II, SPREP, SWIRE Shipping Company and Blue Scope Fiji, where Hyundai and Nissan are conducting collection and storage of used oil for shipment.	12, 13, 21
C. Implement sustainable best practices in WCP management		
SPREP, PICTs and partners shall implement best practice occupational health and safety measures for formal and informal workers in the WCP management sectors	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, shall implement WCP prevention and reduction programmes	One of eight activities progressed: e-waste (HP toners and ink cartridges) collected and exported (see strategic action 3).	12

Strategic actions	Summary of activities	Sources
PICTs, supported by SPREP and partners, shall implement resource recovery programmes	Two of four activities progressed: EPR programme established between HP New Zealand, MNRE, Samoa Stationery and Books for e-waste (HP toners and ink cartridges) collection and export; 'Clean Schools' programme conducted in three schools and a study visit to the landfill site conducted for four schools; education for schools also progressed through the Greening of the Games (Pacific Games) campaign.	12, 18, 19
PICTs, supported by SPREP and partners, shall remediate contaminated sites and WCP stockpiles in accordance with best practices	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, will expand user-pays WCP collection services	One of one activity progressed: MNRE, with the support of JICA (J-PRISM II), analysed user-pays systems in Tonga, Vanuatu and New Zealand; investigated user-pays legal frameworks and stakeholder profiles; conducted a study tour to Vanuatu, Tonga and Fiji; and prepared options to introduce a user-pays waste collection system in Samoa.	8
PICTs, supported by SPREP and partners, shall improve WCP management infrastructure and support sustainable operation and maintenance	Two of eight activities progressed: intermediate bulk containers procured for used oil storage; Vaiaata landfill improved under the J-PRISM project.	20, 21
PICTs, supported by SPREP and partners, shall implement best practice environmental monitoring and reporting programmes	One of one activity progressed: water quality testing conducted at landfills by the Water Resources Division, MNRE	21
D. Develop human capacity		
SPREP, PICTs and partners shall implement sustainable human capacity development programmes for WCP management stakeholders	One of one activity progressed: capacity building needs assessment completed with JICA/J-PRISM II between 2017 to 2019, to identify training and human resource exchange needs.	16, 19
E. Improve dissemination of outcomes and experiences in WCP management		
SPREP, PICTs and partners shall utilise project outcomes to implement regional and national WCP education and behavioural-change programmes	Zero of four activities progressed.	
F. Promote regional and national cooperation		
SPREP, PICTs and partners shall establish a regional Clean Pacific Roundtable to coordinate and facilitate waste management and pollution-control dialogue and networking in the region	One of two activities progressed: participated in CPRTs 2016 and 2018 with the support of JICA (J-PRISM II).	20

Strategic actions	Summary of activities	Sources
SPREP, PICTs and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities	Two of three activities progressed: Steering Committee established to monitor the implementation of the National Solid Waste Management Strategy and coordinate technical working groups; MNRE and SPREP initiated the Greening of the Games (Pacific Games) campaign, to reduce the use of single-use plastics at sporting events (and promote carbon footprint offsets); 10th Pacific Water and Wastewater Conference and Expo 2017 hosted by the Samoa Water Authority in collaboration with MNRE and other water and sanitation sector partners; attended annual J-PRISM II Steering Committee Meetings, as a regional platform to share practices and project progress; held annual national J-PRISM II Joint-Coordination-Committee Meetings to share project progress and good practices with all stakeholders; participated in a sub-regional workshop on disaster waste management.	3, 14, 15, 19, 20
SPREP, PICTs and partners shall cooperate to ensure timely monitoring of the Pacific Regional Waste and Pollution Management Strategy 2016–2025	Zero of one activity progressed.	

SOURCES:

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SOLOMON ISLANDS: CLEANER PACIFIC 2025 (CP2025) PROGRESS ASSESSMENT, 2016–2019[162]

OVERVIEW

Based on available data and information, the Solomon Islands' overall CP2025 progress is rated as FAIR :

- *National legislation, policies, strategies, plans for waste, chemicals and pollution (WCP)*: National Waste Management and Pollution Control Strategy 2016–2024 developed and aligned with CP2025 (Table 1).
- *Twenty CP2025 performance indicators*: with reference to 2014 baseline information, three indicators have improved (user-pays waste collection and water quality monitoring operational; asbestos removed); one indicator has deteriorated (urban waste collection coverage decreased); five remain unchanged/stable; progress is undetermined for six indicators due to data being available for one year only; and five indicators have no data for assessing progress (Table 2). Note, one of the unchanged/stable indicators actually reflects positive progress, given its good 2014 baseline.
- *Implementation Plan 2016–2019, 15 strategic actions*: good progress achieved for five (WCP data collection and management; public-private partnerships; environmental monitoring; human capacity development; Clean Pacific Roundtable participation); limited progress achieved for six; and no progress for four strategic actions (Table 3).

Based on the progress assessment results, five activity areas that require further work are:

- Implementation of WCP prevention and reduction programmes;
- Management of hazardous waste, including development of inventories;
- Development and implementation of routine monitoring and reporting, especially for WCP management activities;
- Improvement of WCP management infrastructure, working towards sustainable operation and maintenance; and
- Implementation of WCP education and behavioural-change programmes.

RESULTS

Tables 1, 2 and 3, below, document key findings from the CP2025 progress assessment for the Solomon Islands. Where appropriate and feasible, progress has been assessed with reference to baselines recorded in CP2025.

TABLE 1 Status of waste, chemical and pollution (WCP) legislation, policies, strategies, plans

	Legislation (L)[a]		Policies, strategies, plans (PSP)		
	2016	2020	2016	2020	Sources[b]
Solid waste	X	X	X*	X*+	2, 3 (L), 2, 18 (PSP)
Healthcare waste			D*	D*^	2 (PSP)
Other hazardous waste				X*	2, 4 (PSP)
Liquid waste	X	X	X1	X*	3 (L), 2 (PSP)
Chemicals	X	X	C2#	C2#	2, 4 (L), 16, 20 (PSP)
Oil spill contingency	N/A	N/A	D	D	
Air pollution					
Plastics (including single-use)[c]				C	2 (PSP)
Container deposit[c]		C		C	19 (L), 19 (PSP)
Litter[c]					

[162] Progress assessment reviewed and validated by the Solomon Islands.

a = some of the waste/pollution categories do not have specific laws, but are covered under general laws to varying degrees; b = information/data sources for 2016 L, 2020 L and 2020 PSP only, 2016 PSP data from source 1; c = new category, not referred to in CP2025; N/A = not applicable; X = enacted (L) or endorsed (PSP) and current; C = preparation has commenced; D = prepared but not endorsed (PSP); blank cells indicate WCP categories not addressed in L or PSP; 1 = for sanitation only; 2 = POPs only; * = part of an integrated policy, strategy or plan; + = in addition to the National Waste Management and Pollution Control Strategy, Honiara City Council has published a Solid Waste Management Plan 2018–2027; ^ = healthcare waste is referred to under the National Waste Management and Pollution Control Strategy, which also makes reference to a draft healthcare waste policy; # = National Implementation Plan (Stockholm Convention) prepared in 2018, but transmission is not recorded on the Convention Secretariat website.

TABLE 2 Progress assessment, CP2025 performance indicators

IMPROVED | UNCHANGED/STABLE | DETERIORATED | UNDETERMINED | NO DATA

Performance indicators	2014	2020	Sources[A]
Per capita generation of municipal solid waste (kg/person/ day)	ND	0.88[b,c]	5
No. of marine pollution incidents	ND	1	7
No. of port waste reception facilities	0	0	8
Waste recycling rate (= amt recycled, reused, returned/amt recyclable) (%)	ND	ND[d]	
No. of national or municipal composting programmesa	1[d]	1[e]	6
No. of national or state container deposit programmes	0	0[f]	6
No. of national EPR programmes for used oil	0	0g	9
No. of national EPR programmes for e-waste	0	ND	
No. of national or state user-pays systems for waste collectiona	0	1[h]	6
Waste collection coverage (% of population)	60 (urban) 12 (national)	51 (urban)[i]	6
Waste capture rate (= amount collected/amount generated) (%)	ND	41[j]	6
No. of temporary, unregulated and open dumps	> 3[k]	ND	
Quantity of asbestos stockpiles (m^2)	3,150	500 removed during PacWaste project[l]	12
Quantity of healthcare waste stockpiles (tonnes)	ND	ND	
Quantity of e-waste stockpiles (tonnes)	ND	ND	
Quantity of used oil stockpiles (m^3)	ND	ND	
Quantity of pharmaceutical and chemical stockpiles (tonnes)	ND	ND	
Urban sewage treated to secondary standards (%)	0	0	10
No. of water and environmental quality monitoring programmes	0	1[m]	13
No. of national chemicals and pollution inventories	0	ND	

A = 2020 data sources only, 2014 data from source 1; EPR = Extended Producer Responsibility; ND = no data; a = unchanged/stable indicator actually reflects good progress, given the 2014 baseline; b = 2016 adjusted estimate based on the average of a 2014 data range, 0.75–1.0 kg/person/day; c = for comparison, 2018 waste disposal (not generation) estimate determined for Honiara was 0.32 kg/person/day (source 6); d = 7.2% recycling rate was determined using a different formula: (amt recycled, reused/generated waste) x 100; e = '1' indicates composting programmes operational; f = one private company has a CDS for glass bottles in Honiara; g = EPR scheme run by one supplier for its products only; h = trade refuse fees paid by businesses, under Trade Refuse Agreements with Honiara City Council; i = mid-point of reported collection coverage range, 42–60%. The midpoint, 51%, was chosen for reporting in this table and for inclusion in the regional analysis; j = mid-point of waste capture rate range, 37–45%, based on comparative data from JICA and APWC; k = number of authorised open dumps only, ND for other dumps; l = this indicator is rated as 'improved' based on the removal of asbestos; m = '1' indicates water and sediment quality monitoring program under R2R project.

TABLE 3 Progress assessment, CP2025 Implementation Plan 2016–2019 strategic actions and linked activities

GOOD PROGRESS (≥ half of linked activities progressed)	LIMITED PROGRESS (< half of linked activities progressed)	NO PROGRESS (no linked activities progressed)

Strategic actions	Summary of activities	Sources
A. Strengthen institutional capacity		
SPREP, PICTs and partners shall undertake regular WCP data collection and management, including storage, interpretation, dissemination and sharing	Two of four activities progressed: waste audit conducted for Tulagi under the initiative of the Ministry of Environment, Climate Change, Disaster Management and Meteorology, Central Provincial Government and Honiara City Council with the support of JICA (J-PRISM II); water and sediment quality monitoring program established along the Mataniko River and at adjacent coastal sites under R2R Project.	13, 18
PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation and strengthen institutional arrangements to support and promote best practice WCP management	Three of seven activities progressed: National Waste Management and Pollution Control Strategy 2016– 2024 developed and aligned with CP2025, with the support of JICA (J-PRISM II); institutional arrangements reviewed and recommendations for improvement developed, as part of National Waste Management and Pollution Control Strategy; development of national healthcare and asbestos waste strategies supported by the PacWaste project; Solid Waste Management Plan 2018–2027 published by Honiara City Council; National Implementation Plan (Stockholm Convention) prepared in 2018.	2, 8, 12, 18, 20
B. Promote public-private partnerships		
SPREP, PICTs and partners shall strengthen existing and develop new public-private partnerships including through strengthened public-private partnership frameworks	Two of three activities progressed: public–private partnership established between Sol Power Solomon Islands Ltd (SPSIL) and the Environment and Conservation Division (ECD) of the Solomon Islands Government to recover household solar batteries; Solomon Islands Recycling and Waste Management Association launched with the support of JICA (J-PRISM II).	12, 15
C. Implement sustainable best practices in WCP management		
SPREP, PICTs and partners shall implement best practice occupational health and safety measures for formal and informal workers in the WCP management sectors	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, shall implement WCP prevention and reduction programmes	One of nine activities progressed: pre-feasibility study on Container Deposit System (CDS) conducted by JICA (J-PRISM II).	11, 19
PICTs, supported by SPREP and partners, shall implement resource recovery programmes	One of three activities progressed: Eco School 3Rs pilot project promoted in Honiara schools with the support of J-PRISM.	17
PICTs, supported by SPREP and partners, shall remediate contaminated sites and WCP stockpiles in accordance with best practices	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, will expand user-pays WCP collection services	One of three activities progressed: study conducted on economic measures for maintaining effective solid waste management with the support of J-PRISM II.	11

