



Pacific Adoption of Waste to Energy Solutions - PAWES

Project Updates

Update on work package 1 and 3: Capacity strengthening of government entities in the application of support tools for evidence-based decision-making in WtE. Promotion of cross-sectoral collaboration among government entities and the educational, research and private sector.

Purpose

The purpose of this paper is to provide an overview of how the PAWES project team proposes to deliver on work packages 1 and 3. The proposal is all aligned with the objectives, outputs and activities detailed in the Description of the Action (DOA).

Introduction of work package 1 and 3

To best illustrate and explain how work package 1 and 3 fit into the big picture of this PAWES project the following table provides a summary of the objectives, expected outputs and activities and how this flows from the top of the intervention logic down to the activities. This is all clearly explained in detail in the DOA and the Annual Report has this table included in it with all the work packages. A more detailed activity section for work package 1 and 3 is attached as Annex 1.

Table 1 Work package 1 and 3 intervention logic.

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| Overall Objective i.e., Impact | | |
| Enhanced SWM and energy security in the Pacific region | | |
| Specific Objectives i.e., Outcome | | |
| Specific objective 1: | | |
| National and subnational government entities able to make informed decision on developing a sustainable WtE sector. | | |
| Expected Outputs | | |
| Output 1.1 | Output 1.2 | Output 1.3 |
| Enhanced capacity of government entities in the application of support for evidence-based decision making in WtE | Increased access to data on SWM and RET | Enhanced cross-sectoral collaboration among government entities and the educational, research and private sector on WtE |
| Main activities. These are expressed as work packages (WP) | | |
| WP1 - Capacity of government entities in the application of support tools for evidence-based decision-making in WtE. | | |
| <p>The Action will ensure that Pacific national and sub-national governments have the understanding and capability to make effective and efficient decisions regarding WtE in their national context. The activities of this Work Package will focus on understanding the existing capability and policy/operational context for SWM and RET at the national level, any appropriate initiatives to fill sectoral gaps, and what training is required for government entities to make the requisite decisions in the future.</p> <p>A1.1 – Baseline assessment on decision-making processes at governmental level on the waste and renewable energy sectors.</p> <p>A1.2 – Feasibility assessment of WtE for the Pacific National and regional feasibility studies and strategies will be designed (and undertaken) based on baseline assessments and information gleaned from global, regional and south-south knowledge exchange.</p> <p>A1.3 – Training on WtE policy making adapted to the Pacific. Training on WtE policy making will be delivered to Pacific countries, through adapting existing training materials from international examples or developing new materials, presenting at national workshops, and mentoring.</p> | | |
| WP3 – Promotion of cross-sectoral collaboration among government entities and the educational, research and private sector. | | |
| <p>Provide in person and virtual platforms to discuss the adoption of existing technologies, an awareness of lessons learned from previous Pacific WtE pilots or successful WtE implementation internationally, and facilitate ongoing south-south knowledge exchange and cooperation among government entities and the educational, research and private sector. This could include trade missions, trade fairs/expos and conferences. These platforms and other mechanisms will support Pacific national and subnational governments to enhance coordination and facilitate dialogue between ministries, to clarify roles and policy settings, to review WtE in national plans and, where possible, to assist government mobilise resources to progress the recommendations provided through national/regional feasibility studies (A1.2).</p> <p>A3.1 – Deliver Pacific WtE presentations at international/regional conferences. There are relatively few Pacific entities and people working in the WtE sector, and many of the relevant people are also working across many other sectors. Therefore, ways will be investigated to promote cross-sectoral collaboration through attaching to existing Pacific conferences on RET and SWM, to minimise the time burden on Pacific representatives and maximise the chance of positive attendance.</p> <p>A3.2 – Build Pacific WtE website. Develop a website on Pacific WtE with automated and flexible features within the Pacific Data Hub ecosystem and promote the website.</p> <p>A3.3 – Strengthening existing Private Sector-Government-Partnership initiatives. This activity will ensure a holistic approach to waste management through WtE. The consortium will support government through the development /review of relevant energy roadmaps, policies and legislation that will provide the enabling environment for WtE and facilitate investment by the Private Sector.</p> <p>A3.4 – Undertake WtE Trade Missions Technical advice on WtE, and on RET and SWM more generally, will be provided to groups of government officials traveling to countries/regions where WtE is currently in operation to investigate and learn what is currently operational in terms of WtE. These represent key consultation events through which cross-sectoral collaboration on WtE will be enhanced. The learnings from these missions will help inform potential implementation of research pilots (as part of A 5.1) and operational systems in the Pacific.</p> | | |

