Terminal Evaluation (TE) – First Phase

The Development for Renewable Energy Applications for Mainstreaming and Market Sustainability (DREAMS)

GEF PROJECT ID: 5363

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GEF FOCAL AREA: CLIMATE CHANGE

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FINAL TERMINAL EVALUATION REPORT
as of February 21, 2023

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Acronyms and Abbreviations

Acronym	Meaning
AGMO	Autonomous Group Market Operator
APEC	Association of Philippine Electric Cooperatives
APR	Annual Progress Report
AREC	Affiliated Renewable Energy Center
BAU	Business-As-usual
BoI	Board of Investment
BOT	Build-Operate-Transfer
BTOR	Back-To-Office Report
CBRED	Capacity Building to Remove Barriers to Renewable Energy Development
CCC	Climate Change Commission
CPAP	Country Programme Action Plan
CSO	Civil Society Organization
CSR	Corporate social responsibility
CTA	Chief Technical Advisor
DENR	Department of Environment and Natural Resources
DILG	Department of the Interior and Local Government
DLPC	Davao Light and Power Company
DBP	Development Bank of the Philippines
DPWH	Department of Public Works and Highways
DTI	Department of Trade and Industry
DU	Distribution utility
EC	Electrical Cooperatives
ECC	Environmental Clearance Certificate
EE	Energy Efficiency
EIAs	Environmental Impact Assessments
EIS	Environmental Impact Statement
EMB	Environment Management Bureau
EOP	End of Project
EPIMB	Electric Power Industry Management Bureau
EPIRA	Electricity Power Industry Reform Act
EPPB	Energy Policy and Planning Bureau
ER	Energy Regulation
ERC	Energy Regulatory Commission
ERDB	Energy Resource Development Bureau
ESIA	Environmental and social impact assessment
ESMP	Environmental and Social Management Plan
EU	European Union
EWH	Electric water heaters
FFEP	Finance Facility for Energy Projects (under DBP)
FIT	Feed-in Tariff
FIT-ALL	Feed-in Tariff Allowance
FPIC	Free and Prior Informed Consent
FPS	Financial Procurement Specialist
FY	Fiscal year
GDP	Gross Domestic Product
GEF	Global Environment Facility
GFI	Government financial institution
GHG	Greenhouse Gas
GHI	Global Horizontal Irradiance
GIZ	German Agency for International Cooperation

Acronym	Meaning
GoP	Government of the Philippines
GJ	Gigajoules
GWh	Gigawatt-hour
IEA	International Energy Agency
IP	Indigenous Peoples
IPP	Independent power producers
IPRA	Indigenous Peoples Rights Act
IRENA	International Renewable Energy Agency
Ktonnes	Kilotonnes
kWh	Kilowatt hours
LBP	Land Bank of the Philippines
LGC	Local Government Code
LGU	Local Government Unit
LGUGC	LGU Guarantee Corporation
MDG	Millennium Development Goals
M&E	Monitoring and Evaluation
MJ	Megajoules
Mtonnes	Million tonnes
MW	Megawatt
MWh	Megawatt – hour
NAMA	Nationally Appropriate Mitigation Actions
NCIP	National Commission on Indigenous Peoples
NPD	National Project Director
NEA	National Electrification Administration
NGCP	National Grid Corporation of the Philippines
NGOs	Non-Government Organizations
NPC	National Power Corporation
NPC-SPUG	NPC - Small Power Utilities Group
NPD	National Project Director
NPM	National Project Manager
NREB	National Renewable Energy Board
NREL	National Renewable Energy Laboratory
NREP	National Renewable Energy Program
NWRB	National Water Resources Board
PEMC	Philippine Electricity Market Corporation
PEP	Philippine Energy Plan
PIR	Project Implementation Report
PMU	Project Management Unit
PPA	Power purchase agreement
PPP	Public private partnership
PPF	Project Preparation Fund
PREMS	Philippine Renewable Energy Market System
ProDoc	UNDP Project Document
PS	Private Sector
PSALM	Power Sector Assets and Liabilities Management Corporation
PSC	Project Steering Committee
PV	Photovoltaic
QTP	Qualified Third Party
RDI	Research and Development Institute
RE	Renewable energy
REC	Renewable Energy Certificate
REM	Renewable Energy Market

Acronym	Meaning
RER	Renewable Energy Registry
RES	Renewable Energy Sources
RET	Renewable Energy Technology
RPS	Renewable Portfolio Standards
SEF	IFC Philippine Sustainable Energy Finance Program
SESP	Social and Environmental Screening Procedure
SF4RE	Support Facility for Renewable Energy
SNC	Second National Communication
TJ	Terajoules
TOE	Tons of oil equivalent
ToR	Terms of Reference
TransCo	National Transmission Corporation
TWG	Technical Working Group
UNDP	United Nations Development Programme
UNDAF	United Nations Development Assistance Framework
UNFCCC	United Nations Framework Convention on Climate Change
VECO	Visayas Electric Company
VRE	Variable Renewable Energy
WESM	Wholesale Electricity Spot Market
WTE	Waste-to-energy

1. EXECUTIVE SUMMARY

1.1. Project Information Table

Project Details		Project Milestones	
Project Title	**Development for Renewable Energy Applications Mainstreaming and Market Sustainability (DREAMS)**	PIF Council Approval Date:	November 15, 2013
UNDP Project ID (PIMS #):	5194	CEO Endorsement Date (FSP) / Approval date (MSP):	February 10, 2016
GEF Project ID:	5363	ProDoc Signature Date:	July 28, 2016
UNDP Atlas Business Unit, Award ID, Project ID:	BU: PHL Award ID: 00088788 Project ID: 00095299	Date Project Manager hired:	July 24, 2017
Country/Countries:	Philippines	Inception Workshop Date:	September 20, 2017 November 20-21, 2017
Region:	South East Asia	Mid-Term Review Completion Date:	July 16, 2020
Focal Area:	Climate Change Mitigation	Terminal Evaluation Completion date:	February 21, 2023
GEF Operational Programme or Strategic Priorities/Objectives:	Reduce GHG emissions through promotion and facilitation of the commercialization of renewable energy (RE) markets.	Planned Operational Closure Date:	June 30, 2023[1] January 28, 2023[2] July 28, 2023[3]
Trust Fund:	GEF		
Implementing Partner (GEF Executing Agency)	UNDP under NIM Modality		
NGOs/CBOs involvement:	-		
Private sector involvement:	-		
Geospatial coordinates of project sites:			

1.2. Project Description

The desired economic growth of the Philippines is significantly hampered by the unreliability and high cost of electricity. The country has limited fossil fuel reserves, a high dependence on renewable energy (RE) and imported fossil fuels. To attain an inclusive and equitable economic growth, the Government of the Philippines (GOP) is pursuing policy thrusts and programs thru the provision of secure, sustainable, and resilient energy strategies, as embodied in the updated Philippine Energy Plan 2020-2040 (PEP). The PEP is the second comprehensive energy blueprint supporting the government's long-term vision known as **AMBISYON 2040**. This plan reiterates the aim to attain a clean energy future by (a) ensuring energy security, (b) achieving optimal energy pricing, and (c) developing sustainable energy systems.

[1] The signature page of the 'Project Document' mentions the closure date as 31 Dec 2020, however, considering the duration of the implementation of the project as five years, the operational closure of the project would be 30 June 2021.

[2] The project received a no-cost extension in 2020, extending the Closing Date to 28 January 2023.

[3] The project received another no-cost extension in 2022, extending the Closing Date to 28 July 2023.

Currently, the Philippines has one of the most expensive electricity in Southeast Asia, despite having geothermal, hydropower, solar, and other renewable energy resources as well as a deregulated and privatized power industry under the Electric Power Industry Reform Act (EPIRA 2001). The primary fuels for power generation in the Philippines come from imported fossil fuels and continued reliance on these sources for power generation contributes to rising GHG emissions. Coupled with fluctuating global fossil fuel prices, the country is vulnerable to sudden price spikes and global competition for fuel sources, which need to be mitigated through the development of domestic renewable energy.

Having experienced the potential impact of Renewable Energy (RE) as a clean energy source, the Philippines is now keen on developing RE not only to address the issue of high import bill for fossil fuels, but also contribute to the reduction of GHG emissions. Despite the past efforts to catalyze RE development, barriers still exist at the program and project levels that constrain RE development, especially at the local level where the RE Act of 2008 (RA 9513) has not been effectively implemented. For hydropower development in the Philippines, there are a number of bottlenecks in the approval process including difficulties with the water sustainability plans as well as settling indigenous people's claims over revenue from these hydropower projects. For solar energy development in the Philippines, the majority of the solar PV installations in the baseline are mainly installed as individual solar home systems. The Government plans to implement Concentrated Solar Thermal Power (CSP) demonstration plant to demonstrate the cost efficiencies of CSP plants. On the other hand, the Philippines is the second largest producer of geothermal power in the world (next to the United States) with a potential of 5,000 MW.

This project, 'The Development for Renewable Energy Applications Mainstreaming and Market Sustainability (DREAMS)' is a follow-up to the CBRED project.[4] The DREAMS project is designed to address the issues related to RE development, primarily the process of regulatory approvals for RE projects in the Philippines at the national, sub-national, and the local levels. The DREAMS project is targeted to address the issues that have emerged with the Government's efforts to accelerate RE development since the completion of the CBRED project in 2010. The DREAMS project activities include building capacity of the local government and host communities, and the streamlining of the national approval process that will create an investment-friendly environment, conducive to satisfying local permitting requirements and more widespread promotion of RE projects as intended under the National RE Plan (NREP). This would also include operationalization of the remaining implementation mechanisms under the RE Act that were introduced under the CBRED, including establishment of the RE Market and Registrar, which are the components of the Renewable Portfolio Standards (RPS), designed to accelerate development of RE resources in the country.

Despite the challenges and disruptions caused by COVID-19, the project endeavored to continuously implement its various programs and activities in a structured manner towards results. The pandemic resulted in limited operation of offices, re-prioritization of activities of the project's local partners, travel bans and cancellation of public events and capacity building activities. With these constraints, the DREAMS Project requested and was granted a first project extension until January 2023. The Project has adapted, since then, the hybrid modes of project delivery and remote local coordination until its general lifting of lockdowns most recently. In December 2022, during this project terminal review, the implementation team was granted one further extension until June 2023 in light of the terminal evaluation key recommendation for additional time (no cost extension) in order to complete the monitoring of the SF4RE projects and to consolidate the knowledge products for scale up.

Design

The objective of the DREAMS project was to reduce GHG emissions through promotion and facilitation of the commercialization of renewable energy (RE) markets. This is to be done, through the removal of barriers to increase investments in RE-based power generation projects. The objective of the project is to be achieved through its following four planned Outcomes, as follows:

Outcome 1: Enforcement of a supportive policy and regulatory environment for leveraging investment in RE development and applications at the local level;

Outcome 2: Strengthened institutional capacity that leads to increased RE investment at the local level;

Outcome 3: Increased share of RE-based power capacity; and

Outcome 4: Enhanced confidence of local RE developers that leads to an enhanced uptake of RE projects and successful replication using proven and merging RE technologies.

[4] As per ProDoc.

The Project had targeted to lead to direct lifetime GHG emission reductions of 2,445 ktonnes of carbon dioxide equivalent; indirect GHG emission reduction ranging from 4,889 to 141,000 ktonnes of carbon dioxide equivalent; and some 20,000 sitio-based households in far-flung areas will obtain access to reliable sources or renewable energy.

Purpose and Methodology
In accordance with UNDP and GEF M&E policies and procedures, all full- and medium-sized UNDP-supported GEF-financed projects are required to undergo a Terminal Evaluation (TE) at the end of the project. The project started on 28 July 2016 and is in its 6th year of implementation.[5]

In addition to the evaluation of the relevance and effectiveness of the national priorities as expected outcomes, the expected global benefits towards impacts were also considered in the TE process. In order to assess global environmental impacts, the TE for example, considered results in terms of contribution to sustainable development benefits, as well as global environmental benefits (direct and indirect GHG emission reductions). The evaluation compared and analyzed the GEF Tracking Tool at the baseline with the one completed at the time of mid-term review and final scores. The evaluation answered question about the status and issues with employing RE technologies for electricity generation. It considered the remaining barriers to achieving the project objective in the remaining period of the project and finally asked what are the aspects of the project that have already been successful and what are the ways in which the project can further expand these benefits. The project has received another no-cost extension during this TE review and additional assessment will be done towards the end of this second extension period.

1.3. Evaluation Rating Table

The table below shows the summary of the terminal evaluation ratings. Detailed explanatory notes are found in Chapter 5.

1. Monitoring & Evaluation (M&E)	Rating: Satisfactory (S) / Justification
M&E design at entry	Satisfactory (S): minor shortcomings
M&E Plan Implementation	Satisfactory (S): with minor shortcomings
Overall Quality of M&E	Satisfactory (S): with minor shortcomings
2. Implementing Agency (IA) Implementation & Executing Agency (EA) Execution	**Rating: Satisfactory (S)**
Quality of UNDP Implementation/ Oversight	Satisfactory (S): with minor shortcomings
Quality of Implementing Partner Execution	Highly Satisfactory (HS)
The overall quality of Implementation/ Execution	Highly Satisfactory (HS)
3. Assessment of Outcomes	**Rating (see Annex 6.8 for Rating Scales) / Justification**
Relevance	Satisfactory (S)
Effectiveness	Satisfactory (S)
Efficiency	Satisfactory (S): with minor shortcomings
Overall Project Outcome Rating	Satisfactory (S)

[5] The TE process must follow the guidance outlined in the document 'Guidance For Conducting Terminal Evaluations of UNDP-Supported, GEF-Financed Projects' (http://web.undp.org/evaluation/guideline/documents/GEF/TE_GuidanceforUNDP-supportedGEF-financedProjects.pdf).

4. Sustainability	Rating: Moderately Likely (ML)
Financial sustainability	**Moderately Likely (ML)**
Socio-political sustainability	**Moderately Likely (ML)**
Institutional framework and governance sustainability	**Moderately Likely (ML)**
Environmental sustainability	**Moderately Likely (ML)**
Overall Likelihood of Sustainability	**Moderately Likely (ML)**

The table below provides an overview of the Project Objectives along with the summary of different Outputs for the four planned outcomes of the project. During the MTR, recommendations were made to carry out some modifications in the log-frame of the project. The suggested modifications are highlighted in the table, which now shows the indicators to monitor and verify the achievement of the planned Objectives and the Outcomes of the project. The values in parenthesis are the actual targets to be confirmed at EOP (with the second extension).

Objective/Outcome	Indicator	Baseline	Targets (End of Project)	Status at TERMINAL REVIEW
Project Objective: To promote and facilitate the commercialization of the renewable energy (RE) markets through the removal of barriers to increase investments in RE based power generation projects	• **Indicator A**: Cumulative direct project CO_2 emission reductions from RE development by end-of-project (EOP), ktonnes CO_{2eq}	0	205	790
	• **Indicator B:** % share of RE in the power generation mix of the Philippines	14.4	35	29.44
	• **Indicator C:** Number of sitio households in far-flung areas that have obtained access to reliable sources of renewable energy due to the Project	0	20,000	357 (direct), 12,090 (indirect)
	• ***Indicator D:*** *Total project direct GHG emissions reductions over the lifetime of the RE capacity created by the project (ktonnes CO_{2eq})*	0	2,440	1,302[6] ; 157,606[7]
Outcome 1: Enforcement of a supportive policy and regulatory environment for leveraging investment in RE development and applications at the local level	• **Indicator 1.1:** Number of approved and enforced policies and guidelines for leveraging RE investments by Year 2	0	8	15
	• **Indicator 1.2:** Number of sitios with off-grid rural electrification plans using RE	0	12	28 (6,745)
	• **Indicator 1.3:** Number of businesses who have accreditation or applied for DOE accreditation by EOP to manufacture, fabricate or supply locally-produced RE components	0	50	2 (18)
Outcome 2: Strengthened institutional capacity that leads to increased RE investment at the local level	• **Indicator 2.1:** Number of funded and implemented RE projects championed or facilitated by LGU-based RE focal points	0	5	9 (11)
	• **Indicator 2.2:** Number of RE projects facilitated by operational provincial-level RE market service centers	0	5	7 (14)
	• **Indicator 2.3:** Number of RE projects that were designed based on information and technical advice obtained from the established RE knowledge platform	0	6	0
Outcome 3: Capitalized RE market leads to an increased share of RE based power capacity	• **Indicator 3.1:** Cumulative MW of installed capacity registered in the RER established in the "capitalized" RE market	0	10	2,833.25 MW
	• **Indicator 3.2:** Number of RE developers registered in the RER	0	15	136
Outcome 4a: Enhanced confidence of project developers on the viability of RE projects at the local level	• **Indicator 4.1:** MW of RE projects that are being developed through the PPF	0	15	12.697 MW
	• **Indicator 4.2:** Number of bankable RE plans completed by other LGUs who were interested in RE-based energy systems by Year 3	0	3	5

[6] Lower bound, bottom-up estimates
[7] Upper bound, top-down estimates

Objective/Outcome	Indicator	Baseline	Targets (End of Project)	Status at TERMINAL REVIEW
	• **Indicator 4.3:** Number of certified technicians for RE equipment assembly and supply working with locally DOE accredited RE manufacturing entities by EOP	0	10	45
Outcome 4b: Increased number of operational RE projects using proven and emerging RE technologies that boosts successful replication	• **Indicator 4.4:** MW of installed capacity of RE projects being implemented that received support from new or improved RE financial mechanisms, by EOP	0	5	0
	• **Indicator 4.5:** MW of installed capacity of RE projects resulting from accelerated expediting of RE service contracts by EOP.	0	75	TBD[8]

1.4. Summary of Findings, Conclusions, and Lessons Learned

FINDINGS

The project was appropriately designed to address the identified problem with four interlinked components. It would operationalize and further refine Energy Policies based on earlier collaborative UNDP GOP work. The overall strategy was to advance work on the four perceived key barriers, which were translated into project component-outcomes, namely:

1. To operationalize and refine energy policies including tithe local levels;
2. Support local governments with local RE planning (LREPs);
3. Establish and support a register to promote compliance and monitoring of the RE market (PREMS);
4. Undertake a series of small grants -renewable energy projects, which include a focused demonstration of the larger on-grid and off-grid projects (SF4RE).

The evaluation reaffirmed a key MTR finding that the project's expected outcome target was overambitious as well as its assumption about monitoring the targets within the timeframe. In this sense, the project design was somewhat flawed. For instance, firstly the DREAMS project was to support selected RE projects in the overall approval process leading to the creation of an **RE capacity of about 75 MW, which was supposed to lead to the direct GHG emission reductions of 205 ktonnes CO_{2eq} within the implementation timelines of the DREAMS project.** Such direct GHG emission reductions would happen after the DREAMS project. It is a much longer-term expected outcome to be realized only after the main project work areas are completed. Another instance is that while the RE market register is complete and working, it needs at least another year to allow the data to be gathered and monitored. In addition, the pilot (catalytic) Support Facility for RE (SF4RE) micro- or mini-grid projects are just starting to be implemented and need to be fully installed, operationalized, monitored, and assessed in order to calculate their contribution to the reduction in GHG emissions.

Financing local demonstration with a focus on the micro- and mini-grid projects serving underserved areas (SF4RE) was a key adaptation as the original project intended to implement demonstration of larger grid renewable energy projects.

The Project Steering Committee (PSC) was strong as a management/monitoring mechanism, especially for decisions concerning the procurement and the normative inputs (guidance and tools development) as well as the capacity development goals of the project. Major decisions were taken to adapt to changes and the dynamic implementation contexts were taken and supported actual project implementation on the ground towards achieving results.

Using the original indicator framework, an adaptive accelerated project strategy was employed. In terms of the unrealized project plan based on the PIF, the government pushed forward with the design of 18 SF4RE demonstration projects, which was commended as this project was supporting the government in reaching its last mile constituents with more capacities on the ground in off-grid locations; and as such was supporting key national targets around a difficult problem concerning how to provide energy access for all.

The Project has become increasingly relevant and is aligned with the needs and priorities (providing technical support, knowledge inputs, tools, and capacity building) of the GOP. It was designed based on early UNDP-GOP collaboration on RE policy. The current focus was operationalizing the growing enabling environment and policies, especially at the local levels and stimulating the market through demonstrations (showing the investment case) and the development of an RE compliance register. The relevance has increased during implementation with the passing of new national laws concerning

[8] To be determined at the end of EOP.

microgrids and a national focus on electrification and poverty reduction in unserved and underserved areas. It is fully aligned with national policies including the recent development of the national renewable energy plan (NREP, supported by this project) as well as new targets concerning climate change, energy security, and poverty alleviation. To cite a few examples, these breakthroughs are as follows:

- Microgrid Systems Act (RA 11646) passed in 2022 provides attention to off-grid areas.
- Energy Transition-Energy Security-High Cost of Energy in a public building (new energy efficiency law became operational in 2022)
- Energy security and DRR continuity in critical infrastructure schools and hospitals
- Focus on last mile electrification
- Addressing SDGs

The project had an overambitious design with a longer-term GHG expected outcome, i.e., %GHG target to be realized after the implementation of the four interlinked components on Policies, Institutional LREPs, Compliance thru PREMS and demonstration of the market investment case (including the private sector and government actors) through SF4RE. Additionally, this was intended to be a **catalytic work** – intended to showcase the viability and reliability of RE – however, the SF4RE work is high risk as it did not provide 100 percent coverage in the communities in which it worked with (e.g., 100% last mile electrification). These areas must become the focus for completion by the government shortly.

- Four interlinked components – needed an overarching **knowledge management platform**, i.e., with a dedicated budget for scaling up and replication of the project learnings to other provincial, municipal, and barangay LGUs and the broader stakeholders.
- Determine the indicators and targets where appropriate per the issues identified.
- Thematic Focus – The design includes a holistic RE (on-grid and off-grid) view but during the project, private sector (PS) adaptations moved focus towards demonstration (SF4RE) to showcase investment cases on small-scale off-grid RE systems. This project focus was learning about how to implement small-scale projects in rural off-grid small islands and areas which is favorable in terms of the focus on rural unserved and underserved communities.
- The design could have been more explicit in terms of the targeting needed to support the knowledge case around benefits of key cross-cutting areas i.e., RE/DRR/CC/GE linkages, women's economic and empowerment in small businesses through renewable energy, youth (skills development for maintaining energy systems, socio-cultural development) and capacity building for the national engineers and technicians.
- The design called for a partnership approach but this was unrealized, i.e., with more UN, private sector, and CSOs on PSC - involvement in the monitoring of the implementation. One entity (NEA) could also be included in the PSC as it provides supervision to about 120 electric cooperatives.
- No PS or CSO involvement in the steering committee
- The actual focus of the project on micro-off-grid supports hard GOP last-mile electrification work.
- SF4RE was designed later during implementation – this was delayed – it was also only catalytic support - so this must be continued to avoid if not eliminate the risks associated with its stoppage; endeavor for 100 % completion and full electrification coverage in partner beneficiary villages.
- Project needs documentation, codification, and consolidation of the cases and lessons learned to provide scientific, technical, and evidence-based knowledge case studies.

A key barrier was the lack of demonstration of RE projects, established using the de-risking mechanisms (**Renewable Portfolio Standards, establishment of RE markets for trading of RE certificates**) provided in the RE Act. The action for this is being carried out under Outcome 3 of the project. With good progress towards implementation of the 'Philippine RE Market System (PREMS)', the progress towards results and its completion for the Outcome of the project is Highly Satisfactory.

Another key barrier that the DREAMS project addressed was the **lack of coordination and lack of clarity regarding the roles and responsibilities in the overall development of an RE project,** particularly, regarding the provisions in the RE Act. This DREAMS project targeted enhancing the capacity of the institutions at the local level to increase investment in the RE projects at the local level (Outcome 2). **Under the 'Local RE Planning Capacity Building Program (LREP Cap Build)', the activities to achieve this objective were implemented successfully and Iloilo expressed a good practice that can be further improved, codified, and scaled.** Such LREP capacity building program across all provinces of the Philippines needs to be replicated and sustained for the longer term.

On global relevance, the GOP contributed significantly to the targeted 205 tons of CO_2 reduction by the end of the project. There has been a significant improvement in RE share in the power generation mix as of December 2021, increasing to

29.44% from 14.4% as baseline, with a total RE installed capacity of 7,914 MW. The project has provided RE access to 357 sitio households out of the target of 20,000. With the completion of approved RE pilot projects under SF4RE, particularly solar, hybrid and micro-hydro cases, the target number of households may have been achieved at end of the project.

Nearing its closure, the evaluation team has found that the DREAMS Project has made significant accomplishments in supporting its high-priority national relevance. The project supported the finalization of the National RE Plan 2020-2040 (NREP 2020-2040), which has been officially signed on 30th June 2022. It establishes the Philippine government's pathways toward increasing the RE generation mix in the succeeding years. It institutionalizes the Philippines' target of 35% RE by 2035 and 50% by 2040.

A key feature of the DREAMS project has been to provide support development of the RE projects using the '**Project Preparation Fund (PPF**)'. The creation of PPF was a provision in the project design. Utilization of the funds provided for PPF was to be carried out through the **SF4RE initiative** and is still to be finalized and completed. This project must not end before these small grants' demonstration projects are all completed. The project has approved 18 RE sub-projects under the Support Facility for Renewable Energy (SF4RE). Out of this, eight solar/hydro/hybrid sub-projects have completed installation, with 328.95 KW-installed capacity. One was under rehabilitation due to a fire incident. The rest of the projects are expected to complete installation/commissioning by end of the project, which will benefit households, livelihoods, and delivery of social services. Linked to these sub-projects is support for the development of local RE plans and capacity building for local stakeholders?

The Project was implemented efficiently through a learning-by-doing approach working closely with the DOE RE Management Bureau. Project management and all activities were fully integrated with DOE oversight - coordination and technical monitoring i.e., project approvals and decision-making done with the support of relevant DOE departments, i.e., solar and hydro, wind biomass bureaus.

Despite the past efforts under the RE Act to catalyze RE development in the Philippines, barriers still exist, such barriers include the following:

- At the local level where the RE Act has not been effectively implemented, there are issues with the approval process for the RE project. At the local level, there is also a lack of capacity and understanding regarding the provisions of the RE Act and how this is operationalized and implemented.
- The implementation mechanisms for some of the provisions in the RE Act, like RE Markets and Register which is a component of RPS, were not in place.
- There is a lack of demonstration of the successful implementation of the RE projects under the new regime following the RE Act.

In terms of cost-effectiveness, the DREAMS project has managed to effectively contribute to the overall aim of operationalizing the policies and to promulgate the implementation of learning across the key government stakeholder groups at national and subnational levels. The 18 demonstration projects (SF4RE) are uniquely aimed at last-mile electrification areas and therefore have unearthed holes in policies and standards in terms of the following:

1. The market register (need for voluntary market register), and
2. The need for standards for implementing micro off-grid project implementation.

Additionally, the idea that the project would stimulate the market is dependent on the evidence-based case studies arising from this project such that work is still needed to propagate the knowledge products, tools, lessons, and learning to the broader group of stakeholders. The DOE, supported by the DREAMS project is finalizing the development of an RE information management system and this will be a key platform for scaling up the lessons learned and cases from the project to the localities, as it will consolidate in one place all DREAMS work for further scale-up and replication to other provinces and municipalities.

There is a growing demand for technical support in the government, CSOs, and private sector for the operationalization of the RE policy environment. DOE will have to reconsider the internal institutional capacity needed to support the surge in demand for the RE project as the knowledge of the good practices is rolled out.

RE initiatives that mitigate GHG emissions is environmentally impactful. This is an environmentally supportive project where policies and enabling environment for RETs and EE areas offer a great entry point for moving towards a low-carbon more sustainable development pathway. The knowledge and technical inputs provided to the government have been supportive to grow the enabling environment of green Philippines in line with its agenda to be carbon neutral.