Strategic actions	Summary of activities	Sources
PICTs, supported by SPREP and partners, shall improve WCP management infrastructure and support sustainable operation and maintenance	Three of nine activities progressed: three high temperature incinerators installed and commissioned at the Honiara Hospital, Kiluufi Hospital and Kirakira Hospital, and one installed at the Helena Goldie Hospital under the PacWaste project; landfill operation manual for Ranadi disposal site developed with the support of J-PRISM II; new "Waste Management & Control Division" established by Honiara City Council.	11, 12, 18
PICTs, supported by SPREP and partners, shall implement best practice environmental monitoring and reporting programmes	One of one activity progressed: water and sediment quality monitoring program established along the Mataniko River and at adjacent coastal sites under R2R Project.	13
D. Develop human capacity		
SPREP, PICTs and partners shall implement sustainable human capacity development programmes for WCP management stakeholders	One of two activities progressed: capacity building needs assessment completed with JICA/J-PRISM II between 2017 to 2019, to identify training and human resource exchange needs; participated in annual JICA short course training.	14, 18
E. Improve dissemination of outcomes and experiences in WCP management		
SPREP, PICTs and partners shall utilise project outcomes to implement regional and national WCP education and behavioural-change programmes	Zero of four activities progressed.	
F. Promote regional and national cooperation		
SPREP, PICTs and partners shall establish a regional Clean Pacific Roundtable to coordinate and facilitate waste management and pollution-control dialogue and networking in the region	One of two activities progressed: participated in CPRTs 2016 and 2018 with the support of JICA (J-PRISM II); co-shared the cost for participation with JICA (J-PRISM II) in 2018.	8
SPREP, PICTs and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities	One of three activities progressed: Honiara City Council, in cooperation with MECDM and Provincial Centres, led human and institutional capacity development initiatives targeting towns/cities, to share good practices and strengthen capacity nation-wide (e.g. with waste audits); attended annual J-PRISM II Steering Committee Meetings, as a regional platform to share practices and project progress; held annual national J-PRISM II Joint-Coordination-Committee Meetings to share project progress and good practices with all stakeholders; participated in sub-regional workshops (JICA/J-PRISM II) on landfill management in PNG, and on disaster waste management in Samoa; attended disaster waste management training in Japan.	8, 18
SPREP, PICTs and partners shall cooperate to ensure timely monitoring of the Pacific Regional Waste and Pollution Management Strategy 2016–2025	Zero of one activity progressed.	

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TOKELAU: CLEANER PACIFIC 2025 (CP2025) PROGRESS ASSESSMENT, 2016–2019[163]

OVERVIEW

SPREP has had very limited engagement with Tokelau during the first implementation phase of CP2025 (2016–2019). Consequently, it has been difficult to determine to the extent to which Tokelau has adopted the strategy.

Based on available data and information, Tokelau's overall CP2025 progress is rated as LIMITED:

- *National legislation, policies, strategies, plans for waste, chemicals and pollution (WCP)*: no progress identified (Table 1).
- *Twenty CP2025 performance indicators*: with reference to 2014 baseline information, zero indicators have improved, four remain unchanged/stable, progress is undetermined for nine indicators due to data being available for one year only, and seven indicators have no data for assessing progress (Table 2). Note, one of the unchanged/stable indicators actually reflects positive progress, given its good 2014 baseline.
- *Implementation Plan 2016–2019, 15 strategic actions*: good progress achieved for one (Clean Pacific Roundtable participation), limited progress achieved for two, and no progress for 11 strategic actions. Activities under one strategic action were not applicable to Tokelau (Table 3).

Based on the progress assessment results, five activity areas that require further work are:

- Development of an integrated WCP strategy and action plan that is aligned with CP2025 and includes a reporting framework;
- Development and implementation of WCP prevention and reduction programmes;
- Management of hazardous waste, including development of inventories;
- Development and implementation of routine monitoring and reporting, especially for the receiving environment; and
- Development and implementation of WCP education and behavioural-change programmes.

RESULTS

Tables 1, 2 and 3, below, document key findings from the CP2025 progress assessment for Tokelau. Where appropriate and feasible, progress has been assessed with reference to baselines recorded in CP2025.

TABLE 1 Status of waste, chemicals and pollution (WCP) legislation, policies, strategies, plans

	Legislation (L)[a]		Policies, strategies, plans (PSP)		Sources[b]
	2016	2020	2016	2020	
Solid waste	X	X	X*	ND	2 (L)
Healthcare waste	ND	ND	X*	ND	
Other hazardous waste	ND	ND	X*	ND	
Liquid waste	X^	X^	X*	ND	2 (L)
Chemicals	ND	ND	ND	ND	
Oil spill contingency	N/A	N/A	D	D	9 (PSP)
Air pollution	ND	ND	ND	ND	
Plastics (including single-use)[c]	ND	ND	ND	ND	
Container deposit[c]	ND	ND	ND	ND	
Litter[c]	ND	ND	ND	ND	

a = some of the WCP categories do not have specific laws, but are covered under general laws to varying degrees; b = information/data sources for 2016 L and 2020 L, 2016 PSP data from source 1; c = new category, not referred to in CP2025; N/A = not applicable; ND = no data; D = document prepared but not endorsed; X = enacted (L) or endorsed (PSP) and current; blank cells indicate WCP categories not addressed in L or PSP; ^ = sewage and marine oil spills; * = part of an integrated policy, strategy or plan.

[163] Progress assessment not reviewed and validated by Tokelau.

TABLE 2 Progress assessment, CP2025 performance indicators

IMPROVED | UNCHANGED/STABLE | DETERIORATED | UNDETERMINED | NO DATA

Performance indicators	2014	2020	Sources[A]
Per capita generation of municipal solid waste (kg/person/day)	ND	0.69[b]	3
No. of marine pollution incidents	ND	ND	
No. of port waste reception facilities	0	0	9
Waste recycling rate (= amt recycled, reused, returned/amt recyclable) (%)	ND	ND	
No. of national or municipal composting programmes	0	0[c]	5
No. of national or state container deposit programmes	0	ND	
No. of national EPR programmes for used oil	0	ND	
No. of national EPR programmes for e-waste	0	ND	
No. of national or state user-pays systems for waste collection	0	ND	
Waste collection coverage (% of population)a	100	99[d]	4
Waste capture rate (= amount collected/amount generated) (%)	ND	ND	
No. of temporary, unregulated and open dumps	3[e]	ND	
Quantity of asbestos stockpiles (m^2)	ND	ND	
Quantity of healthcare waste stockpiles (tonnes)	ND	ND	
Quantity of e-waste stockpiles (tonnes)	ND	ND	
Quantity of used oil stockpiles (m^3)	6	ND	
Quantity of pharmaceutical and chemical stockpiles (tonnes)	ND	ND	
Urban sewage treated to secondary standards (%)	0	0	8
No. of water and environmental quality monitoring programmes	0	ND	
No. of national chemicals and pollution inventories	0	ND	

A = 2020 data sources only, 2014 data from source 1; EPR = Extended Producer Responsibility; ND = no data; a = unchanged/stable indicator actually reflects good progress, given the 2014 baseline; b = estimate based on income groups in source 4 (Fig. 2.6, pg 27), using the 2016 average value for upper middle income countries; c = organic waste fed to pigs; d = source 4 reports 99% coverage – this is very close to 100%, which may have been a rounded-up value, so this indicator is deemed unchanged; e = authorised open dumps.

TABLE 3 Progress assessment, CP2025 Implementation Plan 2016–2019 strategic actions and linked activities

GOOD PROGRESS (≥ half of linked activities progressed) | LIMITED PROGRESS (< half of linked activities progressed) | NO PROGRESS (no linked activities progressed)

Strategic actions	Summary of activities	Sources
A. Strengthen institutional capacity		
SPREP, PICTs and partners shall undertake regular WCP data collection and management, including storage, interpretation, dissemination and sharing	One of four activities progressed: greenhouse gas emissions estimated for the waste sector and reported as part of New Zealand's greenhouse gas emissions inventory.	5
PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation and strengthen institutional arrangements to support and promote best practice WCP management	Zero of six activities progressed.	

Strategic actions	Summary of activities	Sources
B. Promote public-private partnerships		
SPREP, PICTs and partners shall strengthen existing and develop new public-private partnerships including through strengthened public-private partnership frameworks	One of three activities progressed: Memorandum of Understanding signed between the Department of Economic Development, Natural Resources and Environment (EDNRE) and the Pacific Recycle Co. Ltd Samoa, to cooperate on waste management – resulting in collection and export of metal waste.	7
C. Implement sustainable best practices in WCP management		
SPREP, PICTs and partners shall implement best practice occupational health and safety measures for formal and informal workers in the WCP management sectors	Zero of one activity progressed.	
PICTs, supported by SPREP and partners, shall implement WCP prevention and reduction programmes	Zero of eight activities progressed.	
PICTs, supported by SPREP and partners, shall implement resource recovery programmes	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, shall remediate contaminated sites and WCP stockpiles in accordance with best practices	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, will expand user-pays WCP collection services	N/A to Tokelau.	
PICTs, supported by SPREP and partners, shall improve WCP management infrastructure and support sustainable operation and maintenance	Zero of six activities progressed.	
PICTs, supported by SPREP and partners, shall implement best practice environmental monitoring and reporting programmes	Zero of one activity progressed.	
D. Develop human capacity		
SPREP, PICTs and partners shall implement sustainable human capacity development programmes for WCP management stakeholders	Zero of one activity progressed.	
E. Improve dissemination of outcomes and experiences in WCP management		
SPREP, PICTs and partners shall utilise project outcomes to implement regional and national WCP education and behavioural-change programmes	Zero of four activities progressed.	
F. Promote regional and national cooperation		
SPREP, PICTs and partners shall establish a regional Clean Pacific Roundtable to coordinate and facilitate waste management and pollution-control dialogue and networking in the region	One of two activities progressed: participated in CPRTs 2016 and 2018.	6
SPREP, PICTs and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities	Zero of three activities progressed.	
SPREP, PICTs and partners shall cooperate to ensure timely monitoring of the Pacific Regional Waste and Pollution Management Strategy 2016–2025	Zero of one activity progressed.	

SOURCES:

1 SPREP (2016) Cleaner Pacific 2025: Pacific Regional Waste and Pollution Management Strategy 2016–2025 https://www.sprep.org/publications/cleaner-pacific-2025-pacific-regional-waste-and-pollution-management-strategy

2 http://www.paclii.org/tk/indices/legis/2016-laws.html

3 Kaza S., Yao L., Bhada-Tata P., Woerden F. (2018) What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050. Urban Development Series. Washington, DC: World Bank, https://openknowledge.worldbank.org/handle/10986/30317

4 Tokelau National Statistics Office and Stats NZ (2017). Profile of Tokelau: 2016 Tokelau Census of Population and Dwellings. Available from www.tokelau.org.nz and www.stats.govt.nz.

5 Ministry for the Environment, New Zealand Government (2020) New Zealand's Greenhouse Gas Inventory 1990–2018, Vol. 1, Chapter 8

https://www.mfe.govt.nz/sites/default/files/media/Climate%20Change/new-zealands-greenhouse-gas-inventory-1990–2018-vol-1.pdf

6 Guinto M B., Solid Waste Management Adviser, SPREP, pers. comm., 29 June 2020

7 https://www.tokelau.org.nz/Bulletin/December+2017/Solid+Waste+Management+MOU+Signed+between+Tokelau+EDNRE+and+Pacific++Recycle+Co.+Ltd.html

8 https://www.pwwa.ws/wp-content/uploads/2020/01/PWWA-Seven-Years-of-Benchmarking_2018-FINAL-DRAFT.pdf

9 Talouli A., Pollution Adviser, SPREP, pers. comm., 25 June 2020

TONGA: CLEANER PACIFIC 2025 (CP2025) PROGRESS ASSESSMENT, 2016–2019[164]

OVERVIEW

Based on available data/information, Tonga's overall CP2025 progress is rated as FAIR :

- *National legislation, policies, strategies, plans for waste, chemicals and pollution (WCP)*: Tonga does not have a national waste management strategy aligned with CP2025, however, the Combined Utilities Business Plan 2018–2022 was developed with a detailed business plan for Tonga's Waste Authority Ltd; NATPLAN (National Marine Spill Contingency Plan) updated (Table 1).
- *Twenty CP2025 performance indicators*: with reference to 2014 baseline information, one indicator has improved (asbestos removed), four remain unchanged/stable, progress is undetermined for eight indicators due to data being available for one year only, and seven indicators have no data for assessing progress (Table 2). Note, one of the unchanged/stable indicators actually reflects positive progress, given its good 2014 baseline.
- *Implementation Plan 2016–2019, 15 strategic actions*: good progress achieved for five (development of national policies, strategies, plans; user-pays waste collection; environmental monitoring; human capacity development; Clean Pacific Roundtable participation); limited progress achieved for three; and no progress for seven strategic actions (Table 3).