Proposed Work Plan

The work that is proposed in this section can all be mapped back to Table 1 Work package 1 and 3 intervention logic.

| Description of Activities | Timeframe |
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| <p>1. Feasibility Cost Benefit Analysis on WtE Technology</p> <p>This feasibility cost benefit analysis will be country specific. It will look at what WtE technology is available based on feedstock available in each country. It will list the options available, cost, suppliers, pros and cons, meet environmental standards, and back up support needed. This will include photos, videos where available and contact details of providers etc. The results from this work will be shared in country during the WtE technology symposium.</p> <p>A ToR for this support will be drawn up and it is envisaged that this will be advertised early July. Possibly a 20 to 30 day piece of work.</p> <p>The Baseline Assessments and initial feasibility studies for each country will be used as the basis for delivering on this output.</p> | <p>Report to be completed by September 2023 and findings from this to be used for the WtE Technology Symposium in 2024.</p> |
| <p>2. WtE Policy and Roadmaps</p> <p>This support is in response to the concept notes each country prepared whereby all came back with the interest to develop the national WtE policy.</p> <p>A ToR for this support will be drawn up where one person or company or consortium could apply to deliver all 5 country WtE policy and road maps. Each government would be asked to provide a country lead to be engaged in the delivery of their national WtE policy and roadmap.</p> <p>As each country has different needs the ToR will need to be developed in close consultation with the concept notes that have been developed. It is envisaged that this piece would be approximately.</p> <p>It is envisaged that work on this will be approximately 8 to 10 days per country (50 days in total roughly) which includes in an in-country visit alongside the training on policy development. However, most of the work for each country can be done remote as this is reviewing existing data from the baseline assessments and desk review on existing frameworks etc.</p> | <p>July through to September for preparatory work.</p> <p>In country missions in the margins of the National WtE Forum and training on WtE policy design.</p> |
| <p>3. National Workshops on WtE</p> <p>Training on WtE policy design adapted to the Pacific – Target group government officers. 1 day workshop.</p> <p>Training on WtE policy making will be delivered to the 5 participating countries through adapting existing materials from international examples or developing new materials, presenting at national workshops, and mentoring.</p> <p>This training will be aligned with the design and development of the WtE policy in each country, therefore ideally this training needs to take place at the start of any in country visit from the Technical Assistance (Contractor) to undertake in country work for the WtE policy design and roadmap. It is envisaged that this would work well in the margins of the National WtE Forums.</p> <p>Development of training materials. Speak with IRENA on documents and Technical Assistance in this area for example document on "Renewable Energy Policies in a Time of Transition" and SIDS Lighthouses Initiative.</p> | <p>Last week of September through to first week of November.</p> <p>To be held every second week in each country.</p> <p>To be held in the margins of the National WtE Forum</p> |