The project has addressed effectively the cross-cutting issues such as gender, poverty alleviation, stakeholder engagement, environmental safeguards and risk management particularly in implementing the SF4RE component. Monitoring and evaluation of the status of these issues are evidently supported by appropriate program of activities.

CONCLUSIONS

Generally, the project team has been working on four key areas, namely: 1. Policy (NREP and others), 2. LREPs (Local RE Planning), 3. PREMs (RE Market register), and 4. SF4RE (Demonstrations and Proof-of-Concept). The project has strategically planned and supported the project steering committee in making key adaptations towards results in these areas despite difficult times, i.e., COVID-19 pandemic, rising prices due to war in Ukraine, and supply chain issues and challenges.

As to the relevance of the project, the strategic integration of cross-cutting issues is increasingly relevant with high impact-oriented content across the four components and the national development targets. The DOE-based project is witnessing a unique window of opportunity for project content acceleration towards the interlinked development goals: sustainable national development, carbon neutrality, environment and risk reduction, gender, and poverty alleviation targets, amongst others.

The project was focused on upstream support to planning RE and successfully rolled out the NREP and supported a model planning exercise in the provinces of Iloilo and Palawan. The plans will need further targeting, alignments with the NREP goals, and continued support but concerted solid show nonetheless.

In terms of the PREMs, the project team has made a key contribution toward the formalization of the RE market with a regularity and certification system up and running at 98% completion of the sector registration. The project work had also unearthed a key policy gap in term of the need for a voluntary compliance register and standards for non-formal market entrants such as the needed off-grid projects to target last mile electrification. The project has also surfaced gaps in RE policies and standards in terms of the microgrid and off-grid areas. Consequently, it has shown the need for more work on the market register (by including voluntary compliance registry) and on the minimum standards for implementing microgrid off-grid project implementation. It is also highlighting the need for further DOE engineering resources to serve the increasing demand for RE development in communities.

The 18 demonstration projects (SF4RE component) are uniquely aimed at the last-mile development goals particularly in rural and often marginalized remote off-grid places, which are classified as geographically isolated and depressed areas (GIDAs). A core idea was that the project would stimulate the market, however this is a strategy dependent on the evidence case arising from the project outputs and outcomes, and so work is needed to continue to propagate the knowledge products, tools, lessons, and learning insights to the broader group of stakeholders. Through the SF4RE component of the project, the cross-cutting issues such as gender, poverty alleviation, last-mile electrification, were addressed sufficiently.

While knowledge management was not built into the project design, which is a major lesson learned and oversight of the project designers, it was implicit in the overall project result. The DOE, supported by the DREAMS project is finalizing the development of an information management system and as such will be a key platform for scaling the lessons learned and case studies from the project for wider dissemination and sharing to other provinces and localities in the country. The knowledge management work base is needed to consolidate the lessons and learning insights from the project, especially the investment cases which can trigger private sector investments and financing in the RE market across the various provinces and municipalities.

LESSONS LEARNED

In terms of lessons learned, a few critical ones around the project cycle criteria are as follows:

- **Design.** Knowledge management and communications are critical in the cross-cutting components that need to be included in the catalytic and replication effect of any given project.

- **Implementation.** Adaptive management and strong country ownership are critical for results in a dynamic and changing context of a given project. Specifically, the following lessons learned are:
  1. Knowledge management. Documentation and proper dissemination of processes, steps, results, and lessons learned are a necessary exercise in further scale-up and replication works.

2. Stakeholder engagement. Careful selection of key stakeholders is crucial for any project to succeed; however, a more holistic and inclusive partnership with a broader group of stakeholders (i.e. academe and RDIs, private sector, communities, and government sectors) is indispensable in sustaining project outcomes and achieving long-term targets and goals.

- **Results.** The lessons in reflecting the results by component are as follows:
  1. **RE policy** is comprehensive, which involves on-grid and off-grid markets across sectors as well as cross-cutting many relevant issues for sustainable and holistic development. It takes time to go through the RE policy ecosystem and determine the correct policy mix across sectors and for operationalization down to the community level.
  2. Getting a seat in the **local planning process and building local capacities** involves trust. The project team was able to gain the trust of the local government units and the local engineering staff to provide technical assistance and to help guide the process in their own time. More is now needed to continue to build up the skills and capacities for local engineers through practicum-based capacity building. Technical assistance in design and implementation is crucial.
  3. **RE Market register**. Swift and quality (technical design) procurement were critical in securing a good vendor and receiving the software output on time. Additionally, with regard to the private sector's involvement in the regulation of the RE market, more work is needed to complete the registry terms of setting up a voluntary market register which makes up a considerable (and otherwise unaccounted) percentage of the players.
  4. Small grants, thru the **SF4RE** are a good way to generate RE local solutions and 'good practice' examples in providing proof-of-concepts. However, the examples must also have management and livelihood complements to complete the good practices intended for scaleup and replicability.
  5. Social preparation by way of developing communities as stakeholders in stimulating the RE market is a necessary component in deploying demonstration projects, which are cross-cutting in nature.
  6. Capacity building in technical and financial management is important in mainstreaming and sustaining RE projects in communities, particularly in targeting last mile electrification and integrating cross-cutting issues such as poverty alleviation, DRR, and gender sensitivity.

- **Sustainability.** Commitment and strong project ownership coupled with adaptive management and proactive, holistic, and broader stakeholder engagement is key towards attaining sustainable project outcomes across different sectors (socially and politically, financially, institutionally, and environmentally).

1.5. Recommendations Table

Rec #	TE Recommendations	Entity Responsible	Time Frame
A.	**Category 1**		
A.1	The project needs to complete its technology and knowledge management work. The project is given a tentative rating of satisfactory (S) during this TE review, for its modalities as well as treatment of the content, its high level of country ownership, and solid adaptive management. This rating can be raised to highly satisfactory (HS) in July 2023 with a granted extension to allow the completion of outstanding areas that required careful attention, namely: (1) Full implementation of remaining SF4RE projects with post-mortem monitoring, assessment and evaluation; (2) Launching and operationalization of RE Information Management System serving as the Knowledge Management platform; (3) Consolidation, documentation, codification, and sharing of knowledge products to its direct and indirect stakeholders; and (4) Operationalization of RE Trust Fund. Otherwise, the project will end (after second extension) rated as Unsatisfactory (U). The incomplete work poses a very high risk to the communities as beneficiaries - with the unfinished RE pilot projects.	UNDP/GOP	January 2023- July 2023

	The slow procurement and bottlenecks in procurement processes including project management recruitment and staff turnover were raised as common issues. This was for two main reasons, namely: 1. The absence of a developed RE market for its bids to do related work – notably a problem that this project intended to address and support, and 2. Bottlenecks in the supply chain due to COVID-19 pandemic. The project team and steering committee recognized these concerns to be out of their control and so the project was adapted accordingly and granted an extension. The project is a high risk to the indigenous, remote, oof-grid, and rural communities it is piloting in, it is technically- and infrastructure-heavy in terms of its content and would reasonably need a short extension of at least six months to oversee the full installation of the SF4RE projects with technical and programming oversight and to provide a consolidation of the knowledge output for scaleup and replication nationally and internationally (as a good practice).		
B.	**Category 2**		
B.1	Consolidation, Documentation, Codification and Sharing of all Knowledge and Learning Products generated by the Project	UNDP/GOP	Jan 2023-July 2023
B.2	The project should be designed with a knowledge management component and needs sufficient time to properly document, consolidate and share the case studies and knowledge products in formats targeted to their specific audiences for the best effect. A preliminary list of all knowledge products of the project is included in this report. The communications (media) work is also still in progress, which will form part of the knowledge products envisioned. The project learning and knowledge work needs further refinements and consolidation (work on case studies and investment cases) and is to be uploaded in the RE information management system (also a work still in contract) and to be presented in a sustainable manner for further scale up and replication as intended. The project needs to have a final national workshop in the last period (during the requested extension) to disseminate its outputs and further raise awareness of its intended outcomes and impacts. It is a good idea to invite friendly neighboring countries to learn about the experience, e.g., other ASEAN member states.	UNDP/GOP	Jan 2023-July 2023
B.3	The project needs to develop a solid template for its further investment arguments, including a showcase of the cost benefits of investment to the cross-cutting areas (education, poverty, health, DRR, GENDER, climate change) and as case documents for each of its SF4RE projects. It should produce a flagship investment case that outlines the cost-benefit analysis in a way that makes completing an agreement with the various stakeholders including the international community, the private sector, the local governments, and the communities (as partners and beneficiaries), as a way of strengthening the RE value chain and resolve procurement issues down the road. The informational management system is a key sustainability measure and needs to be designed and rolled out as the knowledge-sharing interface of the DREAMS works.	UNDP/GOP	Jan 2023-July 2023
B.4	The project needs to complete the Operations Manual and initiate the operationalization of the RE Trust Fund. There is an expressed need and felt demand from direct stakeholders (e.g., communities and private sector) for further replication and scale up of SF4RE projects, especially in addressing last mile electrification, cross-cutting issues, and in productive uses of electricity, in the short- and medium-term. The RE Trust Fund can be tapped to mobilize efforts to address such identified needs.	UNDP/GOP	Jan 2023-July 2023
C	**Category 3: Way forward work**		
C.1	Continue the further implementation of the **RE Operations Manual**. Institutionalize and implement fully the **RE Trust Fund** to enable the continued support for the **SF4RE program** and other activities to achieve the GOP targets on last-mile electrification and plans for 35% RE by 2035 and 50% RE by 2040.	GOP	post-DREAMS

	Continue the project activities on **PREMS** and **LREPs** to achieve full implementation and full participation of LGUs. The SF4RE projects need to be sustained, replicated, and scaled-up as a way to further promote RE mainstreaming and intensify the RE market development. The full implementation of PREMS would lead to an impactful contribution to the GOP's nationally determined contribution (NDC) to GHG emission reduction and avoidance. The replication of LREPs in all LGUs is a desired output which would lead to dramatic achievement of the project outcomes. The intended project outcomes need to be monitored to ensure its achievement many years down the road. For instance, the calculation of GHG emissions during the lifetime of the SF4RE projects must be monitored and managed properly, as this would contribute to the GOP's nationally determined contribution to GHG emission reduction and avoidance.		
C.2	To emphasize further, there is a need to **continue the support for the SF4RE facility** in order for the country to achieve 100% household electrification rate, reaching all the off-grid areas and tapping existing natural and renewable resources such as solar, hydro, and biomass, amongst others. Thus, the proposed **RE Trust Fund would strategically serve this purpose**. More specifically, 1. The call for intensive and extensive market development for RE systems and products is urgent. 2. There is a need to establish the standards for implementing projects involving the RE system, especially for micro-grids and off-grid systems. 3. In establishing the standards for micro-grid and off-grid RE systems thru the SF4RE facility and other means, the following must be considered: a. Technical design and specifications, which should include context and realities on the ground, considering household electrification and productive uses of RE to support livelihood and improve quality of life b. Appropriate business model considering cost-benefit analysis, financial management structures c. Capacity building of partners and stakeholders, including beneficiaries d. Diffusion of appropriate technologies, including Internet of things, fintech, AI, and others; procurement processes which can be enhanced thru extensive market development e. Provision of a variety of good operation and maintenance approaches f. Disaster and risk management g. Grievance management mechanisms h. Environmental and social impact assessment, mitigation, monitoring and management i. Sustainability, which includes replication and scaleup 4. Consolidation, documentation, and knowledge management of all case studies and projects involving RE systems to provide educational learning materials, promote awareness and further innovation, thereby supporting the RE mainstreaming strategy of the country.	GOP	post-DREAMS
C.3	Moving forward, procurement is an important challenge to be addressed, resolved and improved further so as to ascertain the achievement of project targets, outputs, and outcomes.	UNDP/GOP	post-DREAMS
C.4	Design a new project concept note and endeavor to do resource mobilization with potential donors for financing the remaining bottlenecks unearthed while implementing the DREAMS project. The big areas of outstanding work include continued knowledge generation and management work with the private sector, academe and RDIs, local government units, and CSOs, to further strengthen the RE value chain, i.e., to enter the market, work on practical-based capacity building with regional and local engineers, minimum standards for microgrids, and work on	UNDP/GOP	post-DREAMS

	a voluntary market register. This work will complete the enabling environment for the potential scale-up to full market readiness for RE.		

2. INTRODUCTION

2.1. Purpose and objective of the evaluation

In accordance with UNDP and GEF M&E policies and procedures, all full- and medium-sized UNDP-supported GEF-financed projects are required to undergo a Terminal Evaluation (TE) at the end of the project. This Terms of Reference (ToR) sets out the expectations for the TE of the full-sized project titled "**The Development for Renewable Energy Applications Mainstreaming and Market Sustainability (DREAMS) Project with PIMS 5194"** implemented through the Department of Energy of the Government of the Philippines. The project started on 28 July 2016 and is on its 6th year of implementation.[9]

2.2. Scope of the Evaluation

The TE report is intended to assess the achievement of project results against what was expected to be achieved and draws lessons from the implementation that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming. This TE report is to promote accountability and transparency and assesses the extent of project accomplishments.

The DREAMS Project is ending in January 2023. The TE is thus completed three months before the project end date. The TE was conducted in fulfillment of the project's Monitoring and Evaluation framework and in accordance with UNDP and GEF guidance. The final evaluation considered impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental benefits/goals. The TE provides recommendations for follow-up activities/steps with corresponding management response, including to ensure sustainability and promote replicability of project results. The results are to be used by all main parties (UNDP, GEF, and partner government agencies and stakeholders) to assess their approaches and to inform the design of future interventions.

2.3. Methodology

The evaluation is summative of the entire project period (up to Q4 2022) and includes recommendations. It is closely following the GEF and UNDP guidelines and was acccording to the criteria and guidelines of the OECD-DAC: relevance, efficiency, effectiveness, sustainability, and lesson learned (guidelines/standards for evaluating development and humanitarian projects).[10] It was participatory, ensuring the inclusion of all relevant stakeholders' perspectives. Data collection employed a range of qualitative and quantitative methodologies.

The evaluation was gender-responsive, which applies mixed-methods (quantitative and qualitative data collection methods and analytical approaches) to account for the complexity of gender relations and to ensure participatory and inclusive processes that are culturally appropriate. The design of the evaluation was theory and principle based. The theory of change of the DREAMS project was used as the basis for the evaluation.

Data collection methods include desk review of **more than 30 documents** (Annex 6.4), observations, **27 key informant interviews (KII)** both online and onsite, and **18 focus group discussions (FGD)** with **116 individuals [44 female (38%) and 72 males (62%)]** and community members as partners and beneficiaries in **seven (7) project sites**. A case study approach, including cost benefit analysis and cross-sectoral assessments, was undertaken for an in-depth study of key issues and implementation modalities at the country level. It included stakeholder consultations, observations, review, and documentation analysis (e. g., progress and completion reports, workshop and mission reports, knowledge and advocacy products, and other appropriate documentation produced and related by the GEF Project Implementation Unit and UNDP). The criteria for the provincial case study selection were identified during the inception phase in collaboration with the project team to focus on opportunities for learning and feasibility of the visit (given COVID-19 restrictions) and were focused on work in two provinces (Iloilo and Palawan provinces) – where the national consultant led the data collection and analysis in pilot case project sites. The evaluation integrated gender and human rights approaches and perspectives throughout data collection and analysis. Understanding and assessing how the project addresses complex, intersecting discriminations and how it affects women's rights was part of this approach. Evaluators conducted consultations with stakeholder groups (including online and onsite modalities) using participatory tools such as focus group discussions, consultations and interviews and observations of the pilot sites. Based on consultations, the national consultant visited selected project sites to validate the desk review and documentation analysis findings and identify good practices and lessons learned. Generally, targeting and snowballing

[9] The TE process must follow the guidance outlined in the document 'Guidance For Conducting Terminal Evaluations of UNDP-Supported, GEF-Financed projects')(http://web.undp.org/evaluation/guideline/documents/GEF/TE_GuidanceforUNDP-supportedGEF-financedProjects.pdf).

[10] Terminal Evaluation Guidelines attached.

(identifying key informants from others involved in the interview process) was applied to select key informants and interviewees.

The international evaluation specialist was externally recruited to provide technical leadership on the implementation and objectivity in a team of two experts (one international: team leader for evaluation and one national: Renewable Energy expert) for a useful, technically balanced, and forward-oriented terminal evaluation. The international consultant was responsible for the conduct and the overall implementation across four phases: inception report writing/framework development, research, data collection, data analysis, and then a final report writing process.

The standard GEF evaluation criteria guided the development of the evaluation matrix and questionnaires (Annex 6.5) for assessing the project results and performance. The methods were augmented by a set of strategic questions developed as the inception study progressed (see examples below). The partnership efficacy and project performance assessment were also reviewed based on actual results.

Strategic Evaluation Question Topics:

- Was DREAMS project design needs and priority based and did the project continue to be relevant in light of emerging issues and priorities?
- Did the DREAMS project meet all its expected outcomes and targets? Did the project deliver all of its planned activities? Why and or why not?
- Was the DREAMS project efficient and present value for money in terms of the actual results achieved?
- How much local and global impact did this project actually achieve?
- How sustainable are the result of DREAMS including the institutional, operational and financial support?
- What are the next steps for DREAMS post project in 2023?

2.4. Data Collection and Analysis

2.4.1. Desk Review Phase

The first phase (July-August 2022) included an extended inception period in order to confirm the client's and the international consultant's understanding of the TOR, refine the role and methods for the national consultant to undertake a full review of the pilot project and interview local government stakeholders. It was also to undertake an in-depth desk study of the documentation and the theory of change, resources, and results framework. The first phase cumulated in a draft desk study informed document, a set of core evaluation questions and the refinement of tools for gathering data.[11]

The evaluation consultants considered evaluability i.e., was the project framework smart and the project sufficiently monitored for final evaluation and scrutiny of whether a capacity assessment and baseline for monitoring had been adequately established. The consultants developed survey tools in line with the GEF evaluation question matrix (see data collection tools in Annex 6.5). A drop box folder for all project documentation was created and shared. Finally, to achieve ownership and legitimacy of the process, a set of online validation evaluation inception meeting-workshops was hosted by the UNDP CO and the PMU on September 12 and 29, 2022.

2.4.2. Data Collection Phase

The data collection phase (September-November 2022) involved desk study, online meetings and in person missions to visit the project management unit (PMU), interview key stakeholders, visit the local government units, and visit 7 suggested project sites (SF4RE[12]) led by the national consultant. The data collection was done guided by the overarching OECD DAC criteria in order to validate results based on the overarching policy, capacity building, and the pilot's project sustainability goals.

The project site visits and field missions were carried out starting **October 10, 2022** until **November 18, 2022**, which was the last date for field mission and data collection. Due to time limitation and other considerations, a selection of project sites (seven out of 18) was visited for field missions in consultation with the Coordinating Unit, Project Team, and the TE team.

[11] The phase involves confirming the key evaluation questions (see a draft sample matrix attached) with the evaluation consultants.

[12] The criteria and status of each SF4RE project visited (and not visited) and the project description of each including both technical and financial proposals, including status or plans of implementation are based on the discussion in Chapter 4: Progress towards results on Outcome 4 and summary of findings included in Annex 2. This describes how each project is vetted and selected for SF4RE support, criteria, metrics, and processes. It also provided a cost-benefit analysis as a product of evaluation.

During these visits, key informant interviews, focus group discussions, and technical analysis were conducted, with the aim of validating the sustainability and impact of the project.

The basis for selection includes, but not limited to the following considerations:

- geographic location (Luzon, Visayas, Mindanao);
- type of RE system implemented (Solar PV, hydropower, etc);
- type of direct stakeholders and target beneficiaries (community-level beneficiaries like farmers, fisher folks, others; local level stakeholders and beneficiaries such as LGUs and or institutions belonging to LGUs; regional or provincial level, which may be a combination of communities and LGUs; others);
- type of electricity or power use (household consumption, productive uses, community facilities); and
- level of implementation at the time of site visit (installations which are completed and operational, installations which are ongoing, under rehabilitation, etc.)

An initial information gathering and validation included staging interviews with the Project Coordinator and team, UNDP staff including the regional technical adviser and the counterpart staff at the country mission and then with government offices, country partners, project beneficiaries, implementing partners, and others were held online.[13] During the SF4RE site visits, a cost benefit analysis was done which considered the installed capacity, purpose or uses of RE, direct beneficiaries, cost breakdown (total investments, equipment, personnel costs, operating costs, miscellaneous costs, total expenses); expected income generated monthly or yearly from the project, direct users, beneficiaries, business model applied or implemented, owners or operators, management model adopted and plan, quantity, quality and reliability of service/supply provided, plans for scalability and replicability in neighboring or other areas.

The phase involved conducting online interviews (Annex 6.3A) with key stakeholders and disseminating a questionnaire/survey (see Annex 6.5). A simple questionnaire was disseminated to the project implementation unit and the team involved in the implementation in order to collect data on the program-level implementation goals and to solicit key insights as a forward-looking process.

A paper survey was forwarded with the initial request for interviews (Annex 6.5) to high-level officials who delegated the interviews to those who participated across sectors and levels. One-to-one interviews were also conducted through the field visits and consultant missions (Annex 6.5), and through online calls made with key government stakeholders, PMU and UNDP staff. The evaluators transcribed and coded all notes based on interviews given throughout the process.

2.4.3. Analysis and Synthesis Phase

The analysis phase included coding key themes and issues emerging from the data and validation against the project's stated success indicators and theory of change. This period included: a study of the trends, gathering of perceptions based on experiences), reporting on initial main findings, and incorporating comments. A draft evaluation report was then provided to the project partners to gather feedback. Finally, the evaluation results were presented to governments, donors, and other stakeholders.

2.4.4. Dissemination Phase

The final stage (October-November 2022) included efforts to finalize the report after receiving inputs. It further required incorporating the comments received. The evaluation team shared the final findings report with the client and discussed the lessons learned.

2.5. Ethics

The evaluation was conducted in accordance with the United Nations Evaluation Group Norms and Standards for Evaluation and the United Nations Evaluation Group Ethical Guidelines. Specific commitments included:

Independence and Impartiality. The consultants remained independent from the UN at all times. Clear reasons for evaluative judgments, and the acceptance or rejection of comments on the evaluation report were given. The final report made clear that it is the view of the consultants, and not necessarily that of UN which may articulate its voice through a Management Response. Any real or perceived Conflicts of Interest will be assessed by UN and addressed appropriately and transparently.

[13] The TOR is the starting point.

Credibility and Accountability. The consultants aimed at using best review practices to the best of their abilities at all times and ensure that all deliverables are met in the timeframes specified, or that UN is advised ahead of time so that mitigating action can be taken.

Rights to self-determination, fair representation, protection and redress. All data collection included a process of ensuring that all contributors and participants give genuinely free, prior and informed consent. Contributors were given opportunities to refuse, grant or withdraw their consent based upon clear understandings of the persons/institutions involved, the intention of the process, and possible risks or outcomes.

Avoidance of Harm. The consultants worked with UN staff to identify vulnerable groups prior to workshops, and to ensure that any participatory processes are responsive to their needs.

Accuracy, completeness and reliability. During the desk review and data collection and analysis phases, the consultants ensured that all evidence is tracked from its source to its use and interpretation.

The following ethical principles were taken into account as per the UNEG ethical guidelines:

- ✓ Intentionality of evaluation (Utility and necessity)
- ✓ Obligation of evaluator (Independence, impartiality, credibility, conflict of interest, honesty, integrity and accountability)
- ✓ Obligation to participants (Respect for dignity & diversity, Rights, confidentiality and avoidance of harm)
- ✓ Evaluation process & product (accuracy, completeness, reliability, transparency, reporting, etc.).
- ✓

The evaluators have signed an ethical code of conduct.

2.6. Limitations to the Evaluation

The TER evaluation scope was highly ambitious with many activities across four substantive components. The limitations were supported by working closely with the UNDP officers and inclusion of a national consultant in the TE team, who had a technical background. The evaluator (team lead) also employed a longer desk study of the project documentation and worked with the UNDP teams at regional and country level in order to offset the limitations including using surveys. As the evaluation progressed, the evaluator maintained the flexibility of whom to interview by using snowballing to identify key informants. The following table showed the risks involved and the mitigation approach followed.

Risk	Impact	Probability	Mitigation
Different expectations around comprehensiveness, depth and results of the final evaluation	Medium	Medium	In the inception phase, consultations with UNDP underlined the understanding and agreement on the expected results of the evaluation. The evaluation touches all key aspects sufficiently to support informed, fact-based findings and recommendations.
Limited availability/unreliability of statistical data at the regional/local administrative level	Medium	Medium	Available sources of information were identified (National Data).
Possible defensiveness around the evaluation and its findings	Medium	Medium	Pro-active transparency around the evaluation exercise: The evaluators provided appropriate information about the evaluation and its independent and impartial status, together with guarantees around the confidentiality of internal sources and inputs by interviewees.
Lack of follow-up and lasting benefit from the evaluation	High	Low	The evaluation focused on creating valid findings and reasonable recommendations that will be easily incorporated and monitored into the Management Response.

2.7. Structure of the evaluation report

The report has key sections as follows: Sections 1 and 2 on project and evaluation information sections, Sections 3 and 4 on implementation and management, and Section 5 on conclusions, lesson learned, and results.

3. PROJECT DESCRIPTION

3.1. Project start and duration, including milestones

Project duration	60 months
PIF Approval Date	Nov 15, 2013
CEO Endorsement Date	Feb 10, 2016
Project Document Signature Date (project start date):	Jul 28, 2016
Date of Inception Workshop	Nov 21, 2017
First Disbursement Date	May 10, 2017
Expected Date of Mid-term Review	Jan 28, 2019
Actual Date of Mid-term Review	Jul 16, 2020
Expected Date of Terminal Evaluation	Nov 30, 2022
Original Planned Closing Date	Jul 28, 2021
Revised Planned Closing Date Closing Date with second no-cost extension	Jan 28, 2023 Jul 28, 2023

The five-year project started implementation officially in 2016. An MTR was held in July 2020. The final evaluation started in July 2022. The project closes in July 2021. The project was granted an 18-month no cost extension in 2020 and is slated to close on January 2023. Another no-cost extension was granted and the project will close on July 28, 2023.

3.2. Development context: environmental, socio-economic, institutional, and policy factors relevant to the project objective and scope

The Philippines has one of the most expensive electricity in Southeast Asia despite having geothermal, hydropower and other renewable energy resources as well as a deregulated and privatized power industry under the Electric Power Industry Reform Act (EPIRA 2001). A significant proportion of primary fuels for power generation in the Philippines comes from imported fossil fuels. The continued reliance on fossil fuels for power generation are causing an increase in GHG emissions. With fluctuating global fossil fuel prices, the Philippines is vulnerable to sudden price spikes, a situation the country hopes to mitigate through the development of domestic renewable energy.

GEF supported the project "Capacity Building to Remove Barriers to Renewable Energy Development (CBRED)" from 2002 to 2010 in the Philippines. This current project resulted in the formulation of the RE Act including its 'Implementing Rules and Regulations (IRR)' and initial regulatory frameworks. To encourage and accelerate the participation of the private sector, provisions were made in the Act for fiscal and non-fiscal incentives (such as the Renewable Portfolio Standard or RPS, Net Metering and Green Energy Option, among others). The CBRED Project was successful in enhancing awareness of the private sector, local government units, and communities on various aspects of renewable energy resource development. Because of CBRED, the DOE was able to initiate engagement with the private sector as well as with the grassroots communities in the pursuit of renewable energy technology for their livelihoods.

3.3. Problems that the project sought to address: threats and barriers targeted

Despite the past efforts to catalyze RE development in the Philippines, barriers still exist at the program and project levels that constrain RE development, notably at the local level where the RE Act has not been effectively implemented. For hydropower development in the Philippines, there are a number of bottlenecks in the approval process including difficulties with the water sustainability plans as well as settling indigenous people's claims over revenue from these hydropower projects. For solar energy development in the Philippines, the majority of the solar PV installations in the Philippines in the baseline are mainly installed as individual solar home systems. The Government plans to implement Concentrated Solar Thermal Power (CSP)

demonstration plant to demonstrate the cost efficiencies of CSP plants. Philippines is the second largest producer of geothermal power in the world (next to the United States) with a potential of 5,000 MW.