Based on the progress assessment results, five activity areas that require further work are:

- Development of an integrated national WCP strategy and action plan that is aligned with CP2025, and includes a reporting framework;
- Development of public-private partnerships, especially for container deposit, EPR and recycling programmes;
- Implementation of WCP prevention and reduction programmes;
- Management of hazardous waste, including development of inventories; and
- Development and implementation of routine monitoring and reporting, especially for WCP management activities.

RESULTS

Tables 1, 2 and 3, below, document key findings from the CP2025 progress assessment for Tonga. Where appropriate and feasible, progress has been assessed with reference to baselines recorded in CP2025.

TABLE 1 Status of waste, chemicals and pollution (WCP) legislation, policies, strategies, plans

	Legislation (L)[a]		Policies, strategies, plans (PSP)		
	2016	2020	2016	2020	Sources[b]
Solid waste	X	X	D*		2 (L), 5, 6, 7 (PSP)[e]
Healthcare waste	X	X			2 (L)
Other hazardous waste	X	X	D*		2 (L)
Liquid waste	X	X	D*		2 (L)
Chemicals	X	X	C[1]	C[1^]	2 (L), 4 (PSP)
Oil spill contingency	N/A	N/A	X	X	17 (PSP)
Air pollution	X	X			2 (L)
Plastics (including single-use)[c]	X[d]	X[d]			3 (L)
Container deposit[c]					
Litter[c]	X	X			2 (L)

[164] Progress assessment not reviewed and validated by Tonga.

a = some of the WCP categories do not have specific laws, but are covered under general laws to varying degrees; b = information/data sources for 2016 L, 2020 L and 2020 PSP only, 2016 PSP data from source 1; c = new category, not referred to in CP2025; d = customs levy on the importation of plastic bags and disposable plastic containers; e = Tonga does not have a dedicated national waste management strategy or plan, but waste management is addressed in the Tonga National Strategic Development Framework 2015–2025 and Tonga National Infrastructure Investment Plan. The Combined Utilities Business Plan 2018–2022 includes a section focused on Tonga's Waste Authority Ltd; N/A = not applicable; C = preparation has commenced; D = document prepared but not endorsed; X = enacted (L) or endorsed (PSP) and current; blank cells indicate WCP categories not addressed in L or PSP; * = part of an integrated policy, strategy or plan; 1 = for POPs only; ^ = National Implementation Plan (Stockholm Convention) is yet to be updated to account for recent COP amendments.

TABLE 2 Progress assessment, CP2025 performance indicators

IMPROVED | UNCHANGED/STABLE | DETERIORATED | UNDETERMINED | NO DATA

Performance indicators	2014	2020	Sources[A]
Per capita generation of municipal solid waste (kg/person/day)	ND	1.4[b]	8
No. of marine pollution incidents	ND	ND	
No. of port waste reception facilities	0	0	17
Waste recycling rate (= amt recycled, reused, returned/amt recyclable) (%)	9	ND	
No. of national or municipal composting programmes	0	ND	
No. of national or state container deposit programmes	0	ND	
No. of national EPR programmes for used oil	0	0[c]	9
No. of national EPR programmes for e-waste	0	ND	
No. of national or state user-pays systems for waste collectiona	1[d,e]	1[d,f]	12
Waste collection coverage (% of population)	100 (urban) 71 (national)[g]	ND	
Waste capture rate (= amount collected/amount generated) (%)	ND	ND	
No. of temporary, unregulated and open dumps	ND	ND	
Quantity of asbestos stockpiles (m^2)	4,850	6,880 removed during PacWaste project[h]	10
Quantity of healthcare waste stockpiles (tonnes)a	0	ND	
Quantity of e-waste stockpiles (tonnes)	ND	ND	
Quantity of used oil stockpiles (m^3)	ND	0	15
Quantity of pharmaceutical and chemical stockpiles (tonnes)	ND	ND	
Urban sewage treated to secondary standards (%)	0	0	16
No. of water and environmental quality monitoring programmes	ND	ND	
No. of national chemicals and pollution inventories	ND	ND	

A = 2020 data sources only, 2014 data from source 1; EPR = Extended Producer Responsibility; ND = no data; a = unchanged/stable indicator actually reflects good progress, given the 2014 baseline; b = 2011/2012 estimate for Vava'u; c = EPR scheme run by one supplier for its products only; d = '1' indicates user-pays system in place; e = Tongatapu only; f = user-pays system now covers Tongatapu and Vava'u; g = Tongatapu data only; h = this indicator is rated as 'improved' based on the removal of asbestos.

TABLE 3 Progress assessment, CP2025 Implementation Plan 2016–2019 strategic actions and linked activities

GOOD PROGRESS (≥ half of linked activities progressed)	LIMITED PROGRESS (< half of linked activities progressed)	NO PROGRESS (no linked activities progressed)

Strategic actions	Summary of activities	Sources
A. Strengthen institutional capacity		
SPREP, PICTs and partners shall undertake regular WCP data collection and management, including storage, interpretation, dissemination and sharing	One of three activities progressed: assessment and monitoring methodology developed to report waste volume and water quality under Ridge to Reef project (unknown if monitoring programme is operational).	11
PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation and strengthen institutional arrangements to support and promote best practice WCP management	Three of six activities progressed: NATPLAN (National Marine Spill Contingency Plan) updated; development of national healthcare and asbestos waste management strategies supported by the PacWaste project; Combined Utilities Business Plan 2018–2022 developed with a detailed business plan for Tonga's Waste Authority Ltd.	6, 10, 17
B. Promote public-private partnerships		
SPREP, PICTs and partners shall strengthen existing and develop new public-private partnerships including through strengthened public-private partnership frameworks	Zero of three activities progressed.	
C. Implement sustainable best practices in WCP management		
SPREP, PICTs and partners shall implement best practice occupational health and safety measures for formal and informal workers in the WCP management sectors	Zero of one activity progressed.	
PICTs, supported by SPREP and partners, shall implement WCP prevention and reduction programmes	Zero of eight activities progressed.	
PICTs, supported by SPREP and partners, shall implement resource recovery programmes	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, shall remediate contaminated sites and WCP stockpiles in accordance with best practices	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, will expand user-pays WCP collection services	Two of three activities progressed: with support from JICA under J-PRISM II, Tonga Waste Authority Limited (WAL) investigated and implemented the expansion of user-pays waste management services to Vava'u; stakeholder meetings conducted by WAL to build support and awareness for the Vava'u service.	12
PICTs, supported by SPREP and partners, shall improve WCP management infrastructure and support sustainable operation and maintenance	Three of eight activities progressed: with support from JICA under J-PRISM II, Kalaka landfill improved and a landfill operation manual developed by WAL to extend the facility's life; new manager appointed at WAL to address accounts, public relations and disposal sites operation, and to assist with expanding service provision to the outer islands; "Ha'apai Waste Management Service Plan" and "'Eua Waste Management Service Plan" developed by WAL, to support expansion of services to the outer islands; three high temperature incinerators installed and commissioned for three hospitals (Vaiola Hospital, Niu'eiki Hospital and Niu'ui Hospital) through the PacWaste project.	10, 12, 14

Strategic actions	Summary of activities	Sources
PICTs, supported by SPREP and partners, shall implement best practice environmental monitoring and reporting programmes	One of one activity progressed: assessment and monitoring methodology developed to report water quality under Ridge to Reef project (unknown if monitoring programme is operational).	11
D. Develop human capacity		
SPREP, PICTs and partners shall implement sustainable human capacity development programmes for WCP management stakeholders	One of two activities progressed: capacity building needs assessment completed with JICA/J-PRISM II between 2017 to 2019, to identify training and human resource exchange needs.	13, 18
E. Improve dissemination of outcomes and experiences in WCP management		
SPREP, PICTs and partners shall utilise project outcomes to implement regional and national WCP education and behavioural-change programmes	Zero of four activities progressed.	10
F. Promote regional and national cooperation		
SPREP, PICTs and partners shall establish a regional Clean Pacific Roundtable to coordinate and facilitate waste management and pollution-control dialogue and networking in the region	One of two activities progressed: participated in CPRTs 2016 and 2018 with JICA (J-PRISM) assistance; 1 officer self-funded attendance to CPRT 2018.	19
SPREP, PICTs and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities	One of three activities progressed: attended annual J-PRISM II Steering Committee Meetings, as a regional platform to share practices and project progress; held annual national J-PRISM II Joint-Coordination-Committee Meetings to share project progress and good practices with all stakeholders; participated in a sub-regional (JICA/J-PRISM II) workshop on disaster waste management.	18, 19
SPREP, PICTs and partners shall cooperate to ensure timely monitoring of the Pacific Regional Waste and Pollution Management Strategy 2016–2025	Zero of one activity progressed.	

SOURCES:

1 SPREP (2016) Cleaner Pacific 2025: Pacific Regional Waste and Pollution Management Strategy 2016–2025 https://www.sprep.org/publications/cleaner-pacific-2025-pacific-regional-waste-and-pollution-management-strategy

2 https://ago.gov.to/cms/

3 http://extwprlegs1.fao.org/docs/pdf/ton136449.pdf

4 http://chm.pops.int/Implementation/NationalImplementationPlans/NIPTransmission/tabid/253/Default.aspx

5 https://www.theprif.org/documents/tonga/infrastructure-planning-and-management/tonga-national-infrastructure-investment-plan

6 http://prdrse4all.spc.int/sites/default/files/final_combined_business_plan_2018_2022.pdf

7 http://extwprlegs1.fao.org/docs/pdf/ton168846.pdf

8 https://www.sprep.org/attachments/j-prism/Waste%20Characterization%20Report/Tonga/Development%20Plan_SWM%20(1).pdf

9 https://www.sprep.org/attachments/used-oil-mission-report-fiji-kiribati-niue-vanuatu-scl.pdf

10 SPREP (2018) Pacific Hazardous Waste Management (PacWaste). Volume 2: Country Reports, unpublished

11 https://www.pacific-r2r.org/sites/default/files/2020–03/Project_Progress_Tonga.pdf

12 JICA (2020) Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries Phase II (J-PRISM II) (Group 2), Project Completion Report (2nd Term), Kokusai Kogyo Co., Ltd. Yachiyo Engineering Co., Ltd.

13 https://www.sprep.org/sites/default/files/29-SPREP-Meeting/New/Eng/WP%205.3.%20Att.1%20-%20Progress%20towards%20achievement%20of%20the%202018_19_PIP%20Strategic%20Outcomes.pdf

14 https://www.sprep.org/attachments/Publications/Newsletters/j-prism-buzz-3.pdf

15 Haynes D, Leney A. and O'Grady J. (2018) Report Two: Country Missions and Consultations, https://www.sprep.org/gefpaspops/gefpas-reports

16 https://www.pwwa.ws/wp-content/uploads/2020/01/PWWA-Seven-Years-of-Benchmarking_2018-FINAL-DRAFT.pdf

17 Talouli A., Pollution Adviser, SPREP, pers. comm., 25 June 2020

18 JICA, J-PRISM II team, pers. comm., 26 June 2020

19 Guinto M B., Solid Waste Management Adviser, SPREP, pers. comm., 29 June 2020

TUVALU: CLEANER PACIFIC 2025 (CP2025) PROGRESS ASSESSMENT, 2016–2019[165]

OVERVIEW

Based on available data/information, Tuvalu's overall CP2025 progress is rated as GOOD:

- *National legislation, policies, strategies, plans for waste, chemicals and pollution (WCP)*: Tuvalu Integrated Waste Policy and Action Plan developed and aligned with CP2025; UPOPs National Action Plan developed; and the Waste Management Act 2017, Waste Management (Litter and Waste Control) Regulation 2018, Waste Management (Prohibition on the Importation of Single-Use Plastic) Regulation 2019 and Waste Management (Levy Deposit) Regulation 2019 enacted (Table 1).
- *Twenty CP2025 performance indicators*: with reference to 2014 baseline information, seven indicators have improved (composting, container deposit programme, EPR for used oil, water quality monitoring operational; national waste collection coverage increased; number of open dumps and used oil stockpile decreased); four indicators remain unchanged/stable; progress is undetermined for seven due to data being available for one year only; and two indicators have no data for assessing progress (Table 2).
- *Implementation Plan 2016–2019, 15 strategic actions*: good progress achieved for 11 (WCP data collection and management; development of WCP legislation, strategies, plans; best practice occupational health and safety; resource recovery; improvement of WCP infrastructure; environmental monitoring; human capacity development; WCP education and behavioural change; Clean Pacific Roundtable participation; monitoring of CP2025 activities); limited progress achieved for three; and no progress for one strategic action (Table 3).

