

Final evaluation of IUCN project Plastic Waste Free Islands

January 2019 - December 2022

Final Report





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Acronyms and abbreviations

ABWREC	Antigua and Barbuda Waste Recycling Corporation
AOSIS	Alliance of Small Island States
APWC	Asia Pacific Waste Consultants
AVC	Alternate Value Chain
AR	Annual Report
BAT	Best Available Technology
B2B	Bottle-to-Bottle
CDL	Container Deposit Legislation
DRS	Deposit Refund Scheme
EIA	Environmental Investigation Agency
EQ	Evaluation Question
ET	evaluation team
FHTA	Fiji Hotel and Tourism Association
GEF	Global Environment Facility
GPML	Global Partnership on Plastic Pollution and Marine Litter
HDPE	High Density Polyethylene
IUCN ORMACC	IUCN Mexico. Central America and the Caribbean Regional Office
IUCN ORO	IUCN Oceania Regional Office
MST	Most Sustainable Technology
MSW	Municipal Solid Waste
MTR	Mid-term Review
NPA	National Project Assistant
Norad	Norwegian Agency for Development Cooperation
OECD	Organisation for Economic Co-operation and Development
OECD-DAC	OECD Development Assistance Committee
OECS	Organization of the Eastern Caribbean States
PACPOL	Pacific Ocean Pollution Prevention
PET	Polyethylene terephthalate
PICs	Pacific Island Countries
РР	Polypropylene
PSA	Public Service Announcement
PWFI	Plastic Waste Free Island
PWRL	Pacific Waste Recyclers Limited
SB	Searious Business
SIDS	Small Island Developing States
SPREP	Secretariat of the Pacific Regional Environment Programme
SPTO	South Pacific Tourism Organisation
SRWMA	Samoa Recycling and Waste Management Association
SWMA	Solid Waste Management Authority
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
VESS	Vanuatu Environment and Scientific Society
VRWMA	Vanuatu Recycling and Waste Management Association
W2P	Waste-to-Product
WB	World Bank Group
WG	Working Group

Executive Summary

As part of its global Close the Plastic Tap Program, IUCN launched in 2019 the Plastic Waste Free Islands (PWFI) project with the support from the Norwegian Agency for Development Cooperation (Norad) to address the problem of plastic pollution leaked by Small Island Developing States (SIDS).

PWFI was planned as a three-year project focusing on six SIDS: Fiji, Vanuatu and Samoa in Oceania and Antigua and Barbuda, Saint Lucia and Grenada in the Caribbean. It was granted a 12-month no-cost extension in 2021 due to a delay in implementation in the start-up phase and due to the COVID-19 restrictions. At the moment of writing this report IUCN was waiting for Norad's final approval on another no-cost extension for the Pacific countries until end of August 2023. The project was implemented by IUCN headquarters and the IUCN regional offices for the Caribbean and Latin America (ORMACC), and for Oceania (ORO).

In accordance with IUCN's Monitoring and Evaluation Policy, the Final Evaluation of the PWFI project was undertaken from December 2022 to March 2023 by PEMconsult. It had the purpose of assessing PWFI's implementation, results and sustainability with the aim of informing decisions for the development of project proposals for potential additional interventions, replication or scaling up the approach across wider contexts. Using the standard OECD/DAC criteria, the evaluation was based on a combination of direct consultations with project stakeholders, visits to four out of the six targeted countries, project analysis and document review. The rating of evaluation questions, outputs and outcomes is based on the **UNDP/GEF rating scale**. Overall, the project performance is rated *Satisfactory*.

Focused on three key sectors for SIDS (waste management, tourism and fisheries), the project was found to be highly relevant to the national priorities of the targeted SIDS. This was especially helpful in the case of the Caribbean countries, which are lacking effective strategic-level policies to deal with national waste flows and are having difficulty in implementing recently approved legislation due to lack of internal capacity and effective action-oriented solutions. In the case of the Pacific, some countries were more advanced in terms of policy and the PWFI was relevant for elaborating business cases which could assist compliance with legislation.

In both regions, the project generated new and important knowledge which is useful for guiding strategic planning on circular economy solutions and, with the developed Blueprint, the project provided SIDSs and regional and global organizations with a useful stepping stone for further policy development at the national, regional and global levels. The country-specific stakeholder mapping was done with a good level of detail and the stakeholder engagement was inclusive and constant. Centered on quantifying and qualifying plastic flows to develop business cases and work with the private sector in especially the waste management and tourism sectors, the approach of PWFI supported the emerging private recycling sector and contributed to the global research on developing sound feasible solutions for promoting circular economy. The evaluation team found the project's **relevance** to the global, regional and national context to be *Highly Satisfactory*.

The evaluation team found the project to be coherent with other initiatives at various levels. It made efforts to avoid duplication of work and establish collaboration with national, regional and global organizations. However, these efforts at times fell short of producing a very high level of integration, which is partly due to the fact that plastics is a fairly recent area of global environmental policy. The policy sphere of plastics has been increasingly receiving more attention over the last decade and many initiatives and projects need to be better coordinated. Nevertheless, the project could have benefitted from a thorough mapping of initiatives and projects at the start of or even before implementation. At the global level there was substantial progress on policy development as 175 nations in 2022 agreed to develop a legally binding agreement on plastic pollution by 2024. In this context, IUCN is using the outputs of PWFI in supporting the governments in SIDS and their regional organizations to prepare for the treaty negotiations. The project was in most cases able to build effectively on past work and the knowledge generated has been shared with various organizations working on plastic waste management (such as WB, the PEW Trusts and Common

Seas), whose tools will need careful articulation with the project's Blueprint when engaging the same geographies. The overall project's **coherence** was rated as *Moderately Satisfactory*.

The final evaluation rated the project's overall **effectiveness** as *Satisfactory*, whilst noting a considerable difference in the level of achievement between the two regions. The attribution of the rating needs to be contextualized by the reality that the project implementation was severely impacted by the Covid pandemic, which led to substantial delays and readjustments in the implementation strategy, especially with regards to the reports on quantification of plastic waste and leakage, on which the rollout of the remaining Outputs was directly dependent. Although project management adapted under challenging circumstances, the one-year extension granted by the donor was not able to fully compensate for the disruption in implementation, and several outputs like the Blueprint, the policy assessments and the economic assessment for the Pacific region countries were finalized too late to be used as intended.

Stakeholder engagement was generally effective and managed to create adequate buy-in, which nevertheless only began making its way to the highest levels of decision-making towards the end of the implementation period. The timeframe of the latter was nevertheless too short to meet the objectives related to the uptake of policy recommendations and to develop a network around the Blueprint. The regional difference in the level of output achievement may be attributable to various factors, of which the most impactful may have been the different operational setups chosen by each regional office. In the Caribbean, under the close supervision of ORMACC, each country had a local National Project Assistant, whereas in the Pacific, ORO assumed the regional operations in their entirety. This enabled a comparatively stronger presence of the project on the ground in the Caribbean, allowing more effective stakeholder engagement and follow-up of activities. PWFI also successfully managed to generate awareness and buy-in by providing spaces of engagement to a growing network at national and global level for advancing best practices to minimize plastic waste leakage and in demonstrating the impact that small grants to the private sector can have for the capacity of circular economy businesses to take off. The MEL was adequate and in certain aspects innovative by including outcome harvesting in the implementation process and revision of the Theory of Change.

In terms of the project's **efficiency**, the final evaluation rated the project as *Satisfactory*. Even before the pandemic, the project had a slow start that in part could have been minimized with a more thorough scoping and design phase. Paradoxically, while the implementation of PWFI was severely delayed by the pandemic, it also meant the funds that had been allocated to travel and field missions could be reshuffled to other (planned and additional) activities, thereby facilitating output delivery. This was particularly remarkable as the use of small grants to consolidate pilot projects on alternative value chains in several cases created the conditions for sustainable business cases.

The conditions for implementation of PWFI varied considerably across countries and each SIDS presented its own opportunities and difficulties. However, the regional articulation of PWFI in the Pacific was arguably more challenging on account of the differences in time zone and geographical distances with all the difficulties in communication and access that they entail. Contracting national project assistants to ensure a stronger presence on the ground, more focus on timely and adequate information and day-to-day communication with stakeholders and an initial comprehensive mapping of ongoing and previous plastic waste initiatives could have contributed to enhanced results in that region.

The project's **impact** was found to be **Satisfactory**. Its most impactful contribution was the knowledge generated on the plastic flows according to polymer type, which despite some limitations that may have impacted the accuracy of the produced baseline estimates, provided an adequate template to be improved for producing similar assessments. The data was also impactful in terms of the attention it has received by governments and stakeholders. The findings from the policy assessments, in combination with the activities related to the other outputs, have contributed to increase the level of visibility of the plastics problem in each of the targeted countries. PWFI has also further contributed to consolidate IUCN as a global leading entity in the field of plastic pollution. Other impacts of the project are likely to materialize over the next years, fueled by the *Deplastify* tool for supporting the assessment of most suitable technologies for managing

non-recyclable plastics in SIDS, the delivered policy recommendations, position/policy papers and business cases for alternative value chains.

The prospects for the sustainability of PWFI are markedly different in the two regions. Not only has the project achieved more in the Caribbean, but these gains will also benefit from the follow-up project starting soon in the same three Caribbean countries plus Saint Vincent and the Grenadines and Saint Kitts and Nevis. The results in the Pacific are fewer than in the Caribbean, but sustainability is still likely in several areas, especially if a no-cost extension until end of August 2023 is granted. Apart from a few PWFI initiatives that are likely to continue, the three targeted countries and others in the Pacific will also benefit from the knowledge generated from the 'quantification reports' and the work with the Blueprint which will continue regionally. The evaluation team has found the project's sustainability to be **Likely** for the Caribbean countries and **Moderately Likely** for the Pacific ones.

Evaluation Criteria	Rating
Relevance	HIGHLY SATISFACTORY
Coherence	MODERATELY SATISFACTORY
Effectiveness	HIGHLY SATISFACTORY (Caribbean) / MODERATELY SATISFACTORY (Pacific)
Efficiency	SATISFACTORY
Impact	SATISFACTORY
Sustainability	LIKELY (Caribbean) / MODERATELY LIKELY (Pacific)

Table 1 - Rating	of Main	Evaluation	Criteria
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Conclusions

The Final Evaluation of PWFI has reached the following conclusions:

Conclusion 1: PWFI supported the national priorities of the targeted SIDS on reducing plastic waste and leakage by generating new knowledge, demonstrating business cases for plastic recycling and providing step-by-step guidance for further policy development and implementation including the private sector in recycling and reuse.

<u>Conclusion 2:</u> PWFI was well designed because its four outcomes constituted an integrated package with data and knowledge generation, policy development, private sector development and the Blueprint, which is a document with lessons learned that at the same time points to the future because it is readily usable for a variety of target groups. At an overall level, the project delivered well on all the components and was less successful in relation to policy development.

Conclusion 3: The COVID-19 restrictions which were in place for at least half of the implementation period and longer in the Pacific had a profound impact on project implementation and result achievement. The effects of the pandemic on the project implementation were mostly negative but there were also positive effects that improved implementation and led to unexpected achievements.

<u>Conclusion 4:</u> PWFI was very successful in establishing a space for people and organizations to find common interest that was productive to generate awareness and adequate levels of buy-in.

<u>Conclusion 5:</u> PWFI project management at HQ level was responsive to solve problems and applied adaptive management when faced with the COVID-19 restrictions. The financial management was efficient and unspent funds due to the pandemic were productively reallocated to provide small grants to consolidate pilot projects on alternative value chains. This demonstrated a way of applying funds which, to a certain extent, can be more efficient than the workshops and travelling they were originally intended for. Some of the projects supported that way are likely to have local long-term impact.

Lessons learned

1. Pandemics such as the COVID-19 pandemic can hit without notice and have profound negative consequences on project implementation. Project management and implementation that have inbuilt flexibility in terms of application of resources e.g., budget and staff will fare better.

2. Influencing national and regional policies takes time and requires in-depth understanding and knowledge of the context and the stakeholders. Having policy assessments and recommendations ready early in the implementation process increases the chances of their uptake by national governments.

3. With very limited human resources, staff of SIDS governments are typically overwhelmed by multiple functions and policy areas. Other national stakeholders often wear multiple hats in different organizations. This makes stakeholders in SIDS very prone to participation fatigue and special attention should be given to this factor when planning stakeholder engagement and consultancy work.

4. Related to the previous lesson, available human resources with relevant experience and educational background are also more limited than in bigger countries, meaning that finding suitable national consultants may be more difficult and have the effect of prolonging hiring or contracting procedures.

5. The purchase of technical equipment is very time-consuming both because of their specifications and their clearance procedures by international organizations such as IUCN. Procurement scrutiny when supporting a private company to purchase equipment is even more stringent than regular service or output related contracts. This means that the preparatory time required for contracts that relate to equipment purchase needs to be factored in and adequately planned as early as possible during implementation.

Recommendations

Based on the in-depth evaluation of the PWFI project, the following recommendations are presented to the IUCN and any other entities, such as governments, donors, and development agencies, involved in the design or implementation of a future project of this nature and scale.

Recommendation 1:

IUCN should immediately present a proposal to Norad for using the funds unspent by <u>IUCN ORO</u> to secure the full handover of project initiatives to national governments and dissemination in the Pacific of project documents and results including the economic assessments, the policy assessments and the Blueprint.¹

Recommendation 2:

Based on the experience with different performance of the project management in the Caribbean and in the Pacific, and the closing down of possibilities for travelling during a pandemic, IUCN should consider how it best responds in securing adequate and appropriately locally staffed project management.

Recommendation 3:

Based on the positive experience in providing small grants for machinery and equipment to small and medium-sized companies to overcome initial barriers for production in closed loop recycling projects, and which was to a large extent made possible by the reallocation of unspent funds due to COVID-19 and thus an unexpected project result, IUCN should carefully study how it could learn from that experience and integrate a small grant scheme in similar projects.

Recommendation 4:

High-quality waste estimates can only be achieved when countries have a general waste collection system that covers the entire population, and the adequate infrastructure, equipped with weighbridges, to receive

¹ A detailed proposal for activities to be supported by an eventual extension is included in the section "Recommendations".

waste. In its strategic approach to plastic waste and leakage IUCN should keep this in mind and apply a broad and integrated approach that also supports improvement of systems for collecting and treating waste in SIDS.

Recommendation 5:

In view of the weak results in engaging the fisheries sector in the project, IUCN should pay particular attention to developing a carefully prepared strategy considering the specific conditions and challenges of this sector, including a compelling scheme for producing tangible short-term benefits for the sector's stakeholders.

Recommendation 6:

In plastic management projects, IUCN should include an adequate context analysis in project proposals which include key relevant data and information on the political situation, the private sector development, main ongoing projects and partners and general (in addition to plastic) waste management information.

Recommendation 7:

In its plastic projects, IUCN should consider more closely solutions for capacitating local authorities and governments to be able to carry out waste audit campaigns without the need for contracting external auditors, since this would help promoting and facilitating the implementation of national monitoring strategies and waste management systems.

Recommendation 8:

IUCN should always include in the ToR for plastic waste studies and audits the requirement of complete technical methodological reports, made available in open source, with a full and detailed description of the methodology approach used in all the steps of the study.

Recommendation 9:

IUCN should invest more efforts in communication and integration with national and regional stakeholders to operationalize existing cooperation channels and in making sure that stakeholders are kept abreast of project progress and findings even before the respective communication products have been fully finalized

1 Evaluation background and context

To address the problem of plastic pollution leaked by Small Island Developing States (SIDS), IUCN launched in 2019 the Plastic Waste Free Islands (PWFI) project with the support from the Norwegian Agency for Development Cooperation (Norad), as part of its global Close the Plastic Tap Program. PWFI was planned as a three-year project targeting six SIDS: Fiji, Vanuatu and Samoa in Oceania, and Antigua and Barbuda, Saint Lucia and Grenada in the Caribbean. It was granted a 12-month no-cost extension in 2021 due to delay in implementation in the start-up phase and the COVID-19 restrictions.

The project aimed at promoting island circular economy through demonstrating effective, quantifiable solutions to address plastic leakage from SIDS. Having come to an end, the project is being evaluated by external independent evaluators in accordance with IUCN's Monitoring and Evaluation Policy.

It is expected that the findings and recommendations of this final evaluation will help to inform future decisions such as whether to pursue additional interventions, to scale up existing interventions, or to replicate this project elsewhere. The evaluation should also help IUCN identify key lessons learned that could be used for the development of future project proposals and improve the implementation of future interventions.

The evaluation covers the full implementation period of project PWFI from 1 January 2019 to 31 December 2022 and was carried out from mid-December 2022 to end of March 2023 with visits to Antigua and Barbuda and Saint Lucia in the Caribbean and Fiji and Vanuatu in the Pacific at the end of January. A Mid-term Review (MTR) was conducted that covered the implementation up to August 2021. The MTR was carried out remotely due to the COVID-19 pandemic.

In December 2018, a workshop bringing together key managers from IUCN regional offices, IUCN Environmental Law Centre and headquarters reviewed the project document and began operational planning in January 2019. Based on the results of the workshop, a revised budget and work plan for 2019 was submitted to NORAD in February 2019 for approval. The proposal was deemed by Norad to need more detail. Therefore, the signed Grant Agreement included a requirement that IUCN submit to Norad an inception report by end of June 2019, which was to include a final selection of target countries, updated and more specific results framework, as well as details of project partners. Norad approved the final amended work plan and budget for the entire project in June 2019, enabling the project to commence implementation arrangements.

1.1 Project objective and outcomes

The long-term vision of the project was plastic waste-free islands across the globe, and it was expected that the project would contribute to reducing substantially and in the long-term eliminating plastic waste leakage² from the six selected SIDS. The purpose of the project was to demonstrate effective, quantifiable solutions to addressing plastic leakage from SIDS. The project was organized in four outcomes and 12 outputs, as listed in the following table.³

² The spillage of unmanaged plastic waste that originates on land and reaches the ocean.

³ As with the ToC, the project results framework has suffered modifications throughout project implementation. In particular, following a review of the inception report by the donor, the project's 2019 annual report introduces a revised results framework reflecting a critical turning point with a significant number of changes, additions, and deletions made to outputs, outcomes and impact targets, indicators and activities. In the original design there were only three outcomes but the original outcome 1 was split in the present outcomes 1 and 2 and the number of outputs remained the same. According to the MTR, this revision "moved the project to more achievable project targets and better alignment to IUCN's monitoring and evaluating policy 'SMART' monitoring requirements."

Table 2 - PWFI Outcomes and Outputs

Outputs		
.1 Target islands selected through criteria		
.2 Methodology developed to calculate the leakage from different sources		
2.1 Current waste management policies and practices assessed on target SIDS		
o generate a baseline understanding on content, financing and		
mplementation of policies related to project outcome.		
2.2 Policy recommendations delivered to governmental bodies on policy,		
egislation and regulation for plastic waste leakage minimization.		
2.3. Strategy to support recommendation uptake implemented.		
3.1 Key stakeholders (public and private, as well as the informal waste sector)		
n each target sector are identified and engaged in enhanced plastic waste		
nanagement measures.		
3.2 An action plan for each sector on enhanced plastic waste management is		
co-developed with island governments and key stakeholders.		
5.5 Assess and assist the three sectors (tourism, fisheries and waste		
nanagement) to synergistically co-generate up to 5 viable value chains to		
collect, recycle or reuse products from locally sourced recycled plastic streams.		
S.4 Assess best available technologies (DA1) for solutions for effective		
1.1. A growing notwork on bost practice activities to minimize plastic waste		
alkage that includes her stakeholders from the 6 SIDS		
2 Member of the network influenced other stakeholders to contribute to the		
levelopment of the Blueprint		
1.3 A zero plastic waste Blueprint is developed informed by the project		
assons and disseminated through ragional bodies and international sector		
sours (a g. tourism operators, regional scale fisheries or international wasts		
nayers (e.g., courism operators, regional-scale fisheries of international waste		

1.2 Project management and stakeholders

The IUCN Ocean Team in the HQ in Switzerland, with the IUCN Oceania Regional Office (IUCN ORO) and IUCN Mexico, Central America and the Caribbean Regional Office (IUCN ORMACC) were responsible for the overall management and implementation of the project at the regional and national levels. Internal agreements between the Ocean Team and IUCN regional offices were prepared and signed in July 2019. The day-to-day management and coordination for the three Pacific islands, Vanuatu, Samoa and Fiji were done by IUCN ORO in Fiji, while the project was coordinated by IUCN ORMACC from its office in Costa Rica. The project worked formally and informally with several strategic and technical partners. A Senior Regional Program Coordinator was appointed in September 2019 to manage the project and IUCN's Plastic Portfolio. IUCN's Economic Unit was responsible for the technical lead in the project's economics assessments and the Global Program operations unit oversaw the project's financial management.

Key stakeholders of the project were government agencies and institutions, private actors in waste management, tourism and fisheries sectors, civil society organizations that work with and support reduction and recycling of plastic waste, researchers, donor agencies, and the public.

Project progress has been monitored and reported based on a monitoring, evaluation, and learning (MEL) strategy developed in the first year of the project.

1.3 Objective and scope of the evaluation

The objective of the evaluation is to contribute to both learning and accountability. For the purpose of learning it will explore PWFI's work, its achievements and the role played by IUCN to implement good practices and innovative approaches which have been instrumental in achieving the project's results.

For accountability purposes the evaluation has assessed the entire project implementation period including the design of the project, the organization and partnerships, the effectiveness and efficiency in achieving outputs and outcomes and finally the impact on reducing leakage of plastic and promoting circular economy practices and the sustainability of the results achieved.

Whilst the evaluation examined work performed at the global and regional levels, the focus was on assessing the results of the project's interventions and their sustainability at the national level.

2 Evaluation Methodology

Combining different qualitative approaches and methods, the final evaluation was carried out in three phases: the inception phase, the data collection phase, and the analysis and reporting phase. A combination of methods was used to triangulate information and data to ensure the robustness of findings and conclusions. Using the OECD/DAC criteria, the evaluation was based on a combination of semi-structured interviews directly or remotely with a wide range of project stakeholders, visits to sites relevant to the project, extensive internet research, document review and follow up by email to collect additional data. Supporting tools for the evaluation were Evaluation Matrix (Annex A), the theory of change (ToC), contribution analysis relevant for the verification of the harvested outcomes the evaluation criteria of effectiveness and impact and a rating system. The ToC was revised several times during project implementation and the version shown in Annex E is the latest. The rating of EQs, outputs and outcomes was applied comparatively across the six different countries (See Annex F). Each interview had an approximate duration of one hour. With the participants' consent some interviews were recorded to facilitate notetaking. The conducted consultations including (both remote, face-to-face and per email) total of 77 interviews, broken down as follows:

Interviews with Fiji stakeholders (9 F2F, 3 remote, 1 per email):	13
Interviews with Vanuatu stakeholders (all F2F):	9
Interviews with Samoa stakeholders (all remote):	4
Interviews with Antigua and Barbuda stakeholders (9 F2F, 1 remote, 1 per email)	11
Interviews with Saint Lucia stakeholders (9 F2F, 3 remote, 2 per email)	14
Interviews with Grenada stakeholders (all remote)	8
Interviews with regional stakeholders (6 F2F, 3 remote / 3 in the Caribbean, 6 in the Pacific)	9
Interviews with global stakeholders (all remote)	9
Total number of interviews	77

Table 3: Conducted interviews

The full list of interviews is included in Annex C.

The PWFI project has used the Outcome Harvesting method extensively during project implementation and 170 *outcomes* were harvested. A selection of the 27 project *outcomes* with the significance rating of "very significant" constituted the main group of *outcomes* which were selected to be verified. Given that in the case of the Caribbean islands there are only eight of the 27 *outcomes* rated as "very significant", and that consultations with more than the eight boundary partners associated to these outcomes were planned, such consultations constituted an opportunity to verify additional outcomes rated as "significant". The verification and analysis of harvested *outcomes*, included in Annex D, contributed to the analysis of effectiveness, impact and sustainability. The analysis of findings constituted in practice an iterative process throughout the evaluation, enabling the team to discuss, test and validate when possible the initial findings with stakeholders as the evaluation progressed, to ensure that a) the analysis was participatory, and stakeholders could assume ownership of the findings; and b) the team adjusted its emphasis to stay on track and ensure that the evaluation focuses on the key issues. The evidence base, precision, and credibility of oral sources were compared with those of written sources, and the perspectives of different stakeholders were compared. The PWFI project was assessed in accordance with the final evaluation matrix agreed upon in the inception phase (Annex A) and conclusions, lessons, and implementable recommendations were based on the findings.

Theory of change reformatted by the evaluation team

The overall rationale of the project is founded on the assumption that plastic leakage is mainly driven by terrestrial activities. By changing the fate of the plastic waste stream on an island, there will be reduced leakage of plastic into the environment, which in turn will ultimately contribute to healthy marine and coastal ecosystems and communities.⁴ In an intermediate state, given a more acute awareness that litter is negatively impacting marine ecosystems, public health and the beauty of landscapes, there is increased demand for recycled products and financing is increasingly made available for green technologies. The latter are considered relevant drivers towards the desired impact.

If IUCN supports the development of comprehensive methodologies to conduct plastic waste quantification assessments for SIDS, collect data on plastic waste and identify and engage champions from key sectoral domains in the plastic supply chain and policy makers, then knowledge of waste generation and leakage as well as the economic impact of plastic and the value of reduction, recycling and reuse in the six target islands will be improved and **because** IUCN brings added value in terms of knowledge, technologies and partnerships and country, partners are willing to implement new innovative solutions and better plastic waste management. A key assumption is that data are of adequate quality to estimate plastic stocks and flows well.

From intermediate state to impact Healthier marine and coastal ecosystems and communities will be achieved through the reduction of pollution by better management of plastic waste and leakage assuming that markets exist for recycled products and the policy solutions identified are applied, legislated and reinforced. To go from the intermediate state to the impact it is assumed that:

- Markets exist for recycled products,
- Policy solutions identified to reduce plastic pollution are relevant to government and private sector demand.

From outcomes to intermediate state- At the intermediate state, IUCN aims at better management of plastic waste and reduced leakage within the project lifetime. This would be achieved through 4 outcomes:

- Improved knowledge of plastic waste footprints among 6 target islands,
- Increased policy effectiveness in reducing plastic waste generation,
- Plastic waste reduction measures adopted by tourism, fisheries, and waste sectors through alternate value chain development,
- Plastic Waste Free Island Blueprint endorsed by regional SIDS bodies.

As seen in the ToC figure below, several additional outcomes have appeared and are linked to the four formulated outcomes. The accurate quantification of plastic waste has led to increased knowledge on plastic waste among private sector actors and policy makers and has led to intervention measures to reduce plastic waste and this has, in turn, led to buy-in from the policy makers.

Some additional outcomes were identified such as:

⁴ IUCN PWFI MEL Plan

- Champions in key sectors of the plastic supply chain are identified and engaged, which has influenced the policy effectiveness on reducing plastic waste and the integration of circular economy principles in the strategies and plans at country level;
- Members of the civil society are engaged in plastic waste reduction actions and key stakeholders in the tourism, fisheries and waste sectors support the development of alternative value chains which lead to plastic waste reduction measures.

Finally, outcomes 1 to 3 influence the development of a Plastic Waste Free Island Blueprint which is seen as a process-based guidance document which can be adapted in accordance with specific contexts. The endorsement by regional SIDS bodies of such a Blueprint will influence the acceptance and validation of alternative value chains and business plans, if policies and recommendations from the Blueprint are developed, shared and implemented.

The underlying assumptions for these causal chains include:

- Key stakeholders are engaged in the processes and advocate for these solutions,
- Multi-stakeholder working groups agree on national priorities for solutions/proofs of concept,
- Key stakeholders work as a coalition to support the advocacy of the recommendations to decision makers (coordination between organizations in each region and national setting is necessary).

From outputs to outcomes – Through the outputs, a series of outcomes chains are achieved as described above.

From activities to outputs – Based on the results framework which lists the outputs and indicators, IUCN elaborates the annual work plans which are monitored and evaluated regularly. A key assumption is that IUCN brings added value in terms of knowledge, technologies, and partnerships.

From inputs to activities – IUCN, together with the partners identified at global, regional and national level, provides financing, knowledge, experience, technical assistance, coordination and cooperates with partners and stakeholders, providing assistance in terms of logistics, learning, communication and visibility in order to plan and implement the activities.

Figure 1: Theory of change reformatted by the evaluation team



3 Evaluation Findings

Summary of findings for relevance:

1 Aligned with national policies and strategies, IUCN PWFI supported successfully the targeted SIDS in addressing the global plastic waste problem by providing new data on plastic quantities and leakage, furthering policy development and creating conditions for uptake of recycling methods by the private sector.

3.1 Relevance

Aligned with national policies and strategies, IUCN PWFI supported successfully the targeted SIDS in addressing the global plastic waste problem by providing new data on plastic quantities and leakage, furthering policy development and creating conditions for uptake of recycling methods by the private sector.

Plastic waste and leakage are global problems which have serious environmental and health impacts. Plastic waste impacts negatively on ecosystems and biodiversity and the reduction and recycling of plastic therefore contributes to IUCN's mandate to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable. It therefore makes good sense for IUCN to engage in finding ways to reduce and ultimately eliminate the plastic waste problem through its Close the Plastic Tap program, and PWFI.

Small Island Developing States (SIDS), or "Large Ocean States" as some nations are now self-identifying, are particularly affected by the negative impacts of plastic waste because they have limited resources to manage the waste in appropriate and sustainable ways. Because of the long distances between islands in the same country and between islands in neighboring countries, it is difficult to find cost-efficient solutions to manage the waste jointly or to ship it to other countries for treatment. Many SIDS rely heavily on income from the tourism sector which is beginning to experience negative economic effects due to the quantities of plastic waste, but which also contributes considerably to the problem. The focus on SIDS was therefore relevant and aligned with the four objectives of the *Norwegian Development Program to Combat Marine Litter and Microplastics* (updated 2021). At the time of approval, Norad had a geographical focus on SIDS.

Previous waste audits had been done in some of the Caribbean and Pacific countries, but none with a similar level of detail and exclusive focus on plastic as in the assessments undertaken through PWFI. The relevance of generating detailed quantifications and characterization of plastic waste for creating a baseline for developing concrete solutions for circular economy addresses a very real and pressing need in SIDS, which lack the capacity to do such audits without external technical assistance. Especially in the Pacific and to some extent in the Caribbean, the SIDS targeted by PWFI are quite advanced in designing policies, strategies and tools addressing the problems with plastic waste and leakage and are even at the frontline of banning single use plastics but have limited capacity to enforce policies and put in place effective solutions to manage their plastic waste in a circular economy.

IUCN selected three sectors: waste management, tourism and fisheries to focus on for PWFI. In the context of SIDS, tourism is particularly relevant as mentioned above. The fisheries sector is also very relevant as it contributes significantly to the plastic leakage in the ocean and in SIDS where many people unrelated to direct tourism-based services rely on fisheries for their livelihood. The approach of PWFI to develop business cases based on plastic waste and leakage characterization and work with the private sector in especially the waste management and tourism sectors supported emerging private actors involved in plastic circular economy solutions and contributed to the global research on developing sound and reliable methods for quantifying plastic waste and leakage.

The country-specific stakeholder mapping was done with an adequate level of detail and the stakeholder engagement was quite inclusive and constant as clearly recorded in the project's stakeholder engagement tracking tool. The project was found by stakeholders both in the Caribbean and the Pacific to be highly relevant to the national priorities and the evaluation team shares this view. This applies to the selection process of the nine solutions, to the policy work and to the stakeholders involved in the pilot projects, who were involved in effective collaborative processes. The strong link to the private sector was perceived to be a distinctive feature of this project and all stakeholders who had an opinion on the subject welcomed this focus as particularly relevant.

The rating for this evaluation question is Highly Satisfactory.

3.2 Coherence

Summary of findings for coherence:

- PWFI achieved some results in strengthening the implementation of national policy frameworks but was less successful in strengthening regional policy frameworks on plastic waste management. At the global level PWFI is proving instrumental for supporting AOSIS in preparing for the Global Plastic Treaty negotiations.
- IUCN's PWFI did to some extent build on and add value to previous and existing projects and initiatives especially regarding the development of a methodology for auditing plastic waste and leakage.

PWFI achieved some results in strengthening the implementation of national policy frameworks but was less successful in strengthening regional policy frameworks on plastic waste management. At the global level PWFI is proving instrumental for supporting AOSIS in preparing for the Global Plastic Treaty negotiations.

PWFI was very well aligned with global and regional policies and conventions in environmental and natural resources management of the oceans and regional policies and waste management.⁵

With less than 10 years in plastics projects, IUCN is a relatively new player in this field. PWFI design built on various projects such as IUCN's plastic project the Baltic region, MAARPLASTICCS in Southern Africa and Asia, AZORLIT in the Azores and the PWFI Med sister project in Cyprus and Menorca. The PWFI was the first project that IUCN implemented in the Caribbean and the Pacific on this topic in the framework of its Closing the Plastic Tap Initiative that is coordinated by the IUCN's Ocean Team within the Center of Conservation Action.

On the regional level, IUCN ORO initiated coordination with the newly established ANZPAC⁶ and with the South Pacific Regional Environment Program (SPREP) and the South Pacific Tourism Organization (SPTO). These

⁵ These include conventions such as the United Nations Convention on the Law of the Sea (UNCLOS), the International Convention for the Prevention of Pollution from Ships (MARPOL), the Basel, Stockholm and Rotterdam Conventions, the London Convention on the Prevention of Marine Pollution by Dumping of Wastes. In the Pacific region, the project is aligned with policies such as the Convention for the Protection of the Natural Resources and Environment of the South Pacific Region (Noumea Convention) and draft Community Environmental and Natural Resources Policy Framework, the Convention to Ban the importation into Forum Island Countries of Hazardous and Radioactive Wastes and to Control the Transboundary Movement of Hazardous wastes within the South Pacific Region (Waigani Convention) and the Convention on Conservation of Nature in the South Pacific (Apia Convention). In the Caribbean, this alignment is found in the Cartagena Convention for the Protection and Development of the Marine Environment in the Wider Caribbean Region (WCR), the St. George's Declaration of Principles for Environmental Sustainability in the OECS (SGD) and the Eastern Caribbean Regional Oceans Policy (ECROP).

⁶ Australia, New Zealand, Pacific Plastic Pact - A collaborative solution that brings together key players including industry together to further a circular economy for plastic and procuring to implement solutions tailored to the Oceania region to which Vanuatu is member.

partnerships did not reach full maturity and going forward implementing the Closing the Plastic Tap Program there is room for enhancing this cooperation based on mutual efforts in working towards common goals.

The project attempted to engage regional organizations such as the Organization for Economic Co-operation and Development (OECS) and the Caribbean Tourism Organization (CTO) in the Caribbean.⁷ OECS became the main regional interlocutor with the signing of an MoU with IUCN for facilitating data sharing and integration of projects. However, and despite several meetings held with the OECS focal point throughout project implementation and the recent regional workshop held in collaboration with OECS, the evaluation team found that the OECS Commission was not very familiar with the project and was engaged in preparing regionally relevant initiatives that could benefit from the Blueprint and from articulation with Phase 2 of PWFI. This may be related to the fact that OECS' focal point was changed during project implementation and to difficulties in internal communication.