The project, 'Development for Renewable Energy Applications Mainstreaming and Market Sustainability (DREAMS)' is a follow up project to the CBRED project. The DREAMS Project is designed to address issues related to RE development, primarily the process of regulatory approvals for RE projects in the Philippines at the national and the local levels. The DREAMS project is targeted to address the issues that have emerged with the Government's efforts to accelerate RE development since the completion of the CBRED Project in 2010. The DREAMS Project activities include building capacity of the local government and host communities, and the streamlining of the national approval process that will create an investment-friendly environment, conducive to satisfying local permitting requirements and more widespread promotion of RE projects as intended under the NREP. This would also include operationalization of the remaining implementation mechanisms under the RE Act that were introduced through CBRED, including establishment of the RE Market and Registrar, which are components of the Renewable Portfolio Standards (RPS), designed to accelerate development of RE resources in the country.

3.4. Immediate and development objectives of the project

The objective of the DREAMS project is to reduce GHG emissions through promotion and facilitation of the commercialization of renewable energy (RE) markets. This is to be done, through the removal of barriers to increase investments in RE-based power generation projects. The objective of the project is to be achieved through its following four planned Outcomes;

Outcome 1: Enforcement of a supportive policy and regulatory environment for leveraging investment in RE development and applications at the local level;
Outcome 2: Strengthened institutional capacity that leads to increased RE investment at the local level;
Outcome 3: Increased share of RE-based power capacity; and
Outcome 4: Enhanced confidence of local RE developers that leads to an enhanced uptake of RE projects and successful replication using proven and merging RE technologies.

3.5. Expected Results

The Project is targeted to lead to direct project lifetime GHG emission reductions of 2.445 ktonnes of carbon dioxide equivalent; indirect GHG emission reduction ranging from 4,889 to 141,000 ktonnes of carbon dioxide equivalent; and some 20,000 sitio-based households in far flung areas will obtain access to reliable sources or renewable energy.

The table below provides the Project Objective along with the summary of different planned outcomes. It also provides the indicators to monitor and verify the achievement of the planned Objectives and the Outcomes of the project.

As per the design of the project, different outcomes of the project are to be achieved by way of achievement of different Outputs for each of the Outcome. In turn, the Outputs for each of the Outcome are to be achieved by carrying out specific set of activities for each of the Output. Table 5 provides the details of different outputs and the activities to be carried out for each of the Outcomes of the project. At the time of the inception of the project corrections/ modifications were carried out in the activities for some of the Outputs. Table 5 also provides details of the corrections/modifications in the activities carried at the time of the inception of the project

The table below provides the full vetted review of the Project expected outcome and targets along with the summary of different planned outcomes of the project. The table above provides the indicators that were used to monitor and verify the achievement of the planned Objectives Outcomes and the Outcomes of the project.

Project Results Framework (as per Project Document)

Objective/Outcome	Indicator[14]	Baseline	Targets End of Project
Project Objective: To promote and facilitate the commercialization of the renewable energy (RE) markets through the removal of barriers to increase	• **Indicator A**: Cumulative direct project CO_2 emission reductions from RE development by end-of-project (EOP), ktonnes CO_2 • **Indicator B:** % share of RE in the power generation mix of the Philippines	0 14.4 0	205 35 20,000

[14] The numbering of the indicators has been done at the MTR to ease discussion and reference in the report

Objective/Outcome	Indicator[14]	Baseline	Targets End of Project
investments in RE based power generation projects	• **Indicator C:** Number of sitio households in far-flung areas that have obtained access to reliable sources of renewable energy due to the Project		
Outcome 1: Enforcement of a supportive policy and regulatory environment for leveraging investment in RE development and applications at the local level	• **Indicator 1.1:** Number of approved and enforced policies and guidelines for leveraging RE investments by Year 2 • **Indicator 1.2:** Number of sitios15 with off-grid rural electrification plans using RE • **Indicator 1.3:** Number of businesses who have accreditation or applied for DOE accreditation by EOP to manufacture, fabricate or supply locally-produced RE components	0 0 0	8 12 50
Outcome 2: Strengthened institutional capacity that leads to increased RE investment at the local level	• **Indicator 2.1:** Number of funded and implemented RE projects championed or facilitated by LGU-based RE focal points • **Indicator 2.2:** Number of RE projects facilitated by operational provincial-level RE market service centers • **Indicator 2.3:** Number of RE projects that were designed based on information and technical advice obtained from the established RE knowledge platform	0 0 0	5 5 6
Outcome 3: Capitalized RE market leads to an increased share of RE based power capacity	• **Indicator 3.1:** Cumulative MW of installed capacity registered in the RER established in the "capitalized" RE market • **Indicator 3.2:** Number of RE developers registered in the RER	0 0	10 15
Outcome 4a: Enhanced confidence of project developers on the viability of RE projects at the local level	• **Indicator 4.1:** MW of RE projects that are being developed through the PPF • **Indicator 4.2:** Number of bankable RE plans completed by other LGUs who were interested in RE-based energy systems by Year 3; • **Indicator 4.3:** Number of certified technicians for RE equipment assembly and supply working with locally DOE accredited RE manufacturing entities by EOP.	0 0 0	15 3 10
Outcome 4b: Increased number of operational RE projects using proven and emerging RE technologies that boosts successful replication	• **Indicator 4.4:** MW of installed capacity of RE projects being implemented that received support from new or improved RE financial mechanisms, by EOP • **Indicator 4.5:** MW of installed capacity of RE projects resulting from accelerated expediting of RE service contracts by EOP.	0 0	5 75

As per the design of the project, different outcomes of the project are to be achieved by way of achievement of different Outputs for each of the Outcome. In turn, the Outputs for each of the Outcome are to be achieved by carrying out specific set of activities for each of the Output. The table provides the details of different outputs and the activities to be carried out for each of the Outcomes of the project. At the time of the inception of the project corrections/ modifications were carried out in the activities for some of the Outputs.

3.6. Main Stakeholders: summary list

Annex 6.3B provides the list of the actual stakeholders of the project with their respective roles. From the stakeholder analysis, there are different types of stakeholders across national and sub-national levels, and across the sub-national levels, which include the provincial, municipal, and barangay levels. Some stakeholders are also target beneficiaries of the project where SF4RE sub-projects are implemented. The project has identified and documented how each of the stakeholders plays a role in the project and their contributions towards attaining the project outcomes. This resulted in a number of additional actual stakeholders, most of whom are the LGUs, electric cooperatives, and communities (as beneficiaries) who are actively engaged in various project activities and events and have contributed counterpart financing. On the other hand, other stakeholders, who were identified originally during the project conceptualization, most of whom were coming from the private sector, did not eventually engaged during the project implementation.

The following shows the extent of the stakeholder involvement in the DREAMS project:

Type of Stakeholder Groups	Number of Entities

[15] A sitio typically consists of 20-50 households with an average of 5 persons per household

Government Agencies (GA) – National Level	10
Government Agencies (GA) – Regional Level	3
Local Government Units (LGUs) – Provincial Level	5
Local Government Units (LGUs) – Municipal Level	9
Local Government Units (LGUs) – Barangay Level	2
Civil Society Organizations (CSOs)	10
Private Sector: Electric Cooperatives (6), companies (5)	11
Academic Institutions	2
Total	**52**

3.7. Theory of Change

Per ProDoc, under the alternative scenario with GEF support, the barriers described would be lowered. The key issue for the DREAMS Project will be to assist the GOP in meeting its RE targets of 35% by 2030 and 50% by 2040. With the rate at the time of design of approvals for RE projects, the GOP was challenged to meet these targets. Resources from the DREAMS Project were thus used to accelerate the current pace of renewable energy development in the Philippines through actions that are designed to increase investor confidence in RE projects. The following table shows the drivers as inputs, expected results, and expected outcomes of the DREAMS project.

Project Drivers Inputs, Expected Results, Expected Outcomes

Drivers	Inputs	Expected Outcomes	Overall Outcome
Refinement of policy and regulatory environment	Knowledge and capacity	**Outcome 1:** Enforcement of a supportive policy and regulatory environment for leveraging investment in RE development and applications at the local level	Functioning regulatory and market environment leading to reduction in CO2eq
Lack of operational capacities of key government institutions	Knowledge and capacity	**Outcome 2:** Strengthened institutional capacity that leads to increased RE investment at the local level	
Lack of capital for market	Finance and private sector inputs through PIF	**Outcome 3:** Capitalized RE market leads to an increased share of RE based power capacity	
Lack of demonstration and public and private sector	Pilot demonstration and SF4RE	**Outcome 4a:** Enhanced confidence of project developers on the viability of RE projects at the local level	
		Outcome 4b: Increased number of operational RE projects using proven and emerging RE technologies that boosts successful replication	

For example, through the components designed to streamline a tedious regulatory process for RE projects, DREAMS resources would target specific barriers in the process that were identified by DOE and other key stakeholders during the PPG phase. This included assistance to fill in policy gaps (such as one on RE projects providing electricity supply directly to local utilities or generators), clarification on institutional responsibilities, assistance with local ordinances to align with national RE objectives, strengthening guidelines for RE developers on assurances on system security with RE, and strengthening financing mechanisms that will minimize developmental and construction delays on an RE project.

In addition, the project resourcing and technical assistance supported barriers identified related to a lack of institutional capacity and awareness to process applications related to RE approvals. This lack of institutional capacity and awareness is mainly at the local levels of government, was not conducive to an investor-friendly environment. The alternative scenario under DREAMS was to provide assistance to LGUs to harmonize their RE activities more closely with national RE programmes and objectives; streamline the process of permits and licenses at the national level; build more capacity at the local level to liaise with RE investors and monitor RE project development; provide assistance to broker coordination agreements between national and local agencies; and provide assistance for the establishment of an operational RE knowledge platform that can benefit local groups as well as RE practitioners in the Philippines.

Additionally, the alternative scenario under GEF was to provide assistance to RE projects that are currently stranded under the process, in obtaining the necessary approvals for implementation. GEF assistance was to be used as outputs from the other components of DREAMS, namely regulatory and institutional strengthening components to increase the likelihood of an accelerated RE approval process. A functional RE market and other financial incentives under the RE Act would then provide additional financial incentives for smaller less experienced RE developers, thereby creating a larger pool of RE developers, a more thriving wholesale electricity market and ultimately lower electricity prices for end consumers in the Philippines. With some of the infrastructure for the development of an RE market already conceptualized and partially developed, RE market is currently not fully operational. Until there is a critical mass of RE developers in the RE market, there is a strong likelihood that the RE Market will not be fully functional in the near-term. An alternative scenario under DREAMS is to provide assistance towards:

- Making provisions in the RE Act more efficient (such as net metering, green energy options and FiT qualification and payments) that will increase the number of RE developers generating RE into the Philippines grid; and
- A functional RE market that would ensure the inclusion of a critical number of RE developers in the market. With the functional market, RE developers will be able to forecast more secure and increased revenue streams coming from the registration of the RE project with a new RE registrar, and the awarding and sale of RE certificates.

With this financial incentive as well as a streamlined regulatory process and improved institutional capacities, more players will willingly enter the RE market creating more competition and pressure for reduced electricity prices.

4. FINDINGS

4.1. Project Design and Formulation

4.1.1. Analysis of Results Framework: project logic and strategy, indicators

The project was designed to follow on earlier UNDP GOP efforts to accelerate RE development with the CBRED Project, which finished in 2010. The Results Framework/Log-frame provided in the 'Project Document' is presented above (Section 3.5). It has four Outcomes with corresponding Outputs (along with the list of activities to be performed) for each. The DREAMS Project was adequately designed to address key barriers related to RE development, including the process of regulatory approvals for RE projects in the Philippines at the national and the local levels. The DREAMS Project activities include building capacity of the local government and host communities. It also includes activities for streamlining of the national approval process that will create an investment-friendly environment, conducive to satisfying local permitting requirements and a broader promotion of RE projects as intended under the NREP. The work in fact included the development of the NREP and local LREPs. In terms of the broader promotions, activities were expected to support operationalization o the remaining implementation mechanisms under the RE Act that were introduced through CBRED including the establishment of the RE Market and Registrar, which are components of the Renewable Portfolio Standards (RPS), designed to accelerate development of RE resources in the country.

The Project Document was elaborate and provided detailed descriptions of the activities for expected outcome. The logic and the theory of change clearly addressed the key barriers towards larger uptake of RE in its different components and addressed the capacity strengthening needs into an appropriate list of expected outcomes along with the targeted outputs for each of the outcome of the project. The project objectives, different components of the project, the outcomes, and outputs as mentioned in the Project Document are clear and practical. The evaluation team was satisfied that the design was appropriate; however, there were several assumptions concerning design and scheduling that were problematic during the implementation phase. For instance, the assumption that the project would easily procure renewable energy tenders when the market was still underdeveloped did in fact prove to be as challenging according to stakeholders' interviews and as proven by the long and difficult experiences in the actual procurement process. In turn, the private sector investors were still not clear whether it would be a sufficient enabling environment to take risks. Finding bidders for doing the work on installing renewable energy projects was a challenge; there were often bid failures, which resulted to several bidding processes that had to be repeated.

4.1.2. Assumptions and Risks

As mentioned above, the key assumptions included having existing local capacity to further build capacities, i.e. renewable energy project bidders were not forthcoming. Secondly, it was assumed that small grants would be sufficient, however stakeholders especially the community beneficiaries of the SF4RE grants also suggested that more adequate resourcing and time were needed for demonstration projects to be completed and to initiate the broader expected market reaction. In addition, demonstration projects wherever applied should desirably be designed to address the basic and full community needs for electricity access.

Identified Risks[16]

The tables below summarize the Project's risks identified in the Project Document (2016), throughout implementation (2017-present), and through the UNDP Social and Environmental Standards (updated 2022).

Risk	Revised Risk	Original Rating (IL Significance)	Revised Rating (IL Significance)	TE vetted commentary on the Revisions
Inadequate human resources to implement higher volume of RE project approvals leading to continued delays and long approval periods	If local institutions lack capacity at the local level, Local RE projects that require local institution involvement and implementation Would not have access to the necessary technical expertise Which would impact the quality of proposed and implemented projects under the LREP and SF4RE, of outputs 2 and 4 of the project.	I=3 L=3	Quarter Progress Report 2022 Q2 I = 4 L = 3 During TE I = 4 L = 2	During implementation, the risk of inadequate human resources in public institutions was narrowed to the more specific context of lacking technical capacity. Drawing from the SF4RE experience of setting up RE projects, impact of this risk is larger than first identified in the ProDoc. Likelihood in project sites decreased as the capacity building programs and assistance of the Project targeted to address the capacity gaps, especially where important to the RE Projects being implemented. Further, risk was re-identified using a cause-event-impact approach, following UNDP Country Office M&E advise.
Inability to sell and absorb RE into the existing power market		I=3 L=1		The risk was directly addressed by the completion of activities under Output 3, namely the establishment of the RE Registrar and the Philippine RE Market System. Policy support for the RE Market Guidelines also made this risk no longer applicable. The mentioned project outputs established the institutions that allow RE to be sold and absorbed in the existing power market.
The lower global price of oil reduces incentives of potential proponents and communities from pursuing RE development.	If global prices of oil decrease, potential proponents and communities may be disincentivized to pursue RE projects and policies which would prevent new RE projects that increase RE installed capacity, of outputs 2, 3, and 4 of the whole project.	I=1 L=4	Quarter Progress Report 2022 Q2 I = 4 L = 3 During TE I = 4 L = 2	Communities and market consumers of energy have encountered the present situation to be price elastic. Elevated impact of 4 from 1 reflects this. During the last year, the likelihood of price decrease in oil has lowered due to the Russian-Ukraine conflict attributed global price shocks. In fact, project stakeholders explicitly expressed an increased RE interest due to the cost savings from cheaper RE. Risk was re-identified using a cause-event-impact approach, following UNDP Country Office M&E advise.

[16] As per Project Document 2016.

Climate change impacts the level of RE generation	If the incidence and magnitude of climate related calamities increase, vulnerable communities and infrastructure could be damaged or difficult to access which would delay project delivery, divert local partners to more urgent disaster response activities or damage installed projects, affecting output 2 and 4 of the project.	I=3 L=5	Quarter Progress Report 2022 Q2 I = 4 L = 4 During TE I = 4 L = 4	An ESMP was prepared to address climate change risks to the Project. For SF4RE projects, especially those in typhoon prone areas, the updated SESP recommends the consideration of newly installed RE facilities in partner LGU's local Disaster Risk Reduction Management Plans and insurance coverage. Risk was re-identified using a cause-event-impact approach, following UNDP Country Office M&E advise.

Risks Identified During Implementation

Cause	Event	Impact	Date Identified	Impact & Probability	Countermeasures/ Management Response
If the share of coal power in the mix increases	The share of RE in the overall energy mix could decline	Which would impact the project's target RE percentage in the overall energy mix, and the national government's RE mix targets, as supported by output 1 of the project	2019	P = 3 I = 3	The government continues to promote the development of renewable energy and natural gas. The DOE also issued a pronouncement to further promote geothermal projects. In 2020, the DOE enforced a moratorium on new coal power plant projects. The DREAMS project will continue to support the passage and implementation of policies that will lead towards higher RE mix. The NREP 2020-2040 has also been approved 30th June and will lead to an increase RE share by 35% by 2030 and 50% by 2040.

If the government circular that instructs the DOE to have a Treasury Single Account (single account not separate account for all grants and donations due to the DOE) is applicable to the project	The project cannot establish a project account, despite being designed to be implemented via NIM. The NIM modality requires the opening of separate "project account" to be managed by the IP.	Which would impact the procurement of goods and services for the delivery of all products of all project outputs.	Nov 2017	P = 1 I = 5	In the absence of a DREAMS project account, procurement of goods and services is being done via the UNDP process. The Project Steering Committee has approved interim fund and procurement process. A procurement assistant was hired and is based at UNDP CO to facilitate the procurement and payment of services for the DREAMS project. The PMU has brought the absence of a project account to the attention of the UNDP Auditors during the audit period for 2019 and 2020 financial transactions. As previously reported, the PMU in 2018-2019 has coordinated with the finance and legal departments of the DOE as regards the appropriate fund management procedure in the absence of separate project account. For instance, an orientation with relevant units of DOE as regards the NIM has also been conducted by the PMU and UNDP CO. The 2019 and 2020 Audit report did not indicate any risk particular to the absence of dedicated project account that is required under NIM projects.
If the COVID 19 pandemic continues or worsens	Health protocols could restrict or delay travel for a variable period. Sick project staff or partners could decrease work productivity and delay communications.	Which would impact the delivery schedule of product of all project outputs.	2020	P = 3 I = 4	The project has adapted to the new ways of working by maximizing virtual/remote platforms and hiring field coordinators to facilitate engagement with local government and stakeholders. The project would strengthen precautionary measures to ensure health and safety of staff and stakeholders. The project can also be reframed and support activities that would align with current priorities of the government, such as (green) job creation for displaced workers, (green) economic recovery, and health resilience based on RE applications.
If multiple policies and market rules are too cumbersome or lengthy	RE projects that require approval may be delayed indefinitely, and potential investors may find it too costly to invest and initiate RE projects	Which would impact RE policy support and the expediting of RE contracts, of outputs 1 and 4, respectively.	2020	P = 4 I = 3	The government continues to enact enabling policies that will hasten the approval of RE service contracts like the EO 30, EVOSS and RE Omnibus Guidelines. The project may assist applications to comply with these policies. The SF4RE partners are working to secure necessary permits for the RE facilities, such as net metering, building permits, DENR Certificate of Non-coverage (for the Philippine Environmental Impact Statement System), FPIC, and Water Rights Permit, where relevant. The last three mentioned were identified and initiated during the updating of the Project's SESP in Q3 2022.

If the Philippine General Elections are conducted and the administration changes after said elections	Several activities with government institutions may be prohibited during the election period, and relationships and agreements with current officials may be moot.	Which would impact the delivery schedule of SF4RE and LREP projects, under outputs 2 and 4.	2021	P = 5 I = 2	The project coordinated the Commission of Elections (COMELEC) to confirm that prohibited activities during the election period as prescribed in COMELEC Resolution No. 10695 do not cover 2022 project activities. Further, memoranda of understanding with project partners are secured to ensure continuity regardless of change in national and/or local officials.

Social and Environmental Screening Procedure

The Social and Environmental Screening Procedure (SESP) for DREAMS conducted during project design stage in 2016 found that the likely social and environmental risks associated with the baseline projects were considered low. The identified baseline activities are required to strictly comply with the social and environment safeguards regulations of the Philippine government. It categorized the project as "moderate risk" to pursue conservative and precautionary measures, with the intent that the probable risks will be monitored closely and evaluated during annual project review and mid-term review.

With the establishment of the SF4RE component during the implementation phase, the SESP has been updated in 2022. The SF4RE sub-projects supported were markedly different from the baseline activities initially identified during the project design phase. As such, the risk profile changed, especially with the identification of actual construction-related work associated with solar PV and micro-hydro projects various locations. Despite the change in risk profiles, categorization remained "moderate risk."

For SF4RE projects involving solar energy, moderate risks are associated with:

- Location in environmentally critical areas such as watershed and forest reserve areas;
- Existence of Indigenous Peoples within the project site;
- Impacts of climate change;
- Potential safety and health hazards;
- Waste generation;
- Potential impact of water extraction for water pump components; and
- Possible insurgencies.

These risks are limited in scale and reversible if proper management measures are implemented. The full SESP risks for each solar sub-project are done completely.

For SF4RE projects involving hydropower, moderate risks are associated with the:

- Civil works and redevelopment activities during the construction phase;
- Waste generation and disposal;
- Lenient implementation of mitigation measures, safety, health and security in the areas;
- Presence of IPs in project site; and
- Occurrence of disasters and structure failures, which may have adverse impacts on the environment and communities but to a limited scale and extent.

Impacts are expected to be temporary and within the work areas only. These risks are reversible if proper management measures are implemented. The full SESP risks for each hydro sub-project are done completely.

Based on the updated SESP, an Environmental and Social Management Plan for the SF4RE subprojects was drafted and being implemented from October 2022 towards the end of project. In addition to the upcoming ESMP, corresponding management measures were also identified to be implemented by the project, selected contractors, and beneficiaries. The joint Project Management Unit of IP, UNDP, and UNDP Country Office monitored the implementation of the management measures.

4.1.3. Lessons from other relevant projects incorporated into project design

From 2002 to 2010, GEF supported the project "Capacity Building to Remove Barriers to Renewable Energy Development in the Philippines (CBRED)" that resulted in the formulation of the Renewable Energy Act (RE Act) of 2008. To encourage and accelerate the participation of the private sector, provisions are there in the RE Act for fiscal and non-fiscal incentives (such as the Renewable Portfolio Standard, Net Metering and Green Energy Option, among others). The CBRED Project was successful in enhancing awareness of the private sector, local governments and communities on various aspects of renewable energy resource development. As a result of CBRED, the Department of Energy (DOE) of Philippines was able to initiate engagement with the private sector as well as with the grassroots communities in the pursuit of renewable energy technology for their livelihoods. In the past, the National Renewable Energy Program (NREP) of 2011 had contributed in creating substantial interest in RE based power generation projects. Through successful implementation of NREP and enforcement of the RE Act, the Government targetted an increase in RE based power capacity in Philippines to 12,683 MW by 2020 and 15,236 MW by the year 2030.[17]

4.1.4. Planned stakeholder participation

The main platform for engaging in monitoring of the implementation and inter-sectoral government level stakeholders was the Project Steering Committee (PSC). The project in addition to the engagement of the government stakeholders at PSC level managed to bring on-board many other beneficiaries and decision-makers, including provincial governments of Palawan, Iloilo, and the LGUs in these two provinces. Although, the PSC has representatives from different concerned ministries and departments, it did not have members from the private sector, civil society organizations, NGOs, academe and research & development institutions (RDIs), development agencies, trade & industry bodies and the like. In the absence of formal communication channels, the participation and inclusion in monitoring by the broader level stakeholders was missing. This is a lesson learned.

4.1.5. Linkages between project and other interventions within the sector

To recall, the formulation of the Renewable Energy Act (RE Act of 2008) was a result of the GEF-supported project entitled "Capacity Building to Remove Barriers to Renewable Energy Development in the Philippines (CBRED)" from 2002 to 2010.[18] Important provisions in the RE Act include fiscal and non-fiscal incentives (such as the Renewable Portfolio Standard, Net Metering and Green Energy Option, among others), in order to encourage and accelerate the participation of the private sector, thereby, increasing financing and investments in the RE market. The project has raised awareness of the important roles of the private sector as well as the grassroots communities in implementing RE projects for productive uses and livelihood. On the other hand, through the successful implementation of the National Renewable Energy Program (NREP) of 2011, substantial interest was created in RE- based power generation projects. However, it is recognized that barriers still exist that prevent the full development of the RE market, especially on the sub-national and local levels.

As a follow-up of the CBRED project, the current project, 'Development for Renewable Energy Applications Mainstreaming and Market Sustainability (DREAMS)' is designed to address the issues related to RE development, primarily focusing on eliminating the barriers recognized early on, particularly the process of regulatory approvals for RE projects in the Philippines at the national and the local levels. The DREAMS project is targeted to address the issues that have emerged with the Government's efforts to accelerate RE development since the completion of the CBRED Project in 2010. The DREAMS Project activities include building capacity of the local government and host communities, and the streamlining of the national approval process that will create an investment-friendly environment, conducive to satisfying local permitting requirements and more widespread promotion of RE projects as intended under the NREP. This would also include operationalization of the remaining implementation mechanisms under the RE Act that were introduced under the CBRED, including establishment of the RE Market and Registrar, which are components of the Renewable Portfolio Standards (RPS), designed to accelerate development of RE resources in the country[19].

