**UPDATED Sedrea project Completion sTatus and suggestions for completion of deliverables as of JuLY 14, 2016**

| ***Component*** | ***Activity*** | ***Task*** | ***Status******(14th July 2016)*** | ***Suggestions for Completion of Deliverable*** |
| --- | --- | --- | --- | --- |
| 1: RE Policy and Institutional Capacity Building | 1.10: Review and sustainability measures of RE Policy and Program | 1. Gather data/information on the results of the completed and ongoing activities under the GOP’s RE policy and program implementation. Take note also of the following: (a) Activities carried out to prepare for the implementation of the RE policy and program both under SEDREA and North REP[[1]](#footnote-1); (b) RET application activities carried out under SEDREA and North REP that are part of the GOP RE policy and program; and, (c) RET application activities in the country carried out outside of SEDREA and North REP, mainly by other donor agencies and/or the private sector.
2. Upon confirmation by PEO, use the M&E procedures for the RE sector under the NEPP implementation to conduct an analysis of the results achieved so far, and an evaluation of the potentials for realizing relevant targets. Comment also on the M&E procedures as to their applicability, suitability and usability.
3. Formulate recommendations based on the evaluation results, and come up with action plans to carry out the recommendations.
4. Prepare and submit M&E findings and recommendations to PEO and MPIIC.
5. Prepare and submit the M&E report that includes the action plan to carry out the activities to ensure the sustainability of the RE policy and program, under the NEPP.

Deliverable 2: M&E report that includes (a) evaluation of relevant RE policy implementation activities carried out under SEDREA and North REP, and by other entities in the country including the private sector; (b) comments & recommendations on the M&E framework; and, (c) action plan to carry out the activities to ensure the sustainability of the RE policy and program, under the NEPP.  | The Palau Energy Act of 2015 was signed into law by the Palau President on Feb 16, 2016 with the help of the North-REP project. It covers mostly the creation of the Energy Administration (from the usual PEO) and its functions in connection with the basic energy policy, M&E framework and reporting arrangement. Status and update of the completed works by SEDREA and North-REP projects on the policy and institutional aspects were also gathered. On matters related to another North-REP commitment on the transfer of the off-grid SHS units, it is noted, that since the North-REP Project has already been operationally closed, the logistics and installation cost of the said demonstration units cannot be realized as planned (*To be discussed in Deliverable 4*).  Submitted draft Deliverable 2 | Comments and suggestions on draft Deliverable 2.Additional inputs needed:1. Technical report and detailed inventory on the status of the remaining SHS units and batteries compare to what were procured under the project.
2. On the M&E side, status of the EA organizational set-up and present operation. What happened to PEO under the new EA? What unit is in charge of M&E? What are the current problem areas and plans in M&E?
3. Status and impacts of the Net Metering Act (copy please) on the entry of RE projects. Updating of the status based on SEDREA’s contribution.
4. Status and plans for the implementation of the Energy Act.
5. National energy mix of Palau at the start of SEDREA (2009) and at the end (2015)

Deliverable due date: July 18, 2016 (per revised contract July 13, 2016) |
| 2: RE Technology Delivery and Financing Mechanisms | 2.4: Evaluation of the performance of the REFW financing schemes | 1. Using the performance criteria stipulated in the REFW financing scheme, conduct an analysis of the results achieved so far, and an evaluation of the potentials for realizing relevant performance targets by all operational SHS installations.
2. Evaluate the issues involved (if any) that appears to hamper/delay the completion of the deployment of the SHS units that were pre-purchased and sold to residential/commercial users through the REFW financing scheme. Find out why the REFW seemed to have stopped operation in 2013 leading to the non-utilization of a number of pre-purchased SHS units that are supposed to be deployed for residential/commercial applications through the REFW.
3. Formulate recommendations based on the evaluation results for the operational SHS installations, and recommend action plans to carry out the recommendations
4. Review the overall performance of the REFW scheme (degree of accomplishments, remaining funds, issues and problems encountered, etc.), evaluate the findings, and come up with recommendations as to whether to continue the scheme (as is or enhanced) or close it.
5. Prepare and submit the performance evaluation findings and recommendations to PEO and MPIIC, including issues (and corresponding actions to address the issues) involved in the delayed installation of the SHS units that were pre-purchased to be sold to, and installed for, residential/commercial users through the REFW financing scheme.
6. Document all findings and recommendations in a performance evaluation report which include the action plan to carry out activities to ensure the sustainability of the REFW financing scheme, or to enhance its current overall performance.
7. Explore further the potentials for a different financing scheme (not like the subsidy-based REFW) with NDBP for EE initiatives.