In 2020 IUCN formalized an agreement with the GEF Islands Program⁸, which aims at preventing build-up of harmful materials and chemicals through establishment of effective circular and life-cycle management systems in partnership with the private sector. IUCN also engaged with the GEF Pacific component, but in that case, it was more coordination and information sharing, managed by HQ and then the ORO office. Later, the project has also agreed to input data and information into other relevant systems, such as the Green Hub, which serves as a mechanism for collating learning from the GEF Islands project and the PREVENT Waste Alliance, managed by GIZ, to ensure material is disseminated through multiple channels and has maximum reach. More recently, IUCN has been in discussions with Common Seas, Pew Trusts and the Ellen MacArthur Foundation about future strategies in the framework of the continuation of PWFI in a Phase 2 in the Caribbean.

At the global level, and as mentioned under EQ 5 *Impact*, PWFI successfully provided support to the Alliance of Small Island States (AOSIS) in preparation for the Global Plastic Treaty negotiations. As AOSIS represents SIDS at the Intergovernmental Negotiating Committee (INC) of the Global Plastics Treaty, IUCN considered that it would be strategic to support them. In this context, a number of joint workshops were facilitated, including in the Caribbean and the Pacific regions.

At the national level, PWFI builds directly on national policy frameworks. Policy and legal assessments were carried out in all six countries and recommendations took the point of departure in relevant policy areas such as furthering container deposit legislation (CDL) for collecting PET bottles.

IUCN's PWFI did to some extent build on and add value to previous and existing projects and initiatives, especially regarding the development of a methodology for auditing plastic waste and leakage.

Neither the project document nor the inception report has an analysis of the context of the six target countries regarding previous and ongoing projects and government policies relevant to PWFI. Norad assesses projects according to standard criteria where context analysis is included, but according to Norad the context analysis would be part of the project implementation, including, for example, initial policy assessments. For several reasons detailed in section 3.3, the policy assessments were not carried out in the beginning of implementation as planned, and in the Pacific only one of three full policy assessments were finalized by the end of project. The project team was therefore not supported by a fuller initial context analysis and the identification of relevant initiatives occurred gradually and after project inception.

⁷ The CTO underwent a period of organizational restructuring during the project implementation, which prevented effective cooperation with PWFI.

⁸ Which is a GEF Caribbean child project.

As mentioned in the section on relevance, the countries in the Pacific have quite advanced policies and objectives for reducing plastic waste. The countries selected also benefit from support from several donors for implementing waste management projects and programs. Currently, Fiji, Samoa, and Vanuatu are implementing waste management projects which support from mainly Japan, France, the UK, the EU, UNEP, the WB, New Zealand, and Australia. At the time of implementation of PWFI, there were about six projects being implemented in Vanuatu and stakeholders mentioned that support to waste management was in fashion. The project did identify the Environmental Investigation Agency (EIA) report *Plastic Pollution Prevention in Pacific Island Countries: Gap analysis of current legislation, policies and plans* from August 2020, which analyzed the policy situation and gave recommendations to 10 SIDS in the Pacific including Fiji, Samoa, and Vanuatu. IUCN decided to build on this report and therefore adapted the ToR for the policy assessment in the Pacific (See Output 2.2 in EQ3 *effectiveness*).

In other cases, the opportunity for building on existing and previous projects was not identified. As a case in point, Table 2 lists four projects including PWFI which focused on data collection on waste including plastic waste in Vanuatu. These projects were implemented in the same period as PWFI and three of them, including PWFI, contracted APWC to collect and analyze data. The evaluation team finds that the PWFI could have explored with APWC and the organizations responsible for the other projects how the data collection could be made more complementary and turned into an efficient opportunity to pool funds to have a bigger data set. Although it is recognized that such coordination can be cumbersome, the evaluation team finds that it could have been worthwhile to have invested more effort therein. Stakeholders interviewed on this topic have also expressed the opinion that there were possibilities for more efficiency.

The UK Department for International Development (Dfid)-supported projects (see Table 2) led to the elaboration of a draft National Plastic Strategy in Vanuatu. The strategy was about to be launched in March 2020, but COVID-19 pandemic began, and there was a change in government and so it never got officially launched. The evaluation team does not find evidence that PWFI sought to support the approval of this strategy or adapt the policy and legal assessment to what had already been done through these Dfid supported projects.

There were more projects on waste management going on in the Pacific than in the Caribbean so the need for systematic identification of such projects and coordination was higher in this region. In Samoa there are also a high number of projects e.g., the SPREP implemented PacWastePlus that also did a waste audit on Samoa, JICA supported J-prism that is promoting reuse of bottles and includes support from the International Finance Cooperation (IFC) and the Asian Development Bank. The PWFI added value and was appreciated by the government of Samoa which informed that it coordinated and secured complementarity. In Fiji, it was easier to do the coordination, because IUCN ORO is located there, and the project team did coordinate with the World Bank, UNDP, UNEP and others. In the Caribbean, partnerships with the OECS ReMLit project could have been more effectively explored and, in Saint Lucia, there could have been an opportunity to work more closely with the RePLAST-OECS project if both initiatives had engaged each other earlier in implementation and if Unite Caribbean had had more internal capacity at the time for engaging with external partners.

Project title	Waste Audit Report Vanuatu, Oct 2020	Plastic Waste National Level Quantification and Sectoral Material Flow Analysis in Vanuatu, July 2021	Plastic usage in Vanuatu – current situation, viable alternatives and pilot approaches, Nov 2019	Vanuatu – Waste Data report Analysis of waste generation and disposal data, April 2019
Project	PacWastePlus / Pacific Ocean Litter Project	PWFI	EACDS Lot B service 'Strengthening	Clip

 Table 4: Waste management projects including data collection in Vanuatu in period 2018 - 2020

			resilience and response to crises'	
Implementing agency	SPREP	IUCN ORO	DAI	CEFAS (Centre for Environment, Fisheries and Aquaculture Science)
Consultant	APWC / Tonkin & Taylor	APWC	Stewart Williams and Amber Carvan, DAI	APWC
Funding	EU / Australian Aid	NORAD	Dfid (now FCDO)	Dfid
Data collection period	9 - 30 Oct 2020	Sept and Oct 2020	Aug - Oct 2019	3 weeks in Nov 2018

With regards to the data collection, there was good complementarity in the approach for quantifying plastic waste and leakage. The link between polymer-based quantification and plastic flows creates new knowledge that is in demand by various international organizations and is considered relevant for creating an economic case for strategies and interventions focused on plastics. As a global sphere of environmental policy, plastics is a recent area, in which more consolidated and more effective efforts for coordination are currently entering a phase of more productive momentum, especially in face of the ambitious goal to reach a global plastics treaty over the upcoming two years. Through the Global Program of Action on the Protection of the Marine Environment from Land-based Activities (GPA) and the Global Partnership on Marine Litter (GPML), IUCN is playing a leading role in the preparations of SIDS for the negotiations of the plastics treaty. The contributions of PWFI in terms of knowledge and the Blueprint approach are a coherent contribution that IUCN can bring into those processes.

The evaluation team would like to note that regions where SIDS are abundant are particularly challenging for achieving effective integration at programmatic and project level. National level staff are overwhelmed and often have the responsibility of delivering the government's entire environmental agenda, operational and strategic priorities as well as engaging with donors. This is compounded by the fact that plastics are a fairly recent area of global environmental policy, in which more consolidated and more effective efforts for coordination are needed.

In view of the above, the overall project's coherence was rated as Moderately Satisfactory.

3.3 Effectiveness

Summa	Summary of findings for effectiveness			
Output	Findings			
1.1	• The selection of the six target countries was fully completed and formalized but the selection process could have been clearer.			
1.2	• The plastic waste and leakage quantification assessments generated new and valuable knowledge but their late finalization delayed other PWFI outputs.			
	• More complete methodological descriptions would be useful to help with the analysis of the results and for comparing them with other waste audits carried out or to be carried out in the future.			
	• The 'quantification reports' are highly appreciated by stakeholders and the data has already been used in different contexts. IUCN has also concrete plans to use them for preparation of negotiations on the global plastic treaty.			
	• SIDS would need external resources to carry out regular waste audits and monitor the development in plastic waste and leakage.			
2.1	• The policy assessments which were finalized early in the implementation were useful for furthering uptake of policies on plastic waste. Those finalized later are only likely to be useful if they are further promoted in the context of an extension or are picked up by the government or another organization.			
	• The economic assessment reports were well received in the Caribbean and while the economic assessments for the countries in the Pacific were not disseminated. These assessments will be useful for IUCN's support to the Plastics Treaty and for the ongoing generation of knowledge in the plastic waste area.			
2.2	• The early finalization of the policy assessments in the Caribbean allowed for sharing policy recommendations in a timely and effective manner while the absence of final assessments in the Pacific forced IUCN ORO to find alternative solutions which were only partly successful.			
	• PWFI contributed strongly to the Policy Paper on a contained deposit scheme which is likely to influence legislation. In the Caribbean, the more structured and adaptive approach proved more effective to engage governments and achieve results in all three countries.			
2.3	• PWFI contributed strongly to the Policy Paper on a contained deposit scheme which is likely to influence legislation. In the Caribbean, the more structured and adaptive approach proved more effective to engage governments and achieve results in all three countries			
3.1	• The stakeholder engagement effectively established a space for people and organizations to find common interest was productive to generate awareness and buy-in. The waste management and tourism sectors were very engaged while it was difficult to get the fishery sector included.			
	• PWFI achieved good results when including women and youth and IUCN enhanced its capacity to integrate gender in plastic waste projects.			
3.2	• The Marine Litter Management Action Plan and Saint Lucia National Waste Source Inventory was the only action plan elaborated but several tangible results for preparation of actions plans were created.			
3.3	• Small grants to the private sector can make a crucial difference for the capacity of a business to take off.			
3.4	• The Deplastify online tool was developed for assessing solutions for dealing with non-recyclable waste in SIDS. It will be useful for a variety of stakeholders including governments as it is context-specific and dynamic. Capacity building for potential users is needed.			
4.1	• PWFI has contributed as a convener and creator of spaces of engagement to a growing network at national and global level for advancing best practice activities to minimize plastic waste leakage.			
	• The Blueprint is a high-quality document that presents an integrated approach to addressing plastic waste and leakage problems for SIDS based on the lessons and results from PWFI. It can be used in a variety of situations at global, regional and national level.			
4.2	No finding			
4.3	• The Blueprint is a high-quality document that presents an integrated approach to addressing reduction of plastic waste and leakage for SIDS based on the lessons and results from PWFI. It can be used in a variety of situations at global, regional and national level.			

Output 1.1 Target islands selected according to criteria.

Indicator: Number of partnerships with SIDS established. **Final Target:** 6 partnerships established.

The selection of the six target countries was fully completed and formalized but the selection process could have been clearer.

The six small island development states (SIDS) were selected based on a ranking of 18 criteria which reduced to 11 along the selection process. There are no records of how the different countries scored according to the criteria. For the evaluation team it remains somewhat unclear what were the deciding factors to select the countries in the Pacific and the Caribbean, which all were relevant in different ways.

In the Pacific, Fiji, Samoa, and Vanuatu were selected from a short list which also included Kiribati, Palau, and the Republic of the Marshall Islands. In the Caribbean, Antigua and Barbuda, Grenada, and Saint Lucia were selected from a short list that also included Dominica. The cooperation with the countries was formalized through agreements and the governments assigned national focal points. In the Caribbean, the focal points were assigned after the initial meetings in August 2019 while the governments in the Pacific region countries assigned the national focal points at the end of 2019.

The MTR report pointed out that many projects on waste management including plastic had already been carried out or more were already planned to be carried out in Fiji, Vanuatu, and Samoa. Therefore, these countries are fairly well studied. The MTR team found that a more diverse geography, different plastic management experience and a spread in socioeconomic conditions would have added more value. The evaluation team can confirm that many projects are and have been carried out in these three countries. It is however speculative to assess if a different selection would have contributed to achieving better results. See EQ2 on coherence on the topic of coordination between projects.

This output was achieved in all six countries and is rated as **Satisfactory**.

Output 1.2 Methodology developed to calculate the leakage from different sources. Indicator: Number of Input-output flow assessed on SIDS.

Final Targets: 6 Methodology Reports Produced.

The plastic waste and leakage quantification assessments generated new and valuable knowledge, but their late finalization delayed other PWFI outputs.

To ensure a harmonized approach and deliverables across both regions, and also to concentrate the administrative processes, IUCN opted to procure consultants for the *Plastic Waste National Level Quantification and Sectoral Material Flow Analysis* hereinafter 'quantification report' at the global level. It was originally planned that each region should do their own procurement. APWC was awarded the contract based on their technical competencies and their presence and history of work in the Pacific Region. The contract was signed in January 2020 and work started in February 2020.

The reports were finalized in mid-2021 although drafts of the reports were available in the beginning of 2021. APWC also elaborated reports which take a regional perspective in terms of plastic waste generation, management and policies for the Pacific and the Caribbean. These were also finalized in June 2021. These outputs were originally planned to be delivered in the early stages of project implementation and not towards the end as happened. COVID-19 restrictions were the most important cause for the delay, but other reasons include the pre-Covid late start of the project and the procurement process at HQ, which implied adjustments to the budget allocated to HQ and the regional offices. The late delivery of this output

affected other outputs to a significant extent. An example is Output 3.3 on alternate value chains for which Searious Business (SB) only received the data needed quite late.

More complete methodological descriptions would be useful to help with the analysis of the results and for comparing them with other waste audits carried out or to be carried out in the future.

The collection of data on seven different plastic polymers as well as collection of data under COVID-19 restrictions required adaptation of the existing methodology. APWC had developed the first waste audit methodology for SIDS in 2020⁹. This methodology was developed in the framework of the Pacific Regional Infrastructure Facility's (PRIF) initiative¹⁰. The methodology applied by APWC in the six countries is adapted from this methodology focusing specifically on seven plastic polymers. Visual observation was frequently used as a method for quantification instead of weighing because many waste disposal sites on the island do not have electricity, electricity is unreliable and/ or they do not have weighbridges.

The methodology used by APWC to estimate the amount and composition of plastic waste leaked to the environment uses four different methods: i) waste sampling and manual sorting; ii) survey by questionnaire and documentary data; iii) visual inspection of waste arriving at landfills; iv) flow of materials based on product imports and exports. Each of these methods has its procedures, assumptions, conversion factors and respective sources of information, correction of contamination degree, calculation formulas and associated statistical parameters. Without detailed information on all these parameters, not only is it difficult to interpret the estimates that were made, but it is also impossible to establish a benchmark with other studies, as different methodologies and assumptions lead to different results. The evaluation team is aware that IUCN, under PWFI, has commissioned an assessment of data needs and a comparison on different methodologies, which will contribute to address this issue as part of the efforts of methodology harmonization coordinated by UNEP/UN Habitat.

Most standardized methodologies cannot guarantee the representativeness of all waste categories. To increase the accuracy of the results, either the number of samples is increased, which is often impractical given the time and costs involved, or the number of waste categories to be characterized is reduced, which, in turn, reduces information that may be important, for instance to evaluate recycling opportunities. Another factor that greatly interfered with the representativeness of the results was the context of the COVID-19 pandemic, which created different consumption and waste production patterns.

Also due to the COVID-19 pandemic, APWC only successfully completed all field data collection, as it was initially foreseen in the methodology for Antigua and Barbuda and for the waste management sector in Samoa and had to find an alternative methodology with new timelines and costs in response to the COVID-19 situation. Especially in the tourism and fisheries sectors, which were the most affected, much of the information that was expected to be collected in the field was desktop-based analysis. Because of this, APWC statisticians indicated that confidence intervals would be around 30% wider on leakage and around 50% wider on waste generation rates, with this desktop-only approach when compared with full field data¹¹. Also, for the waste management sector (household, commercial and landfill audits), APWC had to hire local

⁹ Waste Audit Methodology: A Common Approach - A step-by-step manual for conducting comprehensive country waste audits in SIDs, EU, SPREP, PacWastePlus, PRIF, 2020.

¹⁰ Based on waste audits commissioned by PRIF in Tuvalu and previous studies in the Pacific from 2017 - 2019 a Pacific wide auditing program which was funded by a range of agencies including the United Nations Environment Programme (UNEP) and the South Pacific Regional Environment Programme (SPREP) (through the EU-funded PacWaste Plus Programme), with support from the Australian-funded Pacific Ocean Litter Project and PRIF. The aim of the series of audits was to gather data that is robust, reliable, current, and comparable across the region. This program carried out waste audits in 16 Pacific Island states including Fiji, Samoa, and Vanuatu.

¹¹ APWC (n.d.). Post Covid methodology For Collection of quantitative data for the Plastic Waste Free Islands Project Target sectors: Waste management, Tourism and Fisheries.

consultants and volunteers and train them remotely to perform the waste audits, which does not guarantee the same specialization in the skills required for waste audits.

The ToR for the APWC assessments did not include a precise definition of the methodological components and parameters that would need to be reported.¹² The methodology planned and carried out for each country is described in the reports' annexes, and contains practically all the important information about the sampling aspects, the organization and training of the teams, the sorting catalog used and the procedures carried out for the collection and characterization of waste samples from the different sectors. However, there is also some relevant information that is omitted, for example, the amount (by weight) of waste sample collected, the definition of the indicators used and their calculation method, the type of statistical treatment applied to the data, the assumptions used, the values adopted from the literature and their sources, the conversion factors used (e.g. volume to weight), etc. Not including these elements makes it difficult to assess the credibility of the data collected and is not conducive for further development and refining of methodologies in this area. As such, their detailed description would be very useful to help with the analysis of the results and for comparing them with other waste audits carried out or to be carried out in the future.

The waste audits carried out in target countries by APWC correspond to the objectives proposed by the project, and gave rise to very useful datasets on each of the six SIDS. The work developed by APWS is noteworthy, as auditing waste constitutes a great challenge and requires much greater efforts in regions or countries that do not have a mature waste management system.

The final reports "Plastic Waste National Level Quantification and Sectoral Material Flow Analysis" and their respective summary versions are very well structured and represent a considerable contribution to the knowledge about plastic waste production and leakage, and which support decision-making related to environmental policy, management and investment.

The 'quantification reports' are highly appreciated by stakeholders and the data has already been used in different contexts. IUCN has also concrete plans to use them for preparation of negotiations on the Global Plastics Treaty.

In the Pacific, the stakeholders that provided comments were from the waste management sector or academia. One stakeholder found that "*The methodology for quantifying the plastic waste and leakage was solid and the collection of data even with Covid restrictions did not alter that there is a high level of accuracy in Fiji and that the quantification of the different polymers of plastic and their leakage has been very important information.*" Another stakeholder questioned the credible intervals and found them unreasonably high.¹³ Stakeholders have indicated that it would require a much bigger data set to be able to narrow the credible interval and have suggested there were resources for this. Many stakeholders did not have comments on these reports due to the technical nature of the analysis of plastic quantification and leakage or they had not heard about the reports. The evaluation team recognizes that there is a is a cost to improving credible interval and sampling and that a cost-efficient balance must be found within available resources, but that perhaps there is room for improvement in this regard (see section on recommendations).

Involved stakeholders in the quantification work in the Caribbean spoke highly of the level of quality and organization of the conducted training and activities. While one stakeholder in Saint Lucia believed that the limitations imposed by the restrictions on the number of samples that were examined could potentially impose greater influences on the reliability and validity of the results, those consultants that were directly involved in coordinating the local teams did not think that COVID-19 had had much impact on the quality

¹² Interviews with Amardeep Wander (APWC) on 23/02/23 and with David Rohindra on 26/02/23).

¹³ In Vanuatu APWC estimated that 58.8% of imported plastic is leaked or held in long-term reservoirs away from landfill (95% credible interval: 19%–82%) while in Fiji it is estimated that 24.7% (95% credible interval: 8.5%–40%). In Samoa it was estimated that 52.9% (95% credible interval: 22%–78%) of imported plastic was leaked or held in long-term reservoirs away from landfill in Samoa

of the results. One made a particularly interesting comment on this topic: "I would disagree with the assumption that the context of COVID-19 compromised the results. I think it actually denotes a very common situation that is part of our reality as a SIDS, in that, it was an external shock that disrupted the "normal" activities and devastated industries, especially tourism. Hurricanes and other natural and anthropogenic events have done the same. The results can be used in tandem with previous data, and with the expectation of future tracking, to help build a more realistic picture of how waste production and management change over time, thus actually helping to identify the most appropriate and effective interventions."

SB used the data to develop the nine business cases for the alternate value chains and for the Most Suitable Technology reports. If awarded the planned tender, they are also planning to use them in the Phase 2 of the project in the Caribbean and for developing the bottle deposit scheme in Fiji, for which they have been contracted by the Government of Fiji.

SB also produced 'qualification reports' which were finalized in June 2021. These are aimed at determining the plastic waste pathways and lifecycle of different types of plastic within the tourism, fisheries, and waste management sectors. So, they were complimentary to the quantification reports done by APWC.

IUCN plans to use these 'quantification reports' in relation to various global events and to inform the negotiations on the legally binding instrument for a global plastics treaty, the second meeting of which is in May 2023.¹⁴ While these plastic waste quantification estimates are the best so far, they present high degrees of uncertainty and should be considered with due reservations when used in political decision-making or investments in recycling projects.

SIDS would need external resources to carry out regular waste audits and monitor the development in plastic waste and leakage.

To prepare the data collection, different groups were trained in interviewing, weighing, sorting, and filling out forms. In total 55 nationals were trained in the six countries.

In Antigua and Barbuda, the APWC benefited from the assistance of volunteers mobilized by the environmental NGO Zero Waste Antigua and Barbuda and government staff also participated. In Saint Lucia and Grenada, APWC supervised the waste sampling and characterization remotely, executed by country local teams set up and coordinated by national consultants. Whereas in Antigua and Barbuda, the APWC team included and trained government staff for conducting some tasks, in the assessments conducted remotely the teams did not involve government staff to any significant extent and relied on externally sourced volunteers. In Vanuatu and Samoa APWC already had experienced staff on the ground.

Waste audits should be carried out by well-trained people who are used to conducting waste characterizations. As was the case with APWC in Antigua and Barbuda before the pandemic hit, firms who carry out these audits usually have their own staff specialized in waste characterization campaigns. The evaluation team understands that in the context of COVID-19 this was not possible, and that remote training of local volunteers was the best option, but face-to-face training is always more effective than remote training. As mentioned above, the training conducted was sufficiently effective to deliver adequate results but going forward in-person training remains a preferable option if sufficient funds are available.

It would have been more productive if the people who were trained and executed the waste auditing tasks on the ground were staff of the local waste management authorities, rather than students or other volunteers. This would have facilitated more focused capacity building in the national governments, where it is most likely to make a difference in reducing external dependency for this type of service.

¹⁴ Interview with Lynn Sorrentino on 13/01/23.

The governments of all six countries do not have human or financial resources to carry out similar audits and the training carried out in the framework of PWFI has only increased capacity marginally. Similar exercises would have to be funded from external sources although it is mandatory in Fiji's legislation to do waste audits every four years. Future waste audits would need external support. However, it should be noted that the Global Partnership on Plastic Pollution and Marine Litter (GPML)¹⁵ is planning to centralize all the collected data to be made accessible to SIDS, which is an important contribution for the development of their capacity.

Annex G includes detailed comments on the methodology applied in the quantification assessment and provides specific recommendations for future applications.

The output was achieved to the extent that APWC adapted their waste audit methodology, and the leakage was calculated. The data in the reports are assessed by several stakeholders to be very valuable and of high quality, even though some have questioned the credibility interval. However, the 'quantification' reports do not detail the methodology that was applied in each country as it was not required by the ToR. In terms of data the evaluation team finds that the work is Highly Satisfactory but in terms of analysis methodology the assessment is Unsatisfactory since both the Output 1.2 and the indicator clearly indicates the importance of the methodology being clearly described.

Outcome 1: Improved knowledge of plastic waste footprints among 6 target islands Indicator: Level of knowledge uptake among 6 target island governments Final Targets: High level of knowledge integration into decision making on plastic waste solutions.

Based on the assessment of the level and effectiveness of the delivery of the Outputs related to Outcome 1 and on the outcome indicator as set out in Results Framework, the evaluation team assesses this outcome as achieved and the rating as Satisfactory.

This outcome is measured by a <u>high level of knowledge integration into decision-making on solutions to</u> <u>manage plastic waste</u>. The 'quantification reports' have generated knowledge and have already been used in several different contexts both within and outside the project context. Data have been used for the policy papers of CDL in Fiji and Antigua and Barbuda, for the Saint Lucia National Waste Source Inventory and Marine Litter Management Action Plan and have been supplied to the World Bank as well as to budget planning in Fiji.

The evaluation team finds that it is evident that there is an improved knowledge level and that the data have improved the overall knowledge globally on plastic waste quantification and leakage especially regarding SIDS. There is good basis for expecting that the data and knowledge will be used in many other contexts in the coming years both at the national level and global level and for academic and policy purposes.

Output 2.1 Current waste management policies and practices assessed on target SIDS to generate a baseline understanding on content, financing and implementation of policies related to project outcome.

Indicators: Number of national policy assessments to assess current gaps in the waste management policies and practices / Number of economic analysis reports on the value of plastics reduction (one per region). **Final Targets:** 6 policy assessments completed (1 per country) / 2 final economic assessment reports.

¹⁵ The GPML is a multi-stakeholder partnership that brings together all actors working to prevent marine litter and plastic pollution. It is led by a Steering Committee and UNEP provides secretariat services.

The policy assessments which were finalized early in the implementation were useful for furthering uptake of policies on plastic waste. Those finalized later are only likely to be useful if they are further promoted in the context of an extension or are picked up by the government or another organization.

To produce a more in-depth and validated policy analysis, ToR for policy assessments was developed and an open request for proposals was called for in the Caribbean and Pacific. In the Caribbean, all three reports were developed by three different consultancies and submitted by the end of April 2021. The draft final policy reports were presented to stakeholders and the analysis and recommendations were validated through validation workshops and remote meetings. While the consultant in Antigua and Barbuda was able to build on the APWC report as planned, this was not the case in Grenada, where the APWC findings came out too late to inform the bulk of the policy assessment from the outset, but which nevertheless were integrated during its finalization, In the case of the Caribbean, the consultations for the policy assessment were guided by a specific Stakeholder Engagement Plans that had been commissioned by ORMACC. In the Pacific, a similar engagement plan was not developed.

During project implementation, policy analysis was also done by other consultants to serve various purposes. APWC included a chapter on policy analysis and sections on gaps and recommendations under each sector chapter in the 'Quantification Reports' and SB also included a chapter on policy recommendations. Furthermore, in 2021, IUCN HQ elaborated the Syntheses of Plastic Pollution Policies for all six countries.

In August 2020 the Environment Investigation Agency (EIA)¹⁶ published the report *Plastic Pollution Prevention in Pacific Island Countries: Gap analysis of current legislation, policies and plans.* Covering 10 Pacific Island countries including Fiji, Samoa, and Vanuatu, the study aimed to identify the current limitations in national plastic pollution policy for preventing plastic pollution. It also explores the potential to implement best practice for the reduction of plastic pollution and the promotion of a safe circular plastics economy. As the study was comprehensive and the aim was very similar to the PWFI project, IUCN decided not to do an overall study on policy recommendations but build on this report from EIA and do complementary studies of policy and legal aspects.

For Fiji a national consultant elaborated the assessment of policy and legal instruments relevant to plastic waste management and plastic pollution prevention¹⁷ which does exist in a final draft which was shared in February 2023 with the evaluation team.¹⁸ The consultant did a separate report with recommendations for all three sectors. The reports for Samoa and Vanuatu have not been finalized yet. The merit of having the policy and legal assessment was to have one singular document per country where the EIA report presents a comparative analysis of the situation in 10 Pacific countries, but now the PWFI has ended and none of the reports have been used as planned. However, and as it is noted under EQ6 *sustainability*, such reports will be used by IUCN to further their work and remain a useful resource to be used by the national stakeholders.

Along the way, IUCN HQ produced the *Synthesis of Plastic Pollution Policies* brochures which included policy recommendations that were partly based on the EIA report and SB also included a set of recommendations in the qualification reports. These policy recommendations and the recommendations in the EIA report

¹⁶ This study was produced with support from the Center for International Environmental Law (CIEL) and World Wildlife Fund – Pacific.

¹⁷ International, Regional and National Policy and Legal Instruments relevant to Plastic Waste Management and Plastic Pollution Prevention in Fiji -Review and analysis to inform policy recommendations for plastic waste leakage reduction measures for the waste management, tourism and fisheries sectors in Fiji, Final draft Patricia Parkinson, ELO Consultants, 2022

¹⁸ National Policy and Legal Instruments relevant to Plastic Waste Management and Plastic Pollution Prevention in Fiji - Review and analysis to inform policy recommendations for plastic waste leakage reduction measures for the waste management, tourism and fisheries sectors in Fiji, Patricia Parkinson, Environmental Law Oceania Consultancy (undated).

were the basis of the discussion and validation which took place in April and June 2022 in Fiji and September and October 2022 in Samoa and Vanuatu.

The possible no-cost extension in the first half of 2023 will give the opportunity to disseminate these important documents.

The economic assessment reports were well received in the Caribbean while the economic assessments for the countries in the Pacific were not disseminated. These assessments will be useful for IUCN's support to the Plastics Treaty and for the ongoing generation of knowledge in the plastic waste area.

Building on the findings of the 'quantification reports' and the 'business plans' (see Output 3.3), IUCN's Economic Knowledge Unit based in Washington DC produced economic assessments for each of the six countries. The results framework foresaw only two regional-level reports, but this was revised to country-specific assessments that were more relevant and more effective for engaging with the different countries. The first stakeholder presentations took place in June 2021 in the Caribbean, followed by an update presented in July 2021. The presentations and, in particular, the estimates related to the impact of marine plastic on economic sectors, were well received by stakeholders who generally considered them useful to guide future action. The final reports were finalized for dissemination in January 2023. The Economic Knowledge Unit reports having a better overview of the Caribbean, where it was able to engage more directly and strongly and get sufficient data from the government. The reasons stated for better communication were the proximity to the Caribbean and being in the same time zone. The presence of the NPAs on the ground was also a decisive factor for overcoming data collection challenges. This was particularly relevant for Grenada, where the NPA was instrumental for helping mobilize different entities whose collaboration was needed for sharing requested data remotely.

The economic assessment reports for the three countries in the Pacific were completed near the end of the project and, as such, have not been shared and discussed with stakeholders. The reports from Fiji and Samoa were only available for the evaluation team on 25 January 2023 in versions for internal use only. The report for Vanuatu has not been finalized yet. IUCN has had discussions with the World Bank on how these reports could be used to support their ongoing work in the region once finalized. A World Bank consultant team has already used the methodology used in the economic assessment (shared through the Caribbean reports) to undertake economic assessments for the World Bank project on economic impacts of plastic pollution on three blue economy sectors in the region. This project is using both the IUCN quantification results and the economic modelling methodology.

The Economic Knowledge Unit is satisfied with the results of the economic assessments as new knowledge has been generated on the costing of a recycling system, the generation of estimates, and how they can be communicated. There has been a lot of focus on creating recycling hubs in the regions to create economies of scale, but the analysis showed that there is only potential economic viability for such a hub in the Caribbean¹⁹. In the Pacific, distances are too long i.e., between Fiji and Brisbane in Australia. The knowledge generated through the economic assessments will be used by IUCN in the upcoming negotiations on the global plastics treaty.

The output was fully achieved for the countries in the Caribbean as both policy and legal assessment and the economic assessment were timely finalized and disseminated. On that basis, the evaluation team assesses the achievement as Satisfactory for the Caribbean. Although all reports are in the process of finalization, in the Pacific none of them were ready before the project implementation period ended and have therefore not been disseminated. The evaluation team

¹⁹ OECS plans to commission a feasibility study on the feasibility of a regional recycling hub in the Caribbean (Interview with the OECS Commission, 31/01/23).

assesses this as only Moderately Unsatisfactory for the Pacific on the account that the COVID-19 restrictions made communication more difficult.

Output 2.2 Policy recommendations delivered to governmental bodies on policy, legislation and regulation for plastic waste leakage minimisation.

Indicators: Policy recommendations shared with National Institutions / Number of meetings to support/advice to SIDS. **Final Targets:** Recommendations delivered / 12 (2 per country).

The early finalization of the policy assessments in the Caribbean allowed for sharing policy recommendations in a timely and effective manner while the absence of final assessments in the Pacific forced IUCN ORO to find alternative solutions which were only partly successful.

In the Pacific, in the absence of finalized policy assessments, IUCN ORO extracted a list of recommendations from the EIA report as well as those developed within the quantification and sectoral material flow analysis reports which were submitted in 2021 to the government focal points in Samoa, Vanuatu, and Fiji requesting feedback. Furthermore, two consultation meetings were held for each country in the Pacific on the revision of existing policies and discussions on recommendations to fill in gaps identified as well as to strengthen policy and legislative environment around plastic waste management. The first in Fiji in April and June were face to face while the ones in Samoa and Vanuatu held in September and October 2022 were online.

In terms of specific recommendations virtually all interviewees in Fiji agreed with the need for a container deposit scheme which as recommendation is worded *Implement container deposit legislation (CDL) or an extended producer levy system to capture other recyclable material.* This recommendation seems likely to be implemented in the coming years in Fiji as there is a new government from December 2022 that is ambitious in environment and climate change. As an indication of the receptivity that this recommendation has received, the Department of Environment informed the evaluation team that funds had been set aside in the State Budget and SB confirmed that they had won the tender to elaborate the proposal for the CDL.

Most stakeholders even from Fiji that had attended the meetings in person did not know that the project had ended, and they expected to receive information about the final documents. The Fiji Department of Environment had the expectation of a formal hand over of the final products of the PWFI. Therefore, even though the output and the indicator target have been met more could have been done if time and resources had allowed for a handover to the relevant government institutions. The perception of the stakeholders suggests that the meetings held were insufficient to communicate the results of the outputs under Outcome 2 and stimulate the development of plastic management policies. Even with the 12-month no-cost extension, outputs were finalized too late in the Pacific to be able to consolidate the work carried out. The evaluation team recognizes that policy uptake through projects with this kind of timeframe is a difficult challenge, and that legislative processes may tend to be slow and likely to extend beyond the life of the projects that prompted them, not getting formally enacted/adopted within the project implementation period. Even in the Caribbean where some outputs were finalized earlier such as the policy assessment reports, one member of the project team reflects: "Perhaps we did not have sufficient time for the implementation aspect in particularly as it refers to policy and legislation, because that takes a little bit more time. Of course, and in the particular context of our islands as well, it tends to take more time than the usual product implementation stage, if you begin like with three years, and we did not actually have that because first we needed to do the assessments."

The policy recommendations were delivered to the government of Antigua and Barbuda, Saint Lucia, and Grenada. The workshops and validation process were led by the consultants who produced the reports. In the case of Saint Lucia, the consultants hosted a virtual consultation workshop for the presentation of the draft report but a second workshop to validate the final version was not carried through as there was severe stakeholder fatigue, which was caused by an increase of virtual engagements to cope with the first stages of

the COVID-19 pandemic. As a more effective strategy, the respective validation took place through direct engagement with high priority stakeholders. In the case of Grenada, although contemplated on the consultancy's stakeholder engagement plan, due to challenges regarding the availability of the Environment Division, it was not possible to convene workshops. The consultant had to reach out to stakeholders to consult and validate the report through one-on-one engagements and questionnaires. The governments selected one of the recommendations to be pursued with the project's assistance (see Output 2.3). Since the policy assessments were finalized in April 2021, it was possible to align the Synthesis report produced by IUCN with these policy assessments by the national consultants.