4.2. Project Implementation

4.2.1. Adaptive management

The use of adaptive management in the DREAMS project was strong and impressive. The project document had been written in a different time circa 2014 and so it needed much adaptation to remain relevant to change and dynamic country context. The PSC was clearly the crucial stakeholder engagement hub as well as the project monitoring and oversight forum. It worked well for jointly making decisions concerning the implementation and maintained the relevance of the project to the needs and

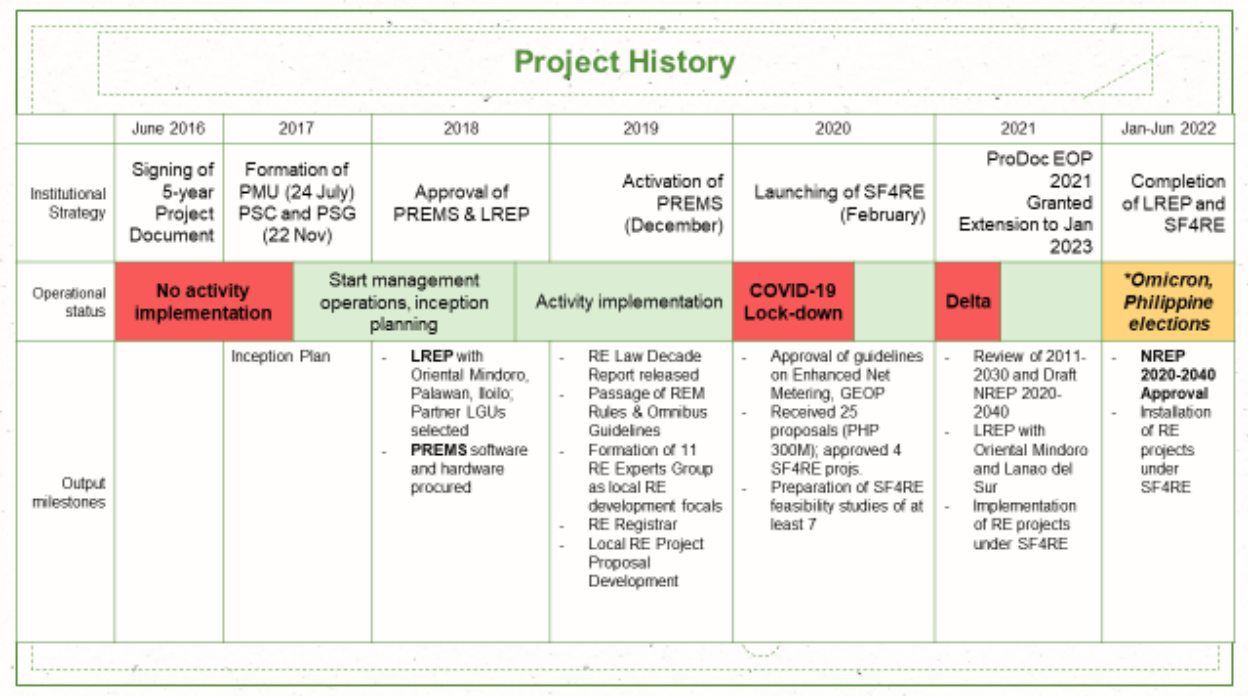
[17] As per Project Document.
[18] Ibid.
[19] Ibid.

opportunities as well as for directing meaningful actions. The main formal platform for engaging the implementation and intersectoral government level stakeholders has been the Project Steering Committee (PSC). Furthermore, the PSC strategically tapped its government human resources by establishing the Project Support Group (PSG), all members of which are officials from various DOE offices, who is tasked as a group to provide technical advise to the PSC especially in evaluating and approving SF4RE project proposals. In addition to the engagement of the government stakeholders at PSC (refer to Annexes 6.3C and 6.3D for the members), the project team brought on-board other beneficiaries and interested decision-makers, including provincial governments of Palawan, Iloilo, and the LGUs in these two provinces. Although, the PSC has representatives from different concerned ministries and departments, it did not include members from civil society organizations (CSOs), NGOs, academia and research & development institutions (RDIs), development agencies, trade & industry bodies, and the like. The reasoning for a focus on government and communities as investors first was well founded. However, the participation of the broader level of stakeholders was not there and will need to be followed through in future activities as a priority as it evidently strengthens the sectoral partnerships for the achievement of the greater goal as demonstrated later by the SF4RE sub-projects. This is a key lesson learned. The following three tables below give a graphic overview of the project history, the project time line and PSC adaptations and decisions during implementation, which shows the strong adaptive nature of the PSC management of the project.

In summary, the Project Steering Committee was robust and resilient as a management and monitoring mechanism especially for the normative and capacity development nature of the project. Major decisions were taken to adapt to changes and dynamic implementing context were taken and have supported implementation towards the achievement of results.

It is noted that COVID-19 affected the execution of project activities and there was a request from PSC for extension of the DREAMS Project, which was approved by GEF for a period from **July 28, 2021 to January 28, 2023.**

Graphical Project History



Project Timelines and Project Board Adaptations

Date	Activities/ Decisions
2014-2015	Project Preparation Grant
2015	Preparation of Project Document
08 February 2016	GEF approved Project for implementation
18 March 2016	Local Project Appraisal Committee endorsed the Project Document
May 2016	Approval of GEF
17 May 2016	UNDP letter to DOE informing approval of Project
24 June 2016	DOE signs Project Document

Date	Activities/ Decisions
01 July 2016	UNDP signs Project Document
28 July 2016	NEDA signs Project Document
24 July 2017	Installation of Project Management Unit
20 September 2017	DOE Internal Inception Planning
20-21 November 2017	Final Inception Planning
21 December 2017	**1st Project Steering Committee Meeting.** Administrative: Decision to use UNDP system to procure and contract goods and services. Project: Approval of the selection criteria for partners of the Project (LGUs and Private Developers); Approval of the work plan and budget for the installation of the PREMS as envisioned in the 2016 Project Document. Management: Approval of primary tasks and functions of the PSC; Approval of the Project Management Structure; Approval of the TOR of the PSG
23 February 2018	**2nd PSC Meeting.** Administrative: Approval of the 2018 AWP and budget amounting to PhP 32,061,251 as part of the PhP 127,975,250 budget projected for 2018-2019. Project: Approval of the TOR of PREMS and recommendation to hire an IT expert to review the TOR; Approval of initial list of project sites where DREAMS may jump-start its project activities under Component 2
08-25 January 2019	Ad-Referendum Process on the 2019 AWP and Budget
19 June 2019	**4th PSC Meeting.** Administrative: Budget re-allocation of Component 1's budget of PhP 5M meant for the review of the effectivity and efficiency of the implementation of the RE Law. Instead use PhP 2M to conduct specific studies on RE policy mechanisms and other related RE guidelines. Project: NEDA proposed and the PSC agreed that DOE REMB has the capacity to lead in defining the guidelines and possible uses of the PPF. A firm was not necessary to conduct a separate study on the PPF. Management: Application of the Revised Salary Scale for SC holders. The adjustment on the salary was factored in the budget of the project.
11 November 2019	**5th PSC Meeting.** Downward Budget Revision from PhP 45.8M to PhP 30.4M or 34% less than the original 2019 budget (approved).
17 December 2019	PREMS and the RE Registrar were activated
18 February 2020	**6th PSC Meeting.** Administrative: Approval of the 2020 AWP and Budget (PhP 92M). Project: Approval of the Guidelines and Operating Manual for the utilization of the US$1M Project Preparatory Fund (PPF) and officially introduced to the energy sector.
27 February 2020	Following the approval of the RE Market (REM) Rules and introduction of the Philippine RE Market Systems (PREMS), PEMC, as the RE Registrar (RER), officially opened the registration of participants.
30 April 2020	The DILG and DOE issued a Joint Memorandum Circular (JMC 2020-01) for LGUs to facilitate the implementation of energy projects.
June 2020	Mid-Term Review
04 August 2020	**7th PSC Meeting.** Administrative: Approval of revised 2020 AWP and Budget (PhP 69M); revised due to the impact of the health pandemic. Project: Approval to launch the Support Facility for RE (SF4RE); Approval to request the UNDP for an extension of the DREAMS EOP date.
August 2020	E-launched SF4RE
10 November 2020	**8th PSC Meeting.** Administrative: Approval of revised 2020 AWP and Budget (PhP 43M); revised based on actual number of proposals received under the SF4RE and given the budget utilization rate of 26% as of October 2020. Project: Approval of 5 proposals under SF4RE
24 March 2021	GEF approves Project extension from 28 July 2021 to 27 January 2023
14 April 2021	Solar PV-Powered Potable Water System Project in Goa, Camarines Sur Province approved via Ad-referendum
18 May 2021	**9th PSC Meeting.** Administrative: Approval of revised 2021 AWP and Budget of PhP 102.06M; based on extension. Project: Approval of operating framework for the RE Rural Electrification Model (RE Modelling); Approval of the Usufruct Agreement with PEMC.
01 June 2021	75kW Solar PV Rooftop Project for the Provincial Hospital of Iloilo approved via Ad-referendum Ajuy, Iloilo Micro-Hydro power plant rehabilitation with capacity expansion and grid interconnection project approved via Ad-referendum
11 October 2021	Letter to DOE Secretary for approval and signature on the MOU with Usufruct between the PEMC and DOE regarding the utilization of the assets of the PREMS
02 December 2021	**11th PSC Meeting.** Approval of revised 2021 budget from PhP 102M to PhP 78M; revised due to the projected non-utilization of the budget by end of December 2021 given the pace of procurement and awarding of contracts particularly under the SF4RE.
06 April 2022	**12th PSC Meeting.** Approval of the 2022 AWP and Budget amounting to PhP 122,734,490. Component 1-Re-allocation of unused funds (initially allocated for the partnership with PCIEERD amounting to 1.2 million) for the voluntary RE market initiative.
22 March 2022	San Remigio Micro-hydro Plant (MHP) Rehabilitation Project approved via Ad-referendum; Solar PV Powered Potable Water Supply Project approved via Ad-referendum; Oriental Mindoro Green Energy Pilot Project approved via Ad-referendum; Solar Powered Aquatic Life Support System Project approved via Ad-referendum
28 July 2022	Launch of the Philippine Renewable Energy Market Interim Commercial Operations

Date	Activities/ Decisions
30 May 2022	Electrification of Sitio Cawili, Bgy. Magsaysay, Cagayancillo, Palawan approved via Ad-referendum
28 January 2023	End of Project

Steering Committee Adaptations and Major Decisions

#PB Meeting Date and Venue	Decisions /Adaptations	What was the action?	Comments
1st PSC Meeting (21 December 2017) Legend Villas, Mandaluyong City	Decision to use UNDP system to procure and contract goods and services	Approval of the selection criteria for partners of the Project (LGUs and Private Developers). Approval of the **work plan and budget for the installation of the PREMS** as envisioned in the 2016 Project Document.	Approval of primary tasks and functions of the PSC; Approval of the Project Management Structure; Approval of the TOR of the PSG.
2nd PSC Meeting (23 February 2018) F1 Hotel, BGC, Taguig	Approval of the 2018 AWP and budget amounting to PhP 32,061,251 as part of the PhP 127,975,250 budget projected for 2018-2019.	Approval of the TOR of PREMS and recommendation to hire an IT expert to review the TOR; Approval of initial **list of project sites where DREAMS may jump-start its project activities under Component 2.**	
3rd PSC Meeting (28 November 2018) Palawan Provincial Capitol			
4th PSC Meeting (19 June 2019) Marquis Events Place, BGC, Taguig City	**Budget re-allocation** of Component 1's budget of PhP 5M meant for the review of the effectivity and efficiency of the implementation of the RE Law. Instead use PhP 2M to conduct specific studies on RE policy mechanisms and other related RE guidelines.	NEDA recommended and the PSC agreed that DOE REMB has the capacity to lead in defining the guidelines and possible uses of the PPF. A firm is not necessary to conduct a separate study on the PPF.	Application of the Revised Salary Scale for SC holders. The adjustment on the salary was factored in the budget of the project.
5th PSC Meeting (11 November 2019) Marquis Events Place, BGC, Taguig City	**Downward Budget Revision from PhP 45.8M to PhP 30.4M or 34% less than the original 2019 budget *(approved)***		
17 December 2019		**The Philippine RE Market System (PREMS) and the RE Registrar were activated and officially introduced to the energy sector**	
December 2019-January 2020		**Mid-Term Review**	
6th PSC Meeting (18 February 2020) Iloilo City Hall Social Hall, Casa Real De Iloilo	Approval of the **2020 AWP and Budget (PhP 92M)**	Approval of the Guidelines and Operating Manual for the utilization of the **US$1M Project Preparatory Fund (PPF)**	
27 February 2020		Following the approval of the RE Market (REM) Rules and introduction of the Philippine RE Market Systems (PREMS), PEMC, as the RE Registrar (RER), officially opened the registration of participants	
30 April 2020		The DILG and DOE issued a Joint Memorandum Circular (JMC 2020-01) for LGUs to facilitate the implementation of energy projects	

7th PSC Meeting (04 August 2020) Online	Approval of revised 2020 AWP and Budget (PhP 69M); revised due to the impact of the health pandemic	Approval to launch the **Support Facility for RE (SF4RE)** Approval to request the UNDP for an extension of the DREAMS EOP date	
August 2020		**E-launched the SF4RE**	
8th PSC Meeting (10 November 2020) Online	Approval of revised 2020 AWP and Budget (PhP 43M); revised based on actual number of proposals received under the SF4RE and given the budget utilization rate of 26% as of October 2020.		
24 March 2021		Communication from GEF approving the extension of the DREAMS Project from **July 28, 2021 to January 28, 2023**	
9th PSC Meeting (18 May 2021) Online	Approval of revised 2021 AWP and Budget of PhP 102.06M; based on extension	Approval of operating framework for the RE Rural Electrification Model (RE Modeling). Approval of the Usufruct Agreement with PEMC	
10th PSC Meeting (05 October 2021) Online			
11 October 2021		Letter to DOE Secretary for approval and signature on the MOU with Usufruct between the PEMC and DOE regarding the utilization of the assets of the PREMS	
11th PSC Meeting (02 December 2021) Online	Approval of revised 2021 budget from PhP 102M to PhP 78M; revised due to the projected non-utilization of the budget by end of December 2021 given the pace of procurement and awarding of contracts particularly under the SF4RE.		
12th PSC Meeting (06 April 2022) Online and Park Inn Hotel, Iloilo City (hybrid meeting)	Approval of the 2022 AWP and Budget amounting to PhP 122,734,490; Component 1-Reallocation of unused funds (initially allocated for the partnership with PCIEERD amounting to 1.2 million) for the voluntary RE market initiative		

4.2.2. Actual stakeholder participation and partnership arrangements

As indicated in Section 3.6 and shown in Annex 6.3B, there are 52 entities identified as actual stakeholders and partners in the DREAMS project. The main platform for engaging the implementation and intersectoral government level stakeholders has been the Project Steering Committee (PSC). The project managed to bring on-board many other beneficiaries and decision-makers, including provincial governments of Palawan, Iloilo, and the LGUs in the two provinces of Palawan and Iloilo. However, it is noted that there are missing representatives from other sectors such civil society organizations, NGOs, academia and research & development institutions (RDIs), development agencies, trade & industry bodies, and the like. This is a lesson learned. The project management was mapped initially and then continuously engaged relevant stakeholders, who can support the goals of the project, particularly in implementing the LREPs and the SF4RE components. The project team develops and leverages necessary and appropriate partnerships with direct and tangential stakeholders and decisions were taken on stakeholder engagement through the steering committee and technical joint oversight.

Participation and Country Driven-ness/ Extent of stakeholder interaction

Per the ProDoc, the country's renewable energy development is driven by Renewable Energy (RE) Act of 2008 under which the GoP will reduce its contributions to the GHG emissions from costly imported fossil fuels. Under the NREP that was developed under the Republic Act 9513, there are provisions that will "promote the development, utilization and

commercialization of renewable energy resources and for other purposes"; a policy framework with strategic building blocks was provided to help the country achieve the goals set forth in the RE Act that includes amongst others:

- The Renewable Portfolio Standard (RPS) which places an obligation on electric power industry participants such as generators, distribution utilities, or suppliers to source or produce a specified fraction of their electricity from eligible RE Resources, as may be determined by the National Renewable Energy Board (NREB);
- The Renewable Energy Market (REM) which is a policy mechanism toward the acceleration and development of renewable energy resources in the country;
- Feed-in-tariff allowance (FiT-ALL) which is a mechanism applied to RE generation used in complying with the RPS that involves a fixed guaranteed price for each RE system and/or technology;
- A Green Energy Option Program (GEOP) that gives consumers the choice to use RE; and
- Net metering that allows distribution grid users to generate RE power and be appropriately credited with its contribution to the grid.

The project pathways were to strategically work directly with DOE as the main Implementing Partner, Philippine Electricity Market Corporation (PEMC), and the Provincial Governments of Palawan and Iloilo. The project team-initiated links with the National RE Board (NREB) and Energy Regulatory Commission (ERC). In 2020-2021, LGUs and Rural Electric Cooperatives were the primary partners in harnessing local investments in RE development, with examples as follows:

- DOE through the Renewable Energy Management Bureau (REMB). The DOE is fully engaged with the implementation of the project, different units of DOE were engaged to support the project particularly on the implementation of the Localized Energy Planning (LREP), Support Facility for RE (SF4RE), Philippine RE Market System (PREMS) and REMB Management Information System.
- PEMC is the implementing partner for one major output of the project which is the establishment of the PREMS.
- Provincial Government of Palawan - the project continues to work with the LGUs in Palawan for the LREP and implementation of RE projects under the SF4RE Projects with selected LGUs.
- Provincial Government of Iloilo - the project continues to provide technical assistance to the Provincial Government of Iloilo to develop their provincial RE Plan and implement RE projects under the SF4RE. The project also assisted selected LGUs and their respective electric cooperatives in developing and implementing RE projects under the SF4RE for their unserved and underserved communities.
- NREB - the project worked with NREB particularly on the updating of the National RE Program and on Localized RE Planning activities of the project.
- ERC – is engaged by the project for the establishment of the RE Market. ERC joined the international technical consultation organized by the project to capacitate regulators in implementing the RE market. The project also collaborated some policy studies to be conducted with ERC but did not materialize.
- The DREAMS Project Document made no mention of Electric Cooperatives (EC) in the list of DREAMS Stakeholders. Currently, however, the DREAMS is working closely with the Iloilo Electric Cooperative 3, Palawan Electric Cooperative, Bohol Electric Cooperative-1, Eastern Samar Electric Cooperative and the Federation of Electric Cooperative with 11 members located in Region 8 (Visayas area) for the implementation of LREP and SF4RE projects.
- Department of Interior and Local Government (DILG) - In 2020, a Joint Memorandum Circular has been signed between the DILG and DOE to ensure that energy planning is incorporated in the mandated comprehensive development plans of LGUs. The capacity building provided by DREAMS to its 13 partner LGUs will help in the implementation of the circular.
- The DOE has taken a new track as regards to working with Affiliated RE Centers (AREC). In previous years, DOE has stopped the support of the ARECs across the country. However, 2019, DOE decided in 2019 to work with ARECs on a per project basis. The Project engaged former AREC experts for the implementation of LREP and SF4RE in Iloilo. The Project has also engaged and partnered with Mariano Marcos State University (former AREC) on SF4RE projects for the Net Zero Study, deployment of solar powered distiller for bioethanol production used as a main agent for bio-based products in response to Covid-19 (pandemic) emerging needs, and the installation of solar-powered aquatic life support systems.

4.2.3. Project Finance and Co-finance

As of end September 2022, the reported cumulative delivery rate was at 69.4%. This observation will be updated and revised again after the second assessment, in consideration of the second no-cost extension approval. The Project team is expecting to deliver a total of USD 2,327,252 by December 2022, with target cumulative delivery rate of 97%. Of which, USD 895,223 has been utilized (USD 244,660.19 expenditure and USD 650,563.34 commitment). The remaining USD 1,432,029 will mainly cover the RE facilities that are yet to be awarded, staff salaries, travel, learning costs, and other operational and recurring

costs. For year 2023, including the proposed 6-month extension period, USD 157,988 has been allocated. This will mainly cover the salaries of the PMU who will continue to implement and monitor the remaining activities, travel for the implementation and monitoring of activities, documentation of project results, and conduct of learning and closing event.

It is noted that a much higher project co-financing (over USD 87M in total) is realized as compared to the original target (USD 38M) during the project inception, which is commendable and encouraging. Annex 6.7 shows the detailed breakdown of project co-financing.

4.2.4. Monitoring & Evaluation: design at entry (S), implementation (S), and overall assessment of M&E (S)

The project was implemented under the NIM (Nationally Implemented Modality), with implementation being carried out by the 'Implementation Partner' (REMB, under the Department of Energy). The monitoring protocols were laid out in the project document and have been completed in line with the standard practice for GEF projects. Provisions were made for mid-term review and a terminal evaluation. The main M&E activities planned at the design stage meet GEF and UNDP requirements and standard practices.

An inception report was prepared after the inception workshop of the project. The PIRs of the years 2018 and 2019, 2020, 2021, 2022 were prepared, as per the requirements. The project prepared the Annual Performance Reports. The work plans were prepared and followed. Quarterly progress reports for the project were prepared regularly. The project document outlined a structured management and monitoring arrangement. UNDP is the GEF executing agency for the project. REMB had the overall responsibility for results of the project. REMB has designated a senior official as the National Project Director (NPD) for the Project. Quarterly progress reports were prepared as per the M&E plan. Financial monitoring and evaluation of the project was carried out using the ATLAS tool of UNDP, which generates reports such as the CDR to gauge the level of delivery on all the outcomes of the project.

UNDP provided management and guidance from its Country Office in Manila and the Regional Hub in Bangkok, and was responsible for monitoring and evaluation as per GEF and UNDP requirements. The Implementing Partner had the overall responsibility of ensuring that all activities are executed accordingly and as per the approved Project Document.

The Project Board (PB) established at the inception of the project provided policy oversight and decision-making for the project implementation. The NPD was responsible for the achievement of the project objectives through institutional coordination with the key stakeholder members of the Project Board (PB) and overall alignment of the Project with the relevant national programs.

The TE team learned that the project had a slow start - delayed hiring of the project manager and the other members of the project team. Additionally, there were changes in the officials in the Implementing Partner (DOE), due to the political changes in 2016, following national elections.

The Project Management Unit (PMU) included a Project Manager (PM), Monitoring and Evaluation Officer (M&EO), a Finance Officer (FO), a Research Assistant (RA), and an Administrative Officer (AO) who looked after the day-to-day operations of the project. The PMU staff since 2017 to present is listed in Annex 6.3E for reference. The PB was serving more as the oversight body for the Project Management Unit (PMU) and monitored the progress of the project (see time frame for implementation above and graphical project history under Section 4.2.1), guide implementation and support the project in achieving its overall outputs, outcomes and objective.

The Project Steering Committee (PSC) and the Project Support Group (which served as the Technical Committee) met regularly and played a critical role in project monitoring and evaluation by using quality assurance, evaluation tools for performance improvement, accountability and learning, and ensuring that required resources are committed. The PSC provided overall direction to the project team. The steering committee was chaired by the National Project Director and includes the GEF Focal Point and members from other relevant government departments. The list of PSC and PSG (technical team) members are found in Annex 6.3C and 6.3D, respectively. The monitoring and evaluation budget provisions in the project are adequate.

The TE team concurs that the project implementation had responded to changing conditions and risks, and had taken advantage of opportunities for partnerships and actions that support the overall project objective.

Accordingly, the project monitoring and evaluation from design at entry to implementation and over-all assessment of M and E are each rated **Satisfactory (S)**.

4.2.5. UNDP/GEF Implementation/Oversight (S) and Implementing Partner Execution (HS), Overall Project Implementation/Execution (HS)

The oversight protocols were outlined in the project document. UNDP as the GEF Executing Agency is focused on the achievement of the results of the project. UNDP provided the required support to the IP and the project team. The support includes inputs provided during the PSC meetings and wherever required, offering some solutions to the problems faced by the project implementation team, e.g. assistance with the procurement process as and when required. UNDP supported the preparation of the annual work plans (and the corresponding budget) and supported garnering approval by the project steering committee. The project team prepared the PIR regularly. UNDP provided its inputs to the PIRs in a regular and timely manner. UNDP also supplied inputs about global good practices through the network of the project.

The Project Steering Committee (PSC) and a smaller project support group (PSG) serving as project technical committee (see further Annexes 6.3C and 6.3D) played a critical role in project monitoring and evaluation by using quality assurance, evaluation tools for performance improvement, accountability, and learning, and ensuring that required resources are committed and providing overall direction to the project team.

Per MTR and validated during the TE, the Project Document was signed in June 2016 and after a delay of a year, PMU was established in July 2017. The delay in the establishment of the PMU was due to the time taken in hiring the 'Project Manager' and other staff for the PMU. The delay in implementation was due to the delay in hiring a suitable Project Manager, and changes in the officials in the Implementing Partner (DOE), due to the political changes in 2016, following the national elections.

Once the PMU was established, there was progress towards implementation. However, implementation of the project slowed down during the 2nd quarter of 2019, particularly during the implementation of LGUs-connected activities due to elections in the country. Implementation picked up again in 2020 via online due to the onset of COVID-19 pandemic. As experienced by all, the pandemic disrupted the momentum as the project involved a lot of procurement of materials and supplies. It also interrupted the regular field monitoring due to limitations in mobility. The project was granted an 18-month extension.

During the inception workshop, activities (for achieving the Outputs and Outcomes of the project) were reviewed vis-a-vis the situation regarding the current and future plans of the DOE and project corrections/modifications were discussed, agreed, and implemented. The 'Results Framework' of the project was duly refined and validated by the PSC during its inception meeting. The principal reporting requirement (Inception Report) was prepared after the inception workshop. The PIRs for the years 2018 and 2019, 2020, 2021, and 2022 were prepared, as per the requirements. The project also prepared the Annual Performance Reports regularly. The work plans were also prepared and followed. Quarterly progress reports were additionally prepared regularly.

The TE team found that the implementation of the project had responded well to changing conditions, made corrections to where these are needed, made up for lacking requirements, and carefully recognized risks where these are due (also indicated in previous section 4.2.4) and had taken advantage of opportunities for stakeholder partnerships and actions that support the overall achievement of the project objective and outcomes.

Accordingly, the implementation and oversight by the UNDP/GEF is rated **Satisfactory**, while the Implementing Agency Execution and Over-all Project Execution are each rated **Highly Satisfactory**.

4.2.6. Risk Management, including Social and Environmental Standards (Safeguards)

"UNDP's Social and Environmental Standards (SES) underpin UNDP's commitment to mainstream social and environmental sustainability in its Programmes and Projects to support sustainable development. The SES strengthens UNDP's efforts to attain socially and environmentally beneficial development outcomes and present an integrated framework for achieving a consistent level of quality in UNDP's programming."

This section outlines the safeguard mandatory assessment and monitoring process prepared in terms of SES. A safeguard analysis was conducted at the project's SESP at CEO Endorsement stage and its monitoring has been continued during

implementation. A gender analysis was also developed in July 2022 and provided in this TE report. The project's grievance redress mechanism (GRM) was organized to address these issues.

Safeguard measures

The DREAMS project had recorded a moderate risk of low delivery in 2020 but this was corrected with the extension and the development of the project facility. During the MTR period, the delivery rate for example went from 37% from 28%, which was reported in previous year. During the second half of 2021 and early 2022, the Project expended budget with the creation of the Support Facility for RE (SF4RE) for the local pilot projects which substantially accelerated delivery rates. The project team acquired an 18-month extension, which provided the enabling environment to catch up and achieve delivery targets.

The Project was recording a high safeguard risk as it was planning to support realization of a hydropower renewable energy project as part of its original design. However, this was removed from the project strategy and therefore there is no need for an action in this respect.

The Social and Environmental Screening Procedure (SESP) for DREAMS conducted during the project design stage in 2016 found that the likely social and environmental risks associated with the baseline projects were considered low. This rating changed with the implementation of SF4RE work post MTR. The baseline activities identified were required to strictly comply with the social and environment safeguards regulations of the Philippine government as well as of UNDP. The project was categorized the SF4RE projects as "moderate risk" to pursue conservative and precautionary measures, with the intent that the probable risks will be monitored closely and evaluated during annual project review and mid-term review.

Support Facility for Renewable Energy (SF4RE)

With the establishment of the SF4RE component during the implementation phase, the SESP was updated continuously with the addition of a **slate of sub-projects (see PIRs)**. The sub-projects supported were markedly different from the baseline activities initially identified during the project design phase. Consequently, the risk profile significantly changed with the identification of actual construction-related work associated with solar PV and micro-hydro projects at various locations of the SF4RE component. The first set of SESP updating focused on the solar-related projects.

For instance, with the updated SESP for solar sub-projects, the overall risk rating was newly categorized as "Substantial." Majority of the risks are associated with the following:

(1) Project site's location in an Environmental Critical Area;
(2) Generation of potentially hazardous wastes such as lithium-ion battery and lack of disposal facilities for solar panels;
(3) Cyber security risks, fire and other safety issues during the installation and maintenance; and
(4) Existence of indigenous peoples and communities within the project site which may trigger the need for an FPIC or consent from NCIP (if proven that the project falls under a social service category).

Corresponding management measures were thus identified and implemented by the project, selected contractors, and beneficiaries. The joint Project Management Unit of IP, UNDP, and UNDP Country Office monitored implementation of the management measures continuously. The SESP was updated and the results informed the updating of the risk register and the implementation of measures that had been monitored closely.

Examples of reported SES monitoring (PIRs) of SF4RE project sites are as follows:

1. Fire in Pamilacan Island, Bohol (a 39.65 KW Community Solar Mini-grid serving 357 households)

- On 22 May 2022, a fire broke out in the powerhouse where the battery and equipment room of the RE facility supported by the Project's SF4RE are located. The affected battery and equipment included those turned over to the Bohol 1 Electric Cooperative (BOHECO-1) by the Project. The RE facility is consequently non-operational.
- Discussions among the representatives of the PMU, BOHECO-1, project proponent WeGen Laudato Si, and the Pamilacan Community Cooperative had been conducted. An official report from the stakeholders is being compiled. Findings from this report are the basis for the next steps, which include rehabilitation and accountability of each institution involved.
- The community has offered to use their savings of about US$ 6,000 for the rehabilitation while the donor of the initial solar PV system is willing to provide inverters. The local electric cooperative has yet to make a commitment. The total cost of damaged batteries and equipment is estimated at US$ 70,000. All solar panels remained intact and operational. The community currently has 24/7 electricity from the diesel-powered generator set.