Deliverable 3:Performance Evaluation Report on the REFW presenting: (a) Findings, analyses and recommendations regarding the (i) SHS units that have been deployed; and, (ii) SHS units that were not deployed; (b) Overall implementation of the REFW by the NDBP; (c) Action plan to carry out activities for the continuance or improvement/replacement of the REFW financing scheme; and, (d) Recommendations for new feasible financing schemes focusing on EE. | Updates on NDBP plans as of May 4, 2016 was received:* REFW started in December 2010; first installation on Feb 2011 and latest loan granted on Nov 2015 for 2 systems
* On-grid systems: Of the 30 units received, 24 were installed, 6 units and 18 inverters are remaining
* Off-grid systems: Of the 41 units received (3 from supplier for training and 38 for loaning), 5 were installed, 33 units are remaining.
* Reasons for not being able to dispose all systems were reported
* The 33 off-grid units are now in PEO possession per NDBP Board of Directors decision on November 12, 2015 and planned to be sold to Koror state or other non-profit organizations.
* With the SEDREA experience, NDBP plans to work with United Arab Emirates for a US$ 1 million package for 100 on-grid systems.

Draft Deliverable 3 was prepared, being completed pending other needed information.  | Draft Deliverable 3 to be discussed with PEO for completion and finalization of plans on the 6 on-grid and on the 33 off-grid systems remaining. The following information are needed to complete the REFW Financing Scheme Evaluation Report draft:* Original targets and performance indicators of the REFW on which actual performance that this evaluation has to benchmark with
* Detailed inventory and status of installed units as to present operational conditions and the remaining SHS units and batteries
* Other detailed information that could come from the performance evaluation report that NDBP is supposed to submit to PEO and UNDP (copy requested if available) per project agreement to complete evaluation according to suggested methodology.
* Actual data and accomplishment based on the performance criteria stipulated in the REFW scheme to analyze results
* Target recipients or buyers of the remaining SHS units and battery systems
* Action plans and recommendations for the PEO (now EA) deployment of the remaining 6 on-grid (with NDBP) and on the 33 off-grid systems (with PEO)

Deliverable due date: July 18, 2016 (per revised contract July 13, 2016) |
| Activity 2.5 RET Full Scale Model Demonstration on technology delivery, financing mechanisms and productive applications | 1. Develop and finalize plans for the installation and operation of the remaining 25 pre-purchased SHS units that are for deployment (in a pre-identified eco-tourism business entity in the Rock Islands) as part of the REFW financing scheme.
2. Identify and evaluate the potential RE delivery mechanisms for the installation of the 25 SHS units for the eco-tourism business unit in the Rock Islands. The RE delivery mechanism should be in line with the SEDREA project objective and Outcome 2 of the project, e.g., financing recovery, productive applications, etc. (Preferably, these units have to be for productive uses. Apart from just meeting household needs) so that there will be financial resources to payback the financing for the installed units.
3. Develop the RE delivery mechanism implementation plan and M&E plan for the SHS installations. This includes the one that will be applied for the North REP-funded SHS units (20 pieces) that will be deployed in 2 southwestern outer islands of the country.
4. Design the guidelines for the operation of the RE delivery mechanism in the selected sites, including delineation of responsibilities for the monitoring, evaluation and reporting of the system performance. This also covers the North REP-funded SHS units in the 2 southwestern outer islands. Assist the PEO in developing the action plan on sustaining the operation and maintenance of the SHS units to be deployed in the 2 southwestern outer islands.
5. Provide guidance (documented as guidance notes) on the: (a) facilitation of discussions with the relevant entities/individuals who will be involved in the installation and operationalization of the SHS units based on the agreed RE delivery mechanism; and, (b) the operation and maintenance to be carried out by the island communities, of the SHS units that will be deployed in the 2 southwestern outer islands.
6. Documentation of the agreements between PEO, NDBP and the operational entity of the installed SHS units under the REFW financing scheme; and between the PEO and the administrators of the 2 southwestern outer islands.
7. Documentation of the work done in the installation of the SHS units and the setting up of the arrangements for the operation, performance monitoring, and maintenance of the installed units. [Note: If the installations will be done in December, then the results of the installation and commissioning work have to be provided to the external consultant. If the installations will be done next year (starting January), the documentation shall be more on the preparations and action plans for the installation of the SHS units.]