IUCN ORO managed to find a workable solution in a situation where the policy assessments were not ready. This produced a concrete and positive result in Fiji. As the dissemination was online in Vanuatu and Samoa the conditions were challenging. If time had allowed, ORO could possibly have used the same approach as ORMACC to present the recommendations on one-to-one meetings as in Grenada. In the Caribbean, there was time and conditions for a more linear process as the assessments were ready already in the beginning of 2021. This made the basis for ORMACC being more effective. This allowed time for uptake by national governments within the project timeframe, and to which this evaluation needs to pay particular attention when looking at effectiveness.

Based on the above, the evaluation team assesses that this output was achieved in the Caribbean and partly achieved in the Pacific. The rating is therefore Moderately Satisfactory.

Output 2.3 Strategy to support recommendation uptake implemented. Indicators: Number of Country Specific Strategies developed.

Final Target: 6 strategy reports developed.

PWFI contributed strongly to the Policy Paper on a contained deposit scheme which is likely to influence legislation. In the Caribbean, the more structured and adaptive approach proved more effective to engage governments and achieve results in all three countries.

This output is reported as *Progress with delays* in the annual report of 2021.²⁰ The evaluation team has not found any evidence of specific strategy reports outlining the strategy for supporting the recommendation in each country. Instead of overall strategies, the focus was on furthering the uptake of selected policy recommendations.

Through discussions with the PWFI team, the Caribbean governments selected one of the recommendations to be pursued with the project's assistance. Encouraged by the experience with the development of the policy paper in Fiji (see below), the Government of Antigua and Barbuda selected the development of container deposit legislation (CDL). This policy recommendation was coherent with the Bottle-to-Bottle (B2B) solution that the country had selected to be developed through Output 3.2. The development of the policy paper was able to make use of the lessons learned from the pilot initiative implemented during the previous year and currently being continued by the government. In the same way as in Fiji, SB formed a working group that also included stakeholders that had participated in the pilot project. Therefore, instead of being engaged in a merely theoretical exercise, the discussions were able to build on the practical experience of the pilot. For example, the pilot had clearly demonstrated that there would be public buy-in if the deposit value was sufficiently attractive and allowed to produce more accurate estimates of collection, processing and exporting costs in the specific national context. The convergence of the policy recommendation with the project pilot thus contributed both in terms of effectiveness and efficiency. In Antigua and Barbuda PWFI also provided support for several awareness raising initiatives and education campaigns on its single use plastic ban.

²⁰ The evaluation team has not had access to the AR 2022.

Box 1: Difficulties in the development of the bottle recycling scheme in Antigua and Barbuda

The were some contentious issues discussed in the working group session concerning:

- The value of the deposit,
- Its relationship to the environmental levy, whether it should replace it or co-exist, and what this would mean for the playing field of importers and national manufacturers/bottlers,
- Whether the private sector or the State should take the role of Management Authority,

• Whether unblown PET pre-forms should be covered or not by the deposit scheme,

Rather than a new piece of legislation, the government officials within the working group decided to introduce the CDL as an amendment to the Environmental Levy Act.

Various stakeholders reported that there were disagreements in the group of stakeholders on these topics which were linked to political economy issues, and which might influence the final version of the proposed legislation. Some stakeholders tried to lobby for their interests with the Government after the policy brief was concluded. The ET finds that there is a risk that the scheme may be watered down to a point where it falls short of enabling the expected change, which may require for adjustments to the amendment being prepared.

In Saint Lucia, the policy recommendation selected by the government to be pursued with the project's assistance was "to increase public awareness, engagement, and education on plastic leakage". PWFI supported various activities including beach clean ups, Public Service Announcements (PSAs), school activities, exhibitions, brochures and posters. Some stakeholders felt that the selection of this policy recommendation was certainly relevant but may have also constituted an easy way out and a missed chance of benefiting from more substantial or technical contributions through the project. One example of a perhaps more productive alternative would be the development of a CDL draft that since 2009 had been systematically blocked by conflicts of interest.²¹ Another is the finalization of the 11-year-old draft of the marine pollution act which the Saint Lucia Air and Sea Ports Authority is trying to get enacted, and which would strengthen the framework for managing ship-generated waste. Despite the Minister's expression of support for this bill, the Air and Sea Ports Authority does not have the financial or human resources to invest in its finalization, which includes some redrafting and stakeholder consultations.

In Grenada, the government also selected the recommendation to be pursued with the project's assistance "to increase public awareness, engagement, and education on plastic leakage", with the specificity of being focused on improving the implementation of the Non-Biodegradable Waste Control Act. PWFI supported training on the Act which sought to address the aspect of gaps in technical knowledge. The training was well prepared with pre-training assessment and a post-training questionnaire, development and delivery of in-person training modules and a training manual. The number of participants in the training (20, excluding the trainer and the IUCN team) was considered disappointingly low by the responsible consultant,²² but participants were mostly representatives from customs, NGOs, trade, private sector, and government. Based on the post-training assessment, the consultant responsible considered the training successful in addressing the identified knowledge gaps. The evaluation team should also note that the relatively low participants of the course was also compensated by the fact that the produced training materials, including the workshop recordings and a training booklet, will remain a valuable resource both as reference material for the participants and also to replicate the training with other stakeholders who did not attend the workshop. PWFI also supported similar initiatives in Antigua and Barbuda.

In relation to the Pacific, the PWFI coordinator²³ confirms that progress was slow on the policy front and much of that work took place in the last year of the project. In 2021, Fiji banned the use of polystyrene. Data collected from the 'quantification reports' were supplied to the government for elaboration of the

²¹ Although the Saint Lucia Government was not interested in the particular recommendation of CDL throughout PWFI implementation, it requested support from ICUN in February 2023 for adopting CDL. ORMACC expects to provide this support during Phase 2 of the project in line with Saint Lucia's Marine Litter Management Action Plan.

²² Interview with Simon Penney on 16/02/23.

²³ Email from Janaka da Silva, 8/02/23.

legislation. The project supported the elaboration of a policy paper to set up a deposit refund scheme (DRS) for beverage containers in Fiji (see Box 2). There is already such a scheme in place, but it only covers certain PET bottles, it does not have national coverage or is backed up by legislation. The topic was discussed in the B2B WG set up by SB where about 15 stakeholder organizations participated. The policy paper is based on the proposal for legislation which was done in 2011 but which was withdrawn before it was approved. Project findings have also been utilized by the Fiji government through the Fiji Department of Environment requesting data for budgetary planning for the new financial year that began in August of 2021.

Box 2: Fiji container deposit scheme

In 2011 a full package for legislation on a container deposit scheme was elaborated and presented to the Parliament for approval. For reasons unknown to key stakeholders interviewed the proposal was withdrawn. Since then, many organizations including the private sector has been pushing for getting the container deposit scheme in place. A deposit scheme will facilitate the recycling of PET bottles and other plastic waste. Presently, a private incentive put in place by Coca Cola and FijiWaterFijiwater is in place where 5 Fiji cents equivalent to 2 eurocents is paid per bottle. A company called Mission Pacific manages this arrangement but there are only three places on the main island Viti Levu where bottles can be handed in. This seriously limit the full recycling of the bottles. Coca Cola introduced clear bottles for the drink "Sprite" in order for easy recycling. Previously it was colored green and had to be isolated from the clear bottles.

According to legislation bottle manufacturers must secure 85% recycling in the first year of operation increasing to 95% in the third year. According to stakeholders this is highly unrealistic with the present inadequate infrastructure but might explain why FijiWaterFijiwater claims to recycle close to 100% while other stakeholders in the waste management sector assess the recycling rate to be about 20%.

In 2021 PWFI supported the elaboration of a policy paper to further the uptake of recommendations on the proposed Deposit Refund Scheme for Beverage Containers. It was developed through a *solutions development working group sub-committee* and was presented to the Fiji government on the 16th of September. The policy paper suggests recommendations on how to set up a deposit refund scheme (DRS) for beverage containers for Fiji, based on the already existing 2011 draft legislation from Fiji's Department of Environment. (AR 2021). As mentioned in text under

In Vanuatu, as mentioned the recommendations were presented in September and October 2022 online and the government that was in place at that time was not progressive on environment issues. In Samoa the recommendations were presented in the same period and also online. The Department of Environment in Samoa informed that a policy paper²⁴ was elaborated which was in line with the government strategy in circular economy.

One of the indicators set out in the Results Framework for Output 2.3 is "6 strategy reports developed". These have not been produced. The evaluation team recognizes the progress that was achieved on promoting the uptake of the policy recommendations. The evaluation team thinks that it would have been preferable for the project management to take a step back and assess the viability of developing strategy documents in the last year of the project implementation and to revise the workplan for 2022.

Based on the above, the evaluation team assesses this output as partly achieved for the Caribbean and the Pacific. The rating is Moderately Satisfactory.

Outcome 2: Increased policy effectiveness in reducing plastic waste generation Indicators: Number of policies on plastic waste use and disposal influenced using project results. Final Target: 6 (1 per island).

Based on the assessment of the level and effectiveness of the delivery of the Outputs related to Outcome 2 and on the outcome indicator as set out in Results Framework, the evaluation team assesses this outcome as partly achieved and the rating as Moderately Satisfactory.

²⁴ The tracking tools for Samoa and the annual reports do not mention work on policy paper.

This outcome is measured by the <u>number of policies on plastic waste use and disposal influenced using project results</u>. The end target is six policies on plastic waste use and disposal influenced using project results. Based on the analysis of the achievement of the outputs, there are three cases where PWFI has influenced the policy level. Both in Fiji, Samoa and Antigua and Barbuda PWFI contributed to the elaboration of policy papers to support the drafting of legislation on contained deposit schemes. The Marine Litter Management Action Plan was approved by the Government of Saint Lucia. This initiative was supported by UNEP with integrated data from the 'quantification report'. As mentioned under the analysis of the outputs, the policy assessments were very delayed in the Pacific which together with COVID-19 restrictions has influenced the work at policy level. At the same, influencing policies takes time and requires a detailed understanding of the political and economic context. Therefore, the target for this outcome is ambitious.

Output 3.1 Key stakeholders (public and private, as well as the informal waste sector) in each target sector are identified and engaged in enhanced plastic waste management measures.

Indicator: Number of stakeholder maps per SIDS. Final Target: 6 (1 per country).

The stakeholder engagement effectively established a space for people and organizations to find common interest was productive to generate awareness and buy-in. The waste management and tourism sectors were very engaged while it was difficult to get the fishery sector included.

Stakeholder mapping was completed early in the implementation and stakeholder consultations took place throughout the process at many different levels and across outcomes. The identification of key stakeholders in the Pacific was comprehensive with a high number of stakeholders identified in each country i.e., 28 organizations and institutions comprising government, private sector in tourism fisheries and waste management, academia and CSO in Samoa, 65 in Fiji, and 37 in Vanuatu. In the Caribbean, there were 46 in Antigua and Barbuda, 38 in Saint Lucia, and 44 in Grenada were identified. In the Caribbean the stakeholder identification and engagement were guided by the developed stakeholder engagement plans for each SIDS.

A majority of the stakeholders interviewed in the Pacific region find that PWFI added value because it was participatory and inclusive, joining many relevant stakeholders and listening to and integrating different viewpoints. The project was important in reinforcing awareness and generating knowledge about an area that is relatively new. The project succeeded in establishing a space for people to find common interest.

Most stakeholders both in the Caribbean and the Pacific agreed that the project was successful in bringing visibility to the seriousness and scale of the plastics crisis. This can be attributable to the successful communication of the findings from Outcome 1 to the government agencies and other stakeholders. However, the quantification reports took a long time to produce, and the project would have been more effective in promoting them and in familiarizing stakeholders with them if they had been ready and available earlier.

Stakeholder participation was generally high and managed to create buy-in, which nevertheless only began making its way to the highest levels of decision-making towards the end of the implementation period. An exception to this was Antigua and Barbuda, whose Minister of Environment demonstrated a significant amount of high-level support to PWFI early on.

Engagement with stakeholders had different patterns in the Caribbean and in the Pacific. In the Caribbean, although there were moments during project implementation in which the project tried to maintain a broad base of engagement, there was a narrowing down of engagement after the 'quantification reports' had been

finalized. The project shifted to engaging mostly those stakeholders that were directly relevant to policy work under Output 2.3 and the implementation of the selected value chain solutions, especially those with an actual or potential relationship either to the AVC business cases or to the policy work under Output 2.3. This meant that some actors like the Fisheries and the National Solid Waste Management (SWMA) authorities in the Caribbean were less involved. Several stakeholders commented that these institutions should have been more involved throughout project implementation and recommend the relevance of building a stronger partnership with the SWMA during Phase 2.

In the Pacific, the stakeholder engagement followed more or less the same pattern but was strongly affected by two factors. Firstly, once the COVID-19 restrictions began, all communication happened online. In this phase of more than two years, there were online meetings with the different working groups (WG) on developing the alternate value chains and the business cases. Communication had to be sent out and could not be disseminated and discussed face-to-face, which tended to reduce engagement, understanding, and buy-in. This was apparent through the stakeholders' vague recollection of what had happened. Secondly, the possibilities for engagement were severely reduced in Samoa and Vanuatu as there was no direct presence from the PWFI during those years. When restrictions were fully lifted, the project was drawing to its end. There was a regional event in December 2022 in which stakeholders from the three countries participated.²⁵ This pattern in engagement is clearly reflected in the fact that some stakeholders participated before the pandemic and some only after the pandemic. Similar to the Caribbean, the stakeholders with the closest relation to PWFI were those from the private sector involved in developing business cases.

A stakeholder in Samoa also found that his institution had supplied data for the PWFI and expressed the wish to be informed and included more closely throughout projects in general. Some stakeholders in the Caribbean mentioned that they felt rushed by the project over the last year of the project implementation and one project focal point noted that there was some stakeholder fatigue after having engaged with so many project consultants throughout implementation. The evaluation team interprets this perception of "rush" by the national stakeholders as a natural effect of the project team putting in substantial effort to compensate for the mentioned delays in implementation and achieving as much as possible during the last project year. This, together with the stakeholder fatigue, is also a consequence of both the pandemic restrictions and the particular context of SIDS, in which understaffing is rather typical and a reduced number of stakeholders tends to wear multiple hats. The reduced availability of stakeholders represented constituted a significant challenge for scheduling and organizing events.

In all the countries it was much easier to engage stakeholders from the waste management and tourism sectors than from the fisheries sector although there are variations between the countries. Despite repeated attempts, the evaluation team did not meet any stakeholders from the fisheries sector in the Pacific and only one in the Caribbean. IUCN ORO confirmed that "*The fisheries sector has been challenging, The Forum Fisheries Agency has not been responsive and data not readily available with the fisheries departments. In Fiji the data was not released when requested. Therefore, there are no sectoral overall action plans for that sector".* In Grenada, the project focal point explained COVID had a particularly brutal impact on the capacity to engage fisheries and fishermen were under too much economical strain to be receptive to any activities other than tending to alternative sources of revenue to compensate for the disruption in their usual work. A key stakeholder suggested that targeting the fisheries sector would have required a carefully prepared strategy considering the specific conditions and challenges of this sector.

The tourism toolkits were generally well received in the target countries. According to the AR 2021, the toolkits were also requested by several countries across the globe. According to the project team, these kits are also posted on the UN World Tourism toolkits pages and are being used as well by the chair of the

²⁵ The agenda items of the workshop included presenting the Blueprint, gender, funding for plastic waste and sharing work of other actors in the region.

IUCN World commission on Protected Areas Tourism task force. One stakeholder in Samoa commented that the toolkits are "a great initiative and will be very useful for tourism businesses it provides cost cutting alternatives/options which hotels can consider."

The active engagement in the Caribbean with the tourism sector during the second half of project implementation focused mainly on engaging the private sector and the tourism associations for building the network of operators to provide the segregated HDPE/PP plastics for the W2P projects and for garnering their interest in becoming potential buyers of the resulting furniture (See Output 3.2). The Fiji Hotel and Tourism Association (FHTA) ²⁶ was engaged in PWFI throughout the implementation period²⁷. FHTA informed the evaluation team that it has shared its concern with PWFI in the beginning of project implementation, namely that the project did not properly understand the dynamics of the tourism sector in Fiji where there are many individual small operators and companies which are located on all the different islands and therefore far removed from each other and from the capital Suva. These companies tend to act individually and quite autonomously to address the challenges they are facing, including management of waste in general and plastic waste. They are also the ones who are directly affected by plastic waste pollution and are therefore highly motivated to act on this topic. FHTA felt that the PWFI did not know or understand the tourism sector sufficiently to design solutions that addressed those characteristics. Nevertheless, FHTA participated throughout the project implementation in both events and working group meetings, informed its members about PWFI and its outputs and was highly interested in any activity that could increase the capacity of its members. The evaluation team perceives the observation of FHTA as a constructive criticism which can be taken into account for future cooperation.

In relation to the general public, the project was very successful in promoting the B2B pilot project in Antigua and Barbuda and the initiative became well-known across the country. In Saint Lucia, and despite the Public Service Announcements broadcast to promote it, the reusable food containers did not to resonate very well with the engaged restaurants and the customers. Despite the lack of success of the initiative, the owner of the restaurant expressed his interest to continue participating and improving the pilot implementation²⁸. In the Pacific, information material about the women waste pickers in Fiji and a workshop received good attention through local newspapers and even in media in Australia. It also gave PWFI publicity. In Samoa, PWFI supported the *Trashion Show* promoted by the Samoa Recycling and Waste Management Association (SRWMA).

PWFI achieved good results when including women and youth and IUCN enhanced its capacity to integrate gender in plastic waste projects

The activity supported by PWFI which best illustrated the link between gender and plastic waste was the workshop organized by Waste Recyclers Fiji Ltd (WRFL). This organization has been active for 29 years in waste recycling during which time it had established strong links with the informal waste pickers of whom many are women. The organization works with waste from a broad perspective including health, gender and human rights. The WRFL brought together 14 female informal waste pickers to Suva for a weeklong workshop from 21 - 25 June 2022 in partnership with the Fiji Women's Crisis Centre and the International Union for the Conservation of Nature (IUCN). The activity of waste picking is highly stigmatized, and the COVID-19 pandemic worsened the conditions for the women as they had to stay at home, and many were

²⁶ It organizes 80% of the tourism sector from accommodation to transport activities.

²⁷ The association began lobbying the government for sustainability in 2014 and to influence it towards a Whole of government sustainable approach. After 4-5 years it began to see changes in awareness and perception. In general, the pandemic was a wakeup call for tourism on the need for sustainability. The tourism board of Fiji (TourismFiji) listed as a stakeholder had not heard about the project, but the board had become highly engaged in environmental and sustainability issues because of COVID-19 pandemic. In summary the feedback on PWFIs engagement with the tourism sector the national level is very mixed both in relation to approach and coordination.

²⁸ Interview via email with Adil Sherwani, received on 16/02/23.

victims of gender-based violence²⁹. The workshop and related events stirred a lot of publicity³⁰ and the women were for the first time seen as contributors to sustainable development. The Waste Recyclers with support from the PWFI project assisted the women forming the '*Collection pillars of recycling*' association. The PWFI funded the workshop in Suva and the information material on the waste pickers. Protective equipment such as safety gumboots, hand gloves, safety glasses and other key equipment was supplied to assist the women to conduct their work in a safer manner. In 2023, IUCN ORO will fund a study on the feasibility of collecting waste in rural and maritime environments, a demonstration community collection project and supply more safety equipment. This activity, and its results, came about because of the COVID-19 restrictions. Funds set aside for travelling could not be used and therefore IUCN ORO looked for relevant activities to support and fund. (see also EQ4 on efficiency). The close cooperation and support to WRFL can be seen as a positive unintended result and is one of the few which are likely to have most impact at the local level. The work and events carried out with WRFL were identified in the OH process as important intermediate outcomes.

In Saint Lucia, PWFI collaborated with the Department of Fisheries to organize a beach clean-up with young people and awareness raising events in schools³¹. This was also done in Fiji with the Suva Harbour Foundation. The "Pacific Ocean Litter Youth Project (POLYP Fiji) *Benu ni Waitui*"³² was formed in November 2021 where it also began to attend PWFI project events.³³ The identification of this project linked a segment of young active students to the project. This activity was identified in the OH process as an intermediate outcome.

PWFI did not have a clear policy or procedure on gender in the implementation of PWFI and there were no gender indicators in the results framework. Over the course of project implementation, the disaggregated reporting on gender improved. Responding to an MTR recommendation on including gender indicators, PWFI commissioned an assessment of the links between gender and plastics. This report was finalized in January 2023. One of the tools that the assessment was based on was a survey carried out in the six countries.³⁴ The recommendations from the report can assist IUCN in integrating gender in design and implementation of plastic waste projects.

This was output was achieved and the rating is Satisfactory.

Output 3.2 An action plan for each sector on enhanced plastic waste management is co-developed with island governments and key stakeholders.

Indicator: Action Plans to reduce mismanaged plastic waste developed with multi-stakeholder input. **Final Targets:** 3 of 3 sectors engaged in 6 countries.

The Marine Litter Management Action Plan and Saint Lucia National Waste Source Inventory was the only action plan elaborated but several tangible results for preparation of actions plans were created.

²⁹ In Pacific Island countries, violence against women and girls is among the highest in the world. National research shows high rates of GBV lifetime experience in Tonga (79 percent), Fiji (72 percent), Vanuatu (72 percent) and Solomon Islands (64 percent). The COVID-19 pandemic exacerbated all the risk factors for Violence Against Women and Girls, including unemployment and poverty which reinforced many of the root causes such as gender stereotypes and harmful social norms. https://www.undp.org/pacific/press-releases/undp%E2%80%99s-regional-response-gender-based-violence-during-covid-19-pandemic

³⁰ www.fijitimes.com www.fbcnews.com.fj

³¹ Interviews with Dominique Finegan (19/1), Ivonne Edwin (30/1) and Michelle Headley (31/0123).

³² Translated in English as "Rubbish in our Ocean".

 $^{^{33}}$ POLYP Fiji is an organization of about 10 – 15 young people, mostly students at the University of South Pacific (USP) that collect plastic waste twice a week at the beach.

³⁴ In Vanuatu this survey only had three respondents.

The Annual Report (AR) 2021 notes that action plans will be developed in 2022. The PWFI project document explains what was expected with the actions plans namely, "Working closely with the chosen stakeholders in each sector, we will use best practice knowledge and on-the-ground knowledge in order to identify a collective framework for action and a timeline for implementation, encouraging synergy between the three sectors and encouraging them to work collaboratively to devise and implement practical solutions."³⁵ It was envisaged to set up a multi-stakeholder steering committee per island to ensure cross-sector collaboration, participation of the government and long-term buy-in of project principles.

In practice, there was a substantial delay and a strong slowdown in the pace of implementation during the pandemic. This meant that virtually all the outputs to feed into the action plans were only ready by mid-2021 and the policy assessments for the Pacific SIDS were not finalized. Furthermore, as explained above, cross-sector cooperation was difficult because there was no buy-in from the fisheries sector, some areas were highly politicized and the private sector participants had different and often opposing interests as illustrated in i.e., the case of bottle recycling scheme in Antigua and Barbuda (see Box 1.)

Therefore, the action plans were not elaborated as planned with one exception. The Marine Litter Management Action Plan and Saint Lucia National Waste Source Inventory was approved by the Government of Saint Lucia by Cabinet Conclusion No.21 of January 16, 2023.³⁶ This initiative was supported by UNEP³⁷ but with integrated data from the 'quantification reports'.

The project management team interprets the delivery of this Output 3.2 as diverse contributions to various project outputs and products, for example the tourism toolkits, the CDL policy papers in Fiji and in Antigua and Barbuda, the capacity building initiative in Grenada, the sharing of PWFI Data with the World Bank to support Fiji's ban on polystyrene and the contribution of knowledge required for the global plastic treaty through IUCN's work with AOSIS. This interpretation is consistent with IUCN's understanding of the project as a foundational baseline for collecting and collating data and knowledge which then permeates into different parts related to drafting policy and plans primarily led by others and supporting the development of other actors planning to work in the regions.

However, while the evaluation team recognizes the substance of the work achieved, it should note that this approach to the delivery of Output 3.2 does not comply with the indicators set out in the Results Framework, and considers that it would have been preferable to produce "action plans" as individual reports to ensure formal compliance with progress indicators or, perhaps as a more efficient alternative, have revised the precise wording of the output formulation and respective indicators.

This output was only achieved in Saint Lucia in accordance with the Results Framework indicators and the rating is Moderately Unsatisfactory.

Output 3.3 Assess and assist the three sectors (tourism, fisheries and waste management) to synergistically co-generate up to 3 viable value chains to collect, recycle or reuse products from locally sourced recycled plastic streams.

Indicator: Number of Proof of concept developed/Prototype of products made from recycled plastic. **Final Target:** 6 proofs of concept developed.

IUCN partner, SB was contracted to propose waste reducing measures through alternate value chain development that were appropriated to the findings of the material flow analysis and to produce proof of concepts and prototypes for commercially viable products made of recycled plastic that would reduce

³⁵ NORAD Plastic Waste Free Island proposal p17.

³⁶ The World Bank program "Unleashing the Blue Economy in the Caribbean" (WB-UBEC) has been indicated as a future source of funding for various actions indicated in Marine Litter action plan, including a proposed waste segregation pilot project, which will be designed to allow for the collection of recyclables separate from organic and other waste.

³⁷ https://www.govt.lc/news/government-takes-steps-to-end-plastic-pollution-in-marine-environments
plastic leakage within the target islands. Learning from the work under this outcome would lead to the development of best practice guidelines. A consultancy contract was signed in December 2019 with work commencing in 2020.

SB started out producing 'qualification reports' which were not originally envisaged in the results framework but aimed at determining the plastic waste pathways and lifecycle of different types of plastic within the tourism, fisheries, and waste management sectors in each country. Their final versions were completed in June 2021. They link the findings in the 'quantification reports' to possible value chains. Based on this work, SB identified nine concept solutions for viable alternative value chains (AVCs). Drafts of these concepts were presented in October 2020. According to the project's Stakeholder Engagement Tracking Tool, between then and December 2020 there were consultations with the national stakeholders to select two solutions per country. Based on that selection, working Groups (WGs) for each of the two selected solutions in each country were established. The WGs were guided by the national focal points and the project team and consisted of stakeholders from government, private sector and civil society organizations relevant for the specific solution of the WG. The solutions were meant to engage all three sectors, but only one solution related to fisheries was selected. The selection of solutions per country is as follows:

Country	Solutions
Antigua and Barbuda	Bottle-to-Bottle recycling and Waste to Product (furniture)
Saint Lucia	Waste to Product (furniture) and Reusable food container ³⁸
Grenada	Waste to Product (furniture) and Net-to-Net Recycling
Fiji	Bottle-to-Bottle recycling and Bucket (roto-moulding)
Vanuatu	Bottle-to-Bottle recycling and Waste to Product
Samoa	Bottle-to-Bottle recycling and Waste to Product (furniture)

Table 5: Selection of value chain recycling solutions in the six countries

Small grants to the private sector can make a crucial difference to the capacity of a business to take off.

Antigua and Barbuda

This B2B initiative aimed to trial PET bottle collection for export and closed-loop recycling³⁹ overseas. A partnership was established between Will's Recycling, the Antigua and Barbuda Waste Recycling Corporation (ABWREC)⁴⁰ which is a non-profit organization linked to the Rotary Club, the Ministry of Health, Wellness and Environment, SB, and IUCN to set up, manage and implement a four-month pilot from July to November 2021. ORMACC considers this pilot as the most successful of all pilot projects in the Caribbean and, based on the interviews and visits conducted, the evaluation team agrees that the initiative was successful on various fronts. There was a large public buy-in and participation that translated into the number of bottles collected significantly exceeded the collection targets. At the end of November 2021, a 40-foot container load of baled PET bottles was shipped to a recycling plant in Mexico belonging

³⁸ In Saint Lucia, the solution Reusable food container was selected as plan B after encountering initial difficulties which the B2B that was the first choice. According to the AR 2020, the B2B "was deemed unfeasible after the Working Group's kick off meeting as the country's bottlers advised that machinery used on island would not be fit for the purpose since it uses a combination of blower fillers. It was suggested that the concept be applied to juice and coconut water producers instead, however the volumes and scale would have been much lower compared to water bottling companies".

³⁹ Achieving a closed loop system in this context means buying back recycled PET in an equivalent amount to the exported quantities.

⁴⁰ ABWREC is a non-for profit project created by Rotary Club. With 18 years of experience, it was a much more solvent corporation at the beginning, successfully exporting scrap metals, PET plastics and grinded HDPE/PP. But especially after China stopped importing plastic waste, the market has changed dramatically over the last few years, with a drop in price of plastic waste and a rise in freight costs. ABWREC has been aware that the only way to make the scheme sustainable is through a closed-loop system through some local regional remanufacturing and therefore considered the project initiative crucial and timely.

to the ALPLA group⁴¹. Through the assistance from another donor, ABWREC is in the process of receiving a more performing baler than the one they currently use, which will improve the compression rates of the PET bales and lower shipping costs. Various recommendations for improvement were shared with the evaluation team which have also been shared with IUCN and include the exploration of the option of vending machines, a collection system based on weight and the including a separate stream for blue-tinted PET. Some difficulties and mishaps with the export of the container to ALPLA were reported. At the moment of the final evaluation, and because the interactions with ALPLA were not satisfactory, ABWREC has gone back to exporting PET plastic to the US, preferring to operate with more reliable partners to be able to clear their stockpiles, despite prices per weight being significantly lower than the prices agreed with ALPLA.

Although it did not get to full implementation phase before project end, the Waste to Product (W2P⁴²) solution had advanced to a considerable extent in Antigua and Barbuda. The partners for the collection scheme were identified, including the group of hoteliers interested in providing the sorted HDPE/PP waste, the collector, the processor (ABWREC) and potential buyers for the materials, either as in the form of parts or as finished (assembled) products. The manufacturing machinery was delivered to Antigua and Barbuda in early February 2023, but there are still some challenges for creating the necessary facilities to accommodate their operation. This will be dealt with in Phase 2, which will also support the necessary training for operating the machinery. Most stakeholders are optimistic about the future success of the scheme because they see a sufficient market for the recycled products, to manage expectations, and ensure a more sustained buy-in from the public and stakeholders, the government preferred those promotional activities for the W2P solution in Antigua and Barbuda be carried out in collaboration with ABWREC only after the machinery had arrived on the island.

Saint Lucia

The W2P pilot initiative in Saint Lucia also took shape. Partners were already identified, with the same partner (Renew St Lucia⁴³) concentrating on the tasks of collection, processing and assembly of the furniture products. In comparison to Antigua and Barbuda, the hoteliers have been more effectively engaged through the organization of various public exhibitions and events at resorts organized by PWFI. Hoteliers interviewed made suggestions to increase the interest in the final products for the high-end segment and for creating initial cashflow, like creating a catalogue with specific options that could be pre-ordered. Renew St Lucia is currently on stand-by waiting for the machinery provided by PWFI. They only intend to start the collection of HDPE/PP when the processing capacity is in place to avoid building up too much backlog.⁴⁴ They have plans to hire a crew of carpenters for producing the final parts of recycled plastic. The evaluation team had the impression that Renew St Lucia is a capable partner that is likely to be able to ensure operations once the training takes place.

The Reusable Food Container was not successful. Few restaurants attended the meetings organized by the project, and only one advanced into a trial phase. The promotional materials do not seem to have had much effect in getting the public interested, and there were hardly any customers who requested the reusable container for take-away orders. The project staff and the restaurant owner raised various possible explanations for the lack of buy-in including skepticism about the level of cleanliness of the containers, the price, religious beliefs banning pork dishes and possible allergies making certain customers especially weary

⁴¹ The name ALPLA comes from the acronym "Alpenplastik Lehner Alwin" but the group is always referred to and known as "ALPLA".

⁴² The W2P solution refers to the processing of HDPE/PP plastics (shredding, melting and molding) to produce parts that can be used as single units or assembled into useful products, e.g. furniture.

⁴³ Similarly to ABWREC, Renew St Lucia has extensive recycling experience (since 2005) with its core business being scrap metal and cardboard, with a short but successful stint in PET exporting that was shut done because of the lack a license that took several years to get. When it was finally granted, the market had changed and PET was no longer attractive.

⁴⁴ There was recently heavy flooding in their facilities, indicating the need to construct an elevated pavement to accommodate the machinery. The construction has not started as they await a more detailed timeline for the reception of the equipment.

of eating from reused containers. Despite the trial's lack of success, the restaurant owner expressed his interest in continuing to participate and improving the pilot implementation.

Grenada

Grenada is where Output 3.3 was least successful. Grenada was the only place where a value chain was selected for fisheries but the business case for Net-to-Net recycling was not developed. There were many discussions and much planning but not much done. SB produced an Extended Producer Responsibility (EPR) position paper for fisheries which was considered by the government to be a useful contribution. The government in Grenada was described by a few stakeholders as having an overcentralized approach to interactions with projects while being severely understaffed. This has the effect of delaying rather than enabling the timely approval and follow-up of activities. The focal point in Grenada mentioned that there had been COVID-related casualties in the already understaffed Department of Fisheries and that fishermen were under too much economical strain to be receptive to any activities other than tending to alternative sources of revenue to compensate for the disruption in their usual work.

With the W2P solution, there was comparatively more progress. By the end of PWFI, however, the project was still in the process of identifying partners for collecting plastics and buying the final furniture products. Even though no manufacturer to lead the pilot project was identified, stakeholders mentioned the existence of adequate candidates for Phase 2. According to a board member of the Grenada Tourism Association, hoteliers maintain their support and interest in participating in the initiative.

As seen from the above, many of the pilot projects and initiatives of the PWFI in the Caribbean are expected to be continued in Phase 2 and can thereby be consolidated and enhance the possibility of impact and sustainability.

Vanuatu

The most successful pilot project on alternate value chains was with RecycleCorp in Vanuatu which also aimed to trial PET bottle collection for export and closed-loop recycling overseas. B2B WG had several meetings where highly interested stakeholders from the waste management sector and beverage companies participated including RecycleCorp⁴⁵. RecycleCorp is part of a small group of stakeholders in Vanuatu who are engaged in waste management and recycling. The Vanuatu Environment Science Society is one of the key drivers in this initiative and played an important role in the B2B project.

The bottle recycling began with an initiative by World Vision Vanuatu (WVV) which implemented a waste management project that ended in 2021. PWFI collaborated and joined with WVV in carrying out some activities. As part of that, a seafront event was carried out in cooperation with RecycleCorp⁴⁶ and Vanuatu Recycling Waste Management Association (VRWMA). WVV Vision had set aside 10 million Vatu equivalent to EUR 75,750 to pay for collected bottles. With a deposit of 10 Vatu per bottle, the project was highly successful, and 1,000,000 bottles were collected, which also illustrates the public support of the actions on plastic taken by the Government in Vanuatu. RecycleCorp got the clean bottles. The Australian packaging and recycling company Visy accepted a shipment of recycled PET bottles for the first time in September 2021. Out of the 40 tons plastic bottles collected, only 8 tons were shipped as many bottles were too dirty to be reused.⁴⁷ This shipment was identified in the OH process as an intermediate outcome.

Building on past valuable experience with bottle recycling and SBs support, RecycleCorp has designed a project for bottle recycling on a more permanent basis. It has a contract with IUCN on supply of a baler

⁴⁵ RecycleCorp has been doing recycling of scrap metal for about 15 years. In terms of export value, it's one of the fifth largest companies in Vanuatu

⁴⁶ It took, however, RecycleCorp over a year to get paid by Visy. It had to do with Visy being a very big company and this was only one container among thousands they were dealing with.