2. Exclusion of schools as beneficiaries in Aborlan, Palawan (where *a 29.3KW Smart Grid Solar PV Household Electrification and Irrigation System for 120 Households is installed*)

- On 23 March 2022, the Project visited a SF4RE RE project site in Sitio Bubusawin, Aborlan, Palawan for a ceremonial memorandum of agreement signing and focus group discussions with the community. During the field

mission, teachers of the local public school raised a grievance regarding their exclusion from becoming potential beneficiaries of the Project's supported Solar PV electrification. This was due to the project design's focus on catering to households.

- The grievance was communicated to the Project Steering Committee Chairperson and members. Other SF4RE projects include public buildings as beneficiaries. As a response, technical assistance was provided to install a solar panel for the school.
- Additionally, to ensure project learning, succeeding endorsed projects for approval are required to consider a holistic RE electrification design, inclusive of schools, as a response to the grievance. The recently approved SF4RE project in Cagayancillo, Palawan is an example. Additionally, the Partner for an on-going project in Polillo is submitting an additional request to provide solar PV system for the school building. From household electrification, DREAMS is moving to upscale its model on rural/community electrification using RE micro-grid technologies and hybrid resources.

4.3. Project Results and Impacts

4.3.1. Progress towards objective and expected outcomes (S)

This section of the report provides an overview of the progress towards results for the various outcomes of the project. In the succeeding tables below, the column with 'Level at PIR' is based on the FINAL PIR (for the year 2022) and status and ratings during TE are indicated as well. Numbers in parenthesis are calculated based on the completion of all project activities, e.g., implementation of SF4RE projects.

The progress towards results has been assessed first for the various outcomes of the project, followed by the assessment of progress towards results for the 'Project Objectives'. This is because for the 'project objectives' the progress towards results has been assessed both in terms of the indicators provided in the results framework and in terms of the progress towards achievement of results in the five outcomes (Outcomes 1, 2, 3, 4a and 4b) of the project. The assessment towards results for the outcomes has been done both in terms of the indicators for the outcomes and in terms of the status of implementation of the activities for the outputs of the outcomes.

Progress towards results: Outcome 1

The Outcome 1 of the project pertains to enforcement of the supportive policy and regulatory environment that was expected to leverage increased investment in RE development and application at the local level.

Indicator 1.1. The DREAMS project has *exceeded* its target number of *supported approved and enforced policies and guidelines for RE investments.* These are all under the implementing mechanisms of the RE Law (RA 9513 of 2008). The Project is involved in all three broad stages of the policy cycle – providing technical expertise and studies during drafting stage, logistical support during public consultations, then once approved, creation of campaigns and IEC materials during enforcement. Towards the project end, an IT based platform (hardware and software solutions referred to as the RE Information Management system) is developed for installation at the office of the Renewable Energy Management Bureau to allow the implementing partner to monitor the performance of these policies.

Among the many policies that are developed, DREAMS was most instrumental in the following three critical policies:

1. **NREP 2020-2040.** The NREP 2020-2040, as mandated under the RE Law, is the roadmap of the Philippines for Renewable Energy, and institutionalizes RE policy mechanisms towards a 35% national RE mix by 2030 and 50% by 2040. DREAMS contributed to the NREP's entire policy cycle – providing technical expertise for assessment of the previous NREP (NREP 2011-2030), coordinating and conducting consultations with the National RE Board, and the final drafting of the NREP 2020-2040; logistical support for participatory public consultations with RE stakeholders as a prerequisite for approval. The policy development work spanned 3 years, and culminated in its signing on June 30 2022. Enforcement and rollout through events, publication, and other IEC will be pursued for the remaining months of DREAMS.
2. **Renewable Portfolio Standards and RE Market.** Achieving 35% national RE mix by 2030 assumes the active participation and compliance of the mandated participants to the Renewable Portfolio Standards (RPS) and RE Market (REM) rules. DREAMS provided technical expertise in the development of the RE Market Rules and logistical support for its participatory public consultations, training of market participants composed of distribution utilities and power generation companies, and the international learning program for the executives and technical management staff of the DOE and partner agencies particularly the Philippine Electricity Market Corporation (PEMC) and the Energy Regulatory Commission (ERC). Despite rules in place, there are resource constraints for the

market's infrastructure needed for actual operations. Thus, DREAMS (as part of Outcome 3) established an enterprise-level platform containing the software and hardware solutions for Philippine RE Market System and the accompanying RE Registrar. **Often overlooked but critical to the RPS and REM is the participation of its mandatory participants at the local level** – DREAMS bridged the national policy with key local Electric Cooperatives (ECs) (as part of Outcome 2 and 4), capacitating ECs to comply with the RPS and participate in the REM through capacity building and supporting investment into actual RE generating facilities through the Support Facility for RE).

3. **Green Energy Option Program (GEOP).** DREAMS provided a RE expert and legal counsel to develop and gain approval for the Issuance of Operating Permits to Renewable Energy Suppliers under the program. Through these Guidelines, end users have the choice to directly contract RE supply from 17 registered GEOP suppliers (as of May 2022). Aside from suppliers, the Project also initiated GEOP's rollout to potential consumers, through IEC and campaigns. DREAMS' strategic target sector for potential GEOP end users are the companies located in export processing zones where the international companies are seeking policy pathways to pursue their corporate responsibility in support of GHG reduction global targets.

On top of approved and enforced policies, DREAMS supported the writing and public consultations for 9 draft policies, some of which are still for government approval.

Indicator 1.2. DREAMS designed and pursued a strategy called the **Local RE Planning Capacity Building Program (LREP).** The program involved the conduct of training needs assessment of LGUs, series of workshops on RE policies and RE technologies or the BIGSHOW – Biogas, Geothermal, Solar, Hydro, Ocean and Wind. The technical experts of the REMB and other DOE units, particularly the Electricity Industry and Power Management Bureau (EPIMB) and the Energy Planning and Policy Bureau (EPPB), provided the technical expertise. The members of the Project Steering Committee, particularly the Department of Environment and Natural Resources, participated in these local events.
The **LREP** was DREAMS' prime mover to support the Total Electrification Plan or 100% electrification of the Philippine Government by harmonizing local and national policies and creating partnership mechanisms among local governments and Electric Cooperatives (EC). LGUs are enjoined to incorporate RE electrification in its plans for social services and livelihood, disaster risk management, and environmental conservation. LREP capacity building activities and technical expertise has been provided to provincial governments of Iloilo, Palawan, Lanao del Sur, Oriental Mindoro, and academic institution Mariano Marcos State University (MMSU).

A "power-house level" achievement of the LREP is the Iloilo Province RE Plan (IPREP). The provincial-level plan covers all 6,737 sitios in the province, by itself alone exceeding the ProDoc's initial targets. The first province-wide RE plan in Western Visayas, and among the first in the country, the plan sets the way for Iloilo Province's RE transition, and includes 3 feasibility studies for potential RE projects. Aside from support in drafting the IPREP, DREAMS supports activities that bring the plan to life: in 2021, installation began for the Support Facility for RE (SF4RE) assisted pilot RE Iloilo Provincial Hospital that the provincial government will replicate to its 13 other hospitals, and Solar PV training for 45 Iloilo municipal officers and engineers.

On top of the IPREP, the LREP provides technical expertise to develop local RE project proposals and plans with other localities. Thirteen (13) of these plans are approved for a goods and services grant for RE projects under Outcome 4's SF4RE. The RE plans cover both off-grid areas unconnected to the man Luzon-Visayas grid and areas connected to the main Luzon-Visayas grid but have intermittent supply due to transmission limitations and remote location. Local electric cooperatives refer to the latter areas as "off the grid."

Indicator 1.3. In 2019, DREAMS reviewed the status of a 2009 Department Circular (2009-07-0010) that was promulgated to support the RE law. Ten years after the passage of the circular, the study found that only two active businesses are in the list of accredited companies and only 18 applications underway. Both the study and related meetings with RE industry stakeholders found that RE Developers opt to supply from relatively cheaper imported RE materials to cut costs, even with incentives for local RE supply in place. This led to low market demand for local RE manufacturing industry, and thus few interested local RE manufacturers and assemblers. There are limited number of industry players aware, or have registered, or if registered have availed of the benefits on the 2009 Department Circular calling for the accreditation of local RE manufacturers and assemblers. These identified bottlenecks in developing the local RE manufacturing industry, a necessary condition for businesses to apply for accreditation, are rooted in market forces beyond the Project's scope.

As an adaptive measure, in 2021, DREAMS pursued an agreement with the Philippine Council for Industry, Energy and Energy Technology Research and Development (PCIEERD) for a comparative market study on imported and local RE supplies. The focus was to be on the micro-hydro industry as this industry – metal works and machinery fabrication- require local materials and many MHP are old and needed repair. The study also aimed to understand what strategies can best respond to the import-dominated market. However, until the last remaining year of the Project, PCIEERD remained unresponsive to the

Project's continuous coordination and communication. The PSC has directed the resources for Indicator 3 be redirected to other policy activities.

Progress towards results: Outcome 1

Indicator	Baseline Level	Target	Level at MTR	Level at FINAL PIR	Status at TERMINAL REVIEW	Rating at TERMINAL REVIEW (Met, Not Met, Partially Met)
• **Indicator 1.1:** Number of approved and enforced policies and guidelines for leveraging RE investments by Year 2	0	8	6	15	15	**Met**
• **Indicator 1.2:** Number of sitios with off-grid rural electrification plans using RE	0	12	0	28 (6,745)	28 (6,745)	**Met**
• **Indicator 1.3:** Number of businesses who have accreditation or applied for DOE accreditation by EOP to manufacture, fabricate or supply locally-produced RE components	0	50	0	2 (18)	2 (18)	**Not Met**

Status of Different Activities for Output 1.1 of the project

Activities	Modifications at Project Inception	Vetted Status at TERMINAL REVIEW
1.1.1 Drafting, finalizing, signing and implementation of Executive Orders, by Year 1, mandating all agencies to spell out their respective functions under the RE Act and how they can contribute to RE development. Examples include fiscal incentives; *DENR, NCIP, and NWRB issuing a Joint Administrative Order to streamline the granting of permits/contracts; President issuing directives to streamline the Environmental Compliance Certificate (ECC) process for RE*	Activity 1.1.1 will be replaced by activities to support the passage of SS1439 and HI3 4892 (Act for the creation at Virtual One Stop Shop for RE)	The Philippine Government has already issued Executive Order 30 when the DREAMS project started. EO 30 provided guidelines to hasten the approval of Energy Projects of National Significance including RE. ***Status at MTR:*** The Act for One Stop Shop for RE (EVOSS) is in place since June 2019. The project supported the public consultation process for this Act. The DREAMS project attended some of the EVOSS consultations and provided input as regard to the experience of the DREAMS project on its LREP Cap Build Program and include EVOSS as topic on some of the DREAMS project IECs. ***Status at TE:*** DREAMS harmonized EVOSS with complementing policy activities, contributing to a streamlined RE policy system and ensuring continuous EVOSS' relevance. These policy activities (under Outcome 2) include technical assistance the development of the Omnibus Guidelines for RE Service Contracts, which must reconcile its permitting timeline with EVOSS, and the inclusion of EVOSS data into the established RE Information System.
1.1.2 Amending of ***Fuel Mix Policy for Power Generation in the Philippine Energy Plan*** that defines the minimum RE share that will position renewable energy to become more mainstream in energy development in the Philippines. With DOE's current challenges in meeting RE targets of the NREP, in the alternative scenario, it will undertake efforts to amend the policy and set higher RE targets. Consequently, this	Support CCC is conducting a study related to item 1.1.2. DREAMS will review the results of the policy study to determine its activities that will result to output 1.1	***Status at TE:*** The ***Renewable Portfolio Standards (RPS)*** requires mandated participants to source or produce a portion of electricity requirements from RE. Minimum annual RPS annually increases at 1% of net electricity sales. DREAMS supported the RPS through logistical support of public consultations, enforcement of the Green Energy Option Program which contributes to Electric Cooperatives' RPS, establishment of the Philippine RE Market System (under Outcome 3) which operationalizes the RPS, and grants to ECs for local RE generation facilities.

Activities	Modifications at Project Inception	Vetted Status at TERMINAL REVIEW
will assist in overcoming the common perception that RE is expensive when in fact, electricity prices in the country are more reflective of the market and the high cost of fossil fuels, and that RE can actually contribute to bringing electricity cost down. This ambitious RE targets will also address a higher penetration of RE resources and enhance the investor environment for RE projects		The DREAMS supported-***NREP 2020-2040 modelled the country's path to 35% by 2030 through increasing the annual increment from 1% to 2.5%.***
1.1.3 Drafting of policy, by Year 1, by DOE to facilitate RE projects to supply to local distribution utilities or generators instead of injecting RE directly to the national grid. The policy will be finalized through a consultative process among the stakeholders and tabled for adoption;	Replace activity 1.1.3 with *capacity building for LGUs and electric cooperatives (EC) on existing RE policies,* e.g. RPS as part of LGU training on RE planning & policy formulation.	***Status at MTR:*** Capacity building for LGUs on LREP are ongoing ***Status at TE:*** The LREP provided an RE 101 workshop to beneficiary LGUs, which includes a workshop on RE policies.
1.1.4 Revise and prepare updated and enforced guidelines of REMB on RE national/local contract awarding, permitting and administration. This would contribute to streamlining approvals of RE Service Contracts (RESC) including management of DOE's systems for preparing and issuing Service Contracts, approvals of RE projects, monitoring and evaluation (M&E) of their development to ensure delivery of pre-development and development/ commercial stages of the Contract within specified time periods, oversight of the RE regulatory process, and the measurement, reporting and verification (MRV) of energy generation and GHG emission reductions;	1.1.4 will include activities that will lead to automation of service contracts awarding and permitting.	***Status at MTR:*** In 2018 to 2019, the DOE created a new institutional process for the permitting process. The processing and issuance of RE Service Contracts (RESC) was led by composite team under the office of Secretary. Now it has been rolled back to REMB. TOR has been prepared for appointment of a consultant for automation of service contracts. The DREAMS supported instead the passage of the Omnibus Guidelines on RESCs which was supported by the DREAMS project. The M&E component is included in the REMB MIS currently being develop with the support of the DREAMS Project. The REMB MIS is an attempt to strengthen the capacity of the REMB on digitization. The digitization of power service contracting including RESC rest with the EVOSS. ***Status at TE:*** The DREAMS-supported Omnibus Guidelines on RESCs has been approved in 2019. The REMB MIS has been contracted, for installation in later 2022.
1.1.5 Clarifications to DOE on harmonizing the law on NCIP on the interpretations of the share of indigenous peoples from the proceeds of RE projects during Year 1. This would contribute to barrier removal over the inability of RE project proponents to reach agreements with indigenous peoples for RE projects;	The EICC rules and guidelines will cover this activity.	***Status at MTR:*** E0-30 is already in place No additional activities are required
1.1.6 Efficient processing of the provisions of the RE Act such as **net metering, green energy options and FIT approvals**. This will take place during Years 1 and 2 to facilitate investment decisions amongst RE developers, many of whom are discouraged at the slow pace of approvals of these provisions;	The review of the effectivity and efficiency of the RA 9153 (RE Act) will be conducted. The output will be presented to the Joint Congressional Power Commission (JCPC). The review will be conducted by an independent external institution	***Status at MTR:*** DOE decided to conduct the revision in two stages: ***(1)*** A review of the 10-year of RE Act in Philippines (RE Decade Report) (completed)***, and (2)*** Identify the specific provision in the law (a consultant has been hired for this). The RE Decade Report prepared by the DOE, which was supported by the DREAMS project was a showcase of the achievements, challenges, and recommendations for a way forward for the RE Law. More details are found in the assessment of the NREP prepared by DOE which was also supported by the DREAMS project. A more comprehensive review of the implementation of the RE Law is included in the 2020 AWP.

Activities	Modifications at Project Inception	Vetted Status at TERMINAL REVIEW
		Status at TE: In 2020, DREAMS supported the RE Decade Report, a showcase of the RE Law's achievements, challenges, and recommendations of ways forward. Hard copies of the publication are shared with key RE market participants, national and local policymakers, and other stakeholders. From 2020-2021, DREAMS, through the contracting of an expert consultant, completed a **Regulatory Impact Assessment of the RE Law.** The review listed the policy mechanisms that have been in place and the actions taken by DOE on the audit conducted on the law. The expert also conducted a capacity assessment of the staff of the REMB to determine training needs and new capacities, if any needed by the staff. These outputs have been shared with the DOE and aims to guide the prioritization of DREAMS' other policy assistance.

Status of Different Activities for Output 1.2 of the project

Activities	Modifications/ Corrections in Activities at Project Inception	Vetted Status of Implementation
1.2.1 Work with LGUs in preparing local energy plans and ordinances to promote renewable energy development. This will include LGUs in Palawan Province and Iloilo Province in working with DOE to prepare local energy plans. Preparations of these local ordinances are being made with the assistance of DILG;	Activity 1.2.1 will include the activities under Output 2.1	***Status at MTR:*** The project has initiated a '**Localized RE Planning Capacity Building Program'** The program is currently engaging the provincial government of Palawan and Iloilo. The program is assisting local government units and electric cooperative to integrating RE plan to their respective development plans to electrify unelectrified households and RE project developments in their localities. ***Status at TE:*** The Project's LREP completed this activity fully in Iloilo and remain on-going in with Palawan. The LREP strategy was also implemented at the Regional level upon the request of the Regional Development Council (RDC)-Region 6. The RDC is the national planning and coordinating mechanism under the Office of the President. The body is chaired by a Provincial Governor that belongs to the region with the National Economic Development Authority as Secretariat. Seven provinces participated in the "RE 101"session. The RDC is preparing a 2023-2028 plan (for 7 provinces) that will have a defined RE component.
1.2.2 Conduct training workshops (2 per year over a 5-year period) for local government personnel to augment DOE efforts to enhance LGU capacities to leverage RE projects in meeting local development goals, using clear implementation guidelines from the RE Act;	The training workshops will include: capacity training to LGUs in the areas of local taxation, economic valuation of public assets. e.g. land.	***Status at MTR:*** The project has initiated a 'Localized RE Planning Capacity Building Program' The program is currently engaging the provincial government of Palawan and Iloilo. As a part of this program capacity building to the officials of LGUs is being carried out. ***Status at TE:*** The Project's LREP completed this activity. LREP includes an RE 101 module covering RE policy mechanisms, a module each for the 6 different RE technologies, and a technical needs assessment.
1.2.3 Facilitation of the active engagement of the LGUs at all stages of RE project through the conduct of meetings and working with designated focal points in the LGU;		***Status at MTR:*** This is being done as a part of 'Localized RE Planning Capacity Building program' ***Status at TE:*** The Project's LREP completed this activity. Part of the LREP provision of technical assistance from RE experts, DOE technical staff for developing RE project proposals until RE project commissioning.
1.2.4 Harmonization of the RE approval process that encompasses both national and local requirements; and		***Status at MTR:*** Resolutions by LGUs for Palawan and Iloilo is already in place. More work is being done. ***Status at TE:*** Completed. The DREAMS-supported Omnibus Guidelines of RESC harmonizes the RE Service Contract approval process.
1.2.5 Conduct workshops and seminars in collaboration with DOE to encourage involvement of local businesses and LGUs as direct investment partners to familiarize them with the process of developing RE projects (2 workshops over the entire 5-year Project period).		***Status at MTR:*** This is being done as a part of 'Localized RE Planning Capacity Building program' ***Status at TE:*** The Project's LREP completed this activity. See Activity 1.2.2-1.2.3.

Status of Different Activities for Output 1.3 of the project

Activities	Modifications at Project Inception	Vetted Status of Implementation
1.3.1 Organize and conduct outreach and stakeholder coordination activities with NGCP and local DUs (to provide more security to delivery of electricity from RE projects), and with private sector technical expertise on grid studies. This will involve annual consultations over the entire 5-		*Status at MTR:* NGCP is carrying out this activity on its own. The DREAMS project participates in the meetings and consultations organized by NGCP. Aside from NGCP initiatives, the DOE also initiated the Competitive RE Zones (CREZ) for strategic development of RE and transmission lines. ***Status at TE:*** NGCP carries out this activity independently.

Activities	Modifications at Project Inception	Vetted Status of Implementation
year Project period between DOE and NGCP (5 consultations) during preparation of the PDP where a list of proposed RE projects is provided that will inform and enable NGCP to initially assess the impact of the RE inputs especially those that will be embedded to the DUs and ensure security of power deliveries;		The NGCP is an active member of the DREAMS Project Steering Committee (PSC). DREAMS' LREP and SF4RE addresses this activity through acting as a unique platform for DUs to coordinate with LGUs and other local stakeholders to design and establish local RE projects. LREP and SF4RE has engaged and partnered with 5 DUs, resulting in actual RE projects.
1.3.2 Preparation of promotional material and RE workshop presentations during Years 1 and 2 for RE developers on compliance requirements under the Philippine Grid and Distribution Codes as required by EPIRA, and include protocols for the host DU to advise the transmission provider of new RE projects;		***Status at MTR:*** NGCP is carrying out this activity on its own. The DREAMS project, upon invitation participates in the meetings and consultations organized by NGCP with local cooperative or are provided information as needed. ***Status at TE:*** The LREP and SF4RE contributes to this activity through including DUs among its beneficiaries and partners. Notable here is a partnership with Iloilo II Electric Cooperative (ILECO II) for a SF4RE supported Solar PV Rooftop System for the Provincial Hospital of Iloilo. Through the RE project, ILECO II will be able to demonstrate its transmission role for RE through the Enhanced Net Metering Program.
1.3.3 Conduct training workshops for qualified consultants (2 workshops over the entire 5-year Project period) on new guidelines for grid stability studies for RE developers. With NGCP's transmission lines and DU's distribution networks under the "open access" rules, an important mandatory requirement for the RE developer is the completion of a "grid impact study", facility study and distribution impact study for the RE project. This training will standardize such reports which are mandatory studies for assessment of the impact of the RE on the local grid; and		NGCP is carrying out this activity on its own. The DREAMS project participates in the meetings and consultations organized by NGCP.
1.3.4 Conduct regular stakeholder meetings (4 each year over the entire 5-year Project period) between DOE, their RE developers with service contracts and all RE stakeholders during the course of RE project development, to ensure full compliance with NGCP requirements that will minimize delays in their approval.		NGCP is carrying out this activity at its own. The DREAMS project participates in the meetings and consultations organized by NGCP ***Status at TE:*** The RE divisions (BIGSHOW) of REMB are conducting stakeholders meeting through their respective industry associations. The DREAMS project, during the review and preparation of the NREP 2011-2030 and 2020-2040, attended these consultations.

Status of Different Activities for Output 1.4 of the project

Activities	Modifications at Project Inception	Vetted Status of Implementation
1.4.1 Conduct a study during Year 3 that involves the collection of all technical specifications and information of RE technologies being proposed for off-grid areas, assesses their capacity for energy generation, and proposes realistic tariffs for each type of RE technology for off-grid areas. The study will also examine at different types of off-grid markets including an electrical cooperative and a qualified third party (QTP) provider		***Status at MTR:*** As per project document, this activity is to be carried out in the 3rd year of project implementation. Planned under the work plan for the year 2020. It is recommended to expedite this work. This work may be combined with activity 3.1.3. Please see Recommendation 5. ***Status at TE:*** DREAMS, through the SF4RE, encouraged different types of off-grid electricity suppliers to pursue and establish RE generation facilities. An RE Modelling report captures SF4RE's experience, outcomes and policy implications.

Activities	Modifications at Project Inception	Vetted Status of Implementation
of electricity where these types of cooperatives and entities do not have the capacity to deal with more than one power supplier, and provide recommendations on how to encourage off-grid electricity suppliers to use RE;		
1.4.2 Conduct analysis of the existing tariff structure for the FiT and table for propose for adoption by the NREB;	The studies and activities will be done in coordination with National Renewable Energy Board (NREB). NREB has completed the public consultations on the RPS and has on-going public consultations on the Green Energy Options. The DREAMS project will support the additional public consultations, if needed, on RPS, FIT, green energy. The production and publication of information, education and campaign (IEC) materials on the said implementing guidelines will also be supported.	This activity was dropped at the time of project inception ***Status at TE:*** DREAMS policy support activities completed the modified activities proposed at project inception.
1.4.3 Conduct workshop with DOE policymakers in Year 4 on study outcomes and policy recommendations to ensure cooperatives and QTPs in SPUG areas utilize RE, possibly through generation of RECs in off-grid applications, and buying RECs when they are in need of energy;		***Status at MTR:*** This is no longer applicable since the policy for the RPS On-grid and Off-grid was prepared and passed prior to DREAMS project start. ***Status at TE:*** Instead of a workshop with policymakers, DREAMS supported the review of the RPS in Off-Grid guidelines areas through the provision of legal RE expert and logistical assistance for its public consultations in 2022.
1.4.4 Conduct studies for DOE on policies to encourage RE development including a study of off-grid tariffs and RECs.		***Status at MTR:*** A consultant will be hired for this activity. TOR for the consultancy is being worked out ***Status at TE:*** DREAMS contracted policy experts to provide technical assistance for the development of 18 RE policies.

Status of Different Activities for Output 1.5 of the project

Activities	Modifications at Project Inception	Vetted Status of Implementation
1.5.1 Conduct an assessment of the capacity and market of local RE manufacturing industry by Year 1 to develop a strategy to improve the local manufacturing industry for RE equipment and parts. This will include a review of current incentives and their subsequent enhancement to catalyze accreditation of local RE manufacturers. Special considerations will be taken for small off-grid RE systems where there is a high cost of transporting equipment, and where consignment arrangements must be considered to reduce the cost. Recommendations for follow-up will be provided;		***Status at MTR:*** A consultant will be hired for this activity. TOR for the consultancy are being worked out. ***Status at TE:*** DREAMS completed the assessment of the DC related to the RE Manufacturing and Assembly Industry, and shared findings with the DOE and members of the Project Steering Committee.

1.5.2 Assessment of the capacity for testing of new RE products on the market as well as quality of assembly of RE systems for compliance to various RE product standards. The activities will be executed by Years 1 and 2. Recommendations for follow-up will be provided;		***Status at MTR:*** Still to be done. The activity is included with 1.5.1. ***Status at TE:*** DREAMS completed an RE Manufacturing Study and shared recommendations with the DOE.
1.5.3 Review and strengthen power meter quality standards by Year 1. While it is in the interest of the RE developer to procure the best quality meters, those that are currently available in the market are of low quality in terms of accuracy and durability compared to precision meters from countries such as Germany. A review of these standards and their enforcement will be conducted to support an up-scaled RE market;		***Status at MTR:*** Still to be done. It is recommended to fast track this activity. Please see recommendation 6. ***Status at TE:*** The Department of Energy, together with the Department of Science and Technology and Department of Trade and Industry, pursued this activity independent of DREAMS. The activity was first submitted for NAMA funding, but was unsuccessful. No further actions were taken.
1.5.4 Conduct a workshop for DOE in Year 2 to present a summary of recommendations to improve the involvement of local businesses in the manufacturing and assembly of RE equipment. DOE will adopt these standards and AREC officers will be targeted to carry out the recommendations of the assessment.		***Status at MTR:*** The report from the consultant for activity 1.5.1 will be available by June 2020. This activity will be carried out after that. ***Status at TE:*** The results of the RE Manufacturing Study was presented in two workshops, one with the DOE and industry players, and another with the Philippine Council for Industry, Energy, and Emerging Technology Research and Development.