Deliverable 4: Report on the Full-Scale RET Application Demonstrations covering the following: (a) Action plans for the deployment of: (i) the remaining SHS units under the REFW financing scheme; and (ii) the North REP-funded SHS units in the 2 southwestern outer islands of the country; (b) RE delivery mechanisms to be applied for the REFW-funded SHS units and North REP funded SHS units; (c) Agreements between PEO and NDBP on the deployment of the remaining SHS units (as part of the REFW), and between PEO and administrators of the 2 southwestern outer islands on the deployment of the North REP-funded SHS units; (d) Guidance provided to users of the installed SHS units; and, (e) Work done on the installation of the SHS units.  | Draft Deliverable 4 has been share with Tutii.Draft MOAs for the delivery mechanisms have been drafted but needs to be revised due to changes in plans With the project closure of North-REP last December 31, 2015, the SHS deliveries to outer islands cannot be realized because the budget for logistics and installation costs that were supposed to be shouldered by North-REP are no longer available.There was an issue encountered regarding the size of the batteries not fitting the required size for the application in the outer islands.The installation of the solar panels in the outer islands still remains to be planned and implemented to complete the project requirements. | The RE delivery mechanisms still need to be worked out based on the plans and recommendations for the PEO (now EA) deployment of the 6 on-grid (with NDBP) and on the 33 off-grid systems (with PEO). This will involve further meetings (to be facilitated by Greg and Tutii) among UNDP, PEO/EA, local government in the islands and the identified beneficiaries for the pilot demonstrations using the remaining SHS units in order to revise and finalize the MOAs on the delivery mechanisms.After the plans are finalized and MOAs are drafted and agreed, the guidelines for operation and maintenance to ensure sustainability need to be worked out also.**NOTE:** Considering the work involved for Tasks # 6 and #7 up to installation of the units and arranging for MOA signing and operational requirements, the project completion extension period of up to 31 August 2016 may not be sufficient. Therefore, for purposes of completing and closing SEDREA, an exit arrangement and a time-bound commitment from PEO/EA to carry out the agreement signing, installation and operational requirements of Tasks #6 and #7 are suggested to be the end results of Deliverable 4. We need some clarification and decision on this. This is important because of the need for proper disposition and documentation of assets involved.Deliverable due date: August 15, 2016 (draft); August 31, 2016 (final) as per revised contract July 13, 2016) |
| 3: RE Technology Development and Industry Support | 3.1: Conduct RE resource inventory  | For each Potential RE Resource:1. Consolidate available RE resource data from relevant government and private sector entities in Palau, as well as from CROP agencies
2. Identify pre-requisites and preparations to be made in the following:
* Application of the selected RE resource assessment procedure for each RE resource
* Conduct the RE resource data gathering work, particularly coordination with relevant partners
* Processing of RE resource data for uploading to comprehensive energy database
* Conduct of RE resource assessment to establish proven and potential resource quantities

Deliverable 5: Approved documentation on the completed preparatory works done. | According to PEO, some RE resource assessments were conducted already by SEDREA and other projects. However, a national inventory of such assessments does not exist. Further discussion with PEO and more information is required to develop and complete a national RE resource inventory.Deliverable 5 outline prepared | Consolidation of available data and information still pending which needs to be facilitated by Greg/Tutii in order to complete assessment on what needs to be done on pre-requisites and preparations under SEDREA for developing and completing the national RE resource inventory.Deliverable due date: August 15, 2016 (per revised contract July 13, 2016)  |
|  | 3.2: Development of RE resource assessment procedure | 1. Review procedures used in the previous and ongoing RE resource assessments done in Palau.
2. Formulate procedures for the measurement and monitoring of RE resource based on the prevailing conditions (geographical, topographical, environmental, etc.), and in line with internationally-known standard RE resource assessment procedures.
3. Develop tools for the calculation, recording and processing of RE resource data.
4. Present the features and application of the tailor-made procedures and tools developed for RE resource assessments in Palau.

5. Document the RE resource assessment procedures. Deliverable 6: Report on the RE resource assessment procedures. | None of the tasks are complete. More detailed information and references are required from PEO. | Based on the results of Deliverable 5, the RE Resource assessment procedures will be recommended.Deliverable due date: August 15, 2016 (per revised contract July 13, 2016) |
| Activity 3.3: Design of capacity building program for RE resource survey and assessment and application | 1. Assess the current local capacity to carry out and interpret results of RE resource assessments.
2. Design a capacity building program for the relevant GOP personnel on the application of the developed RE resource assessment procedures and analysis of RE resource measurement/monitoring results:
* RE resource data gathering, interpretation and analysis; and
* RE resource monitoring and simulation methodologies.
1. ~~Conduct designed capacity building program.~~