⁴⁷ Many of the collected bottles had been mixed with other garbage or been lying on the ground for a long time.

and other equipment. RecycleCorp has put plastic containers at the disposal of different businesses which will secure the supply of PET bottles as there is no collection system in place. The bottles will be stored in an already designed 300 m² storeroom that is to be constructed and funded by RecycleCorp. When the project is up and running there will be a charge for the bin hire and collection for hotels, resorts and larger corporate citizens, who will be the main customers. Other income will be from the sale of the product with the expectation that these two sums will be sufficient for a viable model. The owner of RecycleCorp is very confident that this is a viable business model. In relation to the use of plastic bottles from recycled PET, one beverage company which otherwise was very supportive, had serious reservations about the the appearance of the recycled bottles because in their experience recycled PET is much less transparent and visually less appealing. SB has commented that the quality of recycled bottles is improving.

IUCN ORO has confirmed that the remaining activities to be supported include recycling infrastructure improvement and delivery of a baler. The equipment will be installed and available for inspection by June 2023.⁴⁸This business case illustrates how small grants to the private sector can make the crucial difference for a business to take off.

Fiji

A business plan for W2P on furniture was developed. Only one virtual WG meeting is registered for this value chain in March 2021 with seven participants. Instead of developing a B2B business plan, the focus was on the policy paper of the contained deposit scheme described under Output 2.3 on uptake of policy recommendations. As described, there is a PET bottle deposit scheme for FijiWater and Coca Cola company bottles. It has its limitations as also mentioned in Box 2. Therefore, it was not seen as viable to advance with another recycling scheme before adequate legislation was in place.

In Fiji, the evaluation team did not identify any stakeholder in the private sector (i.e. from the tourism and waste management sectors) that had received the final business plans for recycling. The evaluation team perceives this as inadequate communication about what would be the result of the process on the business plans on alternate value chains or at what moment the involvement of PWFI and SB would end. The leadership of the organizations and companies in the tourism and waste management sector found independently that the project poorly understood the specific dynamics of the private sector.

Samoa

There was a kickoff meeting for the value chain WGs in October 2020 followed by four meetings in the B2B WG and three meetings in the W2P WG. Not all the meetings are registered in the tracking tool.

SRWMA developed a project proposal with SB which according to SRWMA required considerable investment in time and money. However, also according to this association they were never informed about the status of the project proposal and only found out at the last face-to-face meeting in Fiji in December 2022 that it would not go through, even though they had received a prototype of a chair. The third and last meeting of the W2P WG had seven participants including Samoa Pure Water/Manino Water, the Samoa Recycling and Waste Management Association (SRWMA) and Samoa Tourism Authority. According to the presentation of SB at this meeting lessons learnt from the activity would be collected after the delivery of the prototype. Therefore, it appears that there were diverging expectations for this activity. SRWMA also has a contract with IUCN for the delivery of equipment.

The B2B working group also met several times and as in Vanuatu, one of the main results was that Visy accepted to collect recycled bottles from Samoa. This shipment was identified in the OH process as an intermediate outcome.

⁴⁸ IUCN will have the report from this activity ready by end of March.

The output has been achieved since six proofs-of-concept have been developed although not all have been successful to the same extent. The successful ones are part of the key results of Outcome 3 and of the PWFI project because they are expected to be long term. The rating for this is Satisfactory.

Output 3.4: Assess best available technologies (BAT) for solutions for effective elimination of non-recyclable plastic streams in 6 SIDS.

Indicators: Number of reports on BAT (one for each SIDS). **Final Targets:** 6 country reports.

The Deplastify online tool was developed for assessing solutions for dealing with non-recyclable waste in SIDS. It will be useful for a variety of stakeholders including governments, as it is context-specific and dynamic. Capacity building for potential users is needed.

During project implementation there was a shift from the concept of best available technologies (BAT) to most suitable technologies (MST) as recognition of the fact that the best available technologies may not be appropriate for the specific SIDS given financial constraints, lack of facilities, capacity, etc., and so feasible solutions should be structured around the concept of MST. The tool developed by the project for delivering this assessment is called *Deplastify* and is available online at https://deplastify.org.

ToR for services were developed by December 2020, with a call for expressions of interest issued in January 2021. The contract was awarded to a joint venture consisting of SB and CE Delft. Delivered outputs by the end of 2021 included a methodology report, an excel- and web-based tool and six country specific reports. In early 2022, a training module was developed to build national capacity. The validation of the reports and implementation of the training module was done in June 2022 at two regional workshops.

The tool is a technical product which was an evaluation of alternate methodologies for addressing nonrecyclable plastic waste, basically solutions for what should be ideally done with everything else that cannot be reused or recycled. The tool was developed on a technical basis and then applied to each country by using the data collected for the assessments and other information. The tool that can be used by both governments and other stakeholders to understand solutions. Users must obtain data from IUCN, the World Bank, Baci⁴⁹, UN ComTrade⁵⁰ and Plasteax⁵¹, or national databases before using the tool. Once data has been obtained, users can fill in the data to benchmark different technologies to manage noncommercially recyclable plastic, based on several criteria.

The training module was developed as an additional activity to provide the users with more guidance. In the original proposal, the delivery of this output was seen as a simple report. The project team revised the output to be more dynamic and adaptive, where users could explore different scenarios. The reports are therefore not static, as different parameters can be given different weightings that can change the priority solutions. and adapt it, e.g., to future changes in electricity costs.

More capacity building activities to use the tool will be supported during the project's Phase 2 in the Caribbean. The tool is designed to be a relatively simple product to use. The challenge in using it is less about capacity but more about having the information required to update and populate the tool, and secondarily integrating into the national decision-making process which ideally needs to be inclusive and negotiated between stakeholders for ensuring ownership of the selected solutions.

⁴⁹ BACI provides yearly data on bilateral trade flows at the product level. Products are identified using the Harmonized System, which is the standard nomenclature for international trade, used by most customs.

⁵⁰ The UN Comtrade database aggregates detailed global annual and monthly trade statistics by product and trading partner for use by governments, academia, research institutes, and enterprises.

⁵¹ The Plasteax website provides multiple waste management index metrics.

The evaluation team was not able to get feedback from users. The output was effectively delivered by the project and is publicly available (https://deplastify.org), but according to SB it is currently not being used. Based on this, the evaluation team finds it is unlikely that the key users will be fully able to use this new tool considering the late delivery. Beyond the PWFI, however, the tool is likely to be used in other IUCN projects, including the Phase 2 of PWFI, for which the project proposal contemplates not only capacity building for using the tool but also support in the five target countries for implementing suitable solutions for non-recyclables identified through Deplastify.

The evaluation team assessed that this output has been achieved Satisfactory.

Outcome 3: Plastic waste reduction measures adopted by tourism, fisheries and waste sectors through alternate value chain development

Indicators: Number of companies that committed to take forward the commercialization of recycled plastic prototypes and number of stakeholders that endorsed waste reducing measures through the value chain. **Final targets:** 6 (1 per country) companies committed to take forward the prototype / 12 Stakeholders involved in contributing to developing actions.

Based on the assessment of the level and effectiveness of the delivery of the Outputs related to Outcome 3 and on the outcome indicator targets as set out in Results Framework, the evaluation team assesses this outcome as fully achieved and the rating as Satisfactory.

Outcome 3 is measured firstly by the number of companies committed to take forward the prototype. The end target is one per country i.e., six in total. The four companies Renew St Lucia in Saint Lucia, Will's Recycling and ABWREC in Antigua and Barbuda and VRWMA in Vanuatu, which have received support from PWFI to B2B or W2P equipment and machinery and are interested into a full-scale commercial recycling business. Samoa Recycling Waste Management Association (SRWMA) in Samoa is also interested in taking forward the W2P pilot on plastic benches but their project was not adequately prepared for support. In Saint Lucia, the owner of the restaurant that experimented with reusable food containers is interested in continuing with the project even if it was not very popular with customers. In summary, there were six companies in four countries committed to take forward the commercialization of recycled plastic prototypes.

Secondly, this outcome is measured by the number of stakeholders that endorse waste reducing measures through the value chain and the target is 12 stakeholders involved in contributing to developing actions. The evaluation team has measured the achievement by the number of stakeholders who have either participated actively in the pilot projects and remained engaged with an expressed intention of further contributing to the continuation of activities and those involved in the preparation of the pilots that have not reached an operational stage. The manifestation of endorsement by such stakeholders had, to a large extent, been registered by the project team in the process of Outcome Harvesting. The evaluation team was able to confirm such endorsements when interviewing the respective stakeholders (see the list of consultations in Annex C). In other cases, it reached out to stakeholders to verify harvested outcomes. As mentioned under Outputs 3.1 and 3.3 in EQ3, and especially in the case of Antigua and Barbuda and Saint Lucia, there is already a network of hoteliers and, to a lesser extent, of operators from the commercial sector who remain engaged to contribute to the sorting and collection of HDPE/PP plastics. Although the stakeholder engagement tracking tool would point to even higher numbers,⁵² based on what was directly verified during the course of the evaluation through interviews and correspondence, the final target of 12

⁵² Based on the stakeholders who are considered to have reach a level of engagement of "consideration" or "committed" according to the ranking system of the tracking tool.

stakeholders has been clearly exceeded. See the Excel table in Annex D for details of the outcome statements and verification by the evaluation team.

Output 4.1: A growing network on best practice activities to minimize plastic waste leakage that includes key stakeholders from the 6 SIDS.

Indicators: Number of key national stakeholders engaged in the Plastic Waste Free Island Blueprint network. **Final Targets:** 6 key national stakeholders' groups engaged in contributing inputs into Blueprint framework.

PWFI has contributed as a convener and creator of spaces of engagement to a growing network at national and global level for advancing best practice activities to minimize plastic waste leakage.

IUCN considers PWFI-related communications as part of their larger program on *Closing the Plastic Tap* so communication products will be rolled progressively irrespective of project end. There has been outreach through IUCN's main website, IUCN plastics Twitter (with ca. 3000 followers), partners like the UN channels, personal LinkedIn, IUCN webinars. IUCN has written and is planning to produce several articles and news items about the Blueprint, which will be available online and posted in different media. The Blueprint will be translated to different languages to facilitate dissemination and uptake.

Together with Ubuntoo and SB, IUCN has also created the Plastic Waste Free Island Ubuntoo Greenhouse, which will serve as a digital collaboration space to mobilize and scale solutions and ideas through knowledge exchange and discovery of collaboration opportunities. More specifically the aim of the portal is to develop online collaborative community. went live 2022: an The portal in June https://www.iucn.org/story/202207/plastic-waste-free-islands-project-plastic-pollution-solutions-sidsforefront-new.

Plastic Waste Free Island Ubuntoo Greenhouse has 304 members that are external (excluding IUCN/Ubuntoo staff). Of the 304, more than 100 were invited by IUCN directly from the regions and globally. Listed project solutions with a location are 144 in total, with three in the Pacific and one in the Caribbean specifically. Not all solutions have a location tagged to them and most solutions can be applied/used anywhere.

The evaluation team has the strong impression that globally and locally the number of people and organizations who are aware of the problems with plastic waste and leakage is growing. One testimony of that is the agreement to negotiate for a Global Plastic Treaty. In the target countries, governments have or are taking decisive steps to reduce plastic waste and many associations and companies are and were involved even before the PWFI project. However, as mentioned elsewhere, PWFI has contributed as a convener and created spaces for engaging existing and new organizations in joint dialogue. In both regions, but even more so in the Pacific, the networking activities around the Blueprint were happening very late and rushed so the network is not consolidated.

Although this is work in progress, it is clear that stakeholders from 6 SIDS are being included in this network. The evaluation team therefore considers the output achieved and the work carried out as moderately satisfactory.

Output 4.2: Member of the network influenced other stakeholders to contribute to the development of the Blueprint.

Indicator: % of targeted stakeholders that share their learning and provide inputs to the network. **Final Target:** 80%.

Based on the documentation available and the interviews, it is not clear how IUCN intends to calculate the percentage out of the total number of targeted stakeholders, nor is it clear who are the members of the mentioned network. Therefore, the evaluation team has not been able to assess this output fully and give a rating. What is evident about the consultations on the Blueprint is the following.

In Fiji, the Blueprint was discussed in December 2022 in an event with participation from 65 stakeholders from government, private sector, civil society and academia. Many stakeholders remembered having participated in this event. A few had positive comments noting that many ideas had come up and that the Blueprint would be an important tool for the Pacific countries and the region.

IUCN ORMACC organized in October 2022 a regional three-day PWFI workshop in Antigua titled "Caribbean Interregional Workshop in preparation for the Intergovernmental Negotiating Committee (INC) of the Global Plastics Treaty". This workshop included a session on the Blueprint, in which the concept and draft was presented, followed by focus-group discussions to collect feedback and recommendations for the finalization of the Blueprint. The main recommendations are listed in the event minutes. Most participants interviewed by the evaluation team only seemed to have a vague recollection of the concept and discussions. This was perhaps most surprising with the representatives of OECS, who did not seem to be aware of the concept and are involved in the preparation of a project that among other objectives will attempt to develop a model of a recycling system that is viable for the regional context (OECS Recycle) and for which the Blueprint is most likely a relevant document.

At IUCN HQ level, there are several initiatives ongoing to enhance the engagement of various stakeholders as mentioned under Output 4.1.

The evaluation team assessed this output to be partly achieved as it is work in progress.

Output 4.3: A zero plastic waste Blueprint is developed, informed by the project lessons and disseminated through regional bodies and international sector players (e.g., tourism operators, regional-scale fisheries or international waste management providers)

Indicators: Number of PWFI Blueprint developed, informed by project lessons and other similar projects in the Norad portfolio.

Final Targets: 1 Blueprint developed and dissemination plan implemented.

The Blueprint is a high-quality document that presents an integrated approach to addressing reduction of plastic waste and leakage for SIDS based on the lessons and results from PWFI. It can be used in a variety of situations at global, regional and national level.

It took a long time for IUCN, its partners, and stakeholders to find the format for the Blueprint and settle on its content. The *Plastic Waste Free Islands Blueprint – a journey to zero plastic waste* was elaborated and finalized in 2022 based on the experience from all the SIDS included in the project. The Blueprint has an appealing layout and is an easy-to-read format that describes the process for SIDS to become waste free. It has three annexes that explain concepts and list many relevant documents and organizations that work with circular economy and plastic waste management.

It is a product that is based on all the other outcomes of the PWFI project and points to the future. It will be specifically useful for IUCN in its work at the global and regional levels. The Blueprint has become an even more important tool than envisaged because of the decision in 2022 at the fifth session of the United Nations Environment Assembly (UNEA) to end plastic pollution and work towards an international legally binding agreement by 2024. Up to the negotiations in May 2023 IUCN is working at different levels with member countries to prepare them for the negotiations. In that context, the Blueprint is perceived by IUCN HQ to be a very successful product.

The first draft was finalized in December 2022, and the Blueprint will be officially launched and disseminated in March 2023.

The evaluation team assess that this output has been achieved Satisfactorily.

Outcome 4: Plastic Waste Free Island Blueprint endorsed by regional SIDS bodies

Indicators: Level of endorsement of the PWFI Blueprint at the regional level in the Pacific and Caribbean (SPREP and OECS) and Number of additional SIDS engaged with the IUCN Blueprint through remote participation in the learning network or uptake of the principles in the Blueprint.

Final Targets: Blueprint endorsed by Key Regional Bodies / 2 additional SIDS per region engaged to evaluate application of Blueprint to national conditions.

Based on the assessment of the level and effectiveness of the delivery of the Outputs related to Outcome 4 and on the outcome indicator targets as set out in Results Framework, the evaluation team assesses this outcome as partly achieved and the rating as Moderately Satisfactory.

As seen under the output section of this chapter, it took a long time for IUCN, its partners and stakeholders to develop the concept of the Plastic Waste Free Island Blueprint and then the COVID-19 restrictions also contributed to the delay in finalizing. The Blueprint was only presented in the Pacific in December 2022, and it has only been shared online with the stakeholders recently. There are therefore no regional SIDS bodies that have so far endorsed the Blueprint.

No additional SIDS were engaged with the Blueprint through remote participation. However, a Phase 2 of PWFI is just starting up in the Caribbean and apart from the three SIDS already targeted there are two additional SIDS targeted, namely Saint Kitts and Nevis and Saint Vincent and the Grenadines. The Blueprint will be used in various contexts including evaluating its applicability to the national conditions in these countries. Phase 2 envisages the adoption and endorsement of the Blueprint, developed under the PWFI project by all five SIDS. The Phase 2 project document also plans for a series of activities where the Blueprint will be used.⁵³

Annex G provides a table with a summary of the level of output achievement. As for outcomes, their level of achievement is summarized by the following table.

Outcome	Achieved	Partly achieved	Not achieved	Rating	Evidence
Improved knowledge of plastic waste footprints among 6 target islands	Х			S	• The 'quantification reports' have generated knowledge and has already been used in several different contexts both within and outside the project context
Increased policy effectiveness in reducing plastic waste generation		Х		MS	• 3 policies on plastic waste use and disposal and not 6 have been influenced using project results.
Plastic waste reduction measures adopted by tourism, fisheries and waste sectors through alternate value chain development	X (2 nd indicator)	X (1 st indicator)		S	 There were only five companies in four countries committed to take forward the commercialization of recycled plastic prototypes. There were 35 – 45 stakeholders participating in WG meetings in the Pacific and 60 – 90 participating in the Caribbean

Table 5: Summary of achievement outcomes

⁵³ Closing the Caribbean plastic tap project document

Plastic Waste Free X MS • The Blueprint was not endorsed by regional bodies Island Blueprint * * * endorsed by regional * * * SIDS bodies * * *					
Island Blueprint by regional bodies endorsed by regional • No additional SIDS were engaged SIDS bodies with the Blueprint through remote	Plastic Waste Free	Х	MS	•	The Blueprint was not endorsed
endorsed by regional • No additional SIDS were engaged SIDS bodies with the Blueprint through remote	Island Blueprint				by regional bodies
SIDS bodies with the Blueprint through remote	endorsed by regional			•	No additional SIDS were engaged
	SIDS bodies				with the Blueprint through remote
participation.					participation.
Funding has been secured for a				•	Funding has been secured for a
Phase 2 in the Caribbean where					Phase 2 in the Caribbean where
two additional SIDS will be					two additional SIDS will be
targeted					targeted

3.4 Efficiency

Summary of findings for efficiency:

- In both regions most activities happened later than planned due to the COVID-19 pandemic, delays in project start-up and long procurement processes.
- Reallocation of funds from travelling and workshops to the pilot projects on the alternate value chains opened opportunities for expansion and consolidation.
- Assisted by a set of management and monitoring tools, the PWFI operational model functioned well and the project management at the HQ level was responsive to solve problems and applied adaptive management.
- The project management at regional level in the Caribbean was relatively smooth while in the Pacific project management had more difficulties in coordinating and delivering timely results.

In both regions most activities happened later than planned due to the COVID-19 pandemic, delays in project start-up and long procurement processes.

project was million 61 Norwegian kroner (NOK) equivalent to 7,093,023 CHF54. The total expenditure of the project up to the end of 2022 NOK was 54,260,338 equivalent to CHF 6,309,341 corresponding to an expenditure rate of 89 %.55 The audited expenditure from 2019 - 2021 is NOK 32,654,418 equivalent to CHF 3,797,025.56 The low expenditure in that period reflects the various restrictions imposed due to the COVID-19 pandemic. As



restrictions were lifted and the project finished by the end of 2022, expenditure increased substantially in the last half of 2021 and in 2022 as seen in figure 2 and is also detailed below. 11% of the budget was unspent.

⁵⁴ The exchange rate applied is the same as in the PWFI project document i.e., 1 NOK = 8.6 CHF.

⁵⁵ This final expenditure has not been audited yet.

⁵⁶ Independent auditor's report to the Management on the financial reports 1 Dec 2018 – 31 Dec 2019, 1 Jan – 31 Dec 2020 and 1 Jan - 31 Dec 2021, PWC

The planned distribution of the budget is shown in figure 3 where 87% of the budget was allocated to activities under outcomes 1 – 4 of which 78% is for outcomes 1- 3 and 8% is for outcome 4 about the Blueprint.⁵⁷ The 87% is equivalent to CHF 6.2 million. There was in 2018 a standard overhead of 7% at IUCN, and 6% to M&E, administration, financial management, coordination, and supervision which is in the lower end for such projects.





The budget was transferred to IUCN in four installments as follows:

Currency	NOK	CHF
Income received 10.12.18	17,695,905	2,057,663
Income received 09.12.19	17,401,901	2,023,477
income received 28.12.20	8,736,762	1,015,903
Income received 25.11.21	17,048,986	1,982,440
TOTAL	60,883,554	7,079,483

Table 6: Installments from Norad to IUCN

The total transferred amount was NOK 60,883,554. IUCN did not experience any cash flow problems as the installments were timely. IUCN HQ transferred funds to the regional offices in one installment for ORO and three for ORMACC as seen in table 7.

Table 7: Transfers from IUCN HQ to the regional offices

IUCN Office	NOK	CHF
ORO income allocation	3,647,412	424,118
ORMACC Income allocation	3,647,312	424,106
ORMACC Income Allocation	2,423,201	281,768
ORMACC Income Allocation	2,829,400	329,000

⁵⁷ It should be noted that it was only in the inception phase that the outcomes 1 and 2 were split. Originally outcome 1 and 2 were together in one outcome.

IUCN ORO had a budget of NOK 9,660,754 equivalent to CHF 1,123,343. According to the financial report (FR) elaborated by IUCN ORO, CHF 720,923 was spent in the Pacific region. The balance of IUCN ORO is therefore CHF 402,420 equivalent to NOK 3,460,812⁵⁸. It should be noted that the expenditure can be higher than the amount transferred to a region for cash balances. The transfer of funds is based on cash needs but does not limit spending. Overall, IUCN ORO had an expenditure rate of 64.2% of the budget allocated.

IUCN ORMACC had a budget of NOK 9,663,057 equivalent to CHF 1,123,611. The total expenditure was NOK 8.468.802 which gives a balance of NOK 1,194,255 equivalent to CHF 138,867. Overall, IUCN ORMACC had an expenditure rate of 87.6 % of the budget allocated.⁵⁹

The total balance from spending in IUCN ORO and IUCN ORMACC was NOK 4,655,024 equivalent to CHF 541,287.

Figure 4 shows the planned budget distribution for 2019 - 2022. This information is derived from the IUCN ORO financial reporting.⁶⁰ It shows that planned expenditure was spread out over the four years with a modest expenditure in 2019 and peaking in 2021. Figure 5 shows the actual expenditure which was much lower than planned in 2020 and 2021 primarily because of the COVID-19 restrictions but also to some extent because there were delays in finalizing the policy assessments done by the national consultants.

The expenditure in 2022 was considerably higher than planned as 44% of the budget of CHF 1,101,373 was spent in the last year of implementation compared to 28% in planned spending. ⁶¹ An execution of CHF 488,859 was already a considerable achievement as it was 16% higher than the originally planned expenditure. The work plan and budget that IUCN ORO presented to HQ in August 2021 was even more ambitious. The major expenses for the last quarter of 2022 were expected to be the contracting for the alternate value chains.⁶² IUCN ORO and HQ deemed that the expenditure plan was achievable because the contracts were mostly for purchasing equipment and, to a lesser extent, for services. However, the preparatory time required for contracts that related to equipment purchase was underestimated. Extra scrutiny was required by IUCN procurement procedures because they involved supporting a private company to purchase equipment. As these processes were not finalized, it is possible that expenditure will increase as and when the equipment is purchased and paid for. Expenditure per year by IUCN ORO is in figure 5.





The exact balance will be confirmed through the internal audit.

⁵⁹.Informe Financiero al 31 de Diz 2022 F

⁶⁰ IUCN ORO yearly financial estimate.

⁶¹ It should be noted that the planned budget execution figures are from the IUCN ORO yearly financial estimate document and that these estimates were done at a time where it was known that there would be an extension into 2022.

⁶² Email correspondence IUCN HQ.





Figure 6 shows the budget distribution that were initially planned in the Caribbean over the three years.⁶³ As can be seen the amount for 2019 was modest, reflecting the actual situation where the inception phase took up 6 months of the first year. The expenditure was consequently planned for 2020 and 2021 with about half of the budget used for each year. The planning was adaptive based on the total allocation agreed upon. The no cost extension to end of 2022 allowed for spreading the budget over four years.

Figure 7 shows the pattern of expenditure over the four years in the Caribbean which is similar to the Pacific. CHF 564,328 was spent in 2022 which is 55% of the total amount transferred to IUCN ORMACC. It is noticeable that CHF 268,388 was executed in 2021 which amounts to 26% of the total transferred amount. In the Pacific CHF 72,440 was executed in 2021. This difference is strongly connected to the generally earlier easing of COVID-19 restrictions in the Caribbean in comparison to the Pacific.



Figure 6: IUCN ORMACC budget distribution per year 2019 – 2021

⁶³ The FR from IUCN ORMACC does not include budget planning for 2022.



Figure 5: IUCN ORMACC expenditure per year 2019 – 2022 (CHF)

The COVID-19 pandemic was totally unforeseen and even with adaptive management negative consequences for implementation were unavoidable. Even though the shift to procure equipment instead of using funds for travelling did demonstrate adaptive management, this decision posed new challenges in relation to procurement. Overall, and especially in the Pacific, the concentration of implementation and finalization of many activities in the last project year did have an impact on efficiency as many activities and thereby expenditure happened in the last year. In summary, and for the reasons explained above, expenditure in both regions did not align well with the planned budget distribution over the implementation period.

The expenditure was distributed in different categories. Figure 8 shows the distribution of expenditure on the different categories in the Pacific including overhead. Expenditure for staff was highest in 2021. One staff left and another sadly passed away, which explains why the expenditure for staff time is not higher in 2022 when many activities took place. Although 'partner' and 'consultant' are two different categories, in practice the expenditure on these categories could be for either partner or consultant. This happened in both regions. In the Pacific the expenditure for 'partner' was relatively high and at the same level from 2020 – 2022. This included, for example, the national consultants that were carrying out the policy assessments.



Figure 8: IUCN ORO expenditure per category per year

Figure 9 shows the expenditure in the Caribbean for the different categories. Expenses for staff time were lowest in 2019 which reflect the late start-up of activities and contracting of staff. In 2020 and 2021

expenditure is at the same level while it is considerably higher in 2022. This increase was due to the high activity level in the last year. Travelling took place in the beginning of 2020 before COVID-19 set in again in 2022. There are high expenses for the "partner" category in 2021 and 2022, which reflects contracting of SB for the qualification reports, AVC business cases and policy briefs. The expenses for workshops are low also compared to what was planned but expenditure is high in 2022. In both regions, the 12-month extension was crucial for allowing the implementation of planned activities, of which many took place in 2022 and therefore expenditure is high in that year for workshops.





Figure 10 shows the expenditure per outcome per year in the Pacific. It should be noticed that Outcomes 1 and 2 are reported together in financial management. IUCN ORO has reported an expenditure of CHF 720,923.⁶⁴ The amount transferred to IUCN ORO was CHF 424,118. ⁶⁵ As mentioned above the expenditure can be higher than the amount transferred to a region for cash balances. The transfer of funds is based on cash needs but does not limit spending.

Overall, it shows that expenditure has only been reported for the first three outcomes. As mentioned, there was a regional event held in Fiji in December 2022. This was a planned expenditure for IUCN ORO and should appear here. One explanation why it is not included could be that it was not paid by the time the financial report was submitted. The figure reflects what was shown in figures 5 and 7 that the expenditure was low in both regions in the first three years.

⁶⁴ IUCN ORO yearly financial estimate.

⁶⁵ The amount transferred to a region for cash balances, is not directly related to expenditure. The transfer of funds is based on cash needs but does not limit spending.





In the financial and audit reports shared by IUCN ORMACC the budget and expenditure data are not disaggregated per year and per outcome.

Reallocation of funds from travelling and workshops to the pilot projects on the alternate value chains opened opportunities for expansion and consolidation.

In IUCN ORO the budget for travelling was CHF 76,592 and for workshops CHF 298,060. IUCN ORMACC had a budget of CHF 85,773 for travelling and CHF 303,550 for workshops. After COVID-19 travel restrictions set in, IUCN decided to use the funds for workshops and travelling to further support the AVCs.

In the Pacific that led to two contracts, as listed below in table 8.

Pacific.	0	1 /	×.		0	Å	
Company			CHF	Purpose			

Table 8: Small grants to project development from unspent funds for travelling and workshops funds in the

Company	CHF	Purpose
Pacific Waste Recyclers Limited (PWRL)	31.110	Fiji informal sector pilot activities
VanuatuRecyclingandWasteManagementAssociation (VRWMA)	228.574	Vanuatu W2P infrastructure, collection and baling for export
Total CHF	259.684	

In Vanuatu, IUCN financed the purchase of a baler by RecycleCorp to enable the export of recyclable PET bottles. Because of the delay with the consultancy assignments and respective consultations to assist the region, options for reducing plastic waste were provided to the countries only very late during the last half of 2022. The countries have not yet received the hardware, but it is expected in June 2023.⁶⁶

As described under EQ3 effectiveness, the grant to WRFL supported the women waste pickers with security equipment and other pilot activities. The biggest contract was with VRWMA to assist with some construction and the baler for recycling the PET bottles in Vanuatu.

⁶⁶ As of March 2023, IUCN was negotiating a no extension of six months with Norad.

In the Caribbean there were four contracts, as listed below in table 9.

Table 9: Small	grants	to	project	development	from	unspent	funds	for	travelling	and	workshops	in	the
Caribbean													

Company	CHF	Purpose
Searious Business	73.608	Support to advance solutions for recyclables in Antigua and Saint Lucia (policy paper, waste to product)
Luis Eric Ecker	Recyclable Solutions Videos	
Qingdao Shun Cheong Rubber Machinery Manufacturing Co., Ltd	32.252	W2P machinery Antigua and Barbuda Waste Recycling Corporation (ABWREC)
Zhengjiang Guangxu CNC Equipment Co., Lt	4.437	W2P machinery Antigua and Barbuda Waste Recycling Corporation (ABWREC)
Total CHF	118.945	

ORMACC signed a separate contract with SB to continue supporting the rollout of the solutions for recyclables and the policy work in Antigua and Barbuda, as a follow-up to the B2B recycling pilot that they led under the contract with IUCN HQ. The videos by Luis Eric Ecker were intended to raise awareness through capturing footage in Saint Lucia to produce a Public Service Announcement on the W2P and a video that will be used by Renew St. Lucia and the Government of Saint Lucia. The W2P machinery was for Antigua and Barbuda and has been delivered. These four contracts were fully or partly financed with unspent funds from travel and workshops.

The reallocation of funds produced an unexpected positive result at the national and local level because it enabled expanding the pilot projects and consolidating results which are now likely to have lasting impact. This is the case with the Antigua and Barbuda Waste Recycling Corporation (ABWREC) and Renew St. Lucia which will produce plastic chairs and possibly also other products. It will also be the case with the VRWMA which will recycle bottles once the procurement process and handover has been completed.

Assisted by a set of management and monitoring tools, the PWFI operational model functioned well and the project management at the HQ level was responsive to solving problems and applied adaptive management.

In relation to the operational modality, IUCN has adopted a decentralized approach that delegates authority to regions for projects being implemented in the region under the assumption that the regional offices are best placed to address issues related to implementation on the ground. While certainly advantageous in other respects, this organizational structure also has the effect of curtailing the ability of IUCN HQ to successfully address regional coordination issues within the timeframe of the project.

The project was well management under the chosen operational modality at the global level and the global project manager in coordination and consultation with the regional and project managers found practical solutions to adapt implementation to the COVID-19 restrictions. The reporting was timely and communication with the client Norad was productive also in the beginning of the project where there was quite substantial involvement of Norad in refining the results framework and selecting the target countries. The management disposed of 6% of the overall budget and part of the overhead of 7%. The management at HQ level consisted of the overall project and financial management as well as staff for monitoring, evaluation and learning.

Apart from the coordination and supervision of the project in the regions, the HQ management also coordinated the activities at the global level such as the communication activities, the elaboration of the

economic assessment reports and the liaison with other activities under the *Closing the Plastic Tap Program*. These activities have a very substantial budget as can be seen in figure 11 which shows the distribution of 87% of the budget that is allocated to activities under the four outcomes. As seen below, IUCN ORMACC and OR received about 35% of this budget where close to 65% were applied at the global level. This allocation went to cover the costs related to the staff that carried the above-mentioned activities in Gland and New York, part of the amount for contracting APWC and SB, part of expenditure for the policy assessments, support contracts with the Saint Lucia Solid Waste Department , development of the Marine Litter Management Action Plan editing of the documents produced at the regional and national level, travelling and participation in regional and global events, dissemination of the Blueprint and other documents as well as advocacy.

In view of the overall purpose of PWFI which is to demonstrate effective, quantifiable solutions to addressing plastic leakage from small island developing states, the evaluation team finds that this distribution of funds with a very large share to the global level can be justified because the demonstration must take place not only at the national level, but also at the global level in various decision-making fora. Furthermore, several important outputs were produced at the global level and other regional and national products were finalized which will have a much longer lifetime than the project itself. Finally, even if the COVID-19 pandemic had not happened, it does not seem likely that the regional and national level could have absorbed a substantially higher budget.



Figure 11: Distribution between the regions and the global level for activities to achieve the four outcomes

IUCN has clear procedures in terms of financial management. All project and financial managers have access to the same project financial management system in IUCN. The system automatically generates a monthly report, and it is the project manager's responsibility to analyze and follow up on any issues that may arise from the reports. IUCN HQ reviews the monthly statements for the entire project and have discussions with the regions on progress relative to the objectives and their expenditures. The actual control of budgets allocated to the regions is under the respective regional project managers. IUCN HQ also accompanies the overall spending and identifies and addresses issues that may arise. In case HQ identifies problems with financial management, there are different levels of possible action that it can take:

- Identify support required or suggest alternatives to activities that are not progressing at planned speeds. This usually involves facilitating procedures for spending. For example, in the case of procuring equipment for VRWMA in Vanuatu, HQ reviewed ToR and supported the administrative process and the global procurement level to ensure that it followed IUCN procedures.
- Support the contracting process. This usually happens at the level of contracts above CHF 5,000 and below CHF 25,000. An example of this is IUCN's support to follow up of Marine Litter Action

Plan by Saint Lucia Solid Waste Authority, which was executed from HQ in consultation with the regional office.

• Lastly, HQ can retake budgetary and operational control for specific activities. The reallocation of the budgets to pay for the APWC and Serious Business consultancies could be seen as an example of this. According to IUCN, this is usually to be avoided unless deemed absolutely necessary and IUCN HQ has the capacity to take over the activity. Such an action would be done in consultation with the region in question.

The above steps illustrate the tools that HQ has at hand and the examples show that they were applied during implementation when it was deemed necessary based on an assessment.

The project management also used a set of tools to accompany and facilitate the implementation such as Outcome Harvesting, annual reporting, the tracking tools and the risk register. These tools and approaches are regularly assessed and revised by IUCN to improve their usefulness.

The annual reports (AR) were relatively systematic and included a good level of detail. They report progress from the regions to the HQ. The ARs did not include information about management decisions such as the decision on using the funds allocated to travel and workshops for enhancing the value chains.

The risk register is part of IUCN internal processes. It has undergone a significant revision since the beginning of implementation of PWFI. Its objective was to monitor the risks to the organization, and less about an internal project monitoring risk assessment, though there are areas of complementarity. IUCN has just launched a version that is designed specifically for monitoring project risks which is shortly to come online. During implementation the overarching risk management had to do with elaborating an adequate response to the COVID-19 pandemic. This challenge made the risks previously identified less urgent. In the results matrix in the annual reports, risks and assumptions are listed together in the same column. There is no column to assess whether the assumption still holds or if a riskier situation has arisen. In the AR 2021 it is noted that the low capacity and low number of staff in government institutions continue to be a challenge and that the solution that IUCN ORMACC pursues is to extend the contracts with the national project assistants.