.***Summary of the Ratings for different Outputs of Outcome 1***

Output	Rating at TERMINAL REVIEW for progress towards achievement of results
Output 1.1: Approved and enforced cohesive national RE policy, implementing rules and mechanisms.	**Highly Satisfactory**
Output 1.2: Approved and enforced local ordinances, and policies aligned with national RE objectives.	**Highly Satisfactory**
Output 1.3: Strengthened and approved guidelines on RE penetration into grids.	**Not Rated**
Output 1.4: Completed assessments on real cost of RE for formulation of tariffs	**Satisfactory**
Output 1.5: Approved policy recommendations for promoting local manufacturing and assembly of quality RE systems.	**Moderately Unsatisfactory**

In view of the achievements for the indicators (Indicators 1.1 to 1.3) and keeping in mind the progress towards results for the various Outputs, **the result for Outcome 1 of the project is rated as Satisfactory (S).**

Progress towards results: Outcome 2

The Outcome 2 of the project is intended to address the barriers associated with the need for improved capacity in the Philippines, mainly at the local level on RE issues and the development, operation and management of RE projects. The outcome resulting from the outputs from this component is strengthened institutional capacity that leads to increase RE investment at the local level. The succeeding table below provides an overview of the progress towards achievement of results for Outcome 2 of the project against the set of indicators and the targets as listed below.

Indicator 2.1. Through the LREP (introduced in Indicator 1.2), the Project exceeds its target for Indicator 2.1. The LREP engaged with 17 LGUs, leading to the identification and development of 9 actual local RE projects. These RE projects have been approved to receive funding from the DREAMS' SF4RE, and a counterpart financing from the LGU champions. Installation and implementation is ongoing.

The Project's results for this indicator are notably rooted in one of the LREP's features and lessons: local RE projects and plans must be championed not only by LGUs as the indicator envisioned, but also by electric cooperatives and the community. The LREP acted as a platform for these three RE stakeholders to coordinate and in some cases, iron out conflicts for the development of an RE project.

Indicator 2.2. Achieved beyond target levels, this indicator is also actualized through the LREP. The LREP's engagement with local RE stakeholders created province-level RE focal points, and RE Experts Groups (REEG), who eventually became partners for 14 local RE projects. These LREP partners act as "market service centers" in lieu of Affiliated RE Centers identified in the Project Document. At the onset of DREAMS implementation, many of the DOE-established centers were no longer functional.

In 2021, DOE identified still viable ARECs, and began a performance review of ARECs. The review will determine the level of support DOE may provide to the ARECs. Depending on location and the results of DOE's performance reviews, DREAMS is planning to link these viable ARECS to local DREAMS partners.

Going above province-level, the project expanded LREP to the regional level. DREAMS responded to the request of the Regional Development Council (RDC)-Region 6 for an RE Conference and Workshop for the region's LGUs, ECs, and other RE stakeholders. Seven provinces participated in the "RE 101" and BIGSHOW breakout sessions. The RDC is preparing a 2023-2028 plan that will have a defined RE component.

Indicator 2.3. The RE Information Management System (RE IMS) is beginning its development and installation. This will serve as a reference for the students of the DREAMS-supported Mariano Marcos State University RE short course for at least 25 LGUs this year 2022. The course design requires its students to develop an RE Plan or Proposal as a capstone project.

Initially, RE project proposals being developed under the LREP and SF4RE were intended to draw technical information and advice from the RIS. The RIS underwent 4 retenderings, due to the lack of responsive bids from the market. An expert was contracted to review the ToR to address any issues that may be contributing to failure of bidding. The unforeseen delays of tendering means the system will go online already after said RE project proposals have already been completed. The established RIS will benefit future RE project designs with interested DREAMS-engaged LGUs (such as Oriental Mindoro, Iloilo, and Lanao del Sur) beyond the DREAMS project.

Progress towards results: Outcome 2

Indicator	Baseline Level	Target	Level at MTR	Level at PIR	Status at TE	Rating at TERMINAL REVIEW
• **Indicator 2.1:** Number of funded and implemented RE projects championed or facilitated by LGU-based RE focal points	0	5	0	9	9	**Met**
• **Indicator 2.2:** Number of RE projects facilitated by operational provincial-level RE market service centers	0	5	0	7 (14)	7 (14)	**Met**
• **Indicator 2.3:** Number of RE projects that were designed based on information and technical advice obtained from the established RE knowledge platform	0	6	0	0	0	**Not Met**

Status of Different Activities for Output 2.1 of the project

Activities	Modifications at Project Inception	Vetted Status at TERMINAL REVIEW
2.1.1 Harmonizing local energy plans with national RE plan or policies through preparation of a standard methodology and template, a coordination plan for the various entities and its dissemination through an LGU outreach program. Selected pilot LGUs will prepare potential RE projects for local development and submitted to DOE during Years 1 and 2 as a part of the RE and economic development plans that work towards meeting national and regional RE targets. This would involve DOE energy planners who will be based at the LGUs;	The planned activities under 2.1.1 and indicators will be subsumed and targeted under output 1.2.1.	***Status at MTR:*** No assessed as it has been subsumed under 1.2.1. This activity is ongoing under the LREP Cap Build Program of the DREAMS Project. ***Status at TE:*** This activity is completed through the LREP.

Activities	Modifications at Project Inception	Vetted Status at TERMINAL REVIEW
2.1.2 Organize and conduct training programs to improve the knowledge of local officers in the LGUs of the provinces of Palawan and Iloilo on RE project development issues. LGUs ongoing efforts will be supplemented by training workshops organized for DOE outreach officers (one workshop annually for the entire 5-year Project period) to assist and guide implementation of local energy plans and development of pilot RE projects, some of which are RE projects funded by private RE investors as discussed in Output 4.7	New partner companies need to identified by Yr. 1 See output 4.6 on status of the list of private companies that offered CO-financing but whose projects are by now terminated	***Status at MTR:*** The project is in the process of identifying new partner companies as the projects of the private companies which were initially taken on board were either discontinued or completed. The activity is slightly delayed but is still doable. Particularly, considering the recommendation to extend the implementation timelines of the project by one year (please see recommendation 3) ***Status at TE:*** Activity training programs for LGUs are completed through the LREP. Training programs for specific private-funded RE projects are no longer applicable due to lack of partner private-funded RE projects (See Outcome 4)
2.1.3 Streamlining of the regulatory process to be conducted from Years 2 to 3. This will involve identification of several RE projects within a particular pilot LGU that would have similar regulatory permitting requirements, and facilitate setting of a streamlined local regulatory approval process for that LGU. This approach will be reviewed for further streamlining of the regulatory approval every 3 years		***Status at MTR:*** Provided inputs to LGUs in crafting Municipal Ordinance/ Resolutions promoting RE development in their localities. One municipality was able to pass a Municipal Board Resolution to incorporate RE development in their comprehensive development plan. The streamline of regulatory process was done through the EVOSS Law and the E.O. 30 ***Status at TE:*** DREAMS completed this activity through LREP with partner LGUs, and technical assistance for EVOSS and EO 30.

Status of Different Activities for Output 2.2 of the project

Activities	Modifications/ Corrections in Activities at Project Inception	Vetted Status of Implementation
2.2.1 Capacity development of DOE personnel on the evaluation and issuance of RE Service contracts. In addition to ongoing DOE training for the issuance and management of Service Contracts, incremental workshops will be conducted with NWRB and DENR, as well as the analysis of the recently imposed requirements for RE developers (2 workshops in Years 1 and 2 that will open discussions between NWRB and DENR on the water sustainability plans required from RE developers). The workshops would clarify what processes may be streamlined (e.g., 30-day posting of water rights application in LGUs and DPWH regional offices), what documents and specific contents may be required from RE developers on their submissions to both NWRB and DENR, and if the two agencies could agree to consolidate these requirements with the intention of accelerating the approval process for RE projects. Analysis and clarification on a recently imposed requirement for RE developers due to its perceived overlaps with the Environmental Impact Statement (EIS) System;	This Activity is already being done by the Energy Investment Coordinating Council	With the changes made at the time of inception, the project is no more supporting this activity directly. ***Status at TE:*** The Project contributed to this activity through its technical assistance to the development and enforcement of the Omnibus Guidelines for RE Service Contracts (See Outcome 1).
2.2.2 Conduct coordination meetings among agencies such as National Commission on Indigenous Peoples (NCIP) and Environment Management Bureau (EMB) of the DENR on streamlining the approval process for (i)	This Activity is being done by the Energy Investment Coordinating Council	With the changes made at the time of inception, the project is no more supporting this activity. In January 2020, the DOE and NCIP created a Technical Working Group to streamline energy

Activities	Modifications/ Corrections in Activities at Project Inception	Vetted Status of Implementation
compliance of the RE project application to the Indigenous People's (IPs) Right Act, as well as (ii) the Environmental Clearance Certificate (ECC) under the EIS, respectively;		projects in IP areas with the EO 30 as reference point for the process.
2.2.3 Assessing and clarifying the consistency in the determination of Government and IP share of revenues generated by RE resources that are developed and utilized from national wealth. This will be completed in Year 1;		With the changes made at the time of inception, the project is no more supporting this activity. The DREAMS project has included in its LREP the processes and guidelines under ER1-94 (amount of funds allocated by generation companies to LGU, ECs and Communities that are hosting energy projects). Partner LGUs of DREAMS were not aware of this guideline prior to the project. The Electric Power Industry and Management Bureau of DOE is the focal agency for this.
2.2.4 Assessment and provision of recommended measures to streamline the long process at provincial offices to convert public tenured lands to commercial land on which RE projects are located; and		With the changes made at the time of inception, the project is no more supporting this activity. This is covered by the EO 30
2.2.5 Forming and convening a task force (twice annually over the entire 5-year Project period) to facilitate development of and approve sustained improvements in the regulatory process.	This Activity is being done by the Energy Investment Coordinating Council	With the changes made at the time of inception, the project is no more supporting this activity.

Status of Different Activities for Output 2.3 of the project

Activities	Modifications at Project Inception	Vetted Status of Implementation
2.3.1 Conduct technical training program for AREC personnel, local officers at the LGU level who are currently under Affiliated Renewable Energy Centers (ARECs) on RE development. Joint training and exchange sessions will be organized during Years 2 and 3 (4 per year) to facilitate coordination among the LGU focal points and ARECs personnel. These personnel will eventually be based in Market Service Centers (MSCs, see Output 2.4);	Of the 22 ARECs established, only 5 are known as operational. An assessment of the performance and status of the ARECs must be done as an additional activity and will be completed in year l as part of activity 2.3.1	***Status at MTR:*** Most of the AREC are no more functional. Due to which this activity could not be carried out. The project as an adaptive measure is carrying out training of the officials of LGUs under the LREP. A study on ARECs in Iloilo and Palawan was conducted by the DREAMS project. The study points out that the major challenge encountered by ARECs in those areas is the sustainability aspect of the ARECs operations. ***Status at TE:*** This activity was completed through the LREP. See Indicator 2.2 on the Project's adaptive measure of establishing provincial-level RE focal points to act as "market service centers"
2.3.2 Conducting seminars and workshops during Years 2, 3 and 4 (2 for each year) to improve the capacity of DOE officers on managing local development of RE projects. Workshop topics will include i) processing of financial mechanisms being activated under Output 1.4; ii) DOE M&E systems for RE project monitoring (including contract milestones, facets of establishing electro-mechanical completion, MRV systems from Output 1.1 and other aspects of M&E systems); iii) permitting requirements and obligations by project proponents for compliance as well as legal enforcement mechanisms as detailed under Output 2.2; and iv) best practices for maintaining community relations.		***Status at MTR:*** This activity is yet to be carried out. ***Status at TE:*** DREAMS completed this activity through the LREP for local project proponents, and DOE Renewable Energy Management Bureau technical staff capacity building support. Workshop topics have been adapted to meet emerged technical needs.

Status of Different Activities for Output 2.4 of the project

Activities	Modifications at Project Inception	Vetted Status of Implementation
2.4.1 Conduct business planning for the setup of strategically located MSC locations during Years 1, 2 and 3 for the purposes of providing regulatory guidance to private sector investors and project developers getting into a provincial RE market;		***Status at MTR:*** The project is working with the provinces of Palawan and Iloilo. As was mentioned earlier, the MSC at Palawan is no more working (please see the write up for activity 2.3.1), as the Affiliated RE center was not able to bring the counterpart contribution (50%) of funds required for the operation. 2.3.1. ***Status at TE:*** The LREP achieved this activity, and capacitated and established RE Experts Groups in Palawan and Iloilo to act as "market service centers"***.***
2.4.2 Establishment of strategically located MSCs during Years 2 and 3 to interface with investors, civil society and financers. This will include setting budgets and sustainability plans for DOE to sustain operations of each MSC office;		***Status at TE:*** The LREP achieved this activity, and capacitated and established RE Experts Groups in Palawan and Iloilo to act as "market service centers" The LREP also partnered with other provincial-level LGUs and a state university championing RE and RE plans.
2.4.3 Development of promotional materials (i.e., pamphlets, guidebooks, web postings) during Years 2 and 3 that would include information on results of the RE resource assessment that DOE is currently undertaking as a part of their baseline effort, and on financial mechanisms of Output 4.1 that would target potential RE developers, notably at the local level;		***Status at MTR:*** Development of the promotional material is an ongoing activity. The activity of web posting is being related to the activities for Output 2.5. The activity 2.4.3 also has a direct bearing on the achievement for Indicator 2.3 ***Status at TE:*** DREAMS produced a guidebook on MHP development and conducted an RE Conference-Workshop in Region 6, both of which covers resource assessment and financial mechanisms. The Project has also started developing a branding campaign with a contracted communications firm, which will rollout materials throughout 2022 to early 2023.
2.4.4 Establishment of a local RE project database and monitoring system during Years 3 and 4 to track RE development and GHG reductions that will be reported to the DOE; and		***Status at MTR:*** This activity is also related to activity 1.1.4. No progress is reported for this activity. To be included in the REMB MIS and RE Knowledge Portal. Stakeholder's consultations was done and an I.T. Expert was hired for the system analysis and design. The system installation will be done by the end of the year of early next year. ***Status at TE:*** DREAMS has contracted software and hardware for the REMB IMS. Based on contract timelines, installation will be completed by February 2022, which is beyond end of project schedule this January 2023.
2.4.5 Launching and sustained updating of a Provincial RE website during Years 4 and 5. Such a website will contain among other things products from the streamlined RE process developed in Component 1 that will boost the confidence of RE investors and developers showing that the RE project applications will be efficiently processed. Information from the RE resource assessments will be made available on the website.		***Status at MTR:*** No progress reported***.*** To be included in the REMB IMS (RIS) and RE Knowledge Portal. Stakeholder's consultations were done and an I.T. Expert was hired for the system analysis and design. The system installation will be done by the end of the year of early next year. ***Status at TE:*** Activity is included in the REMB IMS. DREAMS has contracted software and hardware for the REMB MIS. Installation will be completed throughout 2022. The 3 provincial field offices of DOE are involved in the construction of the RIS.

Status of Different Activities for Output 2.5 of the project

Activities	Modifications at Project Inception	Vetted Status of Implementation
2.5.1 Formulation of a communication strategy for the Project;		***Status at MTR:*** This activity is still be to done. It is planned under the workplan for the year 2020. ***Status at TE:*** The Project has contracted a communications firm, which started developing a branding campaign for rollout throughout 2022 to early 2023. The contract will end April 2023 which is beyond the end of

Activities	Modifications at Project Inception	Vetted Status of Implementation
		project schedule this January 2023.
2.5.2 Production and screening of 2 Public Service Announcements by Year 3;		***Status at TE:*** The Project has contracted a communications firm, which started developing a branding campaign for rollout throughout 2022 to early 2023.
2.5.3 Production and screening of a Project Documentary by EOP;		***Status at TE:*** The Project has contracted a communications firm, which started developing a branding campaign for rollout in early 2023.
2.5.4 Production of communication pieces, short stories, and knowledge pieces to be published in newspaper, websites, newsletters (at least 1 each year with cumulative 4 by EOP).		***Status at MTR:*** Yet to be done. To be included in the REMB IMS and RE Knowledge Portal. Stakeholder's consultations was done and an I.T. Expert was hired for the system analysis and design. The system installation will be done by early next year. ***Status at TE:*** The Project has produced and released Press Releases on its activities, published on the DOE website. Some Project activities also has coverage with local media. The Project has contracted a communications firm, which started developing a branding campaign for rollout in early 2023.

Summary of the Ratings for different Outputs of Outcome 2

Output	Rating at TERMINAL REVIEW for progress towards achievement of results
Output 2.1: Harmonized local level development plans and RE programs with national DOE programs	**Highly Satisfactory**
Output 2.2: Streamlined system of issuance of permits and licenses	**Not Assessed**
Output 2.3: Focal points established within LGUs	**Moderately Satisfactory**
Output 2.4: Operational provincial-level market service centers	**Moderately Satisfactory**
Output 2.5: Established and operational RE knowledge platforms	**Moderately Satisfactory**

In view of the achievements for the indicators (Indicators 2.1 to 2.3) and keeping in mind the progress towards results for different Outputs, **the result for Outcome 2 of the project is rated as Moderately Satisfactory (MS).**

Progress towards results: Outcome 3

Outcome 3 deals with the establishment of RE Registry and the registration of RE developers.

Indicator 3.1. The Project exceeds Indicator 3.1, as mandatory and voluntary generators register in the RE Registrar. In 2018, DREAMS provided the software and hardware to install the Philippine RE Management System (PREMS) and the RE Registrar, platforms for the enforcement of the RE Market Rules and the RPS. These platforms were activated in 2019. Trainings for participants were conducted in 2020. An IT expert was contracted to complete a Business Continuity Plan in 2021 and to provide monitoring and advice on system enhancements. DREAMS' contribution to PREMS is one of the Project's landmark achievements. The PREMS operationalizes the RE Market and the RPS, ensuring that mandated institutions source from RE and paving the way for a 35% RE generation mix share by 2030 and 50% by 2040.

Indicator 3.2. Similarly, the Project achieves beyond its target RE developer registrants. As of June 2022, 94% of mandated participants have already approved registrations.

Progress towards results: Outcome 3

Indicator	Baseline Level	Target	Level at MTR	Level at PIR	Status at TERMINAL REVIEW	Rating at TERMINAL REVIEW
Indicator 3.1: Cumulative MW of installed capacity registered in the RER established in the "capitalized" RE market	0	10	0	2751.83 MW	2,833.25 MW	**Met**
Indicator 3.2: Number of RE developers registered in the RER	0	15	0	133	136	**Met**

Status of Different Activities for Output 3.1 of the project

Activities	Modifications at Project Inception	Vetted Status at TERMINAL REVIEW
3.1.1 Forecasting of energy mix and determination of the infrastructure requirements for each energy mix. This will upgrade current forecasting methodology that does not consider the variability of RE plant outputs and will include an inventory of proposed RE projects and commitments that are commensurate with the grid to absorbing variable renewable energy (VRE) inputs into the grid. Information regarding the proportions of solar, wind, hydropower, geothermal and other RE sources into the grid will assist in the forecasts of RE inputs and the energy mix over the short and long term;		***Status at MTR:*** This activity is still to be done. The RE forecasting is included in the revised NREP (2020-2040) currently being prepared by DOE with the support from the DREAMS project. The revised NREP will be an input to the Philippine Energy Plan (PEP) including the Transmission Development Plan (TDP). ***Status at TE:*** DREAMS completed this activity through the development and approval of NREP 2020-2040.
3.1.2 Benchmarking on forecasting standards that will require foreign country experience;		This activity is no longer required since the DOE has already acquired capability on forecasting (PLEXOS Software) through its EPIMB. In terms of RPS forecasting, the REMB have developed an Excel based forecasting tools consistent with the approved RPS rules. The EPIMB also recommends the use of opensource forecasting software (e.g. OSeMOSYS). ***Status at TE:*** DREAMS provided PLEXOS software and training for the REMB, to enable forecasting capacities.
3.1.3 Evaluating the economics of RE plant operations and the projected impact of market settlements from REC on the RE project;		***Status at MTR:*** This activity is still to be done. Please see recommendation 5 as well. ***Status at TE:*** DREAMS is currently providing technical assistance through a consultant to complete this activity by 2022.
3.1.4 Studying battery storage of energy from solar PV and other RE technologies	Activity 3.1.4 will be expanded to include all forms of energy storage systems	***Status at MTR:*** The DOE has already issued a policy framework on energy storage in 2019. Included in the 2020 AWP is a study on flexible energy storage systems. ***Status at TE:*** The DOE's Electric Power Industry Management Bureau is conducting the activity independently. No further support needed was identified.
3.1.5 Developing a voluntary RE market where the voluntary purchase of renewable energy certificates (RECs) by private companies that want to boost their "green image" can contribute to reduction in the cost of RE and boost corporate social responsibilities (CSR);		***Status at MTR****:* This is an ongoing activity being done by NREB ***Status at TE:*** This is an ongoing activity conducted by NREB and the DOE. The activity is exploring assistance from the United Kingdom.
3.1.6 Developing market monitoring tools and compliance mechanisms that would discourage non-competitive behavior such as hoarding of RECs;		***Status at MTR:*** This activity is still to be done. It is planned for the year 2020. ***Status at TE:*** DREAMS provided technical assistance for the completion of the REM Manual, which establishes the REM Governance Committee (RGC). The body has mandate and power to oversee and monitor the REM and RE Registrar. To

Activities	Modifications at Project Inception	Vetted Status at TERMINAL REVIEW
		augment this monitoring, DREAMS completed a Business Continuity Plan and a PREMS training for relevant technical staff.
3.1.7 Developing options for alternative compliance payment mechanisms in the event that a RE power producer has a shortfall of RE power delivered to the market;	This activity is dropped	Not assessed. RPS Compliance mechanisms, settlements and disputes are incorporated in theIRR of the REM Rules that DREAMS project assisted in passage and roll-out. (DC 2019-12-0016).
3.1.8 Assessing the requirement of ancillary services;		In 2019, the DOE has adopted a general framework governing the provision and utilization of ancillary services in the grid (DC 2019-12-0018) to ensure the reliability, quality, and security of electricity power.
3.1.9 Monitoring methodologies for co-gen/hybrid systems. The RE Policy does not yet cover the issue of the renewable proportion of a hybrid system;		***Status at MTR:*** No work on the RE policy relating to the RE part of the Hybrid power generation systems. Work on the monitoring methodologies is presently underway ***Status at TE:*** Currently, no hybrid systems are in the RE Market. The 2019 REM Rules provide for participants with multi-fuel hybrid systems. After study and discussions, the PREMS Technical Working Group (chaired by the DREAMS Project) deemed the activity's study not relevant in current RE Market conditions.
3.1.10 Expanding the implementation of the Green Energy Options and assistance to Electricity Suppliers that market RE-based electricity products under the Retail Competition regime. This would enable the Government to get the support of the general populace in the utilization of the RE-based electricity. The Project will also consider ancillary services in the studies noting that NGCP would not be able to integrate all RE technologies without securing transmission line stability.		***Status at TE:*** The Project completed this activity through provision of technical assistance for the development and rollout of the Green Energy Option Program (GEOP). DREAMS also conducted activities to mainstream of GEOP within ecozones. DOE also pursued this activity through a partnership between DOE and the Development Academy of the Philippines, but did not push through due to budgeting constraints.

Status of Different Activities for Output 3.2 of the project

Activities	Modifications/ Corrections in Activities at Project Inception	Vetted Status of Implementation
3.2.1 Review and enhance existing implementing guidelines for "capitalized" RE market development policy. Enhancements would include details of how RECs are issued, sold and traded, how transaction information is disseminated using a website bulletin posting, how RECs are transferred to REC buyers, and monitoring industry compliance to the RPS. These need to be completed and approved by Year 2;		This activity has been completed. The guidelines have been included in the REM rules.
3.2.2 Conduct training sessions for PEMC personnel on the assembly, operations and management of the REM;		This activity has been completed.
3.2.3 Procurement and deployment of software for the web-based RE Registrar in Year 2 up to USD 500,000. Procurement will also include training for operating and maintaining the system; and		This activity has been completed.

3.2.4 Conduct trials of the capitalized RE market mechanisms during Year 3.		***Status at MTR:*** This is an ongoing activity ***Status at TE:*** The Project completed this activity as part of the PREMS activation in 2019.

Summary of the Ratings for different Outputs of Outcome 3

Output	Rating at TERMINAL REVIEW for progress towards achievement of results
Output 3.1: Completed comprehensive market assessments	**Unsatisfactory**
Output 3.2: Established "capitalized" RE markets complete with RE Registrar and operational support	**Highly Satisfactory**

In view of the achievements for the indicators (Indicators 3.1 and 3.2) and keeping in mind the progress towards results for different Outputs, **the result for Outcome 3 of the project is rated as Satisfactory (S).**

Progress towards results: Outcome 4a

Outcome 4a of the project is to address the barriers related to the lack of successful RE projects in the country. Outputs 4.1 to 4.4 will contribute to the achievement of Outcome 4a. The succeeding table below provides an overview of the progress towards achievement of results for outcomes of the project against the set of indicators and the targets as listed.

Indicator 4.1. The Project Preparatory Fund was established as the Support Facility for RE (SF4RE), with an initial US$ 1 million facility funding for goods and services for local RE projects. These actual RE projects may be for rural household electrification, productive use and livelihood, delivery of social services, promotion of the RE Law and/or climate resiliency. The SF4RE is a practical manifestation of capacities learned from LREP. It aims to strengthen local capacities and encourage investments that will integrate RE policies and projects in the executive and legislative agenda of LGUs, DUs, academe and the community strategies of other agencies organizations, rural electric cooperatives, and civil society organizations/foundations. Off-grid and far-flung areas are priority sites.

DREAMS developed 18 RE Projects across the Philippines with a total installed capacity of 1.60 MW. Aside from SF4RE Projects, DREAMS developed the feasibility study for an 11.11 MW Net Zero Campus RE project in partnership with Mariano Marcos State University. The study lays out how to make MMSU not only an energy neutral campus sourcing from renewable source, but also an RE supplier that generates energy to sell. The study has leveraged funding both from MMSU and other financing sources to install its proposed facilities, including a SF4RE grant for a 22 kW Solar Aquatic System.

DREAMS has also developed rehabilitation and expansion projects, including a 5 MW Microhydro Plant in Janopol, Bohol damaged by a typhoon, 8 kW expansion of the SF4RE Smart Grid Solar PV System in Polillo, Quezon, and the household connection expansion of the 40kW Microhydro Plant in Brookes Point, Palawan. The table below shows the list of the project sites under SF4RE, based on the latest project document report[20] and the highlighted sites were visited during the field missions:

#	Project Description in terms of: Installed Capacity | ***Project Title*** | ***Project Household (HH) outreach*** | ***Location*** | ***Total DREAMS Support Amount in PHP million)***
1	49.25 kW Smart Grid Solar PV Household Electrification for 165 HHs in Cagayancillo, Palawan | PHP 6M
2	74 kW Solar PV-powered Fish Processing, Social Services, and Water System for 3486 HHs, Gigantes Island | PHP 6.7M
3	25 kW Solar PV for Tamparan District Hospital in Tamparan, Lanao del Sur | PHP 6.7M
4	34.2 kW Oriental Mindoro Green Energy Pilot Project for 7 Municipal Buildings, 7 Faith Based Buildings and 1 livelihood center in Oriental Mindoro | PHP 4M
5	25 kW Rehabilitation of Bun-acan Micro-Hydropower Plant for 60 HHs in San Remigio, Antique | PHP 4 M
6	22 kW MMSU Solar Powered Aquatic Life Support System, Ilocos Norte | PHP 2.4M
7	4 Potable Water Systems with 1.22 kW per Solar PV water pump serving 128 HHs in Tapaz, Capiz| PHP 3M
8	1 MW Mini-hydropower Plant Rehabilitation for 11,035 HHs in Lawaan, Samar | PHP 10M
9	45 kW Micro-Hydropower Plant Rehabilitation for 9984 HHs in Ajuy, Iloilo | PHP 5M
10	10 kW Micro-Hydropower Plant Rehabilitation for 62 HHs and 5 community facilities in Upper Katablangan, Apayao | PHP 1M
11	42.84 kW Smart Grid Solar PV System for 300 HHs in Burdeos, Quezon | PHP 5.6M

[20] DREAMS Project Document Report: SF4RE Summary dated August 2022.