Based on the progress assessment results, five activity areas that require further work are:

- Implementation of WCP prevention and reduction programmes;
- Management of hazardous waste, including development of inventories;
- Expansion of routine monitoring and reporting, especially for the receiving environment;
- Improvement of WCP management infrastructure, working towards sustainable operation and maintenance; and
- Further development and expansion of WCP education and behavioural-change programmes.

RESULTS

Tables 1, 2 and 3, below, document key findings from the CP2025 progress assessment for Tuvalu. Where appropriate and feasible, progress has been assessed with reference to baselines recorded in CP2025.

TABLE 1 Status of waste, chemicals and pollution (WCP) legislation, policies, strategies, plans

	Legislation (L)[a]		Policies, strategies, plans (PSP)		
	2016	2020	2016	2020	Sources[b]
Solid waste	X	X	0	X*	14 (L), 2 (PSP)
Healthcare waste	X	X		X*	14 (L), 2 (PSP)
Other hazardous waste	X	X		X*	14 (L), 2 (PSP)
Liquid waste	X	X	X*	X*	14 (L), 2 (PSP)
Chemicals	X	X	C1	X[1^]	14 (L), 15 (PSP)
Oil spill contingency	N/A	N/A	D	D	3 (PSP)
Air pollution	X	X			14 (L)
Plastics (including single-use)[c]		X		X*	6 (L)
Container deposit[c]		X		X*	6 (L), 2 (PSP)
Litter[c]	X	X		X*2	14 (L), 2 (PSP)

[165] Progress assessment reviewed and validated by Tuvalu.

a = some of the WCP categories do not have specific laws, but are covered under general laws to varying degrees; b = information/data sources for 2016 L, 2020 L and 2020 PSP only, 2016 PSP data from source 1; c = new category, not referred to in CP2025; N/A = not applicable;
C = preparation has commenced; D = document prepared but not endorsed; O = endorsed document no longer current; X = enacted (L) or endorsed (PSP) and current; blank cells indicate WCP categories not addressed in L or PSP; 1 = for POPs only; 2 = marine litter * = part of an integrated policy, strategy or plan; ^ = UPOPs National Action Plan developed but National Implementation Plan (Stockholm Convention) is yet to be updated to account for COP amendments.

TABLE 2 Progress assessment, CP2025 performance indicators

IMPROVED | UNCHANGED/STABLE | DETERIORATED | UNDETERMINED | NO DATA

Performance indicators	2014	2020	Sources[A]
Per capita generation of municipal solid waste (kg/person/day)	ND	0.49[b]	4, 7
No. of marine pollution incidents	ND	0	5
No. of port waste reception facilities	0	0	5
Waste recycling rate (= amt recycled, reused, returned/amt recyclable) (%)	15	ND	
No. of national or municipal composting programmes	0	1[c]	6
No. of national or state container deposit programmes	0	1	11
No. of national EPR programmes for used oil	0	1	6
No. of national EPR programmes for e-waste	0	0	6
No. of national or state user-pays systems for waste collection	0	0[d]	6, 9
Waste collection coverage (% of population)	100 (urban) 47 (national)	100 (urban) 80 (national)	6
Waste capture rate (= amount collected/amount generated) (%)	ND	ND	
No. of temporary, unregulated and open dumps	9[e]	8[e]	6
Quantity of asbestos stockpiles (m^2)	251[f]	ND	
Quantity of healthcare waste stockpiles (tonnes)	0	ND	
Quantity of e-waste stockpiles (tonnes)	ND	4.54	7
Quantity of used oil stockpiles (m^3)	2.5[g]	2.4	7
Quantity of pharmaceutical and chemical stockpiles (tonnes)	ND	ND	
Urban sewage treated to secondary standards (%)	0	0	8
No. of water and environmental quality monitoring programmes	0	1[h]	6
No. of national chemicals and pollution inventories	0	ND	

A = 2020 data sources only, 2014 data from source 1; EPR = Extended Producer Responsibility; ND = no data; a = unchanged/stable indicator actually reflects good progress, given the 2014 baseline; b = Tuvalu estimate based on 2019 Funafuti overall waste generation estimate of 2,904 kg/day (source 7), 2017 Funafuti population figure of 6,320 (source 4), and 2017 Vaitupu waste generation estimate of 704 kg/day (reported in source 7) and 2017 Vaitupu population estimate of 1,061 (source 4); c = '1' indicates composting programme operational; d = Tuvalu has opted for a waste levy rather than a user-pays waste collection system (e.g. prepaid bags), as the waste levy can be easily added to any imported items that contribute highly to the waste generation rate; e = authorised open dumps (no soil cover); f = Funafuti only; g = the CP2025 Table 11 figure was 14.5 m^3, but according to source 17 the 2014 national stockpile for Tuvalu was 2.5 m^3; h = '1' indicates coastal waters monitoring under Ridge to Reef project.

TABLE 3 Progress assessment, CP2025 Implementation Plan 2016–2019 strategic actions and linked activities

GOOD PROGRESS (≥ half of linked activities progressed)	LIMITED PROGRESS (< half of linked activities progressed)	NO PROGRESS (no linked activities progressed)

Strategic actions	Summary of activities	Sources
A. Strengthen institutional capacity		
SPREP, PICTs and partners shall undertake regular WCP data collection and management, including storage, interpretation, dissemination and sharing	Two of four activities progressed: used oil shipped to Fiji and data recorded; baseline waste surveys completed for all islands; Tuvalu Waste Information System developed by Dept Waste Management (DWM), with waste data recorded daily for quarterly and annual reporting; coastal waters monitored, including testing of lagoon waters surrounding Funafuti Waste Landfill under R2R Project.	6, 13
PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation and strengthen institutional arrangements to support and promote best practice WCP management	Four of seven activities progressed: Tuvalu Integrated Waste Policy and Action Plan 2017–2026 developed; organisational structure revised and new positions recruited for DWM; Waste Management Act 2017 in force, supported by Litter and Waste Control Regulations 2017; two Regulations developed, Single Use Plastic Import Prohibition and Waste Management (Levy Deposit); waste by-laws in place for seven out of eight outer islands; development of a national healthcare waste strategy supported by the PacWaste project; UPOPs National Action Plan developed; DWM and Disaster Management Agency initiated development of a national disaster waste management plan.	6, 12, 16
B. Promote public-private partnerships		
SPREP, PICTs and partners shall strengthen existing and develop new public-private partnerships including through strengthened public-private partnership frameworks	One of three activities progressed: Waste Management and Recyclers Association established.	9
C. Implement sustainable best practices in WCP management		
SPREP, PICTs and partners shall implement best practice occupational health and safety measures for formal and informal workers in the WCP management sectors	One of two activities progressed: PPE use training and enforcement led by DWM; occupational and Public Health and Safety incidents reduced by 50% between 2018 and 2019.	6, 9
PICTs, supported by SPREP and partners, shall implement WCP prevention and reduction programmes	Two of nine activities progressed: Waste Management (Levy Deposit) Regulation enacted; discussions held between DWM and relevant government agencies about enforcing legal provisions to prolong the lifespan of goods, and about options for shops when products are close to expiry dates.	6
PICTs, supported by SPREP and partners, shall implement resource recovery programmes	Three of four activities progressed: green waste collected twice a week by DWM, shredded and sold to Taiwan vegetable garden; green waste collection being introduced to outer islands; partnership developed between DWM, Taiwanese Development Program and Dept of Lands to establish a dry-litter piggery trial site under R2R project; CBA and M&E tools used to improve green waste management; compost sold by Funafuti green waste programme increased by at least 5% in 2018 and 2019; public awareness waste management programmes delivered by DWM, targeting preschools and primary schools.	6, 9, 10

Strategic actions	Summary of activities	Sources
PICTs, supported by SPREP and partners, shall remediate contaminated sites and WCP stockpiles in accordance with best practices	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, will expand user-pays WCP collection services	One of three activities progressed: Waste User Pay Feasibility Study completed by DWM, but Tuvalu has opted for a waste levy rather than a user-pays waste collection system (e.g. prepaid bags), as the waste levy can be easily added to any imported items that contribute highly to the waste generation rate.	6, 9
PICTs, supported by SPREP and partners, shall improve WCP management infrastructure and support sustainable operation and maintenance	Six of nine activities progressed: equipment and spare parts inventory, and infrastructure management and maintenance plan completed by DWM; rehabilitation plan developed for Funafuti dumpsite and related training conducted for workers; designs developed to improve outer islands' disposal sites and new fences completed (4 islands); used oil storage containers procured; disposal and treatment systems investigated for liquid waste; high temperature, dual-chamber incinerator installed for healthcare waste (PacWaste project), with Dept of Health agreeing to gradually absorb operating costs; DWM budget forecast increase of 100% by 2020 (from 2016 baseline).	6, 12
PICTs, supported by SPREP and partners, shall implement best practice environmental monitoring and reporting programmes	One of one activity progressed: coastal waters monitored, including testing of lagoon waters surrounding Funafuti Waste Landfill under R2R Project.	6, 13
D. Develop human capacity		
SPREP, PICTs and partners shall implement sustainable human capacity development programmes for WCP management stakeholders	One of two activities progressed: training needs assessed by DWM for waste and other relevant sectors for all islands.	6
E. Improve dissemination of outcomes and experiences in WCP management		
SPREP, PICTs and partners shall utilise project outcomes to implement regional and national WCP education and behavioural-change programmes	Two of four activities progressed: public awareness programmes delivered by DWM; ongoing weekly and monthly clean-up campaigns involving all govt agencies; women's groups producing alternatives to single-use plastic products.	6
F. Promote regional and national cooperation		
SPREP, PICTs and partners shall establish a regional Clean Pacific Roundtable to coordinate and facilitate waste management and pollution-control dialogue and networking in the region	Two of two activities progressed: participated in CPRTs 2016 and 2018; self-funded a delegate in 2018.	5
SPREP, PICTs and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities	Two of three activities progressed: Waste Management Coordinating, Waste Levy, and Used Lubricating Oil Committees established and operational; Waste Management (Prohibition on the Importation of Single Use Plastic) Regulation 2019 subcommittee operational, to oversee the implementation of the Regulation at the national level; attended annual J-PRISM II Steering Committee Meetings, as a regional platform to share practices and project progress; held annual national J-PRISM II Joint-Coordination-Committee Meetings to share project progress and good practices with all stakeholders; participated in a sub-regional workshop on disaster waste management.	5, 6, 9, 18
SPREP, PICTs and partners shall cooperate to ensure timely monitoring of the Pacific Regional Waste and Pollution Management Strategy 2016–2025	One of one activity progressed: two reviews completed by DWM of Integrated Waste Policy and Action Plan 2017–2026; regular reporting to Cabinet by DWM.	6

SOURCES:

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2 Government of Tuvalu (2016) Tuvalu Integrated Waste Policy and Action Plan: Towards Cleaner and Healthier Islands 2017–2026

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6 Government of Tuvalu (2019) The 2nd Annual Review of the Implementation Status of Tuvalu's Integrated Waste Policy and Action Plan 2017–2026

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VANUATU: CLEANER PACIFIC 2025 (CP2025) PROGRESS ASSESSMENT, 2016–2019[166]

OVERVIEW

Based on available data/information, Vanuatu's overall CP2025 progress is rated as FAIR :

- *National legislation, policies, strategies, plans for waste, chemicals and pollution (WCP)*: National Waste Management and Pollution Control Strategy and Implementation Plan 2016–2020 revised and aligned with CP2025; UPOPs National Action Plan developed; National Implementation Plan submitted to the Stockholm Convention Secretariat; and three orders made under the *Waste Management Act No. 24 of 2014* addressing single use plastics, littering and licensing of private waste operators (Table 1).
- *Twenty CP2025 performance indicators*: with reference to 2014 baseline information, two indicators have improved (waste collection coverage increased, asbestos removed); one has deteriorated (per capita generation of municipal solid waste increased); eight remain unchanged/stable; progress is undetermined for five indicators due to data being available for one year only; and four indicators have no data for assessing progress (Table 2). Note, three of the unchanged/stable indicators actually reflect positive progress, given their good 2014 baselines.
- *Implementation Plan 2016–2019, 15 strategic actions*: good progress achieved for five (development of WCP strategies, plans, legislation; resource recovery; human capacity development; Clean Pacific Roundtable participation; monitoring of CP2025 activities); limited progress achieved for five; and no progress for four strategic actions. Activities under one strategic action were not applicable to Vanuatu (Table 3).