The tracking tools included knowledge uptake, registering of events, level of stakeholder engagement and uptake of policy recommendations. The team in ORMACC applied them more consistently than the ORO team. One example of this is that in 2022 there are very few entries in the tracking tool for the Pacific while many events did happen that year. The information and data in the tracking tool was used to elaborate the annual reports. It is not the impression of the evaluation team that the tools on uptake of policy recommendations and stakeholder engagement were used pro-actively in the Pacific. For example, in the case of VRWMA the engagement level is stated as 'Consideration' although this stakeholder was fully committed and implementing. As mentioned, the tools were more properly populated and updated in the Caribbean and thereby became more useful.

The ToC has developed over the course of project implementation. IUCN held four sessions analyzing project progress by applying the Outcome Harvesting methodology. The sessions highlighted the iterative process of achieving the expected outcomes, the interconnectedness of outcomes and that several outcomes not expected or formulated in the project document are necessary to happen before achieving the expected outcome. This process had the effect of progressively transforming the ToC into an increasingly substantiated description of actual change, rather than just a description of predictive theory, and thus rendering it more useful for decision-making and adaptive management. The evaluation team considers this process a highly innovative approach to M&E with potential added value for generating more understanding and insight about the attribution pathways between outputs and outcomes and eventually impact.

The evaluation team selected the outcomes which were graded very significant for verification. In the case of the Pacific 14 of 19 were verified and 5 were not possible to verify as the stakeholders involved were not available. In the Caribbean, all 7 out 8 outcomes graded very significant were verified and 27 of 50 Significant outcomes were verified and the remaining were not possible to verify because requests for

verification were not replied or because they were not considered sufficiently relevant to be verified. In some cases, i.e., two in the Caribbean and three in the Pacific, the evaluation team did not find evidence that these outcomes could be attributed to PWFI. However, although the events were outcomes of other projects and initiatives, they did have a linkage to PWFI and might in the chain of events have contributed positively to the results of PWFI. This could for example be the case of events organized by SPREP in the Pacific and the implementation of the Non-Biodegradable Act of 2018 in Grenada.

The monitoring of progress in achieving the projects outputs and outcomes was continuous and participatory and secured that all staff involved were engaged in the project implementation and aware of the progress including in achieving intermediate outcomes. The financial management was also closely monitored through regular financial reporting and yearly audits. The project management at HQ and regional level had meetings to discuss and solve issues pertaining to implementation. The coordination at management level and its result were not mentioned in the annual reports and evidence of analysis of the different approaches to management in the two regions has not been shared with the evaluation team.

The MTR was carried out in mid-2021 and the project management had elaborated its management responses by November 2021 on how IUCN would address the recommendations, i.e., which would be implemented, when and how. The MTR has 14 recommendations for short- and medium-term interventions. Table 10 below lists the recommendations, how they were addressed and the results that the evaluation team detected. The management disagreed with one recommendation and partly disagreed with another recommendation. The rest were addressed. In a few cases, as with recommendation 5, the process has not been completed and recommendation 13 has not been implemented. The recommendation to extend the project 12 months was implemented and the need for improving reporting was addressed through renewed efforts in advancing the Outcome Harvesting process while linking it to the frequent revision of the ToC to better track intermediary outcomes achieved by the project. The management also used Outcome Harvesting as a tool to engage the project teams. The use of these tools gave a good insight and contributed to show which important outcomes the project contributed to. The process was supposed to lead to a Semi-Annual Report based on Outcome Harvesting that failed to materialize.

The number of tracking tools was reduced to allow greater focus on the most important ones as a response to the MTR recommendation. The project team at HQ also responded to the MTR recommendation to "Compile policy recommendations into master document" by producing synthesis documents for all 6 countries. This work was guided by an overall M&E strategy.

No	Recommendation	Status
1	12-month extension to project timeline	The extension was agreed with Norad and it had a very positive effect as it permitted to carry out and finalize many activities which had been delayed or were not being carried out because of COVID- 19 restrictions.
2	Adopt Reconstructed Theory of Change	The ToC was revised continuously which served as a learning tool for project staff
3	Adopt mid-year reporting for activities and budgeting	Semi-annual reports based on OH were planned but the evaluation team has not seen such reports.
4	Maintain up-to-date recording of project tracking tools	IUCN agreed with reservations. Several reminders were sent out to project teams which had some, but not full effect, on the updating.
5	Institutionalize use of ERM with project team and consultants	According to the management response document this recommendation is under implementation.
6	Integrate gender indicators for remaining project aspects	The study Gender and Plastics - A review of the links in select Caribbean and Pacific islands was finalized in 2022 and will guide IUCN's work going forward.
7	Compile policy recommendations into master document	The policy recommendations are compiled in the synthesis documents for each country. The evaluation team has not found evidence that the compilation as such supported the Governments to identify key gaps and actions required to mainstream project actions

 Table 10: Assessment of the implementation of the recommendations from the MTR

		but has the impression that the short and graphically pleasant format of the summaries is likely to facilitate their consultation by the understaffed and typically overwhelmed government authorities of the target SIDS. The policy recommendations are also listed in the tracking tool and project staff has reported progress for the countries in the Caribbean and in Fiji. For internal purposes this listing seems useful.
8	Consider reducing the number of	The number of tracking tools was reduced from six to four, which made it easier for project staff to report
	depth over breadth	made it easier for project staff to report.
9	Re-examine the value and utility to	IUCN disagreed with this recommendation. Nevertheless, there were
	to be a useful output and how it	extensive consultations on the format and content of the Blueprint which contributed constructively to the final document.
	would be applied	
10	Reconsider policy outcome	Areas for focus were identified in Antigua and Barbuda, Saint Lucia
	government bandwidth from	further with this recommendation in relation to the ambition on the
	Covid-19 impacts	action plans and the strategies. (Outputs 2.3 and 3.2)
11	Increase government support for	The management response states that this has been supported indirectly through an assessment of financing options. The
	with Ministries of Finance,	evaluation team understands that this was done through the
	Tourism, and Business	economic assessment reports. These reports will be particularly
		useful for future engagement with the six countries as the ones for the Caribbean countries. Fiji and Samoa ware finalized late in 2022
		and the one for Vanuatu is not finalized yet.
12	Ensure business cases are	SB produced business plans for all the alternate value chains which
	supported by detailed and costed examples with demonstrated	were highly useful and appreciated by stakeholders.
	previous successes within a	
	comparable context	
13	Conduct plastic market mapping	IUCN agreed with reservations. In specific pilots, arrangements have
	to support plastic busilless pilots	evaluation team did not find evidence for this mapping.
14	Engage with global plastic	Coordination has been initiated but has not yielded any tangible
	packaging sector (e.g., ANZPAC	results yet.
	Plastic Pact) to further leverage	
	assistance on plastic management	1

The project management at regional level in the Caribbean was relatively smooth while in the Pacific project management had more difficulties in coordinating and delivering timely results.

The evaluation team has found evidence from interviewees, document analysis and achievement of outputs that there were significant differences between the efficiency in IUCN ORMACC and IUCN ORO. This is detailed below.

In both regions the government appointed a national focal point from the ministry responsible for environment. IUCN ORMACC opted for contracting national project assistants (NPAs) in each of the three countries. They were local independent consultants except for Antigua where the NPA was government staff. This choice of staffing strategy facilitated implementation, understanding and adaptation to the political environment. The NPAs were engaged and well connected in their countries. This also enabled PWFI to adapt its stakeholder engagement to deliver more efficiently the policy uptake objectives in a context of covid-related restrictions and stakeholder fatigue.

The implementation in the Pacific was carried out by the regional office in Fiji. IUCN ORO found that the human resources in the regional office were sufficient to carry out the implementation of the project. The internal agreement with the IUCN Global Marine and Polar Program did not specify a specific staffing strategy and it was not deemed necessary to contract national project assistants as in the Caribbean because

Fiji, Samoa, and Vanuatu are geographically closer to each other than the Costa Rica-based ORMACC is to the target SIDS. Sadly, IUCN ORO experienced staff leaving and also a project member who passed away. These circumstances of course added challenges to implementation.

At the time of project development, there were direct flights from Fiji to Samoa and Vanuatu. This also contributed to the decision not to contract extra national staff. Those flights were not operating when COVID-19 restrictions were in place but are back in operation. The decision to not have NPAs made it more difficult to implement the project in Samoa and Vanuatu during the restrictions and reduced the visibility. The workshops and seminars were substituted by online events e.g., the WG meetings. According to the IUCN HQ, the contracting of NPAs was recommended by HQ⁶⁷.

Compared with the situation in the Caribbean, the advantage of having staff present that is well connected and knowledge of local and political conditions, the evaluation team finds that the staffing strategy in the Caribbean gave substantial impetus to achieving better results.

At the same time there were other factors which contributed to difficulties in maintaining a smooth and successful implementation. Several interviewees mentioned that the level of communication and information fluctuated quite a bit, meaning that sometimes it worked well but also frequently there was insufficient communication and follow-up. It was also observed that procurement processes were unusually long. Expectations were sometimes created with partners, which then led to frustration when they were not met. The fluctuating communication strained relationships with some organizations, particularly regional ones in the Pacific. In other cases, stakeholders had the impression that they did not receive regular information and were distant from the project and its development. In the case of the relationship with regional organizations, the evaluation team understands that there are different interests at play and that the question must be seen from different angles. Nevertheless, the evaluation team is assigned to evaluate the PWFI project.

The process for developing policy assessments and recommendations was not efficient. The decision to avoid duplication of efforts and to build on ongoing policy work was good in theory but in practice it took too long to contract national consultants and for them to finalize their work. This meant that the assessments were not ready to be useful for the project and other solutions needed to be found along the way e.g., using the recommendations which were already in the pre-existing EIA report to which the national assessments were meant to be complementary. In hindsight this process should have been ended or sped up with clear deadlines for the national consultants.

Internal stakeholders observed that the time difference combined with COVD-19 travel restrictions made it difficult to build up informal and easy-going working relationship that would facilitate the exchange of opinions and data and speed up implementation of activities.

Another issue in relation to the regional performance is that several output products such as the Synthesis of the Plastic Pollution Policies and the Business Plans were finalized in a layout format that could be shared online. The layout process began in the Caribbean and ended in the Pacific. This also contributed to delays in the Pacific.

A thorough context analysis was out of the scope of this evaluation, but the evaluation team found that the conditions for implementation of PWFI varied considerably across countries and that each SIDS presented its own opportunities and difficulties. However, the regional articulation of PWFI in the Pacific was arguably more challenging on account of the differences in time zone, geographical distance and fragmentation with all the difficulties in communication and access that they entail. Contracting of NPAs to ensure a stronger presence on the ground, more focus on timely and adequate information and day-to-day communication with stakeholders and an initial comprehensive mapping of ongoing and previous plastic waste initiatives could have contributed to enhanced results.

The project's efficiency was rated as Satisfactory.

⁶⁷ Email correspondence from IUCN HQ, 20 March 2023

3.5 Impact

Summary of findings on impact:

- The foundational knowledge on plastic waste and leakage in SIDS has informed global discussions on waste audit methodology and several policy initiatives and plans primarily led by other national and regional initiatives.
- The delivered policy recommendations, position/policy papers, business cases for alternative value chains demonstrated workable solutions and laid the foundation for contributing to improving plastic waste management in the target countries.
- The small grants to support the private sector in adopting and developing circular economy solutions that came from unused funds due to COVID-19 restrictions increase the likelihood of impact of these solutions.
- The integrated approach proposed by the Blueprint is likely to have impact on the approach to plastic waste management at the SIDS, regional and global levels.

The project Results Framework formulates the expected impacts as:

- The quantity of plastic leaked: "A strategic plan for a minimum of 80% reduction in mismanaged plastic waste from baseline estimates endorsed by national governments" by project end and the achievement of the actual reduction by 2030.
- The quantity of plastic generated: "A strategic plan for minimum of 20% reduction in Plastic waste generation from baseline estimates endorsed by national governments" by project end and the achievement of the actual reduction by 2030.

The evaluation team has not found evidence of such strategic plans having been developed by the project and endorsed by national governments. The project has achieved substantial results that could be used for producing such plans and for contributing to the 2030 target, which may still be considered realistic but dependent on a wide range of factors related to the development of the waste management sector in each of the target countries. Norad has explained that the reason why the project has such concrete targets for the impact is that early in the implementation of *The Norwegian Development Program to Combat Marine Litter and Microplastics* there was an ambition that all projects should contribute directly to the overall results framework of that program. Later on, it was considered unrealistic. The PWFI had other impacts which are described below.

The foundational knowledge on plastic waste and leakage in SIDS has informed global discussions on waste audit methodology and several policy initiatives and plans primarily led by other national and regional initiatives.

The evaluation team, in line with the project stakeholders, recognize the impact that the knowledge generated by the project on quantification of plastic waste and leakage and the development and refining of methodologies already has had on several projects and policies and is likely to continue to have as a stepping-stone for future action. Data provided impacted on the development of the business cases, the CDL policy papers in Fiji and in Antigua and Barbuda, the development of the Marine Litter Management Action Plan which is now approved and the National Source Inventory on Plastic Pollution in Saint Lucia, the sharing of PWFI Data with the World Bank to support Fiji's ban on polystyrene and the program Unleashing the Blue Economy in the Caribbean (WB-UBEC). Among other project results, it contributed to creating awareness among stakeholders.

It has also contributed to the knowledge required for the global plastic treaty through IUCN's work with AOSIS. The latter is an unintended result as the plastics treaty was not foreseen when the project was designed. Another unexpected result to which PWFI contributed is that Grenada ratified the BRS (Basel,

Rotterdam, Stockholm) conventions in October 2021 after the process had been stalled at country level for many years.⁶⁸

The evaluation team finds that there is good basis for expecting that the data and knowledge will be used in many other contexts in the coming years both at the national level and global level, including for academic and policy purposes, and ultimately induce practical changes in plastic waste management.

The delivered policy recommendations, position/policy papers, business cases for alternative value chains demonstrated workable solutions and laid the foundation for contributing to improving plastic waste management in the target countries.

The results of most of the outputs delivered by the project hold potential to lead to positive impacts in plastic waste reduction. As is well known, policy development processes are long. However, within its four years of implementation PWFI influenced some steps in this process. Perhaps the most salient achievement in terms of tangible waste reduction is the B2B collection scheme in Antigua and Barbuda that the government is currently running on its own after a generally successful pilot phase. Regarding the CDL scheme in Fiji, the government has allocated money and has contracted a consultant to elaborate the proposal for legislation. The development of the policy paper and awareness raising carried out by PWFI influenced that process and its outside the control of the project if the Fiji government eventually approves and implements the CDL.

There are reasons to be optimistic about the likelihood of these initiatives being able to have real impact on the ground in reducing plastic waste and leakage. One is the increasing visibility and attention that is developing internationally around the issue of plastics that increases the likelihood of support to the sector of waste management. The other, and related to the first, is the increased environmental awareness and stakeholder buy-in achieved by the project at the national level. This increase in awareness has been well illustrated by the outcomes harvested by the project team, and which in turn have been verified by the evaluation team (see Annex D). This is compounded by the increased knowledge about the negative effects that plastic waste has on the economy and the economic viability of recycling from the economic assessments and business cases that PWFI did. The evaluation team finds that these factors are crucial for sustaining the motivation of stakeholders to find workable solutions for the obstacles encountered along the way and thus finds that these project results are likely to lead to tangible impacts in plastic waste management.

The small grants to support the private sector in adopting and developing circular economy solutions that came from unused funds due to COVID-19 restrictions increase the likelihood of impact of these solutions.

The cancellation of project activities that required travel and physical meetings due to COVID-19 led to unspent funds. The project team decided to reallocate such funds to activities under Output 3.3. Rather than just developing a business case for the W2P solutions as originally intended, the project was able to allocate resources for assisting with the purchase of the machinery needed for processing of HDPE/PP plastics. It is very unlikely that project partners would otherwise have had the financial capacity to implement the developed business plans.

This was an especially productive approach in the Caribbean, where the project's Phase 2 foresees capacity building to operate the purchase machinery, further assist in the consolidation of the pilots and follow closely their implementation to draw further learning. In the case of the Pacific, this strategy also had very good results which will be enhanced when IUCN resolves the present problems with procurement and delivers the equipment as agreed. These successes are a part of the key results of Outcome 3 because they

⁶⁸ The national focal point believes that the environmental awareness on plastics created by the PWFI project played a big part in influencing the Government to take this additional step.

are expected by the private companies involved to be economically viable and are likely to lead to a reduction of plastic leakage.

The integrated approach proposed by the Blueprint is likely to have impact on the approach to plastic waste management at the SIDS, regional and global levels.

The *Plastic Waste Free Islands Blueprint – a journey to zero plastic waste* was elaborated and finalized in 2022 based on the experience from all the SIDS included in the project. As mentioned in EQ 3, the evaluation team considers the Blueprint a high-quality product that points to the future by providing dynamic and context-adaptable guidance to tackle the mismanagement of plastic waste in SIDS. As such, it will be specifically useful for IUCN in its work at the global and regional levels. The Blueprint has become an even more important tool than envisaged because of the work that IUCN is involved in for the preparations for the global negotiations for the plastics treaty. Given these processes, the project's Phase 2 in the Caribbean and the mentioned international momentum and increased visibility around the problem of plastic waste, the evaluation team finds it likely that the Blueprint and the integrated approach it presents will be used in various SIDS and contexts at the global level, leading to probable improvements in the ways SIDS manage their plastic waste."

The evaluation team has found the project's impacts to be Satisfactory.

3.6 Sustainability

The knowledge generated and the achieved buy-in for the solutions are likely to lead to the sustainability of key project outcomes.

Even if the project had only produced the knowledge-related products, it is likely that they would have been used in other initiatives. This is evidenced by the interest expressed by various organizations in the produced data. The knowledge generated has been shared with various organizations working on plastic waste management such as WB, the PEW Trust and Common Seas, whose tools will need careful articulation with the project's Blueprint when engaging the same geographies.

The project sustainability benefits from the global attention that the plastics sphere is garnering, partly due to the preparations for the global plastics treaty. Especially in the case of the Caribbean, the outputs of PWFI are currently being used as part of the needed methodological harmonization linked to the regional-level preparations⁶⁹. The project was timely for creating impetus not only for unblocking some related legislative processes that had stalled in some of these countries e.g., in Fiji, but also for generating the needed high-level mobilization to push forward the negotiations for the plastics treaty in a way that strengthens the position of SIDS, historically weak in the global sphere. This project has also further contributed to consolidating IUCN as a leading global entity in the field of plastic pollution. These achievements are likely to draw attention to the Blueprint and possibly attract other investments to consolidate gains in the PWFI countries or further develop the approach in other contexts.

The project's sustainability would benefit from a more effective regional engagement with OECS in the Caribbean and with SPREP and with other capable regional collaborative programs like ANZPAC in the Pacific.

A Phase 2 for PWFI is decisive for the full achievement and consolidation of results, accentuating the regional discrepancy in the project's level of success.

⁶⁹ IUCN organized in October 2022 a regional three-day PWFI workshop in Antigua titled "Caribbean Interregional Workshop in preparation for the Intergovernmental Negotiating Committee (INC) of the Global Plastics Treaty".

The PWFI did not benefit from an exit strategy or specific handover initiatives. The prospects for the sustainability of PWFI are markedly different in the two regions. Not only has the project achieved more in the Caribbean, but these gains will also benefit from the follow-up project starting soon in the same three Caribbean countries plus Saint Vincent and the Grenadines and Saint Kitts and Nevis. There are indications that the transition work is being adequately planned, allowing a smooth continuity between the two phases. In the two new countries a waste quantification audit and characterization will be produced to establish a baseline, which has the potential to be more robust given the context of post-pandemic normality and the lessons learned from Phase 1. For the other countries most of the already initiated processes will be continued. Many of the same activities as in the PWFI project will be introduced in the two countries mentioned with improvements from the lessons learned so far. This work will include the development of the pilot projects, assistance with the uptake of the same and additional policy recommendations, and the application of the Deplastify tool with the respective capacity building. The Saint Lucia Marine Litter Management Action Plan, which integrated the data generated by PWFI, includes various activities for which the government has secured a World Bank loan under the program Unleashing the Blue Economy in the Caribbean (WB-UBEC). The sustainability of all the processes initiated by PWFI in the three Caribbean countries is therefore likely because their further support is assured for the coming years.

The results in the Pacific are fewer and more scattered than in the Caribbean, but sustainability is still likely in several areas. The CDL will be elaborated, and it is fairly likely that it will be approved as there is, since December 2022, a new a progressive government in Fiji. RecycleCorp will continue the B2B initiative with the baler and equipment which will be delivered based on the contract between IUCN and RecycleCorp. The women waste pickers have got a visibility and a recognition of their role in recycling which cannot easily be rolled back to the stigmatised situation where they were before, and the Pacific Waste Recyclers will continue to work with them. The countries in the Pacific not only the three targeted will also benefit from the knowledge generated from the 'quantification report' and the work with the Blueprint which will continue regionally.

The evaluation team has found the project's sustainability to be **Likely** for the Caribbean countries and **Moderately Likely** for the Pacific ones.

4 Conclusions

<u>Conclusion 1:</u> PWFI supported the national priorities of the targeted SIDS on reducing plastic waste and leakage by generating new knowledge, demonstrating business cases for plastic recycling and providing step-by-step guidance for further policy development and implementation including the private sector in recycling and reuse.

The project was found to be highly relevant to the national priorities of the targeted SIDS. This was especially the case of the Caribbean countries, which are lacking effective strategic-level policies to deal with national waste flows and are having difficulty in implementing recently approved legislation due to lack of internal capacity and effective action-oriented solutions. In the case of the Pacific, some countries were more advanced in terms of policy, but they still have challenges with their implementation. With more detailed scoping during design phase, the project might have reached a more productive selection of Pacific SIDS and started implementation with a more tailored strategy for each of the countries, ensuring more complementarity from the outset with other ongoing initiatives at national level. Generally, the project can be said to have been responsive to the needs and priorities of national stakeholders. In both regions, the knowledge generated did not exist in sufficient form for guiding strategic planning for practical circular economy solutions, and with the developed *Blueprint*, the project provided SIDSs with useful step-by-step guidance for further policy development and implementation including the private sector in recycling and reuse. Aligned with national policies and strategies, IUCN PWFI supported SIDS in reducing the global plastic waste problem providing new data on plastic quantities and leakage and furthering policy development and uptake of recycling methods by the private sector.

<u>Conclusion 2</u>: PWFI was well designed because its four outcomes constituted an integrated package with data and knowledge generation, policy development, private sector development and the Blueprint, which is a document with lessons learned that at the same time points to the future because it readily useable for a variety of target groups. At an overall level, the project delivered well on all the components and was probably less successful in relation to policy development.

The design of the project meant that the different outputs and outcomes were integrated, and many outputs fed into other outputs and outcomes. This was in general a successful model because it made the project coherent, but it was also vulnerable to delays in the delivery of outputs which then affected the delivery of other outputs.

This affected negatively the work with the policy recommendations and uptake in the Pacific while policy assessments were timely and delivered in the Caribbean and led to more tangible results. The work on alternate value chains was also affected by late delivery of data but the consultant managed to elaborate timely products achieving tangible results.

The differences in the level and quality of output achievement in the two regions were largely due to the different staffing strategy, the COVID-19 restrictions which among other things restrained communication and face-to-face cooperation, somewhat longer procurement processes and the loss of staff in the Pacific, and the generally smoother and consistently responsive management in the Caribbean.

The Blueprint is a forward-looking document which with its integrated approach and high-quality presentation is a very useful tool for policy dialogue at various levels. As described above the Blueprint did not have a substantial influence on policy development or private sector behavior in the target countries due to its late finalization. As it is forward-looking it is already used by IUCN at the global and regional level.

<u>Conclusion 3</u>: The COVID-19 restrictions, which were in place for at least half of the implementation period and more in the Pacific, had a profound impact on project implementation and result achievement. The effects of the pandemic on the project implementation were mostly negative but there were also positive effects that improved implementation and led to unexpected achievements.

The attribution of the evaluation ratings needs to be contextualized by the fact that the project implementation was severely impacted by the COVID-19 pandemic, which led to substantial delays and readjustments in the implementation strategy, especially with regards to Outcome 1 in general and Outcome 2, 3 and 4 in the Pacific. Although project management adapted effectively under challenging circumstances, the one-year extension granted by the donor was not able to fully compensate for the disruption in implementation which had already had a late start pre-COVID.

One of the main reasons why the restrictions impacted more in the Pacific was the different staffing strategy which meant that the presence of PWFI in particularly Samoa and Vanuatu was very limited. This restrained the possibilities for project staff to accompany progress in finalizing policy assessments and developing the business cases as well as conducting timely and productive consultations on the Blueprint. In the Caribbean, under the close supervision of ORMACC, each country had a local National Project Assistant, whereas in the Pacific, ORO assumed the regional operations in their entirety. This enabled a comparatively stronger presence of the project on the ground in the Caribbean, allowing more effective stakeholder engagement and follow-up of activities. In both regions the timeframe of implementation was considered insufficient to meet the objectives related to the uptake of policy recommendations.

The positive impact was the freeing of funds to invest in closed loop recycling projects through contracts with private sector companies instead of only piloting business cases. This demonstrated the benefit of providing small grants for machinery and equipment to small and medium-sized companies for overcoming initial barriers for production.

<u>Conclusion 4:</u> PWFI was very successful in establishing a space for people and organizations to find common interest that was productive to generate awareness and adequate levels of buy-in.

The stakeholder mapping was comprehensive and project staff continued to identify additional stakeholders throughout the implementation period, who were invited to different events. This was appreciated especially by new organizations which benefitted from exchanges of knowledge and discussions. Stakeholder engagement was generally effective in establishing a space for people and organizations to find common interest that was productive to generate awareness and adequate levels of buy-in. The buy-in nevertheless only began making its way to the highest levels of decision-making towards the end of the implementation period. The project engagement with stakeholders presented a natural tendency to progressively focus on those stakeholders that were directly relevant to the implementation of the selected recommendations and solutions, especially those with an actual or potential relationship either to the business cases or to the policy-related output. This had the effect that unrelated government agencies or stakeholders were not very engaged by the project and was especially the case with the fisheries sector and, to a lesser extent, that of tourism.

<u>Conclusion 5:</u> PWFI project management at HQ level was responsive to solve problems and applied adaptive management when faced with the COVID-19 restrictions. The financial management was efficient and unspent funds due to the pandemic were productively reallocated to provide small grants to consolidate pilot projects on alternative value chains. This demonstrated a way of applying funds which, to a certain extent, can be more efficient than the workshops and travelling they were originally intended for. Some of the projects supported that way are likely to have local long-term impact.

IUCN is well prepared for project implementation in terms of having a set of procedures and tools in place for project and financial management. This includes monitoring tools which, in the case of PWFI, were applied throughout the project and contributed to on-the-job training and awareness of project staff of the changes process and the series of outputs and outcomes which interlinked can lead to change. The risk register was less used and has also been revised by IUCN in the meantime. The financial management was efficient, and the project was audited annually and the audit reports from 2019 - 2021 did not raise any issues of concern. IUCN HQ applied adaptive management by centralizing the procurement of the consultancies for plastic waste and leakage quantification and the work on alternate value chains, thus achieving more coherent consultancy deliverables for both regions. Faced with COVID-19 restrictions that made travelling and organization of events impossible, funds were allocated to small grants to the private sector to consolidate pilot projects on alternate value chains.

IUCN has adopted a decentralized approach that delegates authority to regions for projects being implemented in the region under the assumption that the regional offices are best placed to address issues related to implementation on the ground. While certainly advantageous in other respects, this organizational structure also has the effect of curtailing the ability of IUCN HQ to successfully address regional coordination issues within the timeframe of the project.

The option to leave a more detailed scoping and country analysis for the first part of implementation has some efficiency benefits for selection and approval but it should be combined with a longer timeframe of implementation to accommodate a more time-consuming inception phase.

5 Lessons learned

1. Pandemics such as the COVID-19 pandemic can hit without notice and have profound negative consequences on project implementation. Project management and implementation that have inbuilt flexibility in terms of application of resources e.g., budget and staff will fare better.

2. Influencing national and regional policies takes time and requires in-depth understanding and knowledge of the context and the stakeholders. Having policy assessments and recommendations ready early in the implementation process increases the chances of their uptake by national governments.

3. With very limited human resources, staff of SIDS governments are typically overwhelmed by multiple functions and policy areas. Other national stakeholders often wear multiple hats in different organizations. This makes stakeholders in SIDS very prone to participation fatigue and special attention should be given to this factor when planning stakeholder engagement and consultancy work.

4. Related to the previous lesson, available human resources with relevant experience and educational background are also more limited than in bigger countries, meaning that finding suitable national consultants may be more difficult and have the effect of prolonging hiring or contracting procedures.

5. The purchase of technical equipment is very time-consuming both because of their specifications and their clearance procedures by international organizations such as IUCN. Procurement scrutiny when supporting a private company to purchase equipment is even more stringent than regular service or output related contracts. This means that the preparatory time required for contracts that relate to equipment purchase needs to be factored in and adequately planned as early as possible during implementation.

6 Recommendations

Based on the in-depth evaluation of the PWFI project, the following recommendations are presented to the IUCN and any other entities, such as governments, donors, and development agencies, involved in the design or implementation of a future project of this nature and scale.

Recommendation 1:

For the Pacific region, IUCN should immediately present a proposal to Norad for using the funds unspent by IUCN ORO to secure the full handover of project initiatives to national governments and dissemination in the Pacific of project documents and results including the economic assessments, the policy assessments and the Blueprint.

The activities which are proposed to be carried out with the use of the unspent funds are:

- Finalization of the procurement and hand over of equipment and other support to VRWMA and PWRL as agreed.
- Organization of the event with key stakeholders in particular Government institutions and donor agencies working in waste management to present the final policy and legal assessments. Preferable it should be one event in each country. As there are new governments in Fiji and Vanuatu which might be more progressive on environmental issues, the organization of the events in these two countries should particularly consider how to use this opportunity.
- Organization of events with key stakeholders such as SPREP, SPTO, FHTA, Tourism Fiji, ANZPAC, VESS and others to present the final Blueprint and discuss how it can be used at national and regional levels, particularly in the light of the preparations for the Global Plastic Treaty negotiation.
- Organization of a meeting with the Ministries of Finance and the Departments of Environment in the three countries in the Pacific to present and discuss the economic assessment reports.
- Organization of a series of trainings for different user groups on the Deplastify tool.

Norad has indicated that it may fund such activities based on a case-by-case assessment.

Recommendation 2:

Based on the experience with different performance of the project management in the Caribbean and in the Pacific and the closing down of possibilities for travelling during a pandemic, <u>IUCN should consider</u> how it best responds in securing adequate and appropriately locally staffed project management.

This could be more generally addressed by contracting national project assistants who are familiar with the socioeconomic and political context and are present even under a lockdown, or also by adopting a performance-based approach that can be more adaptive or override regional competencies when key project deliverables are perceived to be at risk and which should secure 1) timely planning and project management, in which procurement processes need to be factored in; 2) reliable communication; 3) dedicated in-house policy and/or business development expertise to coordinate at regional level.

Recommendation 3:

Based on the positive experience in providing small grants for machinery and equipment to small and medium-sized companies to overcome initial barriers for production in closed loop recycling projects, and which was to a large extent made possible by the reallocation of unspent funds due to COVID-19 and thus an unexpected project result, IUCN should carefully study how IUCN could learn from that experience and integrate a small grant scheme in similar projects.

Recommendation 4:

High-quality waste estimates can only be achieved when countries have a general waste collection system that covers the entire population, and the adequate infrastructure, equipped with weighbridges, to receive waste. In its strategic approach to plastic waste and leakage, <u>IUCN should keep this in mind and apply a broad and integrated approach that also supports improvement of systems for collecting and treating the waste in SIDS.</u> This could also enhance the effectiveness of awareness campaigns that appeal to the importance of people reducing and valuing plastic waste, which can fall short if the population does not have a basic waste collection service on their streets, if there are illegal dumps and/or dumping sites, or poorly controlled landfills. The WB Unleashing the Blue Economy in the Caribbean that foresees support to waste segregation at source among other measures is a good example of the complementarity in approaches that must continue to be sought in SIDS.

Recommendation 5:

In view of the weak results in engaging the fisheries sector in the project, IUCN should pay particular attention to developing a carefully prepared strategy considering the specific conditions and challenges of this sector, including a compelling scheme for producing tangible short-term benefits for the sector's stakeholders. This is already relevant in the Closing the Caribbean Plastic Tap (Phase 2), where IUCN needs to explore engaging through different channels, e.g., working through the Marine Stewardship Council or

other agencies that already have established communication channels with the fishing industry and also working with existing bycatch reduction projects that are already changing gear.

Recommendation 6:

In plastic management projects, <u>IUCN should include an adequate context analysis in project proposals</u> which include key relevant data and information on the political situation, the private sector development, <u>main ongoing projects and partners and general (in addition to plastic)</u> waste management information. Such information and data can in most cases be quickly found through internet searches but should be combined with consultations and document review. It will provide valuable guidance in the initial stages of project implementation. In the cases where a prolonged inception phase, e.g., 3-6 months are included in the implementation phase, it should be combined with a longer timeframe of implementation to accommodate the time used in the inception phase.

Recommendation 7:

In its plastic projects, IUCN should consider more closely solutions for capacitating local authorities and governments to be able to carry out waste audit campaigns without the need for contracting external auditors, since this would help promoting and facilitating the implementation of national monitoring strategies and waste management systems. As such, Phase 2 in the Caribbean should use the opportunity presented by the replication of the assessments in Saint Kitts and Nevis and Saint Vincent and the Grenadines to involve and capacitate government staff, not only from those two countries but also from National Solid Waste Management Authorities in Grenada, Saint Lucia and Antigua and Barbuda. The participants of the country teams in Grenada and Saint Lucia are a possible source of trained people to be engaged in similar future exercises.

Recommendation 8:

<u>IUCN should always include in the ToR on plastic waste studies and audits the</u> requirement of <u>the complete</u> <u>technical methodological reports</u>, made available in open source, with a full and detailed description of the methodological approach used in all the steps of the study, namely the assumptions that were made, the sampling size (besides the number of samples) depending on the statistical standards that are intended to be ensured, the definition of the various indicators and the formulas used for calculating them, the conversions made and their sources, and the limitations found while performing the studies. Such reports should also include a description of results handling and interpretation, the comparison with other sources and their limitations or precautions to be considered.

The data resulting from such assessments should be uploaded to an open-source repository for data from different waste audit projects in SIDS, which would allow scientists and analysts to work with larger volumes of data and get better estimates of plastic waste.⁷⁰ Since APWC performed waste audits for other projects, these could have been used for synergy purposes, such as increasing the number of samples to narrow the confidence intervals. The evaluation team acknowledges that most consultants in the field sign confidentiality agreements when collecting data and cannot share it with other parties with expressly permitted to do so. However, as part of the global role that IUCN is increasing taking in the plastics sphere, it may gradually leverage pressure on donors and contractors to contribute to this collective effort by making the full disclosure of data from plastic waste audits the norm rather than the exception.

Recommendation 9:

IUCN should invest more efforts in communication and integration with national and regional stakeholders to operationalize existing cooperation channels and in making sure that stakeholders are kept abreast of project progress and findings even before the respective communication products have been fully finalized.