#	Project Description in terms of: Installed Capacity | *Project Title* | *Project Household (HH) outreach* | *Location* | *Total DREAMS Support Amount in PHP million)*
12	36 kW Solar PV powered Bioethanol Distiller for 3 barangays in Aparri, Cagayan | PHP 7.2M
13	75 kW Solar PV Rooftop for the Provincial Hospital of Iloilo| PHP 5M
14	29.3 kW Smart Grid Solar PV Household Electrification and Irrigation for 120 HHs in Brgy. Apurawan, Aborlan, Palawan | PHP 5M
15	10 Potable Water Systems 2.2 kW/Solar PV water pump serving 820 HHs, Goa, Camarines Sur|PHP 6.2M
16	39.65 kW Community Solar PV Mini-grid for 357 HHs in Pamilacan, Bohol | PHP 3.6M
17	95 kW Solar PV Rooftop for 10 LGU Buildings in Concepcion, Iloilo | PHP 4.9M
18	40 kW Micro-hydropower Plant 150 Household Connection Expansion Brookes Point, Palawan| PHP 0.5M

The RE projects above are demonstrations of what is possible with RE, and how it can happen at the local level. Notably, the projects have a variety in models, technology, and applications. Some are off-grid while others demonstrate on-grid RE policy mechanisms. These are both solar and hydropower facilities. Projects are not limited to household electrification, but also spanning irrigation, aquaculture, bioethanol distilling, and potable water systems. As concrete proofs of concept, the RE projects are compelling LGUs, ECs, possible investors, communities, and other local stakeholders to pursue and invest in such projects.

Indicator 4.2. DREAMS went beyond project targets through the LREP. Enabled through capacity building activities and technical expert assistance, Municipal and provincial LGU partner-beneficiaries outside Palawan and Iloilo, namely Goa, Tapaz, San Remigio, Aparri, Oriental Mindoro, and Lanao del Sur, developed RE plans and projects. These plans were materialized into RE projects through LGU investments and SF4RE assistance.

Indicator 4.3. DREAMS surpassed targets through the LREP. The LREP conducted a technical Solar PV Training with over 90 municipal engineers and technical staff in Iloilo province. Of this 90, 45 completed the course and secured certificates. The course covers Solar PV basics, installation, and assembly. The training ensures there is technical capacity to pursue and support solar projects as envisioned the Iloilo Provincial RE Plan (drafted through the LREP and Outcome 2). Replication of this training is planned for the provinces of Lanao del Sur and Oriental Mindoro at the end of 2022.

Aside from Solar PV Training, DREAMS will also rollout the Guide on Micro-hydropower Plant Development through a capacity building activity with about 30 technical staff and engineers from Aklan, Antique, Capiz and Iloilo. The activity will be in parallel to a stocktaking of hydropower resources in Panay Island, on which the four provinces are located.

Lastly, DREAMS has partnered with Mariano Marcos State University (MMSU) to conduct an executive course on Local RE planning and development, covering all RE technologies. MMSU is the only University in Region 1 that has a course including a research and development program on RE. The course will be conducted this year 2022, and will capacitate technical staff of Ilocos Norte LGUs. Each student will complete a capstone project of an actionable RE plan or project for their respective LGUs.

Progress towards results: Outcome 4a

Indicator	Baseline Level	Target	Level at PIR	Status at TERMINAL REVIEW	Rating at TE
• **Indicator 4.1:** MW of RE projects that are being developed through the Project Preparatory Fund (PPF)	0	15	12.697 MW	17.77 MW (Additional installations: Brookes = 40 kW; Polillo = 8 kW; Janopol = 5 MW)	**Met**
• **Indicator 4.2:** Number of bankable RE plans completed by other LGUs who were interested in RE-based energy systems by Year 3;	0	3	5	5	**Met**
• **Indicator 4.3:** Number of certified technicians for RE equipment assembly and supply working with locally DOE accredited RE manufacturing entities by EOP.	0	10	45	45	**Met**

Status of Different Activities for Output 4.1 of the project

Activities	Modifications at Project Inception	Vetted Status at TERMINAL REVIEW
4.1.1 Review and evaluation of existing funds dedicated to providing support for project preparation and their historical uptake during Year 1. This will include financial products administered by local financial institutions. Similar funds successfully operating in other countries, like those in the region, will also be reviewed. It will also involve evaluation of possible support activities and strategies that can be considered to increase the utility of the existing funds and incentivize project developers and investors for uptake. Findings from the evaluation will serve as a basis for the identification of a suitable financial support mechanism and products to support RE project preparation. The review process will be a coordinated effort between the Project and relevant key stakeholders (e.g. Department of Finance, DOE, local banks such as the Land Bank of the Philippines);		***Status at MTR:*** The study was completed, presented in 2020. The National Economic and Development Authority proposed that rather than creating a Project Preparatory Fund for RE, a funding support for local RE projects. This will allow for a more effective advocacy and tangible use of the funds and encourage local investments in areas where large investors have no appetite. This proposal was approved by the Project Steering Committee on 18 February 2020. ***Status at TE:*** The Project developed and launched SF4RE in August 2020.
4.1.2 Following the review process, the most feasible option will be identified and selected for detailed design and implementation. Strategies will be designed to increase the fund utility; and, new internal rules and regulations formulated to make it more responsive to conditions within the local financing and credit market. This will include, for instance, consideration to relax the current funding limit for RE project proponents, and promoting the use of the fund to a diverse number of small-scale RE applications such as solar PV installations, small wind and micro-hydropower projects. The fund rules should also be cognizant of solar PV installations and their higher probability of implementation than other RE technologies in the Philippines. With the likelihood of solar PV projects, the success rate of such project preparation fund assistance would increase, encourage replication, increase the utility, and a scale-up of RE project development. This activity would be linked with activities on building local technical expertise for RE equipment installation (through other activities such as Outputs 1.5 and 4.3);		***Status at MTR:*** This activity was to follow activity 4.1.1. However, at the time of MID TERM REVIEW, activity 4.1.1 was still underway. As was mentioned in the above paragraphs (while discussing the achievement of targets for Indicator 4.1), the project is facing issues in selecting the beneficiaries for the fund. It is recommended that the project expedite the utilization of funds available to facilitate implementation of the RE projects (please see recommendation 4). ***Status at TE:*** The Project completed this, with SF4RE allocating its funds for 18 RE projects.
4.1.3 Promotion of stronger linkages between project preparation fund and RE loan funds by ensuring preparations of the RE projects to meet the conditions of such existing RE funds. The stronger linkages will facilitate improved access for LGUs and other smaller RE proponents to RE financial products that would increase the likelihood of successful RE implementation. This activity would involve the development and implementation of management arrangements within a financial institution with RE funds and proposed Market Service Centers (MSCs) (in Output 2.4) to assist LGUs and potential smaller RE project proponents in developing RE projects through the use of project preparation fund assistance. This, in turn, would enhance the prospect of the RE proponent successfully accessing finance from existing RE funds;		***Status at MTR:*** PPF is still to be created. Thus, this activity is still to be happen. As has been recommended (please see recommendation 4), one of the ways to utilize the available funds is to provide grant to LGUs to implement the RE projects. ***Status at TE:*** The Project's SF4RE has developed and approved assistance for 18 RE projects. These projects are also funded through a counterpart investment from the project proponent, some of which are sourced through either internal budget or alternate RE financing.
4.1.4 A comprehensive fund management and implementation plan will be prepared detailing the fund capital structure, terms, conditions, financing and implementation structures, roles and responsibilities of fund investors and participants, diversification strategy, and other relevant conditions. The activity will also identify a fund manager and secure co-financing commitments from investors. Review and confirmation from stakeholders involved in the		***Status at TE:*** Given UNDP guidelines, there can be no fund manager and no pooling of funds from investors. Instead, the Project established SF4RE, a fund managed by DOE under a sinking fund scheme to support RE projects. Counterpart funding from project proponents are secured for each RE project, and RE

Activities	Modifications at Project Inception	Vetted Status at TERMINAL REVIEW
implementation phase will be sought before the fund is adopted;		stakeholders are involved right from project design until commissioning.
4.1.5 A financial institution will be identified to anchor the fund mechanisms. A core unit or fund manager for the administration and implementation of financial mechanism will be established within the implementing institution such as a government financial institution. Once the fund secures approval, implementation will kick off, and policy and management guidelines executed.		***Status at TE:*** The activity is no longer applicable. See 4.1.4. SF4RE is managed and implemented at the Project PMU level.
4.1.6 A training program will be designed and executed to develop the capacity and appreciation on RE projects among the staff of the financial institution and to enhance their technical skills on the administration and management of the fund. Underlying training activities of the fund manager shall form part of the overall training program; and		***Status at TE:*** The activity is no longer applicable. See 4.1.4
4.1.7 Organizing and conducting seminars and workshops (2 annually for the entire 5-year Project period) to improve awareness of RE developers of the availability of project preparation funds and RE loan funds within smaller communities. This will encourage increased fund utility that will increase development of RE in SPUG missionary areas.		***Status at TE:*** The activity is no longer applicable. See 4.1.4. A public call for proposal was conducted at the launch of SF4RE. LREP partner-beneficiaries are also capacitated and encouraged to develop an RE project proposal and apply for SF4RE funding.

Status of Different Activities for Output 4.2 of the project

Activities	Modifications/ Corrections in Activities at Project Inception	Vetted Status of Implementation
4.2.1 Development of a least 2 potential RE projects based on the streamlined process developed in Component 2 (Output 2.2). This activity will utilize the raised awareness of the PPF financial mechanisms from Output 1.4, the operational MSCs at the provincial level (Output 2.4) and the knowledge products from Output 4.1 (Off-grid rural electrification model with innovative RE services) and Output 4.3 (FiT and tariff for off-grid areas), in preparing and developing RE projects;	Link Output 4.2 to Output 1.4, 2.2, 4.1, 4.3	***Status at MTR:*** Based on the recommendations at the inception. The project has linked the activities under Output 4.2 to the activities under Output 1.4, 2.2, 4.1 and 4.3. Activities are underway under Outcome 2. The activities under other outputs is still to be carried out. ***Status at TE:*** The Project's developed 18 RE projects through SF4RE and RE Modelling. SF4RE integrated this Output to 1.4, 2.2, 2.4, 4.1, and 4.3.
4.2.2 On-the-job training of local energy professionals to assist these RE project proponents in obtaining concessional loans for the financing of the RE project;		***Status at MTR:*** This activity is still to be done. Action is planned for the year 2020 ***Status at TE:*** The Project's SF4RE partners engaged local technical staff of project proponents, who sourced alternative financing. RE Projects that secured alternate funding include the SF4RE projects with MMSU, and ESAMELCO.
4.2.3 On-the-job training of DOE personnel to assist and process service contracts for these RE projects.		***Status at MTR:*** This is an ongoing activity ***Status at TE:*** The Project's SF4RE involved DOE personnel in the project cycle of its RE projects.

Status of Different Activities for Output 4.3 of the project

Activities	Modifications at Project Inception	Vetted Status of Implementation
4.3.1 Selection of a pilot area for a rural electrification study in Year 3 that is underserved and cross-subsidized for	The study will look at the framework and methodology of the rural	***Status at MTR:*** The activities for Output 4.3 are being done and planned under the LREP (focused on Outcome 2 of the project) being implemented by the project. Most of

Activities	Modifications at Project Inception	Vetted Status of Implementation
electricity delivery and where the potential for RE can reduce electricity costs.	electrification study conducted for San Vicente Palawan under Support CCC Phase 1.	the activities relating to RE by the LGUs and in the rural areas are being carried out under LREP. ***Status at TE:*** The Project has identified SF4RE projects in Aborlan, Palawan, and Amanjuray, Samar as RE Models. These will be documented in a rural electrification study to be completed by 2022.
4.3.2 Development of the rural electrification model for the selected pilot area that changes the current approach of planning the use of conventional and least-cost fossil fuel combustion for rural electrification to RE and ensuring it incorporates investment risks associated with climate resilience (i.e., hurricanes, flooding events, drought, etc.). The model should be consistent with DOE policies that encourage RE development and assessments of off-grid electrification using RE;		***Status at TE:*** The Project has identified SF4RE projects in Aborlan, Palawan, and Amanjuray, Samar as RE Models. These will be documented in a rural electrification study to be completed by 2022. The model of DREAMS is demonstrated through the LREP and SF4RE. These approaches are recognized and recommended as RE program strategies in the National RE Plan 2020-2040 (pages 39, 46-52) and the Philippine Energy Plan 2020-2040 (see pages 12, 221)
4.3.3 Preparation and peer review of a report by Year 4 that summarizes the rural electrification model developed for the pilot area. The report will be disseminated to other similar areas;		***Status at TE:*** The Project has identified SF4RE projects in Aborlan, Palawan, and Amanjuray, Samar as RE Models. These will be documented in a rural electrification study to be completed by 2022.
4.3.4 Monitoring and reporting on the number of other areas by EOP who are adopting the rural electrification model and the firm plans in place by the EOP for implementation.		***Status at TE:*** The Project has identified SF4RE projects in Aborlan, Palawan, and Amanjuray, Samar as RE Models. These will be documented in a rural electrification study to be completed by 2022. Monitoring and reporting of replication in other areas will fall beyond project period.

Status of Different Activities for Output 4.4 of the project

Activities	Modifications at Project Inception	Vetted Status of Implementation
4.4.1 Organization and update of existing training modules of the DOE for RE and design of the training and certification programs by Year 1. DOE will execute training and certification programme of DOE personnel and other energy professionals under its management of Service Contracts.	Activity 4.4.1 will be expanded to include training modules and workshops on other `smaller" RE technologies and is therefore not limited to solar and hydro. The criteria for "smaller" technologies will be determined by DOE.	***Status at TE:*** The Project completed this activity through LREP's technical capacity building activities detailed in Indicator 4.3. The Project also supported the international training of DOE Executives on RE Market development during the preparation of the REM Rules and the RE Registrar and provided a resource expert for a 20 day technical training to all specialists under the Hydro and Ocean division.
4.4.2 Conduct training of trainers' workshops during Years 1 and 2 (4 per year) towards certification of local technical experts.		***Status at TE:*** The Project completed this activity through LREP's technical capacity building activities detailed in Indicator 4.3.
4.4.3 Conduct RE project-based training during Years 2, 3 and 4 (6 per year) on solar and small hydro projects that will include in-class training and on-the-job training.	Activity 4.4.3 will be expanded to include training modules and workshops on other `smaller" RE technologies and is therefore not limited to solar and hydro. The criteria for "smaller" technologies will be determined by DOE.	***Status at TE:*** The Project completed this activity through LREP's technical capacity building activities detailed in Indicator 4.3.
4.4.4 Formalization and funneling of training program to the Commission on Higher Education (CHED) and Technical Education and Skills Development Authority (TESDA) during Year 1. CHED and TESDA will guide training course development with affiliated RE centers at the provincial level with provincial colleges and universities. Certification of local technical experts will be under the purview of these affiliated RE centers. The training modules are on the following: 1) Basics of Renewable Energy; 2) Project Development and Management; 3) Project Appraisal; 4) Pricing; 5) Power Purchase Agreement; 6) Project Financing; 7) Entrepreneurial Skills; 8) Social Marketing/Community Organizing; 9) Database and Information Management; 10) Technician's Training – Solar, Wind and Hydro; and 11) Training of Trainers.		*Status at MTR:* This activity is scheduled for the year 2020. It is recommended that a RE specific training module be the existing modules of Technical Education and Skills Development Authority (TESDA) of Philippines, and be made available as one of the regular courses offered by TEDSA (please see recommendation 12). *Status at TE:* The Project sought to achieve this activity throughout 2020-2022. In collaboration with the REMB Solar and Wind Energy Division, a training needs assessment for wind technicians and wind power developers was completed. A training module that would be offered as a certificate course was drafted for the review and approval of TESDA board. However, after the assessment, TESDA did not act on the proposal for DOE and TESDA to enter into a MOU to ensure clarity and delivery of outputs. As an adaptive action, the Project has partnered with MMSU for a formalized, pilot RE Executive Course, that will serve as a model for other colleges and universities. The pilot implementation will be this year 2022.

Summary of the Ratings for different Outputs of Outcome 4a

Output	Rating at TERMINAL REVIEW for progress towards achievement of results
Output 4.1: Financing mechanisms to enhance local RE investment	**Highly Satisfactory**
Output 4.2: Bankable RE project plans through financial mechanisms	**Highly Satisfactory**
Output 4.3: Rural electrification models incorporating innovative RE market services for off-grid areas	**Satisfactory**
Output 4.4: Training and certification programs for local technical experts	**Satisfactory**

In view of the achievements for the indicators (Indicators 4.1, 4.2 and 4.3) and keeping in mind the progress towards results for different Outputs**, the progress towards results for Outcome 4a of the project is rated as Satisfactory (S).**

Progress towards results: Outcome 4b

Outcome 4b (with indicators 4.4 and 4.5) is expected to lead to increased number of RE projects using proven and emerging RE technologies thus boosting successful replication. Outputs 4.5 and 4.6 will contribute to the realization of Outcome 4b. The succeeding table below provides an overview of the progress towards achievement of results for Outcome of the project against the set of indicators and the targets.

Indicator 4.4. Installed capacity of RE projects receiving support from new or improved RE financial mechanisms will be materialized post-DREAMS Project period. These expected RE projects stem from the Renewable Energy Trust Fund (RETF). DREAMS is currently leading the preparation of the RETF Operating Manual. The Manual will enable the operationalization of the RETF prescribed in the RE law.

DOE has successfully opened a bank account and began sending collection letters in 2022 to the government corporations mandated by law to allocate a portion of their income to the RETF. Three of the four demand letters anticipate a total collection of PHP 3,660,334,177 (USD 67,786,022) for the RETF's starting fund.

The RETF Operations Manual will be presented to a RETF Committee and will be endorsed to the Secretary for approval. The REMB is the managing unit for the utilization of the RETF. The estimated collection above is likely to be exceeded as lack of implementing and quantifying guidelines have already been addressed in 2022. The RETF will be a new RE financial mechanism available to different stakeholders in promoting RE, and eventually newly installed RE capacity. However, these installed capacities will materialize post-DREAMS project period.

Progress towards results: Outcome 4b

Indicator	Baseline Level	Target	Level at PIR	Status at TERMINAL REVIEW	Rating at TERMINAL REVIEW
• **Indicator 4.4:** MW of installed capacity of RE projects being implemented that received support from new or improved RE financial mechanisms, by EOP	0	5	0	0	**Not Met**
• **Indicator 4.5:** MW of installed capacity of RE projects resulting from accelerated expediting of RE service contracts by EOP.	0	75	0	TBD	**Partially Met**

Indicator 4.5. Amidst the lack of RE projects that could directly receive acceleration assistance from DREAMS, the project has supported the building of an enabling environment of RE law policy mechanisms (see Outcome 1). These various policy mechanisms created demand and facilitated the installation of new RE projects.

RE projects were listed in the ProDoc that required technical assistance to secure permits to start installation. Letters of Commitment from these developers were also submitted to the DOE. However, during inception planning of the DREAMS Project, it was revealed that the projects have been discontinued, completed or already being assisted by the REMB. DREAMS continued to work with the DOE to identify potential RE projects for assistance to meet the target. From June 2018 until 2022, DOE endorsed at least 50 RE projects with a potential capacity of more than 5,489 MW encountering barriers on project implementation. However, none of the assessed projects have qualified for assistance or have pushed through. Most of the barriers of the RE projects assessed are beyond the DREAMS Project capability to resolve (e.g. boundary disputes, political issues, relocation of affected indigenous people communities).

Status of Different Activities for Output 4.5 of the project

Activities	Modifications at Project Inception	Vetted Status at TERMINAL REVIEW
4.5.1 Management and compilation of hydropower resource assessments from stream gauging and other reconnaissance-level information;	There will not be any additional studies. Existing data base is fragmented. Funds will be utilized to consolidate and compile the data. The compilation will be loaded in the RE portal hosted by DOE.	***Status at MTR:*** No progress is reported. The knowledge platform under the project is still to be created ***Status at TE:*** Activity is included in the REMB IMS. DREAMS has contracted software and hardware for the REMB IMS. Installation will be completed by February 2022, which is beyond the target end of the project this January 2023.

Activities	Modifications at Project Inception	Vetted Status at TERMINAL REVIEW
4.5.2 Collection and compilation of biomass resource information into an inventory including waste streams from agricultural processes and municipal solid waste;	There will not be any additional studies. Existing data base is fragmented. Funds will be utilized to consolidate and compile the data. The compilation will be loaded in the RE portal hosted by DOE.	***Status at MTR:*** No progress is reported. The knowledge platform under the project is still to be created ***Status at TE:*** Activity is included in the REMB IMS. DREAMS has contracted software and hardware for the REMB IMS.
4.5.3 Collection and compilation of geological and reconnaissance-level information to develop an inventory of potential low enthalpy geothermal project sites; and	There will not be any additional studies. Existing data base is fragmented. Funds will be utilized to consolidate and compile the data. The compilation will be loaded in the RE portal hosted by DOE.	***Status at MTR:*** No progress is reported. The knowledge platform under the project is still to be created ***Status at TE:*** Activity is included in the REMB IMS. DREAMS has contracted software and hardware for the REMB IMS.
4.5.4 Conducting locally-financed detailed wind resource assessments through measurements from wind masts and computer-generated wind models.	There will not be any additional studies. Existing data base is fragmented. Funds will be utilized to consolidate and compile the data. The compilation will be loaded in the RE portal hosted by DOE.	***Status at MTR:*** No progress is reported. The knowledge platform under the project is still to be created ***Status at TE:*** Activity is included in the REMB IMS. DREAMS has contracted software and hardware for the REMB IMS.

Status of Different Activities for Output 4.6 of the project

Activities	Modifications/ Corrections in Activities at Project Inception	Vetted Status of Implementation
4.6.1 Facilitation of the approval of the fully engineered design of COHECO's 60 MW Kapangan Hydroelectric Power Project by working with NCIP and NWRB on clarity of permitting requirements that are now placing risks on delays to their commissioning date. GEF involvement on this particular RE project would facilitate the necessary discussions and define information necessary to obtain approvals for these permits. This would reduce the risk of this RE investment being entirely removed (the investment to date has been on preliminary and feasibility level engineering as well as efforts to obtain regulatory approvals). Once the permit is secured, activities related to civil work construction, equipment installation and commissioning will follow. The benefit of the Project intervention in this case is to demonstrate the process of acceleration and streamlining of regulatory approvals and permits that can be replicated with other backlogged RE project developments;		***Status at MTR:*** This is one of the RE projects, identified at the PPG stage which were to be supported by the project. At the time of project inception, it was recognized that this RE project at the time had encountered FPIC related problems and intra-corporate dispute which is not within the capacity of the DREAMS pursue to assist. Accordingly, other RE projects to substitute this RE capacity were to be identified. ***Status at TE:*** The Hydro Division has recommended the provision of legal support for the conduct of a Free and Prior Informed Consent to pave the way for the full development of a 150MW hydro project located in the same Cordillera Region. After a review of the proposal, the UNDP and GEF did not encourage support due to the request's social and environmental issues. Activity no longer applicable. See Indicator 4.5
4.6.2 Facilitation of the approval of the full engineered design of Enfinity's 1.0 MW Camotes Solar Project. This would include streamlining of the regulatory process including: • Preparing documentation for land acquisition, resolutions of support, interconnection as well as the technical and feasibility studies; • DOE review of the proposal to decide if the proponent is a QTP over a 2-mnonth period followed by their issuance of an RFP to gauge interest of other QTPs; • DOE review of best QTP options; • Negotiation of a waiver agreement with DU and EC;		***Status at MTR:*** This is one of the RE projects, identified at the PPG stage which were to be supported by the project. At the time of project inception, it was recognized that this RE project was discontinued by the developer due to land tenure problems. Accordingly, other RE projects to substitute this RE capacity were to be identified. ***Status at TE:*** Activity no longer applicable. See Indicator 4.5

Activities	Modifications/ Corrections in Activities at Project Inception	Vetted Status of Implementation
• Review of project by NPC and the negotiation of a QTP Service Contract and Supply Agreement; • DOE endorsement of a qualified service contract to ERC followed by ERC approval of the full cost recovery rate of the Contract; • Application to ERC through NPC for a "subsidized approved recovery rate" for unviable areas; • Once the approval is secured the project proponent will proceed with site preparation, equipment procurement and assembly and commissioning.		
4.6.3 Accelerating approval of SunAsia's and Solarus Partners' 12 MW Mogpog Solar PV Project located on the Island of Marinduque. Since this project falls under Resolution 21 of the ERC, assistance will be provided to the project proponents on facilitating the approval of a bilateral power purchase agreement that is pending resolution of a procedural requirement between the DOE, ERC and MARELCO that requires MARELCO to bid out the RE project prior to the award of the bilateral agreement for purchase of the electricity from the project. Once these approvals are received, the project proponents will proceed with site preparations for the solar PV plant including the procurement, equipment assembly and commissioning;		***Status at MTR:*** This is one of the RE projects, identified at the PPG stage which were to be supported by the project. At the time of project inception, it was recognized that this RE project is not going ahead. Accordingly, other RE projects to substitute this RE capacity were to be identified. ***Status at TE:*** Activity no longer applicable. See Indicator 4.5
4.6.4 Provision of regulatory assistance for the accelerated development and approval of First Environtech Alliance's 2.0 MW Biomass Project located in Barangay Armenia, Tarlac City. With this project in development since July 2014, the project proponent has made substantial investments into site investigations and feasibility studies but is unable to proceed further with development due to lack of responses from the regulatory process. The regulatory approval of the 2.0 MW biomass plant will allow the project proponent to proceed with the Phase 2 consisting of the expansion of the current plant. This would include detailed engineering, equipment procurement and installation and commissioning. Assistance will involve: • FiT payments for electricity sold. Project proponents had targeted the sale of excess power under the FiT pricing scheme. Phase 1 of the project will generate 6,880 MWh/yr. that will be used by the project proponent, and Phase 2 will generate 17,200 MWh/yr. to be sold to the grid under the FiT scheme. The uncertainty of FiT pricing is placing Phase 2 of the project on hold; • Wheeling Fee. With the biogas plant embedded within the grid of TARELCO, there has been no clear directives from ERC on the wheeling fee; • Grid Impact Study. The project proponent has not received any clear indications from NGCP on the need for a grid impact study for the 2.0 MW biogas plant. The cost of this study is high and similar to a study for a 100 MW RE project. The lack of a decision from NGCP is forcing the project proponent to place this project on further hold until a decision is made;		***Status at MTR:*** This is one of the RE projects, identified at the PPG stage which were to be supported by the project. At the time of project inception, it was recognized that this RE project is not going ahead. Accordingly, other RE projects to substitute this RE capacity were to be identified. ***Status at TE:*** Activity no longer applicable. See Indicator 4.5

Activities	Modifications/ Corrections in Activities at Project Inception	Vetted Status of Implementation
• VAT for imported goods. Though a biogas plant is VAT exempt, the project proponent has had to pay VAT for imported goods despite government regulations on the exemption status of these goods. As such, Phase 2 of the biogas plant is on hold until there is clarification on the VAT exemption status for imported goods related to RE projects.		

Summary of the Ratings for different Outputs of Outcome 4b

Output	Rating at TERMINAL REVIEW for progress towards achievement of results
Output 4.5: Site-specific RE resource databases	**Satisfactory**
Output 4.6: Expedited RE service contracts	**Satisfactory**

In view of the achievements for the indicators (Indicators 4.4 and 4.5) and keeping in mind the progress towards results for different Outputs**, the progress towards results for Outcome 4b of the project is rated as Satisfactory (S).**

Progress towards results: Project Objectives

Progress towards achievement of results for the various outcomes and outputs of the project were presented above. In view of the progress made towards achievement of results for the various outcomes of the project, an assessment regarding progress made towards achievement of the project objective is presented in this section. The progress towards achievement of the project objective has been done both in terms of the Indicators and Targets for 'Project Objectives' as provided in the log-frame and in terms of the progress towards achievement of the results for various outcomes of the project as discussed in previous sections above.