Based on the progress assessment results, five activity areas that require further work are:

- Development and implementation of routine monitoring and reporting, especially for WCP management activities and the receiving environment;
- Implementation of WCP prevention and reduction programmes;
- Improvement of WCP management infrastructure, working towards sustainable operation and maintenance;
- Management of hazardous waste, including development of inventories; and
- Further development and expansion of WCP education and behavioural-change programmes.

RESULTS

Tables 1, 2 and 3, below, document key findings from the CP2025 progress assessment for Vanuatu. Where appropriate and feasible, progress has been assessed with reference to baselines recorded in CP2025.

TABLE 1 Status of waste, chemicals and pollution (WCP) legislation, policies, strategies, plans

	Legislation (L)[a]		Policies, strategies, plans (PSP)		Sources[b]
	2016	2020	2016	2020	
Solid waste	X	X	X*	X*^	3 (L), 2, 7 (PSP)
Healthcare waste	X	X	X*	X*	3, 6 (L), 2 (PSP)
Other hazardous waste	X	X			3 (L), 2 (PSP)
Liquid waste	X	X	X*	X*1	3 (L), 2 (PSP)
Chemicals	X	X		X2	3 (L), 5, 18 (PSP)
Oil spill contingency	N/A	N/A	D	D	20 (PSP)
Air pollution	X	X		X*3	3 (L) 2 (PSP)
Plastics (including single-use)[c]		X			4 (L)
Container deposit[c]					
Litter[c]	X	X			4 (L)

[166] Progress assessment not reviewed and validated by Vanuatu.

a = some of the WCP categories do not have specific laws, but are covered under general laws to varying degrees; b = information/data sources for 2016 L, 2020 L and 2020 PSP only, 2016 PSP data from source 1; c = new category, not referred to in CP2025; N/A = not applicable; D = document prepared but not endorsed; X = enacted (L) or endorsed (PSP) and current; blank cells indicate WCP categories not addressed in L or PSP; * = part of an integrated policy, strategy or plan; ^ = in addition to the National Waste Management and Pollution Control Strategy, an Annual Solid Waste Management Plan 2019 was published by Port Vila Municipal Council; 1 = pollutants discharged to wastewater; 2 = for POPs only; 3 = mainly emissions from vehicles.

TABLE 2 Progress assessment, CP2025 performance indicators

IMPROVED | UNCHANGED/STABLE | DETERIORATED | UNDETERMINED | NO DATA

Performance indicators	2014	2020	Sources[A]
Per capita generation of municipal solid waste (kg/person/day)	1.3[b]	1.46[c,d]	7
No. of marine pollution incidents	ND	ND	
No. of port waste reception facilities	0	0	20
Waste recycling rate (= amt recycled, reused, returned/amt recyclable) (%)	37	ND	
No. of national or municipal composting programmes[a]	1[e]	1[e]	8
No. of national or state container deposit programmes	0	0[f]	8
No. of national EPR programmes for used oil	0	0[g]	9
No. of national EPR programmes for e-waste	0	0	
No. of national or state user-pays systems for waste collectiona	1h	1[h,i]	8
Waste collection coverage (% of population)	50 (urban)j 12 (national)	~100 (urban)j ~50 (Luganville)	8
Waste capture rate (= amount collected/amount generated) (%)	ND	50k	8
No. of temporary, unregulated and open dumps	ND	ND	
Quantity of asbestos stockpiles (m^2)	19,330	6,250 removed under PacWaste project[l]	
Quantity of healthcare waste stockpiles (tonnes)	0	ND	
Quantity of e-waste stockpiles (tonnes)	ND	ND	
Quantity of used oil stockpiles (m^3)a	0	0[m]	10
Quantity of pharmaceutical and chemical stockpiles (tonnes)	ND	ND	
Urban sewage treated to secondary standards (%)	0	0	17
No. of water and environmental quality monitoring programmes	0	ND	
No. of national chemicals and pollution inventories	0	ND	

A = 2020 data sources only, 2014 data from source 1; EPR = Extended Producer Responsibility; ND = no data; a = unchanged/stable indicator actually reflects good progress, given the 2014 baseline; b = Luganville only; c = estimate based on 2016–17 waste flow determined for Shefa Province and Port Vila Municipal Council (see Table 3–5 in source 7 for figures); d = for comparison, 2018 waste disposal estimate determined for Port Vila was 0.47 kg/person/day (source 8); e = '1' indicates composting programme(s) operational, note, in 2014 there were municipal composting programmes in both Luganville and Port Vila, but in 2019, municipal composting continued in Luganville only; f = two private sector CDPs but no formal programme; g = EPR scheme run by one supplier for its products only; h = '1' indicates user-pays waste collection system is operational; i = prepaid bag systems, Port Vila and Luganville municipalities; j = Port Vila only, with estimated participation rate in prepaid bag scheme used as a proxy for coverage; k = mid-point of waste capture rate range, 30–70%, based on comparative data from JICA and APWC; l = this indicator is rated as 'improved' based on the removal of asbestos; m = stockpile data from 2018.

TABLE 3 Progress assessment, CP2025 Implementation Plan 2016–2019 strategic actions and linked activities

GOOD PROGRESS (≥ half of linked activities progressed)	LIMITED PROGRESS (< half of linked activities progressed)	NO PROGRESS (no linked activities progressed)

Strategic actions	Summary of activities	Sources
A. Strengthen institutional capacity		
SPREP, PICTs and partners shall undertake regular WCP data collection and management, including storage, interpretation, dissemination and sharing	One of three activities progressed: waste audit for Port Vila conducted under the initiative of the Department of Environmental Protection and Conservation (DEPC) and Port Vila Municipal Council (PVMC) with the support of JICA (J-PRISM II).	19
PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation and strengthen institutional arrangements to support and promote best practice WCP management	Five of seven activities progressed: National Waste Management and Pollution Control Strategy and Implementation Plan 2016–2020 revised and aligned with CP2025; UPOPs National Action Plan developed; National Implementation Plan submitted to the Stockholm Convention Secretariat; three orders made under the *Waste Management Act No. 24 of 2014* addressing single use plastics, littering and licensing of private waste operators; Port Vila Municipal Council Annual Solid Waste Management Plan 2019 published; institutional arrangements reviewed and recommendations for improvement developed, as part of National Waste Management and Pollution Control Strategy; development of national healthcare and asbestos waste strategies supported by the PacWaste project; draft disaster waste management plan developed with the support of JICA (J-PRISM II).	2, 4, 5, 7, 11, 19
B. Promote public-private partnerships		
SPREP, PICTs and partners shall strengthen existing and develop new public-private partnerships including through strengthened public-private partnership frameworks	One of three activities progressed: Vanuatu Recycling and Waste Management Association launched with the support of JICA (J-PRISM II).	12
C. Implement sustainable best practices in WCP management		
SPREP, PICTs and partners shall implement best practice occupational health and safety measures for formal and informal workers in the WCP management sectors	Zero of one activity progressed.	
PICTs, supported by SPREP and partners, shall implement WCP prevention and reduction programmes	One of eight activities progressed: Container Deposit Scheme (CDS) pre-feasibility study conducted by JICA (J-PRISM II) and CDS technical working group established.	14
PICTs, supported by SPREP and partners, shall implement resource recovery programmes	Two of two activities progressed: large-scale organics waste bin installed at the main market house in Luganville for composting; Clean School Program promoted on a small scale as a pilot project; school environmental education guidebook (including waste management) published.	8, 13, 14
PICTs, supported by SPREP and partners, shall remediate contaminated sites and WCP stockpiles in accordance with best practices	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, will expand user-pays WCP collection services	N/A to Vanuatu.	

Strategic actions	Summary of activities	Sources
PICTs, supported by SPREP and partners, shall improve WCP management infrastructure and support sustainable operation and maintenance	Three of eight activities progressed: landfill guideline developed, to be implemented for any proposed landfill as a condition under the EIA process; targeted rehabilitation of Bouffa landfill completed during the PacWaste project, including construction of a new access road, repair of damaged gas ventilation facilities and creation of a safe disposal area for asbestos; conceptual design developed for improvement of Bouffa Landfill, including establishment of a landfill management system, recycling yard and stock yard for disaster waste; high temperature healthcare waste incinerators installed in four hospitals, with installation supported by training, during the PacWaste project (Port Vila Central Hospital, Lenakel Hospital, Northern District Hospital, Lolowai Hospital); new septage treatment facility built for safe and secure treatment and disposal of septic tank waste.	11, 13, 15
PICTs, supported by SPREP and partners, shall implement best practice environmental monitoring and reporting programmes	Zero of one activity progressed.	
D. Develop human capacity		
SPREP, PICTs and partners shall implement sustainable human capacity development programmes for WCP management stakeholders	Two of two activities progressed: capacity building needs assessment completed with JICA/J-PRISM II between 2017 to 2019, to identify training and human resource exchange needs; enforcement officers, a police officer, 12 municipal wardens, provincial compliance officer, planner, and area secretary within Shefa province trained to enforce waste management regulations.	13, 16, 19
E. Improve dissemination of outcomes and experiences in WCP management		
SPREP, PICTs and partners shall use project outcomes to implement regional and national WCP education and behavioural-change programmes	Zero of four activities progressed.	
F. Promote regional and national cooperation		
SPREP, PICTs and partners shall establish a regional Clean Pacific Roundtable to coordinate and facilitate waste management and pollution-control dialogue and networking in the region	Two of two activities progressed: participated in CPRTs 2016 and 2018; self-funded a delegate in 2018.	19
SPREP, PICTs and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities	One of three activities progressed: DEPC supported Municipal Councils and Provincial Government Councils with development of their annual Waste Management Plans through a process of information sharing and consultation; attended annual J-PRISM II Steering Committee Meetings, as a regional platform to share practices and project progress; held annual national J-PRISM II Joint-Coordination-Committee Meetings to share project progress and good practices with all stakeholders; participated in sub-regional (in Samoa) and national workshops (JICA/J-PRISM II) on disaster waste management.	19
SPREP, PICTs and partners shall cooperate to ensure timely monitoring of the Pacific Regional Waste and Pollution Management Strategy 2016–2025	One of one activity progressed: progress monitoring of NWMPCS evaluated and summarised by DEPC in 2017, 2018 and 2019, which informed a detailed action plan for the following year.	13, 14

SOURCES:

1 SPREP (2016) Cleaner Pacific 2025: Pacific Regional Waste and Pollution Management Strategy 2016–2025 https://www.sprep.org/publications/cleaner-pacific-2025-pacific-regional-waste-and-pollution-management-strategy

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11 SPREP (2018) Pacific Hazardous Waste Management (PacWaste). Volume 2: Country Reports, unpublished

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18 http://chm.pops.int/Implementation/NationalImplementationPlans/NIPTransmission/tabid/253/Default.aspx

19 JICA, J-PRISM II team, pers. comm., 26 June 2020

20 Talouli A., Pollution Adviser, SPREP, pers. comm., 25 June 2020

WALLIS AND FUTUNA: CLEANER PACIFIC 2025 (CP2025) PROGRESS ASSESSMENT, 2016–2019[167]

OVERVIEW

Based on available data and information, Wallis and Futuna's overall CP2025 progress is rated as LIMITED:

- *National legislation, policies, strategies, plans for waste, chemicals and pollution (WCP)*: new territorial environmental code introduced, imposing a tax on imported beverages (Table 1).
- *Twenty CP2025 performance indicators*: with reference to 2014 baseline information, one indicator has improved (composting programme operational), one remains unchanged/stable, progress is undetermined for eight indicators due to data being available for one year only, and 10 indicators have no data for assessing progress (Table 2).
- *Implementation Plan 2016–2019, 15 strategic actions*: good progress achieved for one (Clean Pacific Roundtable participation), limited progress achieved for four, and no progress for nine strategic actions. Activities under one strategic action were not applicable to Wallis and Futuna (Table 3).