⁷⁰ According to the project team, IUCN is planning to upload the date to the GPML website but the recommendation above also includes the full methodological descriptions.

7 Annexes

Annex A: Evaluation Matrix

	Rating		Questions	Criteria to be considered		Data Sources /	Summary of	Strength
					С	ollection Methods	evidence	of
								evidence
EQ 1 RELEVANCE How appropriate and relevant is PWFI project approach and intervention logic in terms of its objectives and anticipated outcomes, and within the context of each country? HIGHLY SATISFACTORY	HS 1. HS 2.	To what extent is the project fit-for-purpose for achieving the expected four outcomes?	 Alignment with national priorities: Extent to which the project's objectives were in line with the national development priorities; Extent to which the project was appropriately responsive to political, legal, economic, institutional, etc., changes in the country; Stakeholder engagement: Extent to which the project was formulated according to the needs and interests of all targeted and/or relevant stakeholder groups; 	•	Review of main project documents Stakeholder interviews	Multiple interviews. Recognition of stakeholders and experts. Project Documents. Policy reports and summaries	Strong	
		2.	Has there been any changes since the project was formulated that might have affected its relevance? If so, what are these changes and to what extent has the project managed to adapt to ensure it remains relevant?	 Extent to which the intervention is informed by needs and interests of diverse groups of stakeholders through in-depth consultation; Relevance to and complementarity with other initiatives in the target countries; 	•	Review of project reports and documents Comparison with similar studies Stakeholder interviews	Covid-19 Interviews with national stakeholders and IUCN team The global plastics treaty discussed in various interviews.	Strong
	HS	3.	To what extent is the project design relevant to global, regional and national objectives, priorities, policies and plans?		•	Review of project reports and documents	Various documents and interviews attest to this.	Strong

EQ2 COHERENCE To what extent did the project add value to existing policies and on plastic waste? MODERATELY	S	4.	To what extent did the project support and strengthen the implementation of national and regional policy framework on plastic waste management?	•	Relevance to and complementarity with other initiatives at the regional and global level; Extent to which lessons learned from other relevant projects were considered in the project's design; Extent to which the project sought to coordinate with other projects and initiatives;	•	Comparison with similar studies Stakeholder interviews Interviews with donor and IUCN teams Policy review Interview with key project staff and consultants	Interviews with national stakeholders National policy reports	Strong
SATISFACTORY	MS	5.	To what extent did the project build on and add value to previous and existing projects and initiatives (agreements, initiatives, data sources, synergies and complementarities with other projects, partnerships) on plastic waste management?			•	Policy review Interview with key project staff and consultants Comparison with similar studies Policy review	Interviews with regional and global stakeholders	Strong
EQ 3 EFFECTIVENESS To what extent has PWFI achieved its outputs and outcomes at national, regional and global level? HIGHLY SATISFACTORY (Caribbean) MODERATELY SATISFACTORY	HS	6.	How effective has PWFI been in developing methodologies and collecting data to calculate plastic leakage? Were these methodologies aligned with international standards?	•	Extent to which the project's actual achieved outcomes/outputs were commensurate with what was planned; Areas in which the project had the greatest and fewest achievements; and the contributing factors; Constraining factors, such as socio- economic, political and environmental risks; and how they were overcome; Consideration of alternative strategies that would have been more	•	Review of project reports and documents Stakeholder interviews Analysis of harvested outcomes	Interviews with regional and global stakeholders Expertise of ET Interviews with SB, APWC Assessment reports	Strong

(Pacific)			effective in achieving the project's objectives;			
	S	7. How effective has PWFI been in engaging with national key decision makers to mainstream plastic waste reduction policy and decision making and increase effectiveness in reducing plastic waste generation?	• Extent to which different kinds of stakeholders were involved during project implementation;	 Review of MEL documents and reports Interview with key IUCN staff and consultants Stakeholder interviews 	Interviews with multiple national stakeholders	Strong
	S	8. How effective has PWFI been in engaging with the private sector and other key stakeholders to develop and implement enhanced plastic waste management measures in the targeted sectors, including the development of a Plastic Waste Free Island Blueprint?		 Review of project reports Interview with key IUCN staff and consultants Stakeholder interviews 	Interviews with multiple national stakeholders Interviews with IUCN	Strong
	MU	9. How effective has PWFI been in engaging key national stakeholders in the Plastic Waste Free Island Blueprint network?		 Review of project reports Interview with key IUCN staff and consultants 	Interviews with multiple national stakeholders	Strong
		10. What are the factors that positively or negatively influenced the effectiveness of the project?		 Review of key project documents Interview with key project staff and consultants Interviews with donor 	Interviews with IUCN Analysis of expenditure and adaptation of project strategy to Covid	Strong
	S	11. To what extent were the MEL strategy and project indicators/targets adequate to (a) collect the right kind of data to understand the impacts of the project and (b) detect any needed implementation adjustments for better progress towards results?		Review of key project documents	Interview with MEL office and regional coordinators	More than satisfacto ry

				•	Interview with key project staff and consultants Interviews with donor		
	MS	12. To what extent were there significant differences between the achievement of results between regions and between the six different countries?		•	Review of key project documents Interview with key project staff and consultants	Comparison notes and impressions of interviews with national stakeholders and the country visits by the ET Interviews with regional offices and with HQ	Strong
EQ4 EFFICIENCY To what extent are the PWFI outputs in balance with the level of effort, time and resources spent? SATISFACTORY	S	13. To what extent did spending and project delivery align with the planned schedule?	 Resource allocation and cost effectiveness: Extent to which there was an efficient and economical use of financial and human resources and strategic allocation of resources (funds, human resources, time, expertise, etc.) to achieve outcomes; Level to which the project completed the planned activities and met or exceeded the expected outcomes according to schedule, and as cost-effective as initially planned; Project management and timeliness: 	•	Review of key project documents Interview with key project staff and consultants Interviews with donor	Analysis of financial reports Interviews with IUCN HQ, financial officer and regional officers	More than satisfacto ry
	S / MS	14. How efficient were the operational modality, governance structure and project financial reporting/planning in contributing to the overall achievements of PWFI. including in addressing the recommendations from the MTR?		•	Review of key project documents Interview with key project staff and consultants	Interviews with IUCN HQ, MEL officer and regional officers	Strong
	S	15. Could these outputs have been achieved more cost- efficiently?	 Extent to which a project extension could have been avoided; Extent to which the project management structure was efficient in generating the expected results; Extent to which project funds and activities were delivered in a timely manner; Extent to which M&E systems ensured effective and efficient project management; 	•	Interviews with IUCN regional and country teams	Analysis of output delivery timeline Analysis of reports Interviews with IUCN HQ, regional coordinators Interviews with consultants responsible for policy reports	Strong
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EQ5 IMPACT To what extent has PWFI produced significant higher-level effects in addressing plastic leakage from Small Island Developing States? SATISFACTORY	S	16. What are the key changes, intended or unintended, in the project target countries that demonstrate that PWFI has achieved its objectives	 Level of project implementation progress relative to expected level at final stage of implementation; Existence of logical attribution linkages between project outputs and outcomes/impacts; Existence of logical attribution linkages between project outcomes and impacts; Level of progress through the project's Theory of Change; Contributions to changes in policy/legal/regulatory frameworks, 	•	Review of project reports Interview with key IUCN staff and consultants Stakeholder interviews Attribution analysis and analysis of the harvested outcomes	Comparison notes and impressions of interviews with national stakeholders and the country visits by the ET Interviews with regional offices and with HQ	Strong
		17. Were potential negative environmental and social impacts adequately mitigated or avoided? If not entirely, what are the negative impacts that resulted from PWFI intervention and what could be done in the future to avoid them?	 including observed changes in capacities and governance architecture, including access to and use of information; Existence of new private or public investments committed; 	•	Review of project reports Interview with key IUCN staff and consultants Stakeholder interviews	Interviews with national stakeholders	Strong

	18.	To what extent have external factors catalysed or hindered the impact of PWFI?	• Existence of any unintended results of the project (both positive and negative) and assess their overall scope and implications;	•	Analysis of harvested outcomes Review of project reports Interview with key IUCN staff and consultants Stakeholder interviews	Comparison notes and impressions of interviews with national stakeholders and the country visits by the ET Interviews with regional offices and with HQ	Strong
EQ6 SUSTAINABILITY How likely is it that the project's positive results will be sustained into the future? LIKELY (Caribbean) MODERATELY LIKELY (Pacific)	19.	What efforts were made to ensure the sustainability of PWFI results in the long term?	 Likelihood of permanence (long lasting nature) of the impact(s); Existence of any arrangements put in place to facilitate follow-up actions and securing results in the long term; Existence of barriers and risks that may prevent further progress towards long-term impact, including socio- political, institutional and governance and environmental risks; Level of the capacity and willingness of the government to put in resources to follow-up; Level of technical capacity of relevant stakeholders relative to level required to sustain project benefits; Level to which the project's successful aspects are being 	•	Interview with key IUCN staff and consultants Stakeholder interviews Analysis of harvested outcomes	Comparison notes and impressions of interviews with national stakeholders and the country visits by the ET Interviews with regional offices and with HQ Analysis of proposal document of Phase 2 in the Caribbean	Strong

	20. Are there environmental, financial, socio-political or governance risks that could jeopardize the sustainability of the results achieved?	 transferred to appropriate parties, potential future beneficiaries, and others who could learn from the project and potentially replicate and/or scale it in the future; Financial sustainability: Financial requirements for maintenance of project benefits; Likelihood of expected financial resources available to support maintenance of project benefits; Potential for additional financial resources to support 	•	Review of project reports Interview with key IUCN staff and consultants Stakeholder interviews Analysis of harvested outcomes	Comparison notes and impressions of interviews with national stakeholders and the country visits by the ET Interviews with regional offices and with HQ Analysis of financial reports	Strong
	21. What are the indications that the outcomes of the project are sustainable and which project results, lessons, experiences could be used for replication?	benents,	•	Comparison with related initiatives in similar contexts Interview with key IUCN staff and consultants Stakeholder interviews	Interviews with national stakeholders Analysis of country contexts	More than satisfacto ry

Annex B: List of documents consulted

Title	Date	Author(s)	Туре	Location
Plastic Waste National Level Quantification and Sectorial Material Flow Analysis in Antigua and Barbuda	02-01-2021	Asia Pacific Waste Consultants	Report	A&B
Antigua and Barbuda PLASTIC WASTE PROFILE	14-07-2022	Asia Pacific Waste Consultants	Report	A&B
Plastic Waste Free Islands Project Annexes to the Report Plastic Waste National Level Quantification and Sectorial Material Flow Analysis in Antigua and Barbuda	02-01-2021	Asia Pacific Waste Consultants	Annex	A&B
Project Inception report Plastic Waste Free Islands (PWFI) Antigua and Barbuda for International Union for Conservation of Nature (IUCN)	2019	Asia Pacific Waste Consultants	Inception Report	A&B
Synthesis of Plastic Pollution Policies Antigua and Barbuda		Asia Pacific Waste Consultants	Report	A&B
POLICY ANALYSIS AND DEVELOPMENT OF POLICY RECOMMENDATIONS TO REDUCE PLASTIC WASTE IN ANTIGUA AND BARBUDA – FINAL REPORT		Asia Pacific Waste Consultants	Report	A&B
Preliminary data for Antigua and Barbuda		Searious Business	Data	A&B
Bottle to Bottle Recycling Business Plan Antigua and Barbuda	2021	Searious Business	Presentati on	A&B
Waste to Product Business Plan Antigua and Barbuda	2021	Searious Business	Presentati on	A&B
STAKEHOLDER ENGAGEMENT PLAN ANTIGUA AND BARBUDA		Melesha Banhan	Report	A&B
Plastic Waste National Level Quantification and Sectorial Material Flow Analysis in Antigua and Barbuda	okt-20	IUCN	Report	A&B
Antigua and Barbuda		n/a	Synthesis Document	A&B
Policy Paper for the Container Deposit Legislation and Scheme in Antigua and Barbuda		n/a	Policy Paper	A&B
Plastic waste-free islands, Preliminary data for Antigua and Barbuda		Searious Business, Norad, IUCN	Data Sheet	A&B
Top Ten Items - Antigua and Barbuda		n/a	List of Items	A&B
The economic impact of plastic pollution in Antigua and Barbuda: impacts on the fisheries and tourism sectors, and the benefits of reducing mismanaged waste		IUCN Economics Team and Ocean Team, Norad	Report	A&B
Natural capital asset map Antigua and Barbuda		n/a	Мар	A&B
Plastic Waste Free Islands, Stakeholders update meeting Antigua and Barbuda		IUCN, Norad	PPP	A&B
Plastic Waste Free Islands, Antigua and Barbuda, Business Plan, PET Bottle-to-Bottle Recycling	2021	Searious Business, Norad, IUCN	Business Plan	A&B
Plastic Waste Free Islands, Antigua and Barbuda, Business Plan, Bottle-to-Bottle Recycling	2021	Searious Business, Norad, IUCN	Business Plan	A&B
Welcome back in business, Antigua - Barbuda, Hygiene & Safety in Tourism without the need for Single-Use Plastics!		Searious Business, Norad, IUCN	PPP	A&B
Deplastify Report Antigua and Barbuda		n/a	Report	A&B
Plastic Waste Free Islands, Most Suitable Technology (Calculator), Antigua and Barbuda		Searious Business, Norad, IUCN, CE Delft	Methodolo gy	A&B
Plastic Waste Free Island, Qualification report, Antigua & Barbuda	jun-21	Searious Business, IUCN	Report	A&B
PWFI Contextual Analysis		Searious Business	Analysis	A&B

Project Stakeholder Analysis		n/a	Analysis	A&B
Stakeholder Engagement Plan Antigua and Barbuda	31.03.2020	IUCN	Draft Report	A&B
Introduction, Anti-Litter chronology document	2019	n/a	Paper	A&B
Final Report ABWREC Bottle to Bottle		n/a	Report	A&B
Progress Report 1 to IUCN - Bottle to Bottle Recycling		n/a	Report	A&B
Progress Report to IUCN - Bottle to Bottle Recycling		n/a	Report	A&B
Billboard 1		n/a	Picture	A&B
Billboard 2		n/a	Picture	A&B
Antigua and Barbuda National Project Assistant - Final Report Dec 2022 (Empty Document)	dec-22	n/a	Report	A&B
Antigua and Barbuda National Project Assistant - Final Report 24.08.2021 (Empty Document)	24.08.2021	n/a	Report	A&B
Antigua and Barbuda National Project Assistant - First Report 04.05.2021 (Empty Document)	04.05.2021	n/a	Report	A&B
Antigua and Barbuda National Project Assistant - Second Report Sep 2022	sep-22	n/a	Report	A&B
Antigua and Barbuda National Project Assistant - Second Report 02.07.2021	02.07.2021	n/a	Report	A&B
Antigua and Barbuda National Project Assistant - Third Report Oct 2022	okt-22	n/a	Report	A&B
The Regional Office for Mexico, Central America and the Caribbean of the International Union for Conservation of Nature (IUCN-ORMACC) REQUIRES "National Project Assistant for the Plastic Waste-Free Islands project, Antigua and Barbuda"		IUCN	Request for Proposals	A&B
POLICY ANALYSIS AND DEVELOPMENT OF POLICY RECOMMENDATIONS TO REDUCE PLASTIC WASTE IN ANTIGUA AND BARBUDA – FINAL REPORT	30.04.2021	IUCN	Report	A&B
The Regional Office for Mexico, Central America and the Caribbean of the International Union for Conservation of Nature (IUCN-ORMACC) REQUIRES "Policy analysis and development of policy recommendations to reduce plastic waste in Antigua and Barbuda"		IUCN	Request for Proposals	A&B
Project: Enhancement of capacities of waste management stakeholders to support enabling conditions for uptake of the Plastic Waste Free Islands "Waste to Product" solution in Antigua and Barbuda, Product 3. Final Report (Equipment delivery)	21.11.2022	Triple Benefit	Report	A&B
Project: Enhancement of capacities of waste management stakeholders to support enabling conditions for uptake of the Plastic Waste Free Islands "Waste to Product" solution in Antigua and Barbuda, Progress Report: Equipment delivery	23.09.2022	Triple Benefit	Report	A&B
Project: Enhancement of capacities of waste management stakeholders to support enabling conditions for uptake of the Plastic Waste Free Islands "Waste to Product" solution in Antigua and Barbuda, Progress Report 1: Order preparation of equipment (Final version)	20.07.2022	Triple Benefit	Report	A&B
Attachment 1, Terms of Reference, The Regional Office for Mexico, Central America and the Caribbean of the International Union for Conservation of Nature (IUCN- ORMACC) REQUIRES PROFESSIONAL CONSULTANCY SERVICES FOR "Technical support for the purchase of machineries for the Plastic Waste Free Islands "Waste to Product" solution in Antigua and Barbuda"		IUCN-ORMACC	ToR	A&B
Deliverable 2 Searious Business Progress Report		n/a	Report	A&B
Final Guidelines Document and Report		Norad, IUCN, Searious Business	Report	A&B
Bottle-to-Bottle Rewards Program Interim Progress Report		Searious Business	Report	A&B

The Regional Office for Mexico, Central America and the Caribbean of the International Union for Conservation of Nature (IUCN-ORMACC) REQUIRES PROFESSIONAL CONSULTANCY SERVICES FOR "Financial Incentives Program for the Plastic Waste Free Islands Bottle-to-Bottle recycling pilot in Antigua and Barbuda"		IUCN	Request for Proposals	A&B
Cash Redemption Form for Plastic Waste Free Island (PWFI)	aug-21	IUCN et al.	Payment record	A&B
Plastic Waste Free Antigua and Barbuda	okt-21		Payment record	A&B
Cash Redemption Form for Plastic Waste Free Island (PWFI)	jul-21	IUCN et al.	Payment record	A&B
Cash Redemption Form for Plastic Waste Free Island (PWFI)	okt-21		Payment record	A&B
Cash Redemption Form for Plastic Waste Free Island (PWFI)	sep-21		Payment record	A&B
Expert Group Meeting	22 24.08.	UN environnent programme, UN Habitat for a better urban future	Agenda	Copenhage n
Plastic Waste National Level Quantification and Sectorial Material Flow Analysis in Fiji	07-04-2021	Asia Pacific Waste Consultants	Report	Fiji
Plastic Waste Free Islands Project Annexes to the Report Plastic Waste National Level Quantification and Sectorial Material Flow Analysis in Fiji	07-04-2021	Asia Pacific Waste Consultants	Annex	Fiji
Fiji Plastic Waste Profile	2022	Asia Pacific Waste Consultants	Report	Fiji
Project Inception report Plastic Waste Free Islands (PWFI) Fiji for Global Marine and Polar Programme (GMPP), International Union for Conservation of Nature	2020	Asia Pacific Waste Consultants	Inception Report	Fiji
Preliminary data for Fiji		Searious Business	Data	Fiji
Synthesis of Plastic Pollution Policies Fiji		Asia Pacific Waste Consultants	Report	Fiji
Waste to Product Business Plan Fiji	2021	Searious Business	Presentati on	Fiji
Policy Assessment Summary Fiji		n/a	Excel Sheet	Fiji
The economic impact of plastic pollution in Fiji: impacts on the fisheries and tourism sectors, and the benefits of reducing mismanaged waste		IUCN Economics Team and Ocean Team, Norad	Report	Fiji
Fiji	2021	IUCN	Synthesis Doc	Fiji
Workshop Recording Fiji Quantification Validation Workshop		n/a	Workshop Recording	Fiji
Plastic Waste Free Islands, Fiji, Business Plan, Bottle-to- Bottle Recycling	2021	Searious Business, Norad, IUCN	Business Plan	Fiji
Welcome back in business, Fiji, Hygiene & Safety in Tourism without the need for Single-Use Plastics!		Searious Business, Norad, IUCN	PPP	Fiji
Deplastify Report Fiji		n/a	Report	Fiji
Plastic Waste Free Islands, Most Suitable Technology (Calculator), Fiji		Searious Business, Norad, IUCN, CE Delft	Methodolo gy	Fiji
Plastic Waste Free Island, Qualification report, Fiji	jun-21	Searious Business, IUCN	Report	Fiji
PWFI Contextual Analysis		Searious Business	Analysis	Fiji
RE: Support for the Mapping Exercise of Informal Waste Pickers in Fiji	28.06.2022	IUCN	E-Mail	Fiji
Waste Recyclers (Fiji) PTE LTD, 2022 Global Recycling Day Media Statement 2, Struggles and stigma attached to the informal waste picker trade	09.03.2022	Waste Recyclers Fiji Ltd	Statement	Fiji
Talking Points - Informal Waste Pickers Workshop Graduation Address		n/a	List	Fiji

Joint Press Statement: Waste Recyclers (Fiji) Pte Limited and International Union for the Conservation of Nature (IUCN)	09.06.2022	Waste Recyclers Fiji Ltd, IUCN	Draft Press Statement	Fiji
Salutations, Chief Guest		n/a	Remarks	Fiji
FW: Support for the Informal Waste Picker Workshop	19.05.2022	IUCN	E-Mail	Fiji
Fiji Women's Crisis Center Informal Waste Picker Workshop- Wellness & Literacy Program		Waste Recyclers Fiji Ltd	Program	Fiji
Signed Contract, Informal Waste Pickers Workshop Partnership, Terms and Conditions	14.06.2022	Waste Recyclers Fiji Ltd, IUCN	Contract	Fiji
Waste Recyclers (Fiji) PTE Ltd, Tax Invoice	30.06.2022	Waste Recyclers Fiji Ltd	Invoice	Fiji
Informal Waste Picker Workshop, Partnership Proposal for International Union for Conservation of Nature		Waste Recyclers Fiji Ltd	PPP	Fiji
Sponsorship letter IUCN-WRFL Informal Waste Picker Workshop	06.05.2022	IUCN	Letter	Fiji
Sponsorship letter IUCN-WRFL Informal Waste Picker Workshop	24.05.2022	IUCN	Letter	Fiji
IUCN hosts Plastic Waste-Free Islands inception workshop in Fiji		Norad, IUCN, Fondation Didier et Martine Primat	Article	Fiji
Group Photo of PWFI Workshop			Picture	Fiji
PS Waterways and Environment, officiating the inception workshop			Picture	Fiji
Regional Programme Coordination, Opening Remarks			Picture	Fiji
An Assessment of Microplastics in Fiji's Coastal and Riverine Systems		USP	PPP	Fiji
Our Blue Heart is in Trouble	20.02.2020	IUCN	PPP	Fiji
Workshop Fiji JOAO SOUSA IUCN		n/a	PPP	Fiji
RE: Sponsorship for Global Recycling Day celebrations	19.04.2021	n/a	E-Mail	Fiji
Sponsorship Letter Waste Recyclers Fiji Ltd.		IUCN	Letter	Fiji
Global Recycling Day 2022 with our theme "I-RECYCLE FOR A CIRCULAR ECONOMY"		Waste Recyclers Fiji Ltd	Banner	Fiji
Quotation (Community Development T-Shirt Quote)	09.02.2022	International Embroidery Limited	Quotation	Fiji
Confirmation Letter for Bank Account	08.03.2022	Waste Recyclers Fiji Ltd	Letter	Fiji
Global Recycling Day 2022 with our theme "I-RECYCLE FOR A CIRCULAR ECONOMY"		Waste Recyclers Fiji Ltd	Draft Banner	Fiji
Salutations (Fiji Global Recycling Day Celebrations IUCN Draft Remarks) 1		n/a	Draft Remarks	Fiji
Salutations (Fiji Global Recycling Day Celebrations IUCN Draft Remarks) 2		n/a	Draft Remarks	Fiji
Global Recycling Day 2022, Partnership Proposal for IUCN		Waste Recyclers Fiji Ltd	PPP	Fiji
Informal Waste Pickers- Travel & Accommodation		Waste Recyclers Fiji Ltd	Budget	Fiji
Tax Invoice	08.03.2022	Waste Recyclers Fiji Ltd	Invoice	Fiji
Letter to Waste Recyclers (Fiji) Pte Limited	17.03.2022	IUCN	Letter	Fiji
Sponsorship letter IUCN to WRFL	17.03.2022	IUCN	Letter	Fiji
Waste Recyclers IUCN (T-Shirt Description)		International Embroidery Limited		Fiji
RE: Waste Recyclers (Fiji) Limited (WRFL Bank Letter)	18.03.2022	ANZ	E-Mail	Fiji
WRFL Official Letter of Request	15.02.2022	Waste Recyclers Fiji Ltd	Letter	Fiji
Press Statement - PRF/WRFL/IUCN, Launch of community- based pilot recycling project at Kabutri Drive			Press Statement	Fiji
RD Talking Points		IUCN	Remarks	Fiji

Talking Points		IUCN	Remarks	Fiji
Joint Press Statement: International Union for the Conservation of Nature and Waste Recyclers Fiji/Pacific Recycling Foundation	26.08.2022	IUCN, Waste Recyclers Fiji Ltd, PRF	Press Statement	Fiji
Joint Press Statement: International Union for the Conservation of Nature and Waste Recyclers Fiji/Pacific Recycling Foundation (Draft 1)	26.08.2022	IUCN, Waste Recyclers Fiji Ltd, PRF	Draft Press Statement	Fiji
Joint Press Statement: International Union for the Conservation of Nature and Waste Recyclers Fiji/Pacific Recycling Foundation (Draft 2)	26.08.2022	IUCN, Waste Recyclers Fiji Ltd, PRF	Draft Press Statement	Fiji
RD Talking Points		IUCN	Remarks	Fiji
Plastic Waste Free Islands, Fiji, Grant Agreement Signing Ceremony	26.08.2022	IUCN, Norad	Agenda	Fiji
Data Classification PWFI literature		n/a	Literature List	Global
Data classification		n/a	Excel Sheet	Global
Differences in perception and reaction of tourist groups to beach marine debris that can influence a loss of tourism revenue in coastal areas	2017	Allan Paul Krelling, Allan Thomas Williams, Alexander Turra	Article	Global
Economic Impacts of Marine Litter	sep-10	KIMO	Article	Global
Breaking the Plastic Wave, A comprehensive Assessment of Pathways towards Stopping Ocean Plastic Pollution		PEW, Systemiq	Report	Global
The costs and benefits of packaging waste management systems in Europe: the perspective of local authorities	2016	Ferreira S., Cabral M., Da Cruz, Nuno F., Simoes P., Marques R.C.	Article	Global
Marine Litter study to support the establishment of an initial quantitative headline reduction target - SFRA0025	2013	ARCADIS	Report	Global
Analysis of Economical and Environmental Costs for the Selection of Municipal Solid Waste Treatment and Disposal Scenarios through Multicriteria Analysis (ELECTRE Method)	2017	De Medina-Salas L., Castillo- Gonzalez E., Giraldi-Diaz M.R., Guzman-Gonzalez V.	Article	Global
Global Plastics Production		n/a	Excel Sheet	Global
Summary Datasheet		n/a	Excel Sheet	Global
Numerical modelling of floating debris in the world's oceans	2012	Lebreton, Æ.C.M., Greer S.D., Borrero J.C.	Article	Global
Plastic debris in the open ocean	2014	Cozar et al.	Article	Global
Plastic Pollution in the World's Oceans: More than 5 trillion Plastic Pieces Weighing over 150.000 Tons Afloat at Sea	2014	Eriksen et al.	Article	Global
Supplementary Materials for Plastic waste inputs from land into the ocean	2015	Jambeck et al.	Suppleme ntary Materials	Global
Plastic waste inputs from land into the ocean	2015	Jambeck et al.	Article	Global
Future scenarios of global plastic waste generation and disposal	2019	Lebreton L., Andrady A.	Article	Global
More than 1000 rivers account for 80% of global riverine plastic emissions into the ocean	2021	Maijer et al.	Article	Global
Estimates of fishing gear loss rates at a global scale: A literature review and meta-analysis	2019	Richardson K., Hardesty B.D., Wilcox C.	Article	Global
A global mass budget for positively buoyant macroplastic debris in the ocean	2019	Lebreton L., Egger M., Slat B.	Article	Global
Coastal areas and EEZ		n/a	Excel Sheet	Global
Mind-Shifting Solutions for Circular Plastic Use		Searious Business	PPP	Global

Comparison of Plastic Waste Leakage Quantification Methodology Inputs and Outputs, Deliverable 1: Desk Study Report (Draft Outline 1)	okt-22	n/a	Draft Methodolo gy	Global
Comparison of Plastic Waste Leakage Quantification Methodology Inputs and Outputs, Deliverable 1: Desk Study Report (Draft Outline 2)	okt-22	n/a	Draft Methodolo gy	Global
Plastic Waste National Level Quantification and Sectorial Material Flow Analysis in Grenada	07-04-2021	Asia Pacific Waste Consultants	Report	Grenada
Grenada Plastic Waste Profile	2022	Asia Pacific Waste Consultants	Report	Grenada
Plastic Waste-Free Islands Project Annexes to the Report Plastic Waste National Level Quantification and Sectorial Material Flow Analysis in Grenada	01-04-2021	Asia Pacific Waste Consultants	Annex	Grenada
Project Inception report Plastic Waste Free Islands (PWFI) Grenada for International Union for Conservation of Nature (IUCN)	2019	Asia Pacific Waste Consultants	Inception Report	Grenada
Synthesis of Plastic Pollution Policies Grenada		Asia Pacific Waste Consultants	Report	Grenada
Policy analysis and development of policy recommendations to reduce plastic waste in Grenada		n/a	Report	Grenada
Preliminary data for Grenada		Searious Business	Data	Grenada
Waste to Product Business Plan Grenada	2021	Searious Business	Presentati on	Grenada
STAKEHOLDER ENGAGEMENT PLAN GRENADA		Melesha Banhan	Report	Grenada
Grenada		n/a	Synthesis Document	Grenada
Policy analysis and development of policy recommendations to reduce plastic waste in Grenada	apr-21	n/a	Draft Report	Grenada
Plastic waste-free islands, Preliminary data for Grenada		Searious Business, Norad, IUCN	Data Sheet	Grenada
Top Ten Items - Grenada		n/a	List of Items	Grenada
Top Ten Items - Grenada The economic impact of plastic pollution in Grenada: impacts on the fisheries and tourism sectors, and the benefits of reducing mismanaged waste		n/a IUCN Economics Team and Ocean Team, Norad	List of Items Report	Grenada Grenada
Top Ten Items - Grenada The economic impact of plastic pollution in Grenada: impacts on the fisheries and tourism sectors, and the benefits of reducing mismanaged waste Natural capital asset map Grenada		n/a IUCN Economics Team and Ocean Team, Norad n/a	List of Items Report Map	Grenada Grenada Grenada
Top Ten Items - Grenada The economic impact of plastic pollution in Grenada: impacts on the fisheries and tourism sectors, and the benefits of reducing mismanaged waste Natural capital asset map Grenada Plastic Waste Free Islands, Stakeholders update meeting Grenada		n/a IUCN Economics Team and Ocean Team, Norad n/a IUCN, Norad	List of Items Report Map PPP	Grenada Grenada Grenada Grenada
Top Ten Items - Grenada The economic impact of plastic pollution in Grenada: impacts on the fisheries and tourism sectors, and the benefits of reducing mismanaged waste Natural capital asset map Grenada Plastic Waste Free Islands, Stakeholders update meeting Grenada Plastic Waste Free Islands, Grenada, Business Plan, Bottle- to-Bottle Recycling	2021	n/a IUCN Economics Team and Ocean Team, Norad n/a IUCN, Norad Searious Business, Norad, IUCN	List of Items Report Map PPP Business Plan	Grenada Grenada Grenada Grenada Grenada
Top Ten Items - Grenada The economic impact of plastic pollution in Grenada: impacts on the fisheries and tourism sectors, and the benefits of reducing mismanaged waste Natural capital asset map Grenada Plastic Waste Free Islands, Stakeholders update meeting Grenada Plastic Waste Free Islands, Grenada, Business Plan, Bottle- to-Bottle Recycling Deplastify Report Grenada	2021	n/a IUCN Economics Team and Ocean Team, Norad n/a IUCN, Norad Searious Business, Norad, IUCN n/a	List of Items Report Map PPP Business Plan Report	Grenada Grenada Grenada Grenada Grenada
Top Ten Items - Grenada The economic impact of plastic pollution in Grenada: impacts on the fisheries and tourism sectors, and the benefits of reducing mismanaged waste Natural capital asset map Grenada Plastic Waste Free Islands, Stakeholders update meeting Grenada Plastic Waste Free Islands, Grenada, Business Plan, Bottle- to-Bottle Recycling Deplastify Report Grenada Plastic Waste Free Islands, Most Suitable Technology (Calculator), Grenada	2021	n/a IUCN Economics Team and Ocean Team, Norad n/a IUCN, Norad Searious Business, Norad, IUCN n/a Searious Business, Norad, IUCN, CE Delft	List of Items Report Map PPP Business Plan Report Methodolo gy	Grenada Grenada Grenada Grenada Grenada Grenada
Top Ten Items - Grenada The economic impact of plastic pollution in Grenada: impacts on the fisheries and tourism sectors, and the benefits of reducing mismanaged waste Natural capital asset map Grenada Plastic Waste Free Islands, Stakeholders update meeting Grenada Plastic Waste Free Islands, Grenada, Business Plan, Bottleto-Bottle Recycling Deplastify Report Grenada Plastic Waste Free Islands, Most Suitable Technology (Calculator), Grenada Plastic Waste Free Islands, Most Suitable Technology (Calculator), Grenada	2021 jun-21	n/a IUCN Economics Team and Ocean Team, Norad n/a IUCN, Norad Searious Business, Norad, IUCN n/a Searious Business, Norad, IUCN, CE Delft Searious Business, IUCN	List of Items Report Map PPP Business Plan Report Methodolo gy Report	Grenada Grenada Grenada Grenada Grenada Grenada Grenada
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Top Ten Items - GrenadaThe economic impact of plastic pollution in Grenada: impacts on the fisheries and tourism sectors, and the benefits of reducing mismanaged wasteNatural capital asset map GrenadaPlastic Waste Free Islands, Stakeholders update meeting GrenadaPlastic Waste Free Islands, Grenada, Business Plan, Bottle- to-Bottle RecyclingDeplastify Report GrenadaPlastic Waste Free Islands, Most Suitable Technology (Calculator), GrenadaPlastic Waste Free Islands, Most Suitable Technology Plastic Waste Free Island, Qualification report, GrenadaPustic Waste Free Island, Rusification report, GrenadaPustic Waste Free Islands, Most Suitable Technology (Calculator), GrenadaPustic Waste Free Islands, AnalysisProject Stakeholder Analysis	2021 jun-21	n/a IUCN Economics Team and Ocean Team, Norad IUCN, Norad Searious Business, Norad, IUCN n/a Searious Business, Norad, IUCN, CE Delft Searious Business, IUCN Searious Business INCN	List of Items Report Map PPP Business Plan Report Methodolo gy Report Analysis Analysis	Grenada Grenada Grenada Grenada Grenada Grenada Grenada Grenada Grenada
Top Ten Items - GrenadaThe economic impact of plastic pollution in Grenada: impacts on the fisheries and tourism sectors, and the benefits of reducing mismanaged wasteNatural capital asset map GrenadaPlastic Waste Free Islands, Stakeholders update meeting GrenadaPlastic Waste Free Islands, Grenada, Business Plan, Bottle- to-Bottle RecyclingDeplastify Report GrenadaPlastic Waste Free Islands, Most Suitable Technology (Calculator), GrenadaPlastic Waste Free Island, Qualification report, GrenadaPustic Waste Free Island, Rusification report, GrenadaPlastic Waste Free Island, Rusification report, GrenadaPustic Stakeholder AnalysisProject Stakeholder AnalysisStakeholder Engagement Plan Grenada	2021 jun-21 31.03.2020	n/a IUCN Economics Team and Ocean Team, Norad IUCN, Norad Searious Business, Norad, IUCN n/a Searious Business, Norad, IUCN, CE Delft Searious Business, IUCN Searious Business IN/a IUCN	List of Items Report Map PPP Business Plan Report Methodolo gy Report Analysis Analysis Draft Report	Grenada Grenada Grenada Grenada Grenada Grenada Grenada Grenada Grenada
Top Ten Items - Grenada The economic impact of plastic pollution in Grenada: impacts on the fisheries and tourism sectors, and the benefits of reducing mismanaged waste Natural capital asset map Grenada Plastic Waste Free Islands, Stakeholders update meeting Grenada Plastic Waste Free Islands, Grenada, Business Plan, Bottle- to-Bottle Recycling Deplastify Report Grenada Plastic Waste Free Islands, Most Suitable Technology (Calculator), Grenada PWFI Contextual Analysis Project Stakeholder Analysis Stakeholder Engagement Plan Grenada Phase out of single use plastic bags, plastic utensils, & Styrofoam implementation plan	2021 jun-21 31.03.2020 sep-19	n/a IUCN Economics Team and Ocean Team, Norad n/a IUCN, Norad Searious Business, Norad, IUCN n/a Searious Business, Norad, IUCN, CE Delft Searious Business, IUCN Searious Business n/a IUCN Government of Grenada, Ministry of Climate Resilience, the Environment, Forestry, Fisheries, Disaster Management and Information	List of Items Report Map PPP Business Plan Report Methodolo gy Report Analysis Draft Report Draft Report	Grenada Grenada Grenada Grenada Grenada Grenada Grenada Grenada Grenada Grenada
Top Ten Items - GrenadaThe economic impact of plastic pollution in Grenada: impacts on the fisheries and tourism sectors, and the benefits of reducing mismanaged wasteNatural capital asset map GrenadaPlastic Waste Free Islands, Stakeholders update meeting GrenadaPlastic Waste Free Islands, Grenada, Business Plan, Bottle- to-Bottle RecyclingDeplastify Report GrenadaPlastic Waste Free Islands, Most Suitable Technology (Calculator), GrenadaPlastic Waste Free Island, Qualification report, GrenadaPWFI Contextual AnalysisProject Stakeholder AnalysisStakeholder Engagement Plan GrenadaPhase out of single use plastic bags, plastic utensils, & Styrofoam implementation planInstituting a Ban on Single Use and Disposable Plastic Utensils, Reporting on Assessing Alternatives to Plastic Utensils	2021 jun-21 31.03.2020 sep-19 sep-19	n/a IUCN Economics Team and Ocean Team, Norad n/a IUCN, Norad Searious Business, Norad, IUCN n/a Searious Business, Norad, IUCN, CE Delft Searious Business, IUCN Searious Business n/a IUCN Government of Grenada, Ministry of Climate Resilience, the Environment, Forestry, Fisheries, Disaster Management and Information Government of Grenada	List of Items Report Map PPP Business Plan Report Methodolo gy Report Analysis Analysis Draft Report Draft Report Draft Report	Grenada Grenada Grenada Grenada Grenada Grenada Grenada Grenada Grenada Grenada