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| <p><u>An understanding on WtE</u> – Target group: interested private sector, general public (students, community members) government departments. 2 hour workshop to be run over a few days depending on interest and demand. These workshops will be free however registration will be required. These will be advertised widely.</p> | |
| <p>4. National WtE Forums</p> <p>The purpose of the national WtE forums is to: create an awareness of WtE within each national context; get discussions underway; and an understanding of the PAWES Project and how this project is only one piece of the jigsaw puzzle and how it fits into the work that is being done at national, regional and international level.</p> <p>The WtE Forum will consist of Panel member/speakers from a mix of government, private sector, PAWES project etc. Each speaker will speak for approximately 8 mins and then it will be opened up to the floor for questions. Will aim for approx. 4 Panel speakers. So approximately 32 mins of presenting from panel members and then 30 mins of questions. Following this session, they will break for refreshments and continued one on one discussions. Each panel member/speaker will be briefed on the topics and support provided where needed for writing. As part of organising these national WtE Forums contact will be made with the organisers of international WtE expos as well as IRENA to assist with suggesting speakers and technology topics.</p> <p>Each WtE forum will be advertised in the national newspapers and social media. It will be free and open to the public. This will be delivered along with the tertiary education multiplier for each country i.e., UPNG and USP.</p> <p>One of the expected outputs from these WtE Forums is to provide a platform for interested private sector, donors, public members civil society and tertiary education providers understand the level of interest and an area where continued discussion may take place.</p> <p>N.B. Thought has been given to having the National WtE Forums during the same time as the WtE Technology Symposium, however once the Feasibility cost benefit analysis has been completed there is still a lot of preparation needed to put together a worthwhile WtE Technology Symposium (Tech Sym) hence the recommendation that the Forum be held in 2023 and the Tech Sym be held early 2024.</p> | <p>Last week of September through to first week of November.</p> <p>To be held every second week in each country.</p> |
| <p>5. Direct support to Multipliers Government and Private Sector</p> <p>This will be support provided directly to Multipliers in each country i.e., Government and Private Sector based on information collated during the Baseline Assessments. This will involve further discussions with each government representatives, ideas may come from the Baseline assessment or from further discussions once the detailed feasibility cost benefit analysis has been completed.</p> <p>Marshall Islands -To be discussed based on Baseline assessment.</p> <p>PNG – Possible detailed business case for funding for public private partnership for a WtE Power Plant</p> <p>Samoa –Business plan on ensuring profitability and the effective operations of the gasifier plant with funding proposal.</p> <p>Solomon Islands - Business plan on ensuring profitability, effective operations of the private sector plastic pyrolysis plant. Part of this plan will be to ensure that emissions are within acceptable world standards.</p> <p>Tuvalu – To be discussed based on Baseline assessment.</p> | <p>July 2023 through to March 2024</p> <p>Work to commence on ToR-scope of work and get agreement in writing between SPC and each Multiplier.</p> |
| <p>6. National WtE Technology Symposiums</p> <p>The in country national WtE technology symposiums (WtE tech Sym) will an opportunity to bring together private sector, government, financial institutions (banks, donors) to view the range of WtE technology options that are suitable to each country.</p> <p>The results of the feasibility cost benefit analysis will be used and where possible there may be actual options bought in and showcased and where these cannot be bought in the specs will be on e-copy. For example; in PNG a WtE pyrolysis plant of approx. 5 MWs may be feasible as per the</p> | <p>February through to April 2024</p> <p>To be held at two week intervals in each country.</p> |

cost benefit analysis. Then at the WtE Tech Sym the distributors for this technology will be invited to present either via zoom or to be recorded on film, website or paper. Then at the same table will be government officials, private sector and possible funders in this field that would then have the opportunity to speak.

SPC will not favour any provider but facilitate the options being shared. Another example could be for Tuvalu where the feasibility cost benefit analysis may come up with home bio gas units as well as maybe small scale plastic pyrolysis units. Then in Tuvalu the WtE Tech Sym would focus on the suppliers of this type of technology along with the cost benefit analysis for each.

As part of organising these national WtE Tech Sym's contact will be made with the organisers of international WtE expos as well as IRENA to assist with each of the WtE Tech Sym for assistance in suggesting speakers and technology topics. PAcWaste+, PCCREE- Pacific Centre for Renewable Energy and Energy Efficiency (SPC - based in Tonga)