Based on the progress assessment results, five key activity areas that require further work are:

- Development of an integrated WCP strategy and action plan that is aligned with CP2025, and includes a reporting framework;
- Development of public-private partnerships, especially for EPR programmes;
- Implementation of WCP prevention and reduction programmes;
- Management of hazardous waste, including development of inventories; and
- Development and implementation of routine monitoring and reporting, especially for WCP management activities and the receiving environment.

RESULTS

Tables 1, 2 and 3, below, document key findings from the CP2025 progress assessment for Wallis and Futuna. Where appropriate and feasible, progress has been assessed with reference to baselines recorded in CP2025.

TABLE 1 Status of waste, chemicals and pollution (WCP) legislation, policies, strategies, plans

	Legislation (L)[a]		Policies, strategies, plans (PSP)		Sources[b]
	2016	2020	2016	2020	
Solid waste	X	X	X	ND	4 (L)
Healthcare waste	ND	ND	X	ND	
Other hazardous waste	X	X	X	ND	4 (L)
Liquid waste	X	X		ND	4 (L)
Chemicals	X	X		ND	4 (L)
Oil spill contingency	N/A	N/A	X	ND	
Air pollution	X	X		ND	4 (L)
Plastics (including single-use)[c]	ND	ND		ND	
Container deposit[c]	-	X		ND	2 (L)
Litter[c]	ND	ND		ND	

a = some of the WCP categories do not have specific laws, but are covered under general laws to varying degrees; b = information/data sources for 2016 L and 2020 L, 2016 PSP data from source 1; c = new category, not referred to in CP2025; N/A = not applicable; ND = no data; X = enacted (L) or endorsed (PSP) and current; blank cells indicate WCP categories not addressed in L or PSP.

[167] Progress assessment not reviewed and validated by Wallis and Futuna.

TABLE 2 Progress assessment, CP2025 performance indicators

IMPROVED | UNCHANGED/STABLE | DETERIORATED | UNDETERMINED | NO DATA

Performance indicators	2014	2020	Sources[A]
Per capita generation of municipal solid waste (kg/person/day)	ND	0.69[a]	3
No. of marine pollution incidents	ND	ND	
No. of port waste reception facilities	0	0	8
Waste recycling rate (= amt recycled, reused, returned/amt recyclable) (%)	ND	ND	
No. of national or municipal composting programmes	1	ND	
No. of national or state container deposit programmes	0	1	2
No. of national EPR programmes for used oil	0	ND	
No. of national EPR programmes for e-waste	0	ND	
No. of national or state user-pays systems for waste collection	0	ND	
Waste collection coverage (% of population)	100	ND	
Waste capture rate (= amount collected/amount generated) (%)	ND	ND	
No. of temporary, unregulated and open dumps	1[b]	ND	
Quantity of asbestos stockpiles (m^2)	ND	ND	
Quantity of healthcare waste stockpiles (tonnes)	ND	ND	
Quantity of e-waste stockpiles (tonnes)	ND	ND	
Quantity of used oil stockpiles (m^3)	100[c]	ND	
Quantity of pharmaceutical and chemical stockpiles (tonnes)	ND	ND	
Urban sewage treated to secondary standards (%)	ND	ND	
No. of water and environmental quality monitoring programmes	ND	ND	
No. of national chemicals and pollution inventories	ND	ND	

A = 2020 data sources only, 2014 data from source 1; EPR = Extended Producer Responsibility; ND = no data; a = estimate based on 2016 average value for upper middle income countries in source 3 (Fig. 2.6, pg 27); b = authorised open dump; c = likely underestimate given the INTEGRE project (2014–2018) exported 200 m^3 of used oil to New Zealand (source 5).

TABLE 3 Progress assessment, CP2025 Implementation Plan 2016–2019 strategic actions and linked activities

GOOD PROGRESS (≥ half of linked activities progressed) | **LIMITED PROGRESS** (< half of linked activities progressed) | **NO PROGRESS** (no linked activities progressed)

Strategic actions	Summary of activities	Sources
A. Strengthen institutional capacity		
SPREP, PICTs and partners shall undertake regular WCP data collection and management, including storage, interpretation, dissemination and sharing	Zero of three activities progressed.	
PICTs, supported by SPREP and partners, shall develop and enforce national policies, strategies, plans and legislation and strengthen institutional arrangements to support and promote best practice WCP management	One of four activities progressed: new territorial environmental code introduced, imposing a tax on imported beverages.	2

Strategic actions	Summary of activities	Sources
B. Promote public-private partnerships		
SPREP, PICTs and partners shall strengthen existing and develop new public-private partnerships including through strengthened public-private partnership frameworks	Zero of three activities progressed.	
C. Implement sustainable best practices in WCP management		
SPREP, PICTs and partners shall implement best practice occupational health and safety measures for formal and informal workers in the WCP management sectors	Zero of one activity progressed.	
PICTs, supported by SPREP and partners, shall implement WCP prevention and reduction programmes	Zero of eight activities progressed.	
PICTs, supported by SPREP and partners, shall implement resource recovery programmes	One of four activities progressed: recycling and waste management awareness promoted to high school students by the Department of the Environment and the INTEGRE project.	6
PICTs, supported by SPREP and partners, shall remediate contaminated sites and WCP stockpiles in accordance with best practices	Zero of two activities progressed.	
PICTs, supported by SPREP and partners, will expand user-pays WCP collection services	N/A to Wallis and Futuna.	
PICTs, supported by SPREP and partners, shall improve WCP management infrastructure and support sustainable operation and maintenance	One of six activities progressed: Nanu'u landfill closed, fenced and revegetated, and a new Technical Burial Centre established for waste management.	5
PICTs, supported by SPREP and partners, shall implement best practice environmental monitoring and reporting programmes	Zero of one activity progressed.	
D. Develop human capacity		
SPREP, PICTs and partners shall implement sustainable human capacity development programmes for WCP management stakeholders	Zero of one activity progressed.	
E. Improve dissemination of outcomes and experiences in WCP management		
SPREP, PICTs and partners shall utilise project outcomes to implement regional and national WCP education and behavioural-change programmes	Zero of four activities progressed.	
F. Promote regional and national cooperation		
SPREP, PICTs and partners shall establish a regional Clean Pacific Roundtable to coordinate and facilitate waste management and pollution-control dialogue and networking in the region	One of two activities progressed: participated in CPRT 2018.	7
SPREP, PICTs and partners shall strengthen national and regional cooperation and coordination on waste and pollution management activities	One of three activities progressed: 'Recycling waste for zero waste' side event hosted by Wallis and Futuna at the 29th SPREP Meeting of Officials, to share the territory's experience with imposing a tax on imported beverages.	2
SPREP, PICTs and partners shall cooperate to ensure timely monitoring of the Pacific Regional Waste and Pollution Management Strategy 2016–2025	Zero of one activity progressed.	

SOURCES:

1 SPREP (2016) Cleaner Pacific 2025: Pacific Regional Waste and Pollution Management Strategy 2016–2025 https://www.sprep.org/publications/cleaner-pacific-2025-pacific-regional-waste-and-pollution-management-strategy

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8 Talouli A., Pollution Adviser, SPREP, pers. comm., 25 June 2020

APPENDIX 5 Tables from CP2025, updated with new data

TABLE 10 Waste generation and composition in Pacific island countries and territories

Country/ territory	State, municipality or island	Year	Data source	Waste generation rate			Household waste composition, by weight (%)							
				Household waste (kg/p/day)	Commercial/ non-household waste (kg/p/day)	Total urban MSW (kg/p/day)[A]	Organics (food & yard waste)	Paper (including cardboard)	Plastics	Glass & ceramics	Metal	Textiles and rubber	Other residues	Total[L]
American Samoa		2016	1			0.94[B]								
CNMI	Saipan	2018	2			2.6[C]								
Cook Islands		2016	1			1.14[D]								
FSM	Pohnpei^	2017	3	0.74	0.41	1.15	34.9	20.3	15.8	2.6	8.1	5.7	12.6	100
	Yap	2017	3	0.83	0.46	1.29	64.1	9	9.2	0.4	6.4	2 (textiles)	8.8	100
	Chuuk	2017	3	0.58	0.34	0.92								
	Kosrae	2017	3	0.77	0.36	1.13	23.2	17.5	29.5	5.5	13.7	3.4 (textiles)	7.1	100
Fiji		2016	1			0.63[B]								
French Polynesia		2016	1			1.36[E]								
Guam		No date	4			2.39								
Kiribati		2016	1, 5			0.86[B]	55[F]	5	13	3	3	3	18	100
Nauru		2016	1			1.3[C]								
New Caledonia		2016	1			1.07[B]								
Niue		2016	1			1.14D								
Palau	Koror and Babeldaob	2017	6			2.0	55	6.5	8	4.5	7.5	1	17	99.5
Papua New Guinea		2016	1			0.47[B]								
RMI	Majuro and Ebeye	2017	7, 8, 9	0.87[G]		1.3[G]	34[H]	20.5	15.8	3.2	9.6	5.1	11.8	100
Samoa		2017	10	1.06		1.06I	57	5	6	23	2	1	4	98
Solomon Islands		2016	1			0.88								
Tokelau		2016	1			0.69[J]								
Tonga	Vava'u	2011/12	11			1.4	51.5K	7.4	13.4	5.9 (glass)	9	4.1 (textiles & ceramics)	8.9	100
Tuvalu	Funafuti, Vaitupu	2017, 2019	12, 13			0.49								
Vanuatu	Shefa Province, Port Vila Mun.Council	2016–17	14			1.46	49	5	19	2	8	2 (textiles)	14	99
Wallis and Futuna		2016	1			0.69[J]								
Unweighted mean (n = 6, household waste; n = 21, MSW; n = 9, waste composition)				0.8	0.4	1.2	47.1	10.7	14.4	5.6	7.5	3.0	11.4	99.7
For comparison, unweighted mean, CP2025 (n = 14, household waste; n = 5, MSW; n = 15, waste composition)				0.5		1.3	43.6	10.9	16.5	5.5	10	4.2	9.3	100

^ = waste composition figures reported for discharged waste, not generated waste; A = municipal solid waste includes household, commercial and institutional waste; B = urban and rural estimate; C = urban estimate only; D = 2016 estimate based on income groups in source 1 (Fig. 2.6, pg 27), and calculation of the average value across upper-middle and high-income countries; E = value represents total solid waste generated, not only MSW; F = waste composition estimates for Bikenibeu, South Tarawa only (see source 5); G = calculated as an average of the estimated generation rates for Majuro and Ebeye; H = all waste composition data is for Majuro only; I = this figure is an underestimate as it is a household (not municipal) waste generation estimate; J = estimate based on income groups in source 1 (Fig. 2.6, pg 27), using the 2016 average value for upper-middle income countries; K = waste composition estimates for Neiafu town only; L = rounding of waste category estimates means the total ≠ 100; blank cells indicate no data available. NOTE: Refer to individual country and territory profiles for additional background notes and explanations regarding the determination of MSW (kg/p/day) estimates.