Distributors of Alternative Materials for Plastic Utensils, International		IUCN, Norad	PPP	Grenada
Distributors of Alternative Materials for Plastic Utensils, Regional		IUCN, Norad	PPP	Grenada
Request for Proposals (RfP), Consultancy Services for Distributors Catalogue for Alternative Materials for Plastic Utensils in Grenada	jun-22	IUCN-ORMACC	Request for Proposals	Grenada
Carriacou Billboard		n/a	Picture	Grenada
Grenada Billboard		n/a	Picture	Grenada
The Regional Office for Mexico, Central America and the Caribbean of the International Union for Conservation of Nature (IUCN-ORMACC) REQUIRES COMMUNICATION SERVICES FOR "Plastic Waste Free Islands Billboard Adverting, Grenada"		IUCN-ORMACC	Request for Proposals	Grenada
Environment Division Booklet on Styrofoam & Single Use Plastic Legislation for Capacity Building and Public Education		IUCN, UNDP, Norad	Paper	Grenada
The Regional Office for Mexico, Central America and the Caribbean of the International Union for Conservation of Nature (IUCN-ORMACC) REQUIRES communication services for "Plastic Waste Free Islands Training Booklets, Grenada"		IUCN-ORMACC	Request for Proposals	Grenada
Plastics Waste Free Islands Project (Grenada), Report of activities completed in the Month of August 2022	2022	IUCN	Report	Grenada
Final Progress Report 3 - Under Extension 2022	2022	n/a	Report	Grenada
Final Progress Report 4 - Under Extension	2022	n/a	Report	Grenada
First Progress Report 2022	2022	n/a	Report	Grenada
Plastics Waste Free Islands Project (Grenada), Report of activities completed in the Month of May 2022	2022	IUCN	Report	Grenada
NPA Progress Report 1 - Grenada PWFI	2020	n/a	Report	Grenada
NPA Progress Report 2 - Grenada PWFI	2021	n/a	Report	Grenada
NPA Progress Report 3 - Grenada PWFI	2021	n/a	Report	Grenada
NPA Progress Report 4 - Grenada PWFI	2021	n/a	Report	Grenada
NPA Progress Report 5 - Grenada PWFI	2021	n/a	Report	Grenada
Progress Report 2 - under Extension 2022	2022	n/a	Report	Grenada
Plastics Waste Free Islands Project (Grenada), Report of activities completed in the Month of September 2022	2022	IUCN	Report	Grenada
The Regional Office for Mexico, Central America and the Caribbean of the International Union for Conservation of Nature (IUCN-ORMACC) REQUIRES PROFESSIONAL CONSULTANCY SERVICES FOR "National Project Assistant for the Plastic Waste-Free Islands project, Grenada"		IUCN	Request for Proposals	Grenada
Policy analysis and development of policy recommendations to reduce plastic waste in Grenada		IUCN, Norad	Report	Grenada
The Regional Office for Mexico, Central America and the Caribbean of the International Union for Conservation of Nature (IUCN-ORMACC) REQUIRES PROFESSIONAL CONSULTANCY SERVICES FOR "Policy analysis and development of policy recommendations to reduce plastic waste in Grenada"		IUCN	Request for Proposals	Grenada
Grenada Radio Advert		n/a	Audio file	Grenada
Training design and implementation on policies to reduce plastic waste generation and leakage in Grenada	dec-22	Global Waste Associates	Report	Grenada
Request for Proposals (RfP), Consultancy Services for Training design and implementation on policies to reduce plastic waste generation and leakage in Grenada		IUCN	Request for Proposals	Grenada

Manual for the Implementation of the Non-Biodegradable Waste Control Act 2018, From Policy to Action	16.10.2022	Global Waste Associates	Draft Report	Grenada
Potential Plastic Waste Reductions for AVC Solutions		n/a	Data Sheet	n/a
Alternative methodology For Collection of quantitative data for the Plastic Waste Free Islands Project		Asia Pacific Waste Consultants	Methodolo gy	Regional
Post Covid methodology For Collection of quantitative data for the Plastic Waste Free Islands Project		Asia Pacific Waste Consultants	Methodolo gy	Regional
TOR (Terms of reference) Plastic Waste National Level Quantification and Sectorial Material Flow Analysis in Six Small Island Development States in The Caribbean and Pacific	2019	IUCN	TOR	Regional
Post Covid methodology For Collection of quantitative data for the Plastic Waste Free Islands Project		Asia Pacific Waste Consultants	Methodolo gy	Regional
The Regional Office for Mexico, Central America and the Caribbean of the International Union for Conservation of Nature (IUCN-ORMACC) REQUIRES PROFESSIONAL SERVICES	2019	IUCN	TOR	Regional
Plastic Waste Free Islands Blueprint – a journey to zero plastic waste		IUCN	Report	Regional
Plastic Waste Free Islands Inception Report	2019	IUCN	Report	Regional
Plastic Waste Free Islands Annual Report 2019	30/04/2020	IUCN	Report	Regional
Plastic Waste Free Islands Annual Report 2020	05-07-2021	IUCN	Report	Regional
Plastic Waste Free Islands Annual Report 2021	30/04/2022	IUCN	Report	Regional
NORAD Plastic Waste Free Islands Proposal 19112018 (003)		IUCN	Proposal	Regional
Mid-term Review of IUCN's Project: Plastic Waste Free Islands (PWFI): Final Report		Marine Plastic Solutions	Report	Regional
Mid-term Review of IUCN Plastic Waste Free Islands (PWFI) Summary		Marine Plastic Solutions	Report	Regional
Plastic Waste Free Islands Pacific Regional Workshop Outcome Harvesting	12-08-2022	IUCN	Presentati on	Regional
OH PWFI 19 12 2022 Final	19/12/2022	IUCN	List of Outcomes	Regional
PWFI All tools 19.12.22	19/12/2022	IUCN	List of Outcomes	Regional
Monitoring, Evaluation and Learning (MEL) Plan for Plastic Waste Free Islands		IUCN	MEL	Regional
Plastic Waste Free Islands Theory of Change	2022	IUCN	TOC	Regional
PWFI TOC evolution		IUCN	TOC	Regional
Annex 1 Project Summary and Work-plan and Deliverables		n/a	TOR	Regional
PWFI ORMACC Annual Report 2019		n/a	Report	Regional
PWFI ORMACC Annual Report 2020		n/a	Report	Regional
PWFI ORMACC Annual Report 2021		n/a	Report	Regional
PWFI ORMACC semi-annual report 2020		n/a	Report	Regional
2019 Work plan and budget		IUCN	Financial/ work plan	Regional
NORAD Plastic Waste Free Island Project Projected Budget and Work Plan for 2020		IUCN	Work plan	Regional
Revised 2020 Budget		IUCN	Financial	Regional
PWFI Budget version 08 Dec 2020		IUCN	Financial	Regional
PWFI Work Plan Version 1.0		IUCN	Work plan	Regional

NORAD PWFI 2021 budget extension plan		IUCN	Financial	Regional
PWFI 2022 Work Plan Version 2.0		IUCN	Work plan	Regional
P03025 Budget Final Norway Plastic Signed 12.12.2018		IUCN	Financial	Regional
Independent auditor's report to the Management on the financial report for the from period 1 December 2018 to 31 December 2019 of the project "Plastic Waste Free Islands"	22/04/2020	PWC	Report	Regional
Independent auditor's report to the Management on the financial report for the from period 1 January 2020 to 31 December 2020 of the project "Plastic Waste Free Islands"	28/04/2021	PWC	Report	Regional
Independent auditor's report to the Management on the financial report for the from period 1 January 2021 to 31 December 2021 of the project "Plastic Waste Free Islands"	29/04/2022	PWC	Report	Regional
IUCN Plastic Waste National Level Quantification and Sectoral Material Flow Analysis - Caribbean Regional Report	jul-21	Asia Pacific Waste Consultants	Report	Regional
IUCN Plastic Waste National Level Quantification and Sectoral Material Flow Analysis - Pacific Regional Report	jul-21	Asia Pacific Waste Consultants	Report	Regional
Alternate methodology for collection of quantitative data for the Plastic Waste Free Islands Project		Asia Pacific Waste Consultants	Methodolo gy	Regional
Breakdown and Summary of Changes to Costs for PWFI as per Alternate Proposal Supplied on 20/04/2020		n/a	Financial	Regional
Breakdown and Summary of Changes to Costs for PWFI as per Alternate Proposal Supplied on 20/04/2020 - Version 2		n/a	Financial	Regional
Copy of Output sheet IUCN master template		n/a	Output Excel Sheet	Regional
Research Planning - Qualification & Solutions		n/a	Work Plan	Regional
Delivery of Plastic Waste National Level Quantification and Sectorial Material Flow Analysis in 6 Small Islands Developing States (SIDS)		Asia Pacific Waste Consultants	TOR	Regional
Plastic Waste National Level Quantification and Sectorial Material Flow Analysis in Six Small Islands Development States in the Caribbean and Pacific		Asia Pacific Waste Consultants	TOR	Regional
CAPWC Comments on Inception Reports		n/a	Comment	Regional
Categories, Sub-groups and Knowledge Management		n/a	Excel Sheet	Regional
Sub-Groups		n/a	Excel Sheet	Regional
Proposal for a methodology to estimate marine plastic stocks and their impact on fisheries and tourism		IUCN Economic Knowledge Unit	Methodolo gy	Regional
Terms of Reference for Economic Assessment for Plastic Waste Free Islands (PWFI) Project		IUCN Economic Knowledge Unit	TOR	Regional
List data collection PWFI fisheries, tourism, waste management		n/a	Excel Sheet	Regional
Impact assessment Fishery sector methodology		n/a	Methodolo gy	Regional
Impact of derelict fish traps in Caribbean waters: an experimental approach	2014	Simon James Pittman, Chris Caldow, Sarah C. Galt	Article	Regional
Landfill Scenarios		n/a	Excel Sheet	Regional
Policy analysis proposal (development ongoing)		n/a	Methodolo gy	Regional
Plastic Waste Free Islands, Country analysis - Antigua and Barbuda		IUCN, Norad	PPP	Regional
Plastic Waste Free Islands, Country analysis - Fiji		IUCN, Norad	PPP	Regional

Plastic Waste Free Islands, Country analysis - Grenada		IUCN, Norad	PPP	Regional
Plastic Waste Free Islands, Country analysis - Samoa		IUCN, Norad	PPP	Regional
Plastic Waste Free Islands, Country analysis - St. Lucia		IUCN, Norad	PPP	Regional
Plastic Waste Free Islands, Country analysis - Vanuatu		IUCN, Norad	PPP	Regional
Plastic stock and flow estimates		n/a	Report	Regional
Trends and drivers of marine debris on the Atlantic coast of the United States 1997-2007	2010	Ribic C.A., Sheavly S.B., Rugg D.J., Erdmann E.S.	Article	Regional
Geophysical features influence the accumulation of beach debris on Caribbean islands	2017	Schmuck A.M., Lavers J.L., Stuckenbrock S., Sharp P.B., Bond A.L.	Article	Regional
The Mediterranean: Mare plasticum	2020	MAVA, IUCN	Report	Regional
Marine Plastic Pollution in Waters around Australia: Characteristics, Concentrations, and Pathways	2013	Reisser et al.	Article	Regional
Distribution of small plastic fragments floating in the western Pacific Ocean from 2000 to 2001	2016	Uchida et al.	Article	Regional
Notes		n/a	Notes	Regional
		n/a	Data Sheet	Regional
IUCN PWFI Stakeholder Interview List Version 1		n/a	List	Regional
MTE Documents needed Oceania		n/a	Excel Sheet	Regional
Stakeholder List - Pacific		n/a	List	Regional
Stakeholder List - Caribbean		n/a	List	Regional
Plastic waste-free islands, concept solutions		Searious Business, Norad, IUCN	PPP	Regional
Searious Business - Work Plan "Plastic Waste Free Islands" (PACCAR)		Searious Business	Work Plan	Regional
Alternative Value Chains Matrix for Recyclable Plastics		Searious Business, Norad, IUCN	Methodolo gy	Regional
Waste Segregation, Inspirational Guide for Source Segregated Waste Streams	2021	Searious Business, Norad, IUCN	PPP	Regional
Plastic Waste-Free Cruising, Policy Guideline & Toolkit, Hygiene & Safety on Board and Ashore without the Need for Single-Use Plastics!		Searious Business, Norad, IUCN	Policy Paper	Regional
Toolkit for plastic waste-free tours, Hygiene & Safety in Tourism without the Need for Single-Use Plastics		Searious Business, Norad, IUCN	Toolkit	Regional
TOR (Terms of reference) Identification of Alternate Value Chains and Innovative Solutions to Repurpose Plastic Waster in Six Small Island Development States in The Caribbean and Pacific		IUCN	TOR	Regional
Amendment 1 to the Consultancy Agreement RQ002710 executed on 15 November 2019		IUCN	Contract Amendme nt	Regional
Plastic Waste Free Islands, Most Suitable Technologies, Draft Methodology Report	sep-21	Searious Business, Norad, IUCN, CE Delft	Methodolo gy Report	Regional
Plastic Waste Free Islands, Most Suitable Technologies, Methodology Report	sep-21	Searious Business, Norad, IUCN, CE Delft	Methodolo gy Report	Regional
Request for Proposals, MST Most Suitable Technologies/processes to convert/transform/use/disposal of plastic waste	11.03.2021	IUCN	Request for Proposals	Regional

Waste Segregation - Inspirational Guide for Source Segregated Waste Streams	2021	Searious Business, Norad, IUCN	Toolkit	Regional
Searious Business Research and Private sector engagement Approach in Plastic Waste Free Islands		Searious Business	Methodolo gy	Regional
The Regional Office for Mexico, Central America and the Caribbean of the International Union for Conservation of Nature (IUCN-ORMACC) REQUIRES PROFESSIONAL SERVICES		IUCN	Draft Request for Proposals	Regional
Stakeholder Register PWFI PSID		n/a	Methodolo gy	Regional
Plastics and Circular Economy: A Blueprint for Islands		n/a	Draft Report	Regional
Plastic Waste Free Islands, Blueprint - a journey to zero plastic waste		IUCN, Norad	Blueprint	Regional
Plastic Waste Free Islands, Annual Report	2022	IUCN, Norad	Draft Report	Regional
Plastic Waste Free Islands, Annual Report	07.05.2021	IUCN, Norad	Report	Regional
Plastic Waste Free Islands, an initiative managed by IUCN and financed by Norad		IUCN, Norad	PPP	Regional
Response to Norad on comments to the 2019 Annual Report for Plastic Waste Free Islands		IUCN	Response	Regional
DE SILVA Janaka, Follow-up from Annual Meeting; minutes of meeting and inputs to the Annual Report 2019	18.09.2020	Norad	E-Mail	Regional
Plastic Waste Free Islands		IUCN, Norad	Proposal	Regional
Grant Agreement between the Norwegian Agency for Development Cooperation and IUCN; International Union for Conservation of Nature and Natural Resources Regarding GLO-0841 QZA-18/0336 IUCN - Plastic Waste Free Islands		IUCN, Norad	Grant Agreemen t	Regional
Plastic Waste Free Islands 2021 Work Plan		n/a	Work Plan	Regional
Plastic Waste Free Islands, Annual Report	30.04.2020	IUCN	Report	Regional
NORAD Plastic Waste Free Islands Project Projected Budget and Work Plan for 2020	15.November 2020	IUCN	Work Plan and Budget	Regional
2022 Overview (Workplan Summary)	2022	IUCN, Norad	Work Plan	Regional
Annual Review Meeting Plastic Waste Free Island Project	04.09.2020	n/a	Draft Report	Regional
Plastic Waste Free Islands, Inception workshop report	21. 23.01.2019	IUCN, Norad	Report	Regional
Plastic Waste Free Islands Inception Report		n/a	Report	Regional
Gender and Plastics, A review of the links in select Caribbean and Pacific islands	01.02.2023	Profundo	Report	Regional
Communications Reporting		n/a	Excel	Regional
Plastic Waste Free Islands Comms plan timeline		n/a	Excel	Regional
PWFI Communications plan		n/a	Communic ations Plan	Regional
End of Year Newsletter	2020	n/a	Newsletter	Regional
Plastic Waste Free Islands, The Plastic Pollution Crisis		IUCN, Norad	Data Sheet	Regional
Novel concepts and alternatives to turn plastic waste into useful products - resources for a circular economy		n/a	Toolkit	Regional
Plastic Waste Free Islands, Key updates from 2020	2020	IUCN, Norad	Updates	Regional
Plastic Waste Free Islands, A project managed by IUCN and supported by Norad		IUCN, Norad	PPP	Regional

Toolkit for plastic waste-free hospitality, Hygiene & Safety for Businesses in Leisure without the Need for Single-Use Plastics!	dec-20	Searious Business, IUCN, Norad	Toolkit	Regional
Toolkit for plastic waste-free cruising, hygiene & safety on board and ashore without the need for single-use plastics!	dec-20	Searious Business, IUCN, Norad	Policy Guideline & Toolkit	Regional
Banner PWFI Caribbean 1		Norad, Organisation of Eastern Caribbean States	Banner	Regional
Banner PWFI Caribbean 2		Norad, Organisation of Eastern Caribbean States	Banner	Regional
Brochure PWFI		IUCN	Data Sheet	Regional
ORMACC PWFI Communications Plan Updated	2021	n/a	Communic ations Plan	Regional
Banner PWFI 1		Norad	Banner	Regional
Banner PWFI 2		Norad	Banner	Regional
Plastic Waste Free Islands, The Plastic Pollution Crisis		Norad, IUCN, Fondation Didier et Martine Primat	Data Sheet	Regional
PWFI Media/Social Media Links		n/a	List	Regional
Plastic Waste Free Islands Template Key Words and Concept Definitions		IUCN, Norad	Template	Regional
Plastic Waste Free Islands, Template Material Flow Analysis		IUCN, Norad	Template	Regional
Plastic Waste Free Islands, Template Waste Management Policies and Practices		IUCN, Norad	Template	Regional
Plastic Waste Free Islands, Solutions Project: Bottle-to-bottle recycling		IUCN, Norad	Data Sheet	Regional
Plastic Waste Free Islands, Solutions Project: Reusable PET water bottles from bottling company 25x reuses		IUCN, Norad	Data Sheet	Regional
Plastic Waste Free Islands, Solutions Project: Reusable water bottles at hotels & cruise lines		IUCN, Norad	Data Sheet	Regional
Plastic Waste Free Islands, Solutions Project: Non-food dispensing system		IUCN, Norad	Data Sheet	Regional
Plastic Waste Free Islands, Solutions Project: Net-to-net recycling		IUCN, Norad	Data Sheet	Regional
Plastic Waste Free Islands, Solutions Project: Reusable fish packaging		IUCN, Norad	Data Sheet	Regional
Plastic Waste Free Islands, Solutions Project: Waste 2 product		IUCN, Norad	Data Sheet	Regional
Plastic Waste Free Islands, Solutions Project: Reusable food containers		IUCN, Norad	Data Sheet	Regional
Plastic Waste Free Islands, Solutions Project: Circular B2B logistics		IUCN, Norad	Data Sheet	Regional
Deplastify	02.06.2022	IUCN	Agenda	Regional
Attendees 2 June event	02.06.2022	n/a	List	Regional
Deplastifying the Caribbean, Introduction and capacity building on the IUCN tool Deplastify.org	02.06.2022	IUCN, Norad	PPP	Regional
Deplastify, Invitation to Discover Deplastify for the Caribbean	02.06.2022	IUCN	Invitation	Regional
Plastic Waste Free Islands, Most Suitable Technologies	Sep 2021, updated August 2022	IUCN, Searious Business, Norad, CE Delft	Methodolo gy Report	Regional
Funding opportunities for plastic waste and management projects		IUCN	Draft Report	Regional

Plastic Waste Free Islands, Pacific Regional Workshop, Fundraising	8., 9.12.2022	IUCN, Norad	PPP	Regional
Gender and Plastics, A review of the links in select Caribbean and Pacific islands	09.02.2023	Profundo	Draft Report	Regional
IUCN PWFI Survey, Pacific Analysis		IUCN	Questionn aire	Regional
Plastic Waste Free Islands, Pacific Regional Workshop, Gender Discussion	8., 9.12.2022	IUCN, Norad	PPP	Regional
Join IUCN and Partners for "A Post Plastic World"	27.06.2022	IUCN	Agenda	Regional
A Post Plastic World Event Briefing	27.06.2022	IUCN	Agenda	Regional
Blurbs for Ubuntoo platform on documents		n/a	List	Regional
Plastic Waste Free Islands, Caribbean and Pacific Projects (The Plastic Waste Free Islands project brings plastic pollution solutions for SIDS to the forefront with an invitation to a new community on Ubuntoo)		IUCN, Ubuntoo, Norad, Searious Business	Invitation	Regional
IUCN Plastics Knowledge Management	09.01.2022	IUCN	Draft Report	Regional
Enterprise Risk Management Report	23.02.2023	IUCN	Draft Report	Regional
PWFI Monitoring and Tracking Tools		IUCN	Methodolo gy	Regional
Mid-term Review of IUCN's Project: Plastic Waste Free Islands (PWFI): Final Report		IUCN, Marine Plastic Solutions	Report	Regional
Mid-term Review of IUCN's Project: Plastic Waste Free Islands (PWFI): Summary		Marine Plastic Solutions	Summary	Regional
Management Response - PWFI Mid-Term Review (1)	nov-21	n/a	Response	Regional
Management Response - PWFI Mid-Term Review (2)	nov-21	n/a	Response	Regional
OH PWFI 19 12 2022 Final	19.12.2022	n/a	Excel Sheet	Regional
Outcome Harvesting PWFI		n/a	PPP	Regional
Plastic Waste Free Islands, Pacific Regional Workshop, Outcome Harvesting	08 09.12.2022	IUCN, Norad	PPP	Regional
PWFI Outcome Harvesting 2nd Session		n/a	PPP	Regional
PWFI Outcome Harvesting 3rd Session		n/a	PPP	Regional
PWFI Outcome Harvesting 4th Session		n/a	PPP	Regional
Plastic Waste Free Islands Theory of Change		IUCN	TOC	Regional
PWFI Theory of Change Evolution		n/a	TOC	Regional
IUCN PWFI Revised Workplan Budget Including NOK	2019	n/a	Budget, Workplan	Regional
NORAD Plastic Waste Free Island Project Projected Budget and Work Plan for 2020	15.11.2020	IUCN	Budget, Workplan	Regional
Summary of 2021 Cash Request	08.12.2020	n/a	Budget	Regional
Revised 2020 Budget	08.12.2019	Norad, IUCN	Budget	Regional
PWFI 2021 Work Plan Version 1.0	2021	n/a	Work Plan	Regional
Norad PWFI 2021 Budget extension plan	2021	Norad	Budget	Regional
PWFI 2022 Work Plan Version 2.0	2022	n/a	Workplan	Regional
IUCN, International Union for Conservation of Nature and Natural Resources, Gland, Independent auditor's report to the Management on the financial report for the from period 1 December 2018 to 31 December 2019 of the project "Plastic Waste Free Islands"		PWC	Audit Report	Regional
IUCN, International Union for Conservation of Nature and Natural Resources, Gland, Independent auditor's report to the		PWC	Audit Report	Regional

Management on the financial report for the from period 1 January 2020 to 31 December 2020 of the project "Plastic Waste Free Islands"				
IUCN, International Union for Conservation of Nature and Natural Resources, Gland, Independent auditor's report to the Management on the financial report for the from period 1 January 2021 to 31 December 2021 of the project "Plastic Waste Free Islands"		PWC	Audit Report	Regional
Budget as approved by Norad	jun-19		Budget	Regional
The Regional Office for Mexico, Central America and the Caribbean of the International Union for Conservation of Nature (IUCN-ORMACC) REQUIRES "Processing services for Plastic Waste Free Islands Bottle-to-Bottle recycling pilot"		IUCN-ORMACC	ToR	Regional
Request for Proposals (RfP), Video production for the Plastic Waste Free Islands solutions for recyclable plastics in Antigua and Barbuda, Saint Lucia	jun-22	IUCN	Request for Proposals	Regional
Samoa Plastic Waste Profile	2022	Asia Pacific Waste Consultants	Report	Samoa
Plastic Waste National Level Quantification and Sectorial Material Flow Analysis in Samoa	07-04-2021	Asia Pacific Waste Consultants	Report	Samoa
Plastic Waste-Free Islands Project Plastic Waste National Level Quantification and Sectorial Material Flow Analysis in Samoa	01-03-2021	Asia Pacific Waste Consultants	Report	Samoa
Plastic Waste-Free Islands Project Plastic Waste National Level Quantification and Sectorial Material Flow Analysis in Samoa	01-07-2021	Asia Pacific Waste Consultants	Report	Samoa
Plastic Waste Free Islands Project Annexes to the Report Plastic Waste National Level Quantification and Sectorial Material Flow Analysis in Samoa	12-07-2020	Asia Pacific Waste Consultants	Annex	Samoa
Project Inception report Plastic Waste Free Islands (PWFI) Samoa for Global Marine and Polar Programme (GMPP), International Union for Conservation of Nature	2020	Asia Pacific Waste Consultants	Inception Report	Samoa
Synthesis of Plastic Pollution Policies Samoa		Asia Pacific Waste Consultants	Report	Samoa
Preliminary data for Samoa		Searious Business	Data	Samoa
Waste to Product Business Plan Samoa	2021	Searious Business	Presentati on	Samoa
The economic impact of plastic pollution in Samoa: impacts on the fisheries and tourism sectors, and the benefits of reducing mismanaged waste		IUCN Economics Team and Ocean Team, Norad	Report	Samoa
Plastic waste-free islands, Preliminary data for Samoa		Searious Business, Norad, IUCN	PPP	Samoa
Samoa	2021	IUCN	Synthesis Document	Samoa
Workshop Recording Samoa Quantification Validation Workshop		n/a	Workshop Recording	Samoa
Samoa Waste-to-Product, Working Group Meeting #3 Report	31.03.2021	Searious Business, Norad, IUCN	Meeting Report	Samoa
Samoa Bottle-to-Bottle Recycling, Working Group - Meeting #3 - PET CDL concept & EXPORT	18.02.2021	Searious Business, Norad, IUCN	Meeting Report	Samoa
Plastic Waste Free Islands, Samoa, Business Plan, Waste-to- Product	2021	Searious Business, Norad, IUCN	Business Plan	Samoa
Waste-to-product, Turning Trash in to Treasure, Samoa waste to product	2021	Searious Business	PPP	Samoa
Deplastify Report Samoa		n/a	Report	Samoa
Plastic Waste Free Islands, Most Suitable Technology (Calculator), Samoa		Searious Business, Norad, IUCN, CE Delft	Methodolo gy	Samoa
Plastic Waste Free Island, Qualification report, Samoa	jun-21	Searious Business, IUCN	Report	Samoa
PWFI Contextual Analysis		Searious Business	Analysis	Samoa

Subject: Bank Details Confirmation 1	04.11.2021	SRWMA	E-Mail	Samoa
Subject: Bank Details Confirmation 2	04.11.2021	SRWMA	E-Mail	Samoa
Banking Details for Funds Transfer in USD Currency through Western Union Business Solutions		n/a	Data Sheet	Samoa
KATIREWA Paula, Subject: Trashion Show	29.09.2021	SRWMA	E-Mail	Samoa
Samoa Recycling Waste Management Association 1	26.01.2023	IUCN	Letter	Samoa
Samoa Recycling Waste Management Association 2 signed	02.11.2021	IUCN	Letter	Samoa
RE: Request Approval to conduct Waste Audit in Suva	26.01.2023	IUCN, APWC	E-Mail	Samoa
Liquor Planet Invoice	09.11.2021	Liquor Planet	Invoice	Samoa
Roko's Restaurant	03.11.2021	Roko's Restaurant	Invoice	Samoa
Sample Bank confirmation for SRWMA Bank AC details	10.11.2021	Samoa Commercial Bank	Letter	Samoa
Sponsorship Letter		SRWMA	Letter	Samoa
Sponsorship Letter Signed		IUCN	Letter	Samoa
NEH Naydith Events Hirage	08.11.2021	NEH Naydith Events Hirage	Invoice	Samoa
Subject: Bank Details Confirmation	04.11.2021	SRWMA	Letter	Samoa
Re: Confirmation of account	11.11.2021	Samoa Commercial Bank	Letter	Samoa
Trashion Show	04.11.2021	SRWMA	Proposal	Samoa
Trashion Show	23.08.2021	SRWMA	Proposal	Samoa
RE: Support for Global Recycling Day 2022 (Letter SRWMA to IUCN)	04.03.2022	SRWMA	Letter	Samoa
Re: Global Recycling Day 2022	03.03.2022	SRWMA	E-Mail	Samoa
Salutations (Samoa Global Recycling Day Celebrations IUCN Draft Remarks)		SRWMA	Remarks	Samoa
Samoa Recycling Waste Management Awards 2022, Programme (Draft)		SRWMA	Draft Agenda	Samoa
Sponsorship letter IUCN to SRWMA		IUCN	Letter	Samoa
RE: Support for Global Recycling Day 2022 (Sponsorship letter IUCN to SRWMA)	17.03.2022	IUCN	Letter	Samoa
RE: Support for Global Recycling Day 2022 (Sponsorship letter SRWMA)	17.03.2022	IUCN	Letter	Samoa
Concept Paper, Celebrating Global Recycling Day	18.03.2022	SRWMA	Proposal	Samoa
2022 SRWMA Recycling Week Event Cost Estimate		SRWMA	Budget	Samoa
RE: Support for Global Recycling Day 2022 (Letter SRWMA to IUCN)	04.03.2022	SRWMA	Letter	Samoa
How much is a clean beach worth? The impact of litter on beach users in the Cape Peninsula, South Africa	2000	Peter G. Ryan, Jane Turpie	Article	South Africa
BTOR - 7th International Marine Debris Conference Busan, South Korea	14.04.2015	IUCN	Agenda	South Korea
Saint Lucia Plastic Waste Profile	2022	Asia Pacific Waste Consultants	Report	St Lucia
Plastic Waste-Free Islands Project Plastic Waste National Level Quantification and Sectorial Material Flow Analysis in Saint Lucia	nov-20	Asia Pacific Waste Consultants	Report	St Lucia
Plastic Waste National Level Quantification and Sectorial Material Flow Analysis in Saint Lucia	07-04-2021	Asia Pacific Waste Consultants	Report	St Lucia
Plastic Waste Free Islands Project Annexes to the Report Plastic Waste National Level Quantification and Sectorial Material Flow Analysis in Saint Lucia		Asia Pacific Waste Consultants	Annex	St Lucia
Project Inception report Plastic Waste Free Islands (PWFI) Saint Lucia for International Union for Conservation of Nature (IUCN)	2019	Asia Pacific Waste Consultants	Inception Report	St Lucia
Synthesis of Plastic Pollution Policies Saint Lucia		Asia Pacific Waste Consultants	Report	St Lucia