~~4. Evaluate the results of the capacity building program and recommend an action plan for the enhancement or for sustaining the acquired skills of the trainees.~~ [Note: If the designed capacity development program is implemented in December, the relevant information on the implementation of the program. Otherwise, the required deliverable shall be limited only on the design of the capacity development programme.]Deliverable 7: Report on the design of the RE resource assessment capacity development program, and the requirements and plan for the implementation of the program. | None of the tasks are complete. More detailed information and references are required from PEO. | Based on the results of Deliverable 5, the RE Resource capacity development program will be designed and recommended.**NOTE:** Tasks #3 (conduct of the capacity development program) and #4 (evaluation of the results of the capacity development program) may not fit within the allowed extension. Suggest deleting Tasks #3 and #4 during the project completion work and including them as Exit Arrangement for PEO/EA to commit on continuing. Hence, Deliverable 7 as worded remains as is. Deliverable due date: August 15, 2016 (per revised contract July 13, 2016) |
| 4: RE Information, Training and Advocacy | Activity 4.1: Establishment of the RE Center | 1. Review work already completed on the rehabilitation/renovation of the allocated space for the RE Resource Center2. Formulate the following important components of the RE Resource Center profile:• Defined mandate and function and vision of the RE center• Organizational set-up• Business plan for the RE center, including sustainability plan3. Provide guidance to the PEO on the important requirements for the physical establishment of the RE center, launching, and operationalization.4. Documentation of work contributed to the establishment and operationalization of the RE center.Deliverable 8:Document on the RE Center profile: Mandate, purpose, vision, organizational set-up, business plan and sustainability plan.  | * The physical works for the Palau Energy Center is complete and the PEO is using part of the Center as its new office. The Information Center is still available - final payment for physical works needs to be made as soon as possible (the long overdue payment is at risk of being escalated to the Small Tribunal Claims Court).
* PEO received a budget allocation of US$50,000 for the management of PEO.
* The document on the RE Center profile (mandate, vision, organizational set-up, staffing requirements, business plan, and sustainability plan) needs to be developed.
 | Deliverable 8 will be drafted and completed as plannedDeliverable due date: August 26, 2016 (per revised contract July 13, 2016) |
| 4.3: Establishment and operation of the integrated Energy Information Exchange System | 1. Review activities of local agencies working on RE and EE.
2. Assess reported EE/RE technology applications in Palau and in other Pacific Island Countries (PICs) and Small Island Developing States (SIDS).
3. Consolidate information on EE and RE technology applications in the PICs and SIDs.
4. Work with the Palau Community College to define procedures for the setting-up and operationalization of the network of EE and RE technology information system (local, regional, global), and how this supports the PEO Energy Database. Important components of the system may include (for example):
* *Publication of a newsletter containing information circulated through the information exchange system;*
* *Monitoring of the performance of RE and EE projects or installations in the country, and preparation of profiles of these;*
* *Subscription to international journals/publications on RE and EE technologies; and*
* *Preparation of abstracts and/or information notes of relevant articles on RE and EE technologies and publication of these in the newsletter and their incorporation in the energy database*.
1. Documentation of the designed information exchange system.

Deliverable 9: Documentation on the actual designed information exchange system that is linked with the PEO Energy Database. | None of the tasks are complete. More detailed information and references are required from PEO. | This will involve further meetings (to be facilitated by Greg and Tutii) among UNDP, PEO/EA, and PCC on assessment of status of the work done so far by PCC and how PPC could define procedures for the setting-up and operationalization of the network of EE and RE technology information system (local, regional, global), and integrating with the existing PEO Energy Database.A report from PEO/EA and UNDP Palau Coordinator on the arrangements with PCC is needed to complete this Deliverable.**NOTE**: The desired project output on the “Establishment and operation of the integrated Energy Information Exchange System” (as originally worded in the TOR) cannot be fully completed within the extension period. Hence, Deliverable 9 will involve only up to design documented as is now presently worded: *“Documentation on the actual designed information exchange system that is linked with the PEO Energy Database.”* Deliverable due date: August 26, 2016 (per revised contract July 13, 2016) |

1. North REP is an EU-funded project (under the EU EDF-10) that is implemented in the Federated States of Micronesia (FSM), Republic of the Marshall Islands (RMI), and the Republic of Palau (ROP) in the fields of renewable energy and energy efficiency. There were several collaborative work that were done by the SEDREA and North REP projects in Palau on the development of the country’s Energy Framework and Energy Act. [↑](#footnote-ref-1)