SOURCES:

1 Kaza S., Yao L., Bhada-Tata P., Woerden F. (2018) What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050. Urban Development Series. Washington, DC: World Bank, https://openknowledge.worldbank.org/handle/10986/30317

2 https://opd.gov.mp/library/ccr/2019-department-of-public-works-citizen-centric-report/

3 Pohnpei State Solid Waste Management Strategy 2020–2029 (Action Plan: 2020–2024), Yap State Solid Waste Management Strategy 2018–2027 (Action Plan: 2018–2022), Chuuk State Solid Waste Management Strategy 2019–2028 (Action Plan: 2019–2023), Kosrae State Solid Waste Management Strategy 2018–2027 (Action Plan: 2018–2022), https://www.sprep.org/j-prism-2/report-and-materials

4 https://issuu.com/guamepa/docs/guam_zero_waste_plan__final__-_volu

5 Government of Kiribati (2020) DRAFT Kiribati Waste Management Resource Recovery Strategy 2020–2029

6 Republic of Palau (2017) National Solid Waste Management Strategy: The Roadmap Towards a Clean and Safe Palau, 2017 to 2026

7 JICA (2017) Result of Baseline Surveys (Draft) Majuro Atoll, Aug 7, 2017 JICA Expert Team, JPRISM II, unpublished

8 Kwajalein Atoll Local Government (2018) Kwajalein Atoll Solid Waste Management Plan, 2019–2028 (Action Plan: 2019–2023)

9 Republic of the Marshall Islands (2019), National Waste Management Strategy, 2020–2029, unpublished draft

10 Ministry of Natural Resources and Environment (2019) National Waste Management Strategy (2019–2023), https://www.sprep.org/j-prism-2/report-and-materials

11 https://www.sprep.org/attachments/j-prism/Waste%20Characterization%20Report/Tonga/Development%20Plan_SWM%20(1).pdf

12 Asia Pacific Waste Consultants (2019) Tuvalu – Waste Audit Report. Pacific Region Infrastructure Facility

13 Central Statistics Division Ministry of Finance, Economic Planning and Industries (n.d.) Tuvalu Population & Housing Mini-Census 2017: Preliminary Report, https://tuvalu.prism.spc.int/index.php/tuvalu-documents

14 Port Vila Municipal Council, Department of Environment and Pollution Control, Japan International Cooperation Agency (2019) Annual Solid Waste Management Plan (ASWMP) In Year 2019, https://depc.gov.vu/images/Waste.Management/Waste.Management.Planning/PVMC_Annual_SWM__Plan_2019.pdf

TABLE 11 Organic waste management programmes in Pacific island countries and territories

Country/territory	Total no. organic waste management programmes			
	2014[a]	2020[b]	Source[c]	2020 data comments
American Samoa	NKP	1	2	AS-EPA Piggery Compliance Program has approved the Dry Litter Piggery and Wash Down Piggery designs that include composting.
CNMI	NKP	0	3	Currently, Department of Public Works – Solid Waste Division has no composting programme in place
Cook Islands	1	ND		
FSM	2	4	4	Each state has a composting programme
Fiji	5	3	5	Composting programmes in several municipal areas: Suva, Lautoka, Sigatoka
French Polynesia	1	2	6	Sludge and grease from wastewater treatment recycled into compost; municipal green waste collected and composted
Guam	1	1	7	Biosolids composting demonstration project
Kiribati	1	ND		
Nauru	NKP	1	8	
New Caledonia	5	ND		
Niue	1	1	9	Green waste shredding machine being trialled
Palau	1	1	10	Composting programme at Koror State Recycling Center
PNG	1	1	11	Pilot-scale composting programme for Kokopo market waste (J-PRISM II project)
RMI	1	1	12	
Samoa	2	1	13	MNRE working in partnership with a private company for composting at Tafaigata Landfill
Solomon Islands	2	1	14	Kastom Garden Association composting programme in Honiara; green waste from Auki (Malaita Province) markets composted at a local farm; Keep Honiara Healthy campaign, Honiara City Council, promotes home composting
Tokelau	Majority of organic waste fed to animals or placed around plants	0	15	Organic waste fed to pigs
Tonga	NKP	ND		
Tuvalu	NKP	1	16	Funafuti, green waste collected twice/week by Department of Waste Management
Vanuatu	2	1	17	Composting programme in Luganville operated by the municipal council
Wallis and Futuna	1	ND		
Total	27	19		

ND = no data; NKP = no known programme; a = CP2025 baseline data; b = latest available data; c = 2020 data only, 2014 data from source 1.

SOURCES:

1 Secretariat of the Pacific Regional Environment Programme (2016) Cleaner Pacific 2025: Pacific Regional Waste and Pollution Management Strategy 2016–2025.

2 https://www.epa.as.gov/piggeries

3 Office of Planning and Development, CNMI (2019) Resources Report: Planning for Sustainability in the Commonwealth of the Northern Mariana Islands (Working draft) https://opd.gov.mp/wp-content/uploads/opd/ResourcesReport_workingdraft0901.pdf

4 Pedrus P., Deputy Assistant Secretary, Waste Management & Pollution Control Unit, Division of ES&D, Department of Environment, Climate Change, & Emergency Management, National Government, FSM, pers. comm., 28 June 2020

5 http://suvacity.org/; https://www.sprep.org/attachments/Publications/Presentation/cprt-2018/2-shalend-tracking-improvement-waste-management-lautoka.pdf; https://www.sigatokatown.com.fj/

6 https://www.polynesienne-des-eaux.pf/; http://www.technival.pf/

7 https://zerowasteguam.eco/biosolids-composting/

8 Tonkin & Taylor Ltd (2018) Waste Management System Operations and Policy - Preliminary Advice. Nauru Department of Industry, Commerce and the Environment

9 https://www.sprep.org/news/new-waste-initiatives-niue-horizon

10 Asia Pacific Waste Consultants (2019) Palau – Waste Audit Report. Analysis of waste generation, recycling and disposal data collected in November 2019, unpublished

11 JICA (2020) Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries Phase II (J-PRISM II) (Group 2), Project Completion Report (2nd Term), Kokusai Kogyo Co., Ltd. Yachiyo Engineering Co., Ltd.

12 SPREP (2018) Pacific Hazardous Waste Management (PacWaste). Volume 2: Country Reports, unpublished

13 Apo, S., Solid Waste Management Officer and Siaosi F., Chemical/Hazardous Waste Management Officer, Ministry of Natural Resources and Environment, Samoa, pers. comm., 24 June 2020

14 Asia Pacific Waste Consultants (APWC) (2019) Waste Data Report – Solomon Islands https://www.cefas.co.uk/clip/resources/reports/south-pacific-clip-reports/. N.B. report data collected in 2018.

15 Ministry for the Environment, New Zealand Government (2020) New Zealand's Greenhouse Gas Inventory 1990–2018, Vol. 1, Chapter 8

https://www.mfe.govt.nz/sites/default/files/media/Climate%20Change/new-zealands-greenhouse-gas-inventory-1990–2018-vol-1.pdf

16 Government of Tuvalu (2019) The 2nd Annual Review of the Implementation Status of Tuvalu's Integrated Waste Policy and Action Plan 2017–2026

17 Asia Pacific Waste Consultants (APWC) (2019) Waste Data Report – Vanuatu. Analysis of waste generation and disposal data collected in November 2018, https://www.cefas.co.uk/clip/resources/reports/south-pacific-clip-reports/

TABLE 12 Recycling rates in Pacific island countries and territories

Country/territory	Year	Recycling rate (%)	Data source	Comments
FSM	2016/ 2017	68[a,c]	1	Aluminium cans, glass bottles, PET bottles for beverages and cooking oil
Guam	2017	39b	2	Aluminium cans, cardboard, mixed paper, e-waste, ferrous and nonferrous metals, tires, automotive batteries, plastics, mulched composted material and food waste
Kiribati	No date	89b	3	Aluminium cans, PET bottles, lead acid batteries
New Caledonia	2016	41[b]	4	Batteries, oils, tyres, vehicles, electrical/electronic equipment
Palau	2016	78[a]	5	PET bottles, aluminium & steel cans, glass bottles
Samoa (Upolu)	2017	44[b]	6	Aluminium cans
Unweighted mean		**60**	**-**	**-**
For comparison, unweighted mean recycling rate, CP2025		32[d]	7	-

a = Recycling rate based on the number of containers/items redeemed; b = no information available on how the recycling rate was determined; c = national recycling rate calculated on the basis of total number of containers/items redeemed across CDPs in Pohnpei, Yap, Kosrae; d = average of recycling rates (% values) reported for FJ, SA, TO, TV, VU, FP. Note that the recycling rates in CP2025 were based on tonnes of waste recycled/reused locally.

SOURCES:

1 Pohnpei State Solid Waste Management Strategy 2020–2029 (Action Plan: 2020–2024), Yap State Solid Waste Management Strategy 2018–2027 (Action Plan: 2018–2022), Kosrae State Solid Waste Management Strategy 2018–2027 (Action Plan: 2018–2022), https://www.sprep.org/j-prism-2/report-and-materials

2 http://epa.guam.gov/guam-recycles-day-to-celebrate-america-recycles-day-on-november-14/

3 Pacific Region Infrastructure Facility (2018) Pacific Region Solid Waste Management and Recycling. Pacific Country and Territory Profiles, https://www.theprif.org/documents/regional/urban-development-waste-management/pacific-region-solid-waste-management-and

4 https://www.province-sud.nc/element-thematique/gestion-dechets#page-content

5 Republic of Palau (2017) National Solid Waste Management Strategy: The Roadmap Towards a Clean and Safe Palau, 2017 to 2026, https://www.sprep.org/j-prism-2/report-and-materials

6 Ministry of Natural Resources and Environment (2019) National Waste Management Strategy (2019–2023), https://www.sprep.org/j-prism-2/report-and-materials

7 SPREP (2016) Cleaner Pacific 2025: Pacific Regional Waste and Pollution Management Strategy 2016–2025, pg 22, Table 7

TABLE 13 Used oil stockpile estimates for Pacific island countries and territories

Pacific island countries and territories	Stockpile estimates 2013/14[a] (Litres)	Stockpile estimates 2018[b] (Litres)
American Samoa		
CNMI		
Cook Islands	0	
FSM	1,026,682[c]	937,000[d]
Fiji	100,000	
French Polynesia		
Guam		
Kiribati	8,000	64,000[e]
Marshall Islands	1,108,350[f]	2,633,000[g]
Nauru	30,000[h]	100,000
Niue	4,000	~10,000
New Caledonia		
Palau	550,780	1,135,000[i]
Papua New Guinea		
Samoa	8,400	0
Solomon Islands		
Tokelau	6,200	
Tonga		0
Tuvalu	14,500[h]	2,400[j]
Vanuatu	0	0
Wallis and Futuna	100,000[k]	
Regional	**2,956,912**	**4,881,400**

a = source 1; b = source 2, except where another source is indicated; c = sum of Chuuk (21,650), Kosrae (47,682), Pohnpei (891,600) and Yap (65,750) stockpiles; d = estimate for Pohnpei only, note that used oil has been exported since estimate made; e = 50,000 L of used oil was exported to NZ in 2019 (source 3); f = Majuro stockpile only; g = sum of Majuro (2,433,000) and Kwajalein (200,000) stockpiles; h = according to source 2, the 2014 national stockpiles for Nauru and Tuvalu were 46,000 L and 2,500 L respectively; i = data from source 4, which indicates that the stockpile includes all forms of waste oil mixed and stored in large concrete tanks (i.e. includes used cooking oil, not just used lubricating oil); j = data from source 5; k = likely underestimate given the INTEGRE project (2014–2018) exported 200,000 L of used oil to New Zealand (source 6); blank cells indicate no data available.

SOURCES:

1 Baseline figures from SPREP (2016) Cleaner Pacific 2025: Pacific Regional Waste and Pollution Management Strategy 2016–2025, https://www.sprep.org/publications/cleaner-pacific-2025-pacific-regional-waste-and-pollution-management-strategy

2 Haynes D, Leney A. and O'Grady J. (2018) Report Two: Country Missions and Consultations, https://www.sprep.org/gefpaspops/gefpas-reports

3 Government of Kiribati (2020) DRAFT Kiribati Waste Management Resource Recovery Strategy 2020–2029

4 Asia Pacific Waste Consultants (2019) Palau – Waste Audit Report. Analysis of waste generation, recycling and disposal data collected in November 2019, unpublished

5 Asia Pacific Waste Consultants (2019) Tuvalu – Waste Audit Report. Pacific Region Infrastructure Facility.

6 https://integre.spc.int/en/regional-actions/waste-management#territories-declinaisons

APPENDIX 6 List of documents reviewed

The table below lists the main documents and websites reviewed. Additional information sources for the regional and national level progress assessments are referenced within Appendices 3 and 4.