Policy analysis and development of policy recommendations to reduce plastic waste in Saint Lucia		Eunomia	Report	St Lucia
Preliminary data for St. Lucia		Searious Business	Data	St Lucia
STAKEHOLDER ENGAGEMENT PLAN SAINT LUCIA		Melesha Banhan	Report	St Lucia
Saint Lucia	2021	n/a	Synthesis Document	St Lucia
Plastic waste-free islands, Preliminary data for St. Lucia		Searious Business, Norad, IUCN	Data Sheet	St Lucia
The economic impact of plastic pollution in Saint Lucia: impacts on the fisheries and tourism sectors, and the benefits of reducing mismanaged waste		IUCN Economics Team and Ocean Team, Norad	Report	St Lucia
Natural capital asset map St. Lucia		n/a	Мар	St Lucia
Plastic Waste Free Islands, Stakeholders update meeting St. Lucia		IUCN, Norad	PPP	St Lucia
Plastic Waste Free Islands, Saint Lucia, Business Plan, Waste-to-Product	2021	Searious Business, Norad, IUCN	Business Plan	St Lucia
Plastic Waste Free Islands, Saint Lucia, Business Plan, Reusable Food Containers	2021	Searious Business, Norad, IUCN	Business Plan	St Lucia
Plastic Waste Free Islands, Project Impact Report, Saint Lucia Waste to Product		Searious Business, Norad, IUCN	Report	St Lucia
Deplastify Report Saint Lucia		n/a	Report	St Lucia
Plastic Waste Free Islands, Most Suitable Technology (Calculator), Saint Lucia		Searious Business, Norad, IUCN, CE Delft	Methodolo gy	St Lucia
Plastic Waste Free Island, Qualification report, Saint Lucia	jun-21	Searious Business, IUCN	Report	St Lucia
PWFI Contextual Analysis		Searious Business	Analysis	St Lucia
Project Stakeholder Analysis		n/a	Analysis	St Lucia
Stakeholder Engagement Plan Saint Lucia	31.03.2020	IUCN	Draft Report	St Lucia
Request for Proposals (RfP), Consultancy Services for "Technical support for the purchase of machineries for the Plastic Waste Free Islands "Waste to Product" solution in Saint Lucia		IUCN	Request for Proposals	St Lucia
Project: Enhancement of capacities of waste management stakeholders to support enabling conditions for uptake of the Plastic Waste Free Islands "Waste to Product" solution on St Lucia, second progress Report (Equipment ordering for Saint Lucia)	24.11.2022	Triple Benefit	Report	St Lucia
Project: Enhancement of capacities of waste management stakeholders to support enabling conditions for uptake of the Plastic Waste Free Islands "Waste to Product" solution on St Lucia, Progress Report 1	2022	Triple Benefit	Draft Report	St Lucia
Vanuatu Plastic Waste Profile	2022	Asia Pacific Waste Consultants	Report	Vanuatu
Plastic Waste-Free Islands Project Plastic Waste National Level Quantification and Sectorial Material Flow Analysis in Vanuatu	feb-21	Asia Pacific Waste Consultants	Report	Vanuatu
Plastic Waste National Level Quantification and Sectorial Material Flow Analysis in Vanuatu	07-04-2021	Asia Pacific Waste Consultants	Report	Vanuatu
Plastic Waste Free Islands Project Annexes to the Report Plastic Waste National Level Quantification and Sectorial Material Flow Analysis in Vanuatu		Asia Pacific Waste Consultants	Annex	Vanuatu
Project Inception report Plastic Waste Free Islands (PWFI) Vanuatu for Global Marine and Polar Programme (GMPP), International Union for Conservation of Nature	2020	Asia Pacific Waste Consultants	Inception Report	Vanuatu
Synthesis of Plastic Pollution Policies Vanuatu		Asia Pacific Waste Consultants	Report	Vanuatu
Preliminary data for Vanuatu		Searious Business	Data	Vanuatu

Waste to Product Business Plan Vanuatu	2021	Searious Business	Presentati on	Vanuatu
Top Ten Items - Vanuatu		n/a	List of Items	Vanuatu
The economic impact of plastic pollution in Vanuatu: impacts on the fisheries and tourism sectors, and the benefits of reducing mismanaged waste		Aanchal Jain, Leander Raes, Damien Mittempergher	Report	Vanuatu
Plastic waste-free islands, Preliminary data for Vanuatu		Searious Business, Norad, IUCN PPP		Vanuatu
Vanuatu	2021	IUCN	Synthesis Document	Vanuatu
Plastic Waste Free Islands, Synthesis of Plastic Pollution Policies		Asia Pacific Waste Consultants	Report	Vanuatu
Workshop Recording Vanuatu Quantification Validation Workshop		n/a	Workshop Recording	Vanuatu
Vanuatu Bottle-to-Bottle Recycling, Working Group Meeting #2 Report	2021	Searious Business, Norad, IUCN	Meeting Report	Vanuatu
Plastic Waste Free Islands, Vanuatu, Business Plan, Waste- to-Product	2021	Searious Business, Norad, IUCN	Business Plan	Vanuatu
Vanuatu Bottle-to-Bottle Recycling, Working Group - Kick off Meeting Report	2021	Searious Business, Norad, IUCN	Meeting Report	Vanuatu
DE SILVA Janaka, REMINDER: Vanuatu Bottle2Bottle meeting 24/3	22.03.2021	Searious Business	E-Mail	Vanuatu
DE SILVA Janaka, VANUATU Bottle-to-Bottle recycling Recap & next steps	28.01.2021	Searious Business	E-Mail	Vanuatu
Deplastify Report Vanuatu		n/a	Report	Vanuatu
Plastic Waste Free Islands, Most Suitable Technology (Calculator), Vanuatu		Searious Business, Norad, IUCN, CE Delft	Methodolo gy	Vanuatu
Plastic Waste Free Island, Qualification report, Vanuatu	jun-21	Searious Business, IUCN	Report	Vanuatu
PWFI Contextual Analysis		Searious Business	Analysis	Vanuatu
VESS and Plastics		VESS	PPP	Vanuatu
Waste Pickers Workshop Discussion Questions		n/a	Questionnair	e Responses
Event Contract signed			Contract	
Innovative Recycling to Clean Up the Pacific		Pacific Recyclers, ECOS, CRDC	PPP	
FW: Opening Remarks for Plastic Side event	30.07.2019	n/a	E-Mail	
RE: Request for Major Sponsorship/Partnership 2021 Global Recycling Day Event	17.02.2021	n/a	E-Mail	
Supporting File		n/a	Excel Sheet	
Workshop Recording GMT20210721-200843		n/a	Workshop Recording	
Total plastic waste generated across sectors and potential waste reduction per type of plastic		n/a	Data Sheet	
Link for solutions videos			Link	

Annex C: Stakeholders interviewed

Interviewees	at global	and	regional	level

Organization	Name	Contact details	Туре	Date
IUCN HQ	Janaka da Silva	Janaka.DeSilva@iucn.org	remote	Jan 13
IUCN HQ	Lynn Sorrentino	lynn.sorrentino@iucn.org	remote	Jan 13
IUCN HQ	João Sousa	joao.sousa@iucn.org	remote	Jan 17/20
IUCN HQ	Florian Reinhard	florian.reinhard@iucn.org	remote	Feb 22
IUCN HQ	Hugo Luiz Rosano	hugo.ruizlozano@iucn.org	remote	Feb 23
IUCN Economic Knowledge Unit	Leander Raes	Leander.Raes@iucn.org	remote	Jan 12
IUCN ORMAC	Dominique Finegan	Domenique.Finegan@iucn.org	remote	Jan 19
IUCN ORO	Paula Katiwara	Paula.Katirewa@iucn.org	face to face - Fiji	Jan 26
IUCN ORO	Varea Romanu	Varea.Romanu@iucn.org	face to face - Fiji	Jan 23
IUCN ORO	Ken Kassem	ken.kassem@iucn.org	face to face - Fiji	Jan 23
IUCN ORO	Semisi Tawake, finance officer		face to face - Fiji	Jan 24
SPREP	Anthony Talouli	anthony@sprep.org	face to face - Fiji	Jan 23
OECS	Susanna Scott Allena Joseph Joan Norville	susanna.dscott@oecs.int	face to face - St Lucia	Jan 31
Unite Caribbean (REPLAST Project)	Ronald Roach	rroach@unite-caribbean.com	remote	Feb 16
Norad	Per Andreas Larsen Kari Johansen	Per.Andreas.Windingstad.Larsen@norad.no Kari.Synnove.Johansen@norad.no	remote	Feb 27
APWC	Amardeep Wander	amardeeep@apwc.com.au	remote	Feb 23
Searious Business	Rosemarie Wuite	rosemarie@seariousbusiness.com	remote	Feb 23
Pacific Tourism Organisation (SPTO)	Christina Leala Gale	cgale@spto.org	remote	Feb 27

Interviewees in Antigua and Barbuda

Organization	Name	Contact details	Туре	Date
Ministry of Health,	Indira James	Indira.James@ab.gov.ag	face to	Jan 27
Wellness and the	Henry		face	
Environment				
IUCN / Ministry of	Jasiel Murphy	jdjmurphy@hotmail.com	face to	Jan 24
Health, Wellness and the			face	
Environment				
Attorney General's	Deniscia	Deniscia.Thomas@ab.gov.ag	remote	Feb
Chamber	Thomas			22
Will's Recycling	Hasani Williams	willsrecycling@gmail.com	face to	Jan 25
			face	
Antigua and Barbuda	Mario Bento	mario@caribbeanwatertreatment.com	face to	Jan 27
Waste Recycling			face	

Corporation (ABWREC)				
Zero Waste Antígua and Barbuda	Ruth Spencer	ruthspencer5@gmail.com	face to face	Jan 24
Oasis Water	Calbert Francis	calbert@antiguadistillery.com	face to face	Jan 24
Rotary Club of Antigua Sundown	Mario Bento	mario@caribbeanwatertreatment.com	face to face	Jan 26
Pop-up bottle collection point	Staff at the Epicurean pop- up point	Indira.James@ab.gov.ag	face to face	Jan 27
Melesha Banhan	Consultant responsible for the full policy report	melesha@gunningbanhan.com	email	Feb 27
National Solid Waste Management Authority and landfill visit	Sherwin Willshire	only phone no.	face to face	Jan 26

Interviewees in Saint Lucia

Organization	Name	Contact details	Туре	Date
Department of Sustainable Development	Lavina Alexander	lalexander.sde@gmail.com	face to face	Feb 1
Department of Fisheries	Yvonne Edwin	yvonne.edwin@govt.lc	face to face	Jan 30
IUCN / Department of Sustainable Development	Michelle Headley	mishce@gmail.com	remote	Jan 31
Saint Lucia Solid Waste Management Authority	Marie Dalsan	<u>olm@sluswma.org</u>	face to face	Feb 2
Saint Lucia Solid Waste Management Authority	Visit to the Deglos landfill with Marie Dalsan	<u>olm@sluswma.org</u>	face to face	Feb 2
Spice of India (restaurant	Adil Sherwani	admin@spiceofindiastlucia.com	email	Feb 16
The Landings St. Lucia (resort)	Sanicia Sammy	ssammy@landingsstlucia.com	face to face	Feb 1
consultant for the government of Saint Lucia	Bishnu Tulsie	btulsie@gmail.com	face to face	Jan 30
JUA KALI LTD (private recycler)	Laurah John	laurahjohn@hotmail.com	face to face	Feb 1
M&C Group of Companies	Vernessa Chance, Group Marketing Manager	<u>vernessac.hd@mandcgroup.com</u>	face to face	Feb 1
Renew Saint Lucia	Collins Lynch Kurneil Lynch	<u>collins.lynch@yahoo.com</u> <u>kurneillynch@renewstlucia.com</u>	face to face	Feb 2
Balenbouche Estate	Verena Lawaetz	<u>vlawaetz@gmail.com</u>	remote	Feb 2
InsideOut Furniture (retail outlet)	Loraine Moffat	loraine@insideoutslu.com	email	Feb 17
Department of Sustainable Development	Samanthia Justin	sajustin@gosl.gov.lc	remote	Feb 15

Interviewees in Grenada

	NTamaa	Contract dataile	T	Data
Organization	Iname	Contact details	Type	Date
IUCN / Environment	Kenisha Canning	canning4966@gmail.com	remote	Feb 13
	A ' C T '			E1.04
Environment Division	Aria St Louis	environment.sec@gmail.com	remote	Feb 24
Grenada Solid Waste	Myrna Julien	mjulien@gswma.com	remote	Feb 15
Management Authority				
Grenada Green Group	Kenia Charles	grenadagreengrp@gmail.com	remote	Feb 14
Local coordinator for	Richard Boodlo	promiermerketing ad ameil com	romoto	Eab 14
	Richard Deadle	premiermarkeung.gu@gmaii.com	Temote	1.60.14
APWC for the				
quantification assessment				
True Blue Bay Resorts	Russ Fielden	russ@truebluebay.com	remote	Feb 14
	0' D			D14
Global Waste Associates	Simon Penney	simonpenney@globalwasteassociates.ca	remote	Feb 16
Independent Consultant	Safiya Sawney	safiya.sawney@gmail.com	remote	Feb 15

Interviewees in Fiji

Organization	Name	Contact details	Туре	Date
Department of Environment, Ministry of Local Government, Urban Development, Housing and Environment	Kavnil Lal	rajeshni.lata@govnet.gov.fj	face to face	Jan 27
Fiji Hotels and Tourism Association	Fantasha Lockington	pro@fhta.com.fj	face to face	Jan 24
Waste Recyclers Pte Fiji Limited / Pacific Recycling Foundation	Amitesh Deo John Wilson	wasterecsuv@connect.com.fj	face to face	Jan 28
University of the South Pacific	Andrew Irvin	andrew.irvin@usp.ac.fj	face to face	Jan 26
The University of the South Pacific	David Rohindra	david.rohindra@usp.ac.fj	Remote / email	Feb 1
Levuka Town Council	Luke Baleinabuli	luke17baleinabuli@gmail.com	remote	Feb 2
Pacific Ocean Litter Youth Project (POLYP Fiji) Benu ni Waitui	Suzanne Turaganiwai	turaganiwaisuzanne@gmail.com	face to face	Jan 24
Natural Waters of Viti Levu (Trading as Fiji Water)	Nicholas Barnes	Nick.Barnes@wonderful.com	face to face	Jan 24
Natural Waters of Viti Levu (Trading as Fiji Water)	Malelili Rokumatu	Malelili.Rokomatu@fijiwater.com	Email	Jan 26
Narsey Plastics	Vinay Narsey	vinay@narseysplastics.com.fj	face to face	Jan 27
Environmental Law Oceania Consultancy	Patricia Parkinson	patriciaaparkinson@gmail.com; elocfiji@gmail.com	face to face	Jan 23
Tourism Fiji	Brent Hill	bhill@tourismfiji.com	online	Jan 27
Suva Harbour Foundation	Sydel Whippy Bill Lockwood	president.shffj@gmail.com fiji.lockwood@gmail.com	face to face	Jan 27

List of interviewees in Vanuatu

Organization	Name	Contact details	Туре	Date
Department of Tourism	Mark Kalotap	jspooner@vanuatu.gov.vu / mkalotap42@gmail.com	face to face	Feb 2

Vanuatu Environmental Science	Christina Shaw	christina@vanuatuconservat	face to	Feb 2
Society / Vanuatu Recycling Waste		ion.org	face	
Management Association				
World Vision Vanuatu	Florence Joana Bule	Florence_Bule@wvi.org	face to	Feb 1
			face	
Vanuatu Recycling and Waste	Andrew Hibgame	andrew@recyclevanuatu.co	face to	Jan 31
Management Association / Recycle		m	face	
Corp				
		shaun@recyclevanuatu.com		
Vanuatu Beverage	Manutea Durand	marketing@vanbev.vu	face to	Feb 2
		mdurand@vanbev.vu	face	
		sangul.jeanine16@gmail.co		
		m		
Au Bon Marché	Ariitataimai Salmon	taimai.salmon@abm.vu	face to	Jan 31
		krystie.leong@abm.vu	face	
		roddy.lenga@abm.vu		
Department of Local Authorities	Jeffrey Kaitip	jkaitip@vanuatu.gov.vu	face to	Jan 31
https://www.facebook.com/DLA			face	
Vanuatu/				
Vanuatu Chamber of Commerce	Florida Tumulango	florida@savvyvanuatu.com	face to	Jan 30
and Industry/ SUVVA			face	
Vanuatu Environnent Law	Colin Leo	cbllawyers.law@gmail.com;	face to	Jan 31
Association VELA		mightyhillz@gmail.com	face	

List of interviewees in Samoa

Organization	Name	Contact details	Туре	Date
Ministry of Natural Resources and Environment- Division of Environment Conservation	Setoa Apo	setoa.apo@mnre.gov.ws	remote	Feb 2
Samoa Bureau of Statistics	Mose Topeto	mose.topeto@sbs.gov.ws	remote	Feb 22
Samoa Recycling Waste Management Association	Marina Keil	wastemanagementapia@gmail.com	remote	Feb 21
Secretariat of the Pacific Regional Environment Programme (SPREP)	Sainimili Bulai	<u>sainimili@sprep.org</u>	remote	Feb 9

Annex D: Verification of Harvested Outcomes



Annex E: The Theory of Change developed by IUCN in 2022



Assumptions

- A. Data are of adequate quality to estimate plastic stocks and flows well.
- B. Key stakeholders are engaged in the processes and advocate for these solutions.
- C. Multi-Stakeholder working groups agree on national priorities for solutions/proofs of concept.
- D. Key Stakeholders work as a coalition to support the advocacy of the recommendations to decision makers coordination between organisations in each region and national setting is necessary.
- E. Private sector understands profitability of Alternate Value Chains and "best available technologies"; and access to funding for capital investments.
- F. Markets exist for recycled products.
- G. Policy Solutions identified to reduce plastic pollution are relevant to government and private sector demand.

Outputs	-	The Caribbea	an		The Pacific		R	Evidence - Caribbean Evidence - Pacif	
	A & B	St Lucia	Grenada	Fiji	Vanuatu	Samoa			
1.1 Target islands selected through criteria	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	S	Inception report 2019 and inter	views with program coordinator
1.2 Methodology developed to calculate the leakage from different sources	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	HS	Plastic Waste National Level Quantification and Sectoral Material Flow Analysis in A&B (April 2021), in St Lucia (July 2021), Grenada (April 2021), IUCN Plastic Waste National Level Quantification and Sectoral Material Flow Analysis Caribbean Regional Report (July 2021)	Plastic Waste National Level Quantification and Sectoral Material Flow Analysis in Fiji (March 2021), in Samoa (July 2021), Vanuatu (July 2021), IUCN Plastic Waste National Level Quantification and Sectoral Material Flow Analysis Pacific Regional Report (July 2021)
2.1 Current waste management policies and practices assessed on target SIDS to generate a baseline understanding on content, financing and implementation of policies related to project outcome	Achieved	Achieved	Achieved	Partly achieved	Partly achieved	Partly achieved	S/ MU	For each of the islands, the APWC report had produced preliminary policy recommendations, which were integrated in the "Qualification Reports" which were being simultaneously produced by Searious Business and which also included policy analysis / recommendations (finalized in June 2021.	Synthesis of Plastic Pollution Policies available in June 2021 with recommendations. Fiji policy and legal assessment shared in January 2023. It does not have recommendations. Samoa and Vanuatu policy and legal assessments not shared by end February.
2.2 Policy recommendations delivered to governmental bodies on policy, legislation and regulation for plastic waste leakage minimisation	Achieved	Achieved	Achieved	Partly achieved	Partly achieved	Partly achieved	MS	Full reports were produced by consultants hired to produce a country specific policy analysis and recommendations. The consultations and validations were led by the consultants. The ET interviewed two of these consultants and had access to the full reports.	2 workshops were held in each SIDS in the second half of 2022 to assess and validate policy recommendations. Reports were finalized in Feb 2023. Many stakeholders incl. government were awaiting a formal delivery and discussion of the plan for follow up
2.3. Strategy to support recommendation uptake implemented	Partly achieved	Partly achieved	Partly achieved	Partly achieved	Partly achieved	Partly achieved	MS	The governments selected one of the policy recommendations to be pursued with the project's assistance. A document outlining the strategy for supporting the	The project management did not reassess the need for these strategies but still planned to do them in 2022. Policy paper on CDL

Annex F: Comparison of the level of achievement of outputs across target countries

3.1 Key stakeholders (public and private, as well as the informal waste sector) in each target sector are identified and engaged in enhanced plastic waste management measures	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	S	recommendation in each country is missing. Activities have been implemented in all 3 Caribbean countries as evidenced by several documents and interviews, e.g.: the reports by the international consultant who delivered the trainings in Grenada on the NBWCA, the policy paper produced by Searious Business in Grenada and stakeholders in Saint Lucia that participated in the public exhibitions and events to raise awareness. For the Caribbean stakeholder engagement plans for each SIDS and stakeholder analysis were developed. There were multiple instances of stakeholder involvement throughout depending on the activities at hand. This is for example reported in the tracking tools for stakeholder engagement, workshop meetings and	Stakeholders mapping was completed in 2019 for the Pacific. For the Caribbean stakeholder engagement plans for each SIDS and stakeholder analysis were developed while that was not the case in the Pacific.
3.2 An action plan for each sector on enhanced plastic waste management is co- developed with island governments and key stakeholders	Not Achieved	Partly Achieved	Not Achieved	Not achieved	Not achieved	Not achieved	MU	No action plans for each of the sectors per country have been produce, with the exception of the Saint Lucia Marine Litter Management Action Plan which used PWFI data but was commissioned by the SLSWMA and funded by UNEP.	IUCO ORO confirmed that there are no sectoral overall action plans.
3.3 Assess and assist the three sectors (tourism, fisheries and waste management) to synergistically co-generate up to 3 viable value chains to collect, recycle or reuse	Achieved	Achieved	Partly Achieved	Achieved	Achieved	Achieved	S	No business case was developed for Net-to-Net recycling in Grenada. The business cases were developed, and two pilot projects were fully implemented: B2B in A&B and the Reusable Food Containers in St Lucia. The W2P	In the Pacific the fisheries sector was not responsive so there were no specific value chains or business plans developed for that sector. However, the nine business plans for the alternate value chains are of high quality, several have

products from locally								pilots are advancing in all three	been piloted and at least one is
sourced recycled plastic								countries and will be supported by	expected to be a viable business
streams								the project's Phase 2.	case.
3.4 Assess best available	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	S	The concept was changed underway	from BAT to Most Suitable
technologies (BAT) for								Technologies (MST). A methodolog	ical report was carried out (Sept
solutions for effective								2021) and data sheets were elaborate	d for each of the six SIDS.
elimination of non-								In early 2022, a training module was	developed to build national
recyclable plastic streams								capacity. The validation of the repor	ts and implementation of the
in 6 SIDS								training module was done in June 20	22 at two regional workshops.
4.1 A growing network on	Partly	Partly	Partly	Partly	Partly	Partly	MS	PWFI Ubuntoo Greenhouse has	
best practice activities to	Achieved	Achieved	Achieved	Achieved	Achieved	achieved		304 members that are external	
minimise plastic waste								(excluding IUCN/Ubuntoo staff).	
leakage that includes key								Of the 304, more than 100 were	
stakeholders from the 6								invited by IUCN directly from the	
SIDS								regions and globally	
4.2 Members of the network	Not	Not	Not	Not	Not	Partly	Not	Stakeholders testify to having partici	pated in events discussing the
influenced other	Achieved	Achieved	Achieved	Achieved	Achieved	achieved	rated	Blueprint in the two regions, but the	ET has found no evidence nor
stakeholders to contribute								indication that the stakeholders have	influenced each other to contribute
to the development of the								to the development of the Blueprint.	
Blueprint								1 1	
4.3 A zero plastic waste	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	S	The regional 3-day PWFI	The zero plastic Blueprint was
Blueprint is developed,								workshop in Antigua titled	developed and finalised in by the
informed by the project								"Caribbean Interregional	end of 2022. It was discussed in
lessons and disseminated								Workshop in preparation for the	December 2022 in the Pacific.
through regional bodies								Intergovernmental Negotiating	Dissemination is ongoing at global
and international sector								Committee (INC) of the Global	level.
players (e.g., tourism								Plastics Treaty" (October 22)	
operators, regional-scale								included a session on the	
fisheries or international								Blueprint, in which the concept	
waste management								and draft was presented, followed	
providers)								by focus-group discussions to	
1 /								collect feedback and	
								recommendations for the	
								finalization of the Blueprint. The	
								minutes have been and	
								interviewed stakeholder who	
								participated were asked about it.	
			1	1	1		1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

Annex G: Comments on the waste audit methodology and considerations for future assessments

Comments on the waste audit methodology used in PWFI

1. One of the problems that comes up when performing a plastic flow analysis, considering what goes in (imported plastic – "clean plastic") and what comes out (plastic waste), is the bias resulting from the contamination and moisture content of the plastic waste, especially in lighter plastics, which leads to an overestimation of the weight of plastic waste, when comparing with the weight of the same clean products. Due to this issue, it is recommended to make corrections for the contamination and moisture content of the plastic waste in the samples in these balances.

APWC was asked whether these corrections were made, as none of the reports made available for consultation mention this issue, and the response was that "All counts were converted to weight (using a conversion factor provided by the National Litter index (Australia)) to undertake a comparative analysis. Where the weight was beyond the limit of expected weight based on counts, the counts were converted to weights and these weights were used."

However, to our knowledge, the National Litter index (NLI Australia) is a count method aimed at providing a methodology to capture standardized litter data across all states of Australia, which has been used to assess the evolution of litter reduction for over 10 years on the beaches and streets of Australia (e.g., Perth NRM and KABC, 2022)⁷¹.

The methodology is based on counting the number of litter items and converting them into liters, based on a catalogue with normalized liter values for each item. The NLI is therefore not used to quantify waste (by weight), and even less to help with mass balances. The only scale we know of from the NLI is the one that converts the number of items to volume (liters) and not to weight (kilos). Therefore, information is lacking on the factors used to convert volume (liters) to mass (kilos), and we recommend the inclusion of these factors in the methodology.

2. Another factor that must have had a strong influence on the amount and type of plastic waste produced was the context of the COVID-19 pandemic. The consumption patterns in a society have a direct effect on the waste audit results, which means that the results obtained in the pandemic phase cannot reflect the ones that would normally occur in a situation of normality. These SIDS depend heavily on imports and tourism, which was practically closed, and did not have the same type of economic activities or the same consumption patterns in the COVID-19 pandemic, whether in the tourism, fishing or the domestic sectors. Some reference to this situation, as well as corrections or projections to a context of normality should have been made or explained together with the estimation results.

3. Due to COVID-19, it was necessary to make some adjustments and adaptations to the methodology and plans for waste audits in all the Islands, except for Antigua and Barbuda whose audit was carried out before the COVID-19 pandemic. These changes to the initial proposed methodology are indicated in the report.⁷² But, as referred by APWC statisticians in that same report, since there was a higher degree of reliance on theoretical and desk research, and less field work, the reliability of the results was compromised, with the confidence intervals being around 30% higher on leakage, and around 50% higher on waste generation rates.

Also, for the waste management sector (household, commercial and landfill audits), APWC had to hire local consultants and volunteers and train them remotely to perform the waste audits, which does not guarantee the same specialization in the skills required for waste audits. Some reference to this situation, correction, or projection to a context of normality should have been made or explained together with the estimation results.

 ⁷¹ Perth NRM and KABC (2022). Australian Litter Measure LITTER SURVEY Perth Metropolitan Area May 2022 (Appendix 3 Total Estimated Volume by Item). Available in https://www.kabc.wa.gov.au/library/file/AUSLM/PNRM%20KABC%20Report%2022.pdf.

⁷² APWC (n.d.). Post Covid methodology For Collection of quantitative data for the Plastic Waste Free Islands Project Target sectors: Waste management, Tourism and Fisheries.

4. The audits of the waste arriving at the landfills in the collection vehicles were carried out based on visual estimates of the volume occupied by the different categories of waste. Converting estimated volume (liters) into weight (tons) requires good knowledge of the typical and specific weight of each waste component inside the collection vehicle, which in turn is dependent on the compaction rate and the height of the load.

When APWC was questioned about how the conversion from the visual estimate of the volume into the weight of the different categories of waste was made, the response was that the density factors for waste types (based on the categories used) are well established in the waste auditing community.

Both the US EPA and the NSW EPA (Australia) publish conversion factors for volume to weight conversion (based on compaction rates) for the purpose of being able to visually audit landfills. This information should be in a methodology report, mentioning the conversion factors for volume to weight used in visual audits of landfills, and the respective reference sources.

5. In the quantification and characterization of waste by sampling, a factor that can contribute to a greater or lesser representativeness of the various categories of waste components is the number of items that make up the sorting catalogue. The sorting catalogue used in the PWFI project had 107 components that need to be considered and separated during the audits.

Besides requiring a considerable amount of work and time, this substantially reduces the value of relative accuracy for some subcategories of waste, especially those that are in smaller quantities and that are not produced on a regular basis. We understand that more disaggregation generates more information, but the aim of the project was to quantify seven main plastic waste types, and it was useful to separate, within each polymer, the different products (e.g., bags, bottles or take away containers). However, the additional effort to characterize so many components outside the scope of the project ended up reducing the relative accuracy of the results. Perhaps not disaggregating the sorting catalog so much into products made with the same material could reduce the time consumed in this task and improve accuracy.

6. References to studies or information available on waste production in these six SIDS should also be made. Except for Saint Lucia, we did not see any information on the amount of waste produced in previous years. Although a comparative analysis was not required as part of this study, some benchmarking with other sources would be helpful.

There are several audit studies carried out in these countries within the scope of other projects, although few by the local authorities. A comparison with data obtained in other studies (e.g., Word Bank⁷³ or OECD⁷⁴) which have projections of plastic leakage into the environment, would be useful to validate or highlight the added value of the additional information obtained in this project.

7. The methodological report should also have a description of the indicators that were used, their meaning and calculation formulas. For instance, it is not clear what is the difference between "Overall leakage based on plastic imported, recycled, disposed of and leaked" and "tons plastic waste leaked annually".

8. A report with a robust description of the methodology and a report with the data from the waste audits, their statistical treatment and critical analysis, would allow for a better interpretation of some values that seem strange. For instance, even if we consider the socioeconomic differences when comparing the results obtained for the six countries, there are differences that are difficult to understand, and would benefit from a report with a critical analysis of the results. Examples:

- If we divide the total amount of waste estimated for each island, Total solid waste (ton/year), by the population of that island, the values vary between 1.06 ton/hab.year (3 kg/hab.day) in Antigua and Barbuda, and 0.08 ton/hab.year (200 g/hab.day) in Vanuatu;
- The indicator "Plastic waste disposal rates (%)", is 10.7% in Vanuatu and 1.7% in Samoa;

⁷³ Kaza, Silpa; Yao, Lisa C.; Bhada-Tata, Perinaz; Van Woerden, Frank. (2018). What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050. Urban Development. Washington, DC: World Bank. © World Bank. https://openknowledge.worldbank.org/handle/10986/30317 License: CC BY 3.0 IGO.

⁷⁴ OECD (2022), Global Plastics Outlook: Economic Drivers, Environmental Impacts and Policy Options (<u>https://doi.org/10.1787/de747aef-en</u>).

- The indicator "Plastic waste disposal rates by sector" presents large variations. Example: for household waste (kg/person/day), while the value obtained for Antigua and Barbuda was 0.8 kg/hab.day, for Vanuatu the value was 0.01 kg/hab.day, which is 80 times less.

9. Despite these considerations, the PWFI project has the great merit of having added knowledge about the different types of plastic waste leaked annually in these six SIDS.

Considerations for future waste audits and assessments

1. Local authorities and governments should be capacitated to be able to carry out waste audit campaigns, without the need for contracting external auditors. This should have been another focus of the PWFI project and should be the focus of future ones, since this would help promoting and facilitating the implementation of national monitoring strategies and waste management systems. The ET understands that APWC was asked to capacitate governments through some proxy indicative quantification indicators for the future, which is a good strategy, despite its impact remaining to be measured as it is highly dependent on how the performance of national government staff in conducting such assessments. An internship program could be carried out to place capacitated technicians within government departments, for at least 12 months, aiming to support the process of national-level capacity building.

2. IUCN should ask for complete technical methodological reports, made available in open source, with full and detailed description of the methodology approach used in all the steps of the study, namely the assumptions that were made, the sampling size (besides the number of samples) depending on the statistical standards that are intended to be ensured, the definition of the various indicators and the formulas used for calculating them, the conversions made and their sources, and the limitations found while performing the studies.

3. In future projects, IUCN should request detailed technical reports on results treatment and interpretation, the comparison with other sources (local, World Bank, OECD, etc.), and their limitations or precautions to be considered.

4. An open-source repository for data from different waste audit projects in SIDS would be a good initiative, which would allow scientists and analysts to work with larger volumes of data and get better estimates of plastic waste.

5. Since APWC performed waste audits for other projects, these could have been used for synergy purposes, such as increasing the number of samples to narrow the confidence intervals (if data from these other projects is allowed to be shared).

6. The impact of this type of project can fall short if local governments are unable to reproduce the methodologies used in waste audits, as a way of monitoring the effect of their plastic reduction and recovery strategies. The methodology used by AWPC is expensive and requires high technical expertise. We recommend that IUCN review this matter and continue exploring synergies between the audits carried out within the scope of different projects allowing to statistically improve the results, and the establishment of a standardized methodology that can be easily implemented by local officials, enabling them to be self-sufficient. The report on data needs, objectives and comparison of currently available open access methods that IUCN is drafting is likely to be useful for achieving this goal.

7. High-quality waste estimates can only be achieved when countries have a general waste collection system that covers the entire population, and the adequate infrastructure, equipped with weighbridges, to receive waste. The recent focus on plastics should be coupled with the awareness that it is important to continue supporting the improvement of systems for collecting and treating the waste produced in SIDS. For instance, this could enhance the effectiveness of awareness campaigns that appeal to the importance of people reducing and valuing plastic waste, which can fall short if the population does not have a basic waste collection service on their streets, if there are illegal dumps and/or dumping sites, or poorly controlled landfills.

Annex H: Methodology for rating outputs and outcomes

The rating of EQs, outputs and outcomes were based on UNDP/GEF rating scale as follows:

Table 6: Rating scale for evaluating relevance, effectiveness, efficiency and coherence

Rating	Description
Highly Satisfactory (HS)	Level of outcomes achieved clearly exceeds expectations and/or there were no shortcomings
Satisfactory (S)	Level of outcomes achieved was as expected and/or there were no or minor shortcomings
Moderately Satisfactory (MS)	Level of outcomes achieved more or less as expected and/or there were moderate shortcomings
Moderately Unsatisfactory (MU)	Level of outcomes achieved somewhat lower than expected and/or there were significant shortcomings
Unsatisfactory (U)	Level of outcomes achieved substantially lower than expected and/or there were major shortcomings
Highly Unsatisfactory (HU)	Only a negligible level of outcomes achieved and/or there were severe shortcomings
Unable to Assess (UA)	The available information does not allow an assessment of the level of outcome achievements

Table 7: Rating scale for evaluating impact and sustainability

Rating	Description
Likely (L)	There is little or no risk to the materialization of the desired impacts / to sustainability
Moderately Likely (ML)	There are moderate risks to the materialization of the desired impacts / to sustainability
Moderately Unlikely (MU)	There are significant risks to the materialization of the desired impacts / to sustainability
Unlikely (U)	There are severe risks to the materialization of the desired impacts / to sustainability
Unable to Assess (UA)	Unable to assess the expected incidence and magnitude of risks to the materialization of the desired impacts / to sustainability

Table 8: Rating scale for evaluation of outputs and outcomes

Rating	Description
Exceeded	The expected Outputs/Outcomes were fully achieved
Achieved	The expected Outputs/Outcomes were achieved
Partly Achieved	The expected Outputs/Outcomes were partly achieved
Not Achieved	The expected Outputs/Outcomes were not achieved
Unable to Assess	Unable to assess the level of achievement of the expected Outputs/Outcomes

The rating scale for evaluating Outputs and Outcomes is applied comparatively across the six different countries.

Findings will be developed indicating the strength of evidence as follows:

Table 16: Ranking of evidence

Ranking of evidence	Explanation of ranking of quality of evidence
Strong	The finding is consistently supported by a range of evidence sources, including documentary sources, quantitative analysis and qualitative evidence (i.e. triangulation); or the evidence sources, while not comprehensive, are of high quality and reliable to draw a conclusion (e.g. strong quantitative evidence with adequate sample sizes and no major data quality or reliability issues; or a wide range of reliable qualitative sources, across which there is good triangulation).
More than satisfactory	There are at least two different sources of evidence with good triangulation, but the coverage of the evidence is not complete.
Indicative but not conclusive	There is only one evidence source of good quality, and no triangulation with other sources of evidence.
Weak	There is no triangulation and/ or evidence is limited to a single source.