DOCUMENT	SOURCE
Regional strategies and plans	
Cleaner Pacific 2025: Pacific Regional Waste and Pollution Management Strategy 2016–2025	https://www.sprep.org/attachments/Publications/WMPC/cleaner-pacific-strategy-2025.pdf
Cleaner Pacific 2025: Pacific Regional Waste and Pollution Management Strategy, Implementation Plan 2016–2025	https://www.sprep.org/attachments/Publications/WMPC/cleaner-pacific-strategy-imp-plan-2025.pdf
Pacific Regional Action Plan Marine Litter 2018–2025	https://www.sprep.org/sites/default/files/documents/publications/MAP-Digital-small.pdf
Pacific Ocean Pollution Prevention Programme (PACPOL) 2015–2020: Strategy and Work Plans	https://www.sprep.org/attachments/PACPOL_STRATEGY_Approved_by_20SM.pdf
SPREP Strategic Plan 2017–2026	https://www.sprep.org/attachments/Publications/Corporate_Documents/strategic-plan-2017–2026.pdf
2018–2019 SPREP Performance Implementation Plan and Results Framework	https://www.sprep.org/attachments/Publications/Corporate_Documents/sprep-performance-implementation-plan-results-framework-2018–19.pdf
Regional frameworks and guidelines	
Waste Audit Methodology: A Common Approach	https://theprif.org/documents/regional/waste-management/waste-audit-methodology-common-approach
Practical Guide to Solid Waste Management in Pacific Island Countries and Territories	https://www.sprep.org/publications/practical-guide-to-solid-waste-management-in-pacific-island-countries-and-territories
Regulating plastics in Pacific Island Countries: a guide for policymakers and legislative drafters	https://www.sprep.org/publications/regulating-plastics-in-pacific-island-countries
Pacific Wastewater Policy Statement and Framework for Action	http://www.pacificwater.org/userfiles/file/water%20publication/WastewaterPolicy.pdf http://pacificwater.org/userfiles/file/Pacific%20Wastewater%20Policy%20and%20Framework%20for%20Action.PDF
Framework for Resilient Development in the Pacific: An Integrated Approach to Address Climate Change and Disaster Risk Management (FRDP)	http://gsd.spc.int/frdp/assets/FRDP_2016_Resilient_Dev_pacific.pdf
National policies, strategies, plans	
Cook Islands: Cook Islands Solid Waste Management Policy 2016–2026 Cook Islands Single-Use Plastic Ban Policy 2018–2023 Cook Islands Sanitation (Wastewater Management) Policy 2016	http://ici.gov.ck/waste
Fiji: National Solid Waste Management Strategy 2011–2014	https://doefiji.files.wordpress.com/2013/10/nswms_2011_-2014.pdf
FSM: Chuuk State Solid Waste Management Strategy 2019–2028 Kosrae State Solid Waste Management Strategy 2018–2027 Pohnpei State Solid Waste Management Strategy 2020–2029 Yap State Solid Waste Management Strategy 2018–2027	https://www.sprep.org/j-prism-2/report-and-materials

DOCUMENT	SOURCE
Regional strategies and plans	
Guam: Zero Waste Plan (and technical reports)	https://zerowasteguam.eco/
Kiribati: DRAFT Kiribati Waste Management Resource Recovery Strategy 2020–2029	Environment and Conservation Division, Ministry of Environment, Lands and Agriculture Development
Nauru: National Solid Waste Management Strategy 2017–2026	
Niue: National Integrated Waste Management Strategy 2010–2015	https://www.sprep.org/attachments/Niue_Waste_Management_Strategy_4Mar2011-low_res_2.pdf
Palau: National Solid Waste Management Strategy 2017–2026	https://www.sprep.org/j-prism-2/report-and-materials
RMI: Kwajalein Atoll Solid Waste Management Plan 2019–2028	https://www.sprep.org/j-prism-2/report-and-materials
Samoa: National Waste Management Strategy 2019–2023	https://www.sprep.org/j-prism-2/report-and-materials
Solomon Islands: National Waste Management and Pollution Control Strategy 2017–2026	https://solomonislands-data.sprep.org/dataset/solomon-islands-national-waste-management-and-pollution-control-strategy-2017–2026/resource
Tonga: Combined Utilities Business Plan 2018–2022	http://prdrse4all.spc.int/sites/default/files/final_combined_business_plan_2018_2022.pdf
Tuvalu: Integrated Waste Policy and Action Plan: Towards Cleaner and Healthier Islands 2017–2026 The 2nd Annual Review of the Implementation Status of Tuvalu's Integrated Waste Policy and Action Plan 2017–2026 Tuvalu UPOPs National Action Plan: 2018–2022	https://tuvalu-data.sprep.org/system/files/Tuvalu%20Integrated%20Waste%20Policy%20%26%20Action%20Plan.pdf https://tuvalu-data.sprep.org/system/files/Final%20Copy%20of%20Waste%20Policy%20Performance%20Review%20Report.pdf https://www.sprep.org/gefpaspops/gefpas-reports
Vanuatu: National Waste Management and Pollution Control Strategy and Implementation Plan 2016–2020 Vanuatu UPOPs National Action Plan: 2018–2022	https://environment.gov.vu/images/Waste.Management/NWMS-IP%202016–2020.pdf https://www.sprep.org/gefpaspops/gefpas-reports
SPREP Meeting reports and papers: 2017, 2018, 2019	https://www.sprep.org/governance/corporate-documents
Noumea Convention meeting reports and papers: 2017, 2019	https://www.sprep.org/governance/corporate-documents
Waigani Convention meeting reports and papers: 2017, 2019	https://www.sprep.org/governance/corporate-documents
2016 Clean Pacific Roundtable Outcomes Statement	SPREP WMPC Programme
2018 Clean Pacific Roundtable Outcomes Statement	SPREP WMPC Programme
Forty-ninth Pacific Islands Forum Communiqué, 2018	https://www.forumsec.org/wp-content/uploads/2018/09/49th-Pacific-Islands-Forum-Leaders-Communique-for-unofficial-release.pdf
Fiftieth Pacific Islands Forum Communiqué, 2019	https://www.forumsec.org/wp-content/uploads/2019/08/50th-Pacific-Islands-Forum-Communique.pdf?fbclid=IwAR1WZvpF0MASWkCRavx6DkreOTlLWKb3t9nQHNjhDVevXliVrTZdmW_yzUc
What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050	http://datatopics.worldbank.org/what-a-waste/

DOCUMENT	SOURCE
Regional strategies and plans	
Solid Waste Management and Recycling: Pacific Country and Territory Profiles	https://www.theprif.org/documents/regional/urban-development-waste-management/pacific-region-solid-waste-management-and
GEFPAS Project Resources (2016–2019) Consultancy report for the completion of drafting instructions for model legislation for UPOPs project Consultancy report for the review of used oil regulations Report 1: Desktop Review of Used Oil Management Data Report 2: Country Missions and Consultations Report 3: Work Plan of Proposed Activities and Budget Report 4: Review of E-waste Related Activities in the Pacific Islands Used Oil report - Fiji, Niue, Kiribati, Vanuatu	https://www.sprep.org/gefpaspops/gefpas-reports
Draft GEFPAS Final Report - UNPUBLISHED	SPREP WMPC Programme
PacWaste: Pacific Hazardous Waste Management (PacWaste). Volume 1: Final Report – UNPUBLISHED Pacific Hazardous Waste Management (PacWaste). Volume 2: Country Reports – UNPUBLISHED	SPREP WMPC Programme
Waste Management and Pollution Control Workshop Summary Report, 2017 – UNPUBLISHED	SPREP WMPC Programme
INTEGRE SPC project (Waste Management Regional Action)	https://integre.spc.int/en/regional-actions/waste-management
Team Samoa Va'a Clean-up Day, Report on Rubbish Data Collection and Recommendations	https://pacific-data.sprep.org/story/greening-pacific-games-and-beyond https://pacific-data.sprep.org/dataset/greening-pacific-games-2019
Pacific Private Sector Development Initiative. Case Studies in Private Sector Participation: Solid Waste Management	https://www.adb.org/sites/default/files/publication/230301/pacific-solid-waste-mgt.pdf
Pacific Water and Wastewater Association. Benchmarking 2017, Water Sector in Transition: Seven Years of Benchmarking	https://www.ib-net.org/docs/PWWA%20Seven%20Years%20of%20Benchmarking_2018%20FINAL-10July2018.pdf
Challenges to Plastic Up-Cycling in Small Island Communities: A Palauan Tale	https://escholarship.org/uc/item/4jd2q9dc
International sustainable development frameworks	
SIDS Accelerated Modalities for Action (SAMOA) Pathway	http://www.sids2014.org/index.php?menu=1537
Sustainable Development Goals	https://www.un.org/sustainabledevelopment/sustainable-development-goals/
Other	
CP2025 Implementation Plan Reporting Spreadsheet – UNPUBLISHED	SPREP WMPC Programme
Getting to know the PacWaste Plus Programme	https://www.sprep.org/sites/default/files/pacwaste-plus/PWP%20Factsheet%20-%20Final.pdf
PacWaste Plus Action Document	https://www.sprep.org/attachments/Publications/WMPC/pacwasteplus-action-document.pdf
PacWaste News, Issues 4–7	https://www.sprep.org/pacwaste/resources/newsletters
J-PRISM Newsletter, Issues 1–7	https://www.sprep.org/j-prism-2/report-and-materials

APPENDIX 7 Record of stakeholder consultation

Pacific island countries and territories	Survey emailed by MB (follow-up emails to prompt receipt)	Email receipt	MB replied with Skype offer (follow-up emails to reiterate support available)	Skype	Further information/ questions	MB responses to further information/ questions	Survey response received	Survey follow-up by MB
American Samoa	9/6/2020	9/6/2020	9/6/2020 (18/6/2020) (25/6/2020)					
Commonwealth of the Northern Mariana Islands	9/6/2020 (15/6/2020)							
Cook Islands	9/6/2020 (15/6/2020) (22/6/2020 – sent by SPREP)	23/6/2020	23/6/2020		23/6/2020	23/6/2020		
Federated States of Micronesia	9/6/2020	9/6/2020	9/6/2020	10/6/2020, 11/6/2020, 27/6/2020	10/6/2020, 11/6/2020, 12/6/2020, 22/6/2020, 23/6/2020	10/6/2020, 11/6/2020, 12/6/2020, 22/6/2020, 23/6/2020	28/6/2020	29/6/2020
Fiji	9/6/2020 (15/6/2020)	16/6/2020	16/6/2020 (17/6/2020) (22/6/2020)	Skype organised for 22/6/20, cancelled by FJ due to other commitments. Rescheduled meeting held on 29/7/2020				
French Polynesia	10/6/2020, English version 29/06/2020, French version							
Guam	9/6/2020 (15/6/2020)							
Kiribati	9/6/2020 (15/6/2020)	19/6/2020	19/6/2020 (24/6/2020)				22/7/2020, a copy of the draft Kiribati Waste Management and Resource Recovery Strategy provided, in lieu of survey response	
Nauru	9/6/2020	11/6/2020	11/6/2020 (15/6/2020) (24/6/2020)					

Pacific island countries and territories	Survey emailed by MB (follow-up emails to prompt receipt)	Email receipt	MB replied with Skype offer (follow-up emails to reiterate support available)	Skype	Further information/ questions	MB responses to further information/ questions	Survey response received	Survey follow-up by MB
New Caledonia	10/6/2020, English version 29/06/2020, French version							
Niue	9/6/2020	9/6/2020	9/6/2020 (16/6/2020) (24/6/2020)		10/6/2020	10/6/2020		
Palau	9/6/2020 (15/6/2020)	15/6/2020	15/6/2020 (18/6/2020) (24/6/2020)					
Papua New Guinea	9/6/2020	9/6/2020	9/6/2020 (16/6/2020)	19/6/2020	17/6/2020	17/6/2020	25/6/2020	25/6/2020, 29/6/2020
Republic of the Marshall Islands	9/6/2020 (15/6/2020)	16/6/20	16/6/20	Skype for 24/6/20 did not connect at RMI end. Meeting held on 26/6/2020. Another meeting on 26/6/20 with SPREP's RMI Technical Expert				
Samoa	9/6/2020 (15/6/2020)	15/6/2020	15/6/2020 (18/6/2020) (24/6/2020)		24/6/2020	24/6/2020	7/7/2020	
Solomon Islands	9/6/2020	11/6/2020	11/6/2020 (16/6/2020) (24/6/2020)				29/6/2020	29/6/2020
Tokelau	9/6/2020	10/6/2020	10/6/2020 (18/6/2020)					
Tonga	9/6/2020 (15/6/2020) (22/6/2020 – sent by SPREP)							
Tuvalu	9/6/2020	9/6/2020	9/6/2020 (16/6/2020)	23/6/2020			25/06/2020	25/6/2020
Vanuatu	9/6/2020 (15/6/2020) (22/6/2020 – sent by SPREP)							
Wallis and Futuna	10/6/2020 English version 29/6/2020, French version							

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