The defined objective of the Project is to reduce GHG emissions through the promotion and facilitation of the commercialization of renewable energy (RE) markets by removing the barriers towards investments in RE-based power generation projects. The objective of the project is to be achieved through its four outcomes. The succeeding table below provides an overview of the progress towards achievement of the targets for the four indicators to monitor the achievement of the 'Project Objective'.

Indicator A. The project will tap third-party experts to provide an official computation on the CO_2 emission reduction from RE enabling policies and 18 SF4RE project installations that are being assisted by the DREAMS Project. The computation will determine the end of project contribution by 2022. The project also completed the transfer of the assets (software and hardware) under the PREMS assets to the DOE. The PREMS is an enterprise-based registration and monitoring platform that measures the compliance of mandated participant to the Renewable Portfolio Standards (RPS). The PREMS RE Registrar will operationalize the Renewable Portfolio Standards, which will enable 1% of mandatory participants' electricity supply be renewable. The resulting increase in RE mix in the power supply, which would have otherwise been sourced from non-RE power, directly ensures reduction in GHG emissions as well.

The Midterm Review cautioned that the indicator was overambitious, given that the targets were set in anticipation of the support for the ProDoc-identified four RE projects no longer pushed through (see Indicator 4.5). Further, RE project cycles make it unlikely that new RE projects generate electricity within the DREAMS project timeline.

Given the above, **the progress towards results for Indicator A has been rated as TBD (to be determined),** pending the results of the GHG emission calculations.

Progress towards results: Project Objective

Indicator	Baseline Level	Target	Level at PIR 2019	Status at TERMINAL REVIEW	Rating at MTR	FINAL RATING
• **Indicator A:** Cumulative direct project CO_2 emission reductions from RE development by end-of-project (EOP), ktonnes CO_2	0	205	0	790	**U**	**Partially Met**
• **Indicator B:** % share of RE in the power generation mix of the Philippines	14.4	35	30.3 Installed capacity for RE increased to 7,227 MW in 2018 from 7,079 MW in 2017. However, the percent (%) share of RE Installed Capacity to the Total Installed Capacity in 2018 slightly decreased to 30.3% from 31.1% in 2017 due to higher growth of coal-installed capacity in 2018.	29.44	**MS**	**Partially Met**
• **Indicator C:** Number of sitio households in far-flung areas that have obtained access to reliable sources of renewable energy due to the Project	0	20,000	0	357 direct, 12,090 indirect	**S**	**Partially Met**
• ***Indicator D[21]:*** *Total project direct GHG emissions reductions over the lifetime of the RE capacity created by the project (ktonnes CO2eq)*	0	2440	0	1,303 – 157,606	**S**	**Partially Met**

Indicator B. As of the end of 2021, the total RE installed capacity increased to 7,914 MW, and makes up 29.44% of the Philippine generation mix. In 2022, DREAMS-supported NREP 2020-2040 modeled a 35% RE generation mix by 2030 and 50% by 2040. Policy mechanisms to actualize this mix received technical assistance from DREAMS throughout the project (Indicator 1.1).

The Midterm Review found this target overambitious. The amount of new installed capacity needs to be RE to meet the target – an impractical expectation given the variability of RE and the energy demand of the country.

Accordingly, **the progress towards results for Indicator B is rated as Satisfactory (S).**

Indicator C. The DREAMS' **SF4RE supported 18 RE projects** that will provide RE access, directly and indirectly to at least 21,854 households in total. While the ProDoc envisioned households obtaining access through RE household electrification, in implementation, DREAMS found that reliable sources of RE can also be vital for public social service delivery and productive uses. Of the total households, 22,233 will directly access RE from household electrification, while 424,747 will have indirect access from other RE applications. So far, only eight (8) out of the eighteen (18) projects have been completed in terms of installation and implementation. Post-installation monitoring and evaluation, documentation and analysis, are yet to be conducted.

Completion of the remaining 10 projects is expected by April 2023 at the earliest. **The progress towards results for Indicator C is rated as Satisfactory (S).**

Indicator D. Indicator D has been recommended during the Midterm Review to monitor the achievement of the project results in an objective manner. This additional indicator would allow the Project to capture RE facilities' emission reductions even

beyond the DREAMS Project period. These RE facilities include SF4RE and LREP-assisted projects and rehabilitation works. **The progress towards results for Indicator D is rated as TBD (to be determined).**

Ratings for progress towards results for the various outcomes of the project are provided. The succeeding table below provides the summary of the ratings for the outcomes of the project.

Summary of the Ratings for different Outcomes of the project

Outcome	Rating at TERMINAL REVIEW for progress towards achievement of results
Outcome 1: Enforcement of a supportive policy and regulatory environment for leveraging investment in RE development and applications at the local level	**Satisfactory**
Outcome 2: Strengthened institutional capacity that leads to increased RE investment at the local level	**Moderately Satisfactory**
Outcome 3: Capitalized RE market leads to an increased share of RE based power capacity	**Satisfactory**
Outcome 4a: Enhanced confidence of project developers on the viability of RE projects at the local level	**Satisfactory**
Outcome 4b: Increased number of operational RE projects using proven and emerging RE technologies that boosts successful replication	**Satisfactory**

The objective of the project is GHG emission reductions through the promotion and facilitation of the commercialization of renewable energy (RE) markets. The RPS, projected currently at 1% and to be increased to 2.52%, ensures that 1% and later 2.52% of the power distributed in the grid are from RE sources.

As targeted in the approval of the NREP 2020-2040 to which the Project provided support, the RPS allows the attainment of at least a 35% RE in the Philippines' generation mix by 2030. Also, it is expected that beyond the end of the project, there will be sustained addition in RE capacity due to the local RE projects that are being and will be implemented by the local partners under their Local RE plans developed through DREAMS. These eventually lead to the targeted level of direct GHG emission reductions.

In view of the achievements for the indicators (Indicators A, B, C and D) and keeping in mind the progress towards results for different Outcomes, **the progress towards results for the 'Project Objectives' is rated as Satisfactory (S).**

4.3.2. Relevance (S)

In assessing relevance, the TE team considered the following: alignment with national priorities, relevance, and complementarity to other initiatives, alignment to GEF strategic priorities and finally the relevance of the TOC.

Alignment with National Priorities

One of the significant threats to the economic growth of the Philippines is the unreliability and high cost of electricity. Philippines has limited fossil fuel reserves and a high dependence on renewable energy (RE) and imported fossil fuels. The Government is pursuing policy thrusts and programs in support of national economic development, as embodied in the Philippine Energy Plan 2012-2030 (PEP). The PEP aims to: (a) ensure energy security, (b) achieve optimal energy pricing, and (c) develop sustainable energy system.

As mentioned, the country's renewable energy development is driven by Renewable Energy (RE) Act of 2008 under which the GOP will reduce its GHG emissions from costly imported fossil fuels. Under the NREP that was developed under the Republic Act 9513 provision that will "promote the development, utilization and commercialization of renewable energy resources and for other purposes", a policy framework with strategic building blocks was provided to help the country achieve the goals set forth in the RE Act that includes amongst others:

- The Renewable Portfolio Standard (RPS) which places an obligation on electric power industry participants such as generators, distribution utilities, or suppliers to source or produce a specified fraction of their electricity from eligible RE Resources, as may be determined by the National Renewable Energy Board (NREB);

- The Renewable Energy Market (REM) which is a policy mechanism toward the acceleration and development of renewable energy resources in the country;
- Feed-in-tariff allowance (FiT-ALL) which is a mechanism applied to RE generation used in complying with the RPS that involves a fixed guaranteed price for each RE system and/or technology;
- A Green Energy Option that gives consumers the choice to use RE; and
- Net metering that allows distribution grid users to generate RE power and be appropriately credited with its contribution to the grid.

The project is in line with the development priorities of Philippines, and in line with the national sector development priorities and plans of Philippines. The DREAMS project is a follow up project of the earlier CBRED project. As mentioned earlier, the CBRED project resulted in the formulation of the RE Act including its 'Implementing Rules and Regulations (IRR)' and initial regulatory frameworks. While designing the DREAMS project, the lessons from the CBRED project, as well as the RE projects implemented earlier were taken into account. For example, the DREAMS project has provisions to support smaller RE developers who have the need to for assistance to prepare and package local RE projects into financially viable projects or projects that would qualify under various grant programs. Preparation of RE projects becomes more difficult for smaller developers in light of the tedious RE project development process. Different activities to be carried out under the DREAMS project were reviewed thoroughly at the time of the inception of the project and modifications were made to account for the lessons learned from other projects.

Relevance to and complementarity with other initiatives

In Philippines, GEF supported the project "Capacity Building to Remove Barriers to Renewable Energy Development (CBRED)" from 2002 to 2010. This project resulted in the formulation of the RE Act including its 'Implementing Rules and Regulations (IRR)' and initial regulatory frameworks. To encourage and accelerate the participation of the private sector, provisions were made in the Act for fiscal and non-fiscal incentives (such as the Renewable Portfolio Standard or RPS, Net Metering and Green Energy Option, among others). The CBRED Project was also successful in enhancing awareness of the private sector, local governments, and communities on various aspects of renewable energy resource development. As a consequence of CBRED, DOE was able to initiate engagement with the private sector as well as with the grassroots communities in the pursuit of renewable energy technology for their livelihoods. Despite these efforts to catalyze RE development, the barriers still exist at the program and project levels that constrain RE development in the country, notably at the local level where the RE Act has not been effectively implemented.

The DREAMS project has provisions to support smaller RE developers who have the need to for assistance to prepare and package local RE projects into financially viable projects or projects that would qualify under various grant programs. Preparation of RE projects becomes more difficult for smaller developers in light of the tedious RE project development process. Different activities carried out under the DREAMS project were reviewed thoroughly at the time of the inception of the project and modifications were made to account for the lessons learned from other projects.

Alignment with UNDP and GEF strategic priorities

The project was in line with the UNDP Strategic Plan, CPD, UNDAF, United Nations Sustainable Development Cooperation Framework (UNSDCF), SDGs and GEF strategic programming.

Extent to which the project contributed to the Theory of Change for the relevant country programme outcome

The projected impact of the project in terms of global environmental impacts was to be the reduction in the emissions of GHG. The project document has projected indirect GHG emission reductions due to the project to be about 141,000 ktonnes CO_{2eq} based on a causality factor of 20%. While this is a longer-term outcome, the project and the previous interventions have a significant co-benefit of reduction in the pollutions and local environmental impacts. The assumption is the pathways towards change that see the reduction of barrier to inducting RE. Historically, the Philippines used to have significant share of RE in the overall electricity generation capacity in the country. However, due to recent establishment of more fossil fuel based power plants, the share of RE in the generation mix had reduced. The DREAMS project has in fact been an instrumental catalyzer for the deployment of RE technologies for generation of electricity in Philippines, thereby resulting in the increase of the % share of RE in the overall generation mix.

As per the project design, apart from leading to direct GHG emission reductions, the DREAMS project was to accelerate RE project commercialization with significant participation from the private sector, boost investor confidence and generate lessons and knowledge on effective implementation of RE projects, leading to indirect GHG emission reductions.

4.3.3. Effectiveness (S)

Effectiveness is the extent to which the project's objectives were achieved or are expected to be achieved. Effectiveness is also used as an aggregate measure of (or judgment about) the merit or worth of an activity, i.e. the extent to which an intervention has attained, or is expected to attain, its major relevant objectives efficiently in a sustainable fashion and with a positive institutional development impact.

The TE team considered the following points when assessing effectiveness:

- Extent to which the project contributed to the country programme outcomes and outputs, the SDGs, the UNDP Strategic Plan, GEF strategic priorities, and national development priorities; and factors that contributed to the achieving or not achieving intended outcomes and outputs;
- Extent to which the project's actual outcomes/outputs were commensurate with what was planned;
- Areas in which the project had the greatest and fewest achievements; and the contributing factors;
- Extent to which the intervention achieved, or expects to achieve, results (outputs, outcomes and impacts, including global environmental benefits) taking into account the key factors that influenced the results;
- Constraining factors, such as socio-economic, political and environmental risks; cultural and religious festivals, etc. and how they were overcome; and
- Any alternative strategies that would have been more effective in achieving the project's objectives.

The project was effective in adapting the project plan and meeting its expected results. The assessment of results against the project indicators and targets are provided in the results table in the executive summary and in the original log frame. The Project was implemented efficiently through a learning-by-doing approach working closely with the DOE RE Management Bureau. Project management and all activities were fully integrated with DOE oversight - coordination and technical monitoring i.e., project approvals and decision-making done with the support of relevant DOE departments, i.e. solar and hydro, wind biomass bureaus.

Despite the past efforts under the RE Act to catalyze RE development in the Philippines, barriers remaining included the following:

- At the local level where the RE Act has not been effectively implemented, there are issues with the approval process for the RE project. At the local level, there is also a lack of capacity and understanding regarding the provisions of the RE Act and how this is operationalised and implemented.
- The implementation mechanisms for some of the provisions in the RE Act, like RE Markets and Register which is a component of RPS, were not in place.
- There is a lack of demonstration of the successful implementation of the RE projects under the new regime following the RE Act.

The project was thus addressed these barriers directly, and accordingly, the design included provision to work on the three main tracks, namely: capacity building/training at the local level along with supporting the implementation of RE projects at the local level (addressing barrier a. above); creation of RE Markets and its implementation (addressing barrier b. above); facilitating the implementation of the RE project using 'project preparation fund' created under the project as SF4RE (addressing barrier c. above). As per the project design, these three main work tracks under the DREAMS project were to be supported by several enabling activities e.g. development of policies and regulations, promotion of local production of RE equipment, etc.

By the provisions in the 'Project Document' and in line with the three work tracks the project team in fact did work on the three specific programs under the project, namely, 'Local RE Planning Capacity Building Program (LREP)'; 'Philippine RE Market System (PREMS)'; 'Project Preparation Fund (PPF), also known as SF4RE. These are comprehensive work contributions across four key components.

Key Results based on Strategies in 2022

1. **Policy Interventions**

Indicators

- Number of approved and enforced policies and guidelines for leveraging RE investments: from 0 to a target of 8, actual achievement is 15 (8-15).
- Number of sitios with off-grid rural electrification plans using RE: 12-28
- Number of businesses who have accreditation or applied for DOE accreditation to manufacture, fabricator supply locally produced RE components: 50-2

Results /Strategies for the end of 2022

- Development and operationalization of RE Trust Fund and voluntary REM, rollout of NREP 2020-2040 and GEOP, RE Branding Campaign, others
- LREP, SF4RE, and RE Modelling
- RE Manufacturer's registration booths during project events

2. Institutional Strengthening

Indicators

- Number of funded and implemented RE projects championed or facilitated by LGU-based RE focal points: 5-9
- Number of RE projects facilitated by operational provincial-level RE market service centers: 5-7
- Number of RE projects that were designed based on the information and technical advice obtained from the established RE knowledge platform: 6-0

Results/ Strategies for end 2022

- LREP (MHP capacity building and stock-taking for MHP Devolution, Iloilo Investment Forum)
- SF4RE with LGU partners
- RE Management Information System (RIS) for contract completion; will serve as a reference for MMSU RE Short Course for 25 Ilocos Norte LGUs in November 2022

3. Capitalized Market

Indicators

- Cumulative MW of installed capacity registered in the RER established in the "capitalized" RE market: 10 - 2,833.25 MW
- Number of RE developers registered in the RER: 15-136

Results

- Market register fully developed, installed, and running with 98% subscribed under mandated compliance
- Developed the operational plan for the voluntary compliance

4. Commercialization

Indicators

- MW of RE projects that are being developed through the PPF (SF4RE): 15 – 12.697 MW (upon SF4RE completion)
- Number of bankable RE plans completed by other LGUs who were interested in RE-based energy systems: 3-5
- Number of certified technicians for RE equipment assembly and supply working with locally DOE accredited RE manufacturing entities by EOP: 10-45
- MW of installed capacity of RE projects being implemented that received support from new or improved RE financial mechanisms by EOP: 5-0
- MW of installed capacity of RE projects resulting from accelerated RE projects resulting from accelerated expediting of RE service contracts by EOP: 75-TBD

Results/Strategies for end 2022

- Completion of all SF4RE demonstration projects, documentation, codification, monitoring, assessment, and evaluation
- Completion of the operations manual and guidelines of the RE Trust Fund

4.3.4. Efficiency (S)

Efficiency is a measure of how economically resources and inputs (funds, expertise, time, etc.) are converted to results. It is most commonly applied to the input-output link in the causal chain of an intervention.

Main findings: The project was implemented efficiently through a learning-by-doing approach with the PMU embedded within and working closely with DOE REMB. Project management and all activities were fully integrated with close UNDP-DOE oversight - coordination and technical monitoring, i.e., project approvals and decision-making done with the support of relevant DOE departments i.e., solar and hydro. The structural changes envisioned by the operationalization of the policy environment will take some time and more dissemination of project learning and evidence-based case studies must be done in order for it to be realized, i.e., market growth and technical capacities for practical implementation of projects on the ground.

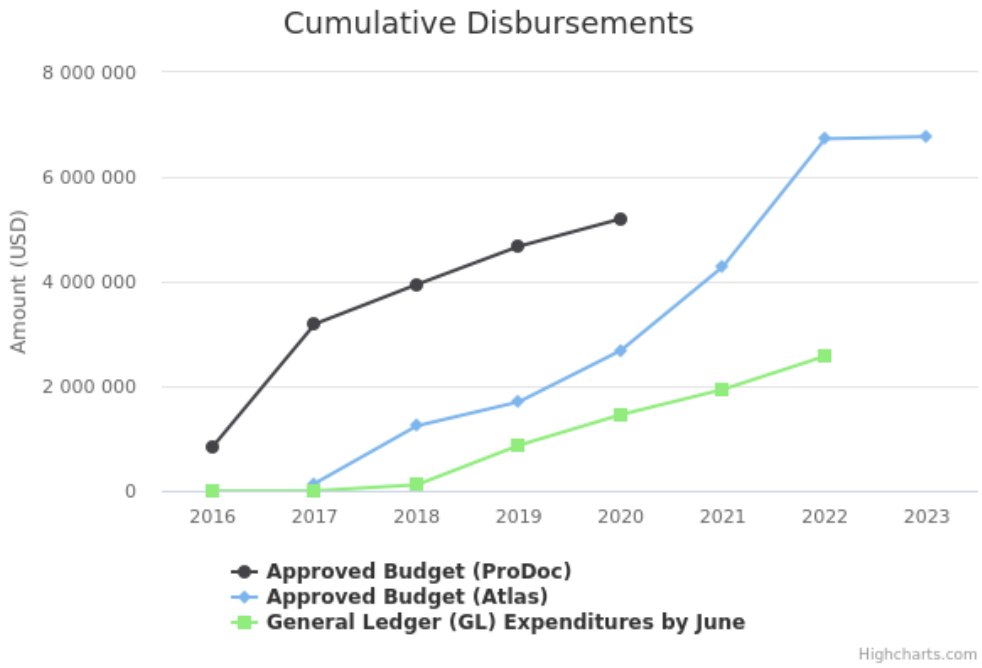
Structural changes envisioned
In terms of cost-effectiveness, the DREAMS project has managed to effectively contribute to the overall aim of operationalizing the policies and to promulgate the implementation of learning across the key government stakeholder groups at national and subnational levels. The 18 demonstration projects (SF4RE) are uniquely aimed at last-mile electrification areas and therefore have unearthed holes in policies and standards in terms of the following:
1. The market register (need for voluntary market register), and
2. The need for standards for implementing micro off-grid project implementation.
Additionally, the idea that the project would stimulate the market is dependent on the evidence-based case studies arising from this project such that work is still needed to propagate the knowledge products, tools, lessons, and learning to the broader group of stakeholders. The DOE, supported by the DREAMS project is finalizing the development of an RE information management system and this will be a key platform for scaling up the lessons learned and cases from the project to the localities, as it will consolidate in one place all DREAMS work for further scale-up and replication to other provinces and municipalities.

Project monitoring expansion
The platform for engaging the implementation and inter-sectoral government-level stakeholders has been the Project Steering Committee (PSC). The project in addition to the engagement of the government stakeholders at the PSC level managed to bring on board many other beneficiaries and decision-makers, including the provincial governments of Palawan, Iloilo, and the LGUs in these two provinces.

Although the PSC has representatives from different concerned ministries and departments, it did not have members from civil society organizations (CSOs), NGOs, academe and research & development institutions (RDIs), development agencies, trade & industry bodies, others. In the absence of formal communication channels, the participation of the broader level stakeholders is missing.

When assessing efficiency, the TE team considered the following resource allocation and cost-effectiveness:

Resource allocation and cost effectiveness thru Cumulative Disbursements



Results per Cost Effectiveness

The GEF contribution of USD 5.2 million was expected to result in a cumulative direct emission reduction of 205,181 tonnes CO_{2eq} by the end of project from the accelerated approvals of 4 RE projects as listed in Output 4.6.[22] In consideration of the service life of the RE technologies, lifetime emission reductions from these accelerated approvals will be 2.44 million tonnes CO_{2eq}. This translates into a GEF abatement cost of USD 2.13 per tonne CO_{2eq}.

The approach of the DREAMS Project was thus to remove barriers to the commercialization of RE in the Philippines at a pace to meet the targets of the NREP, and reduce the country's power sector related GHG emissions. By collaborating with demo RE projects (as outlined in Output 4.6), the DREAMS Project will demonstrate how regulatory and other barriers hindering RE project development (as explained in the Barrier Analysis section) can be addressed to expedite the installation and commissioning of RE projects that have been long stuck in the DOE pipeline. The approach of the DREAMS Project can be used as a template for expediting the development of other backlogged projects, thereby, benefitting the overall RE development in the Philippines. Moreover, GHG emissions from the energy sector will continue to increase without abatement. While energy efficiency can provide GHG reductions, the development of renewable energy for the Philippines is the most cost-effective means of long-term reduction of GHG emissions from the energy sector. The DREAMS Project will accelerate RE project commercialization with significant participation from the private sector, boost investor confidence and generate lessons and knowledge on effective implementation of RE projects, generate indirect emission reductions resulting from the development of a renewable energy investment facilitation center (managed by the DOE) and an enabled RE investment environment (top-down) that will result in the reduction of 141,000 ktonnes CO_{2eq} based on a causality factor of 20%.

The DREAMS project also sought to produce knowledge of global value on how to implement adaptation measures in Small Island states that can be applied in other countries in the region that are not participating in the Project and even for islands in other regions of the world. The value of these early lessons will make the GEF resources applied, more cost-effective in the medium term.

4.3.5. Overall Outcome (S)

Assessment of Outcomes	Rating
Relevance	**Satisfactory (S)**
Effectiveness	**Satisfactory (S)**

[22] As per ProDoc.

Efficiency	**Satisfactory (S)**
Overall Project Outcome Rating	**Satisfactory (S)**

4.3.6. Sustainability: financial (ML), socio-political (ML), institutional framework and governance (ML), environmental (ML), and overall likelihood (ML)

Concerning financial sustainability, there is a growing demand for renewable energy projects with showcases and enabling environment refinements in the Philippines and in particular for work on off-grid micro projects. The ecosystem goes to create an increasing demand in manufacturing, skills development, supplies, and the creation of a more robust RE value chain will ensue.

The government and development partners will need to consider the skills development, and the financial and institutional resources needed to continue to serve the demand including the continuous provision of catalyzing inputs and unearth new financial modalities including innovative sources of financing such as public partnerships, sustainability bonds, and the like. The TE team learned that DOE is establishing the RE Trust fund, as mandated by the RE Act of 2008 and is currently under mobilization with the guidance of an operating manual currently being developed. In the future, more focus is needed on innovative financial, private-public partnerships with foreign investment and the prime environment to trigger private sector investments on funding RE projects.

Additionally, financial sustainability pertains to increasing productive uses of RE and includes a focus on uplifting people from poverty, a focus on increasing RE in public buildings and social services sector for cost-effectiveness, and more promotion of knowledge in terms of the benefits to energy security as well as the socio-economic status of the locality. On investment case, the government may choose to develop a small grants fund for continuing small micro off-grid projects, as can be demonstrated using the RE Trust Fund.

For socio-political sustainability, the focus on off-grid project implementation has demonstrated the linkage to the cross-cutting areas including the linkages to national DRR, poverty alleviation, and gender equity goals. The continued support of standards for off-grid implementation and also on a voluntary market register will feed the likelihood of social policy sustainability which could eventually become the substantive focus of a third phase rollout of the project.

For institutional capacity, there is a growing demand for technical support in the government, CSOs, and private sector for the operationalization of the RE policy environment. DOE will have to reconsider the internal institutional capacity needed to support the surge in demand for RE projects as the knowledge of the good practices is rolled out. Moreover, the government has established strategic partnerships through engagements with local stakeholders in the implementation of the project. This needs to be sustained in order to gain meaningful support from various sectors in strengthening the RE market, which can be made easier by reaching out to other stakeholders like the academia and RDIs, CSOs, NGOs, and the private sector groups with growing interest in RE. Capitalizing on the knowledge-based platform established thru the DREAMS project can stir more initiatives from these sectoral stakeholders.

On environmental sustainability, the project is highly motivated by the environmental impact that the reduction of GHG emissions can contribute. Increased work on propagating the policies and the enabling environment including resources and institutional supports for RETs and EE areas offers a great entry point for moving towards a low-carbon and more sustainable development pathway. The knowledge and technical inputs provided to the government have been supportive to grow the enabling environment of green Philippines in line with its agenda to be carbon neutral.

In summary, in the short term (until July 2023), the project can be sustained with the full completion of the catalytic technical inputs as well as the consolidation, documentation, targeting, and sharing of its knowledge products. If the project is not completed properly, there is a high risk in which the goals and efforts of the currently and partially completed project (in the absence of finalizing the SF4RE pilot and the knowledge consolidation activities) will not be sustained. Consequently, all good efforts will eventually be lost, as the trust and confidence of current stakeholders and partners will falter. A good final push will enable an excellent showcase of the operationalization of the policies and measures put in place thus far. The current project has also provided the government with pathways on its next priorities such as the focus on completing the enabling environment for investments by the new emerging targets on standards for the microgrid, work on voluntary compliance

registry for RPS, and the further enrichment of the knowledge management portfolio to further strengthen and deepen stakeholder engagements and partnerships.

4.3.7. Country Ownership

The project is relevant by its sincere expression of country ownership as demonstrated by the impressive project implementation and adaptive management and as validated by the TE team during the mission. The project is fully in line with the development priorities of the Philippines and its national sector development priorities and plans. For this endeavor, DOE is the key counterpart and national implementing agency, which fully leads the work through the PSC and the PMU. The TE team witnessed the high sense of embeddedness in the work plans of the DOE and the country ownership as expressed in its commitment to do well and achieve more. DOE was leading the steering committee and was hosting in its offices the PMU. The project ownership stems from the problem itself as a significant threat to the economic growth of the Philippines is the unreliability and the high cost of electricity. This problem has been exacerbated by the COVID-19 pandemic and the current war in Ukraine. Given the scenario that the Philippines has limited fossil fuel reserves and a high dependence on renewable energy (RE) and imported fossil fuels; the GOP is thus increasingly pursuing policy thrusts and programs in support of national economic development, as embodied in the Philippine Energy Plan 2012-2030 (PEP) and the NREP 2022. As highlighted in the country's renewable energy development driven by the Renewable Energy (RE) Act of 2008, the GOP will reduce its GHG emissions from costly imported fossil fuels. Under the NREP that was developed under the Republic Act 9513 and the updated in 2022, the Philippines will "promote the development, utilization, and commercialization of renewable energy resources," a policy framework with strategic building blocks which can support the country achieve its goal to be carbon neutral – a goal embodied by the DREAMS project itself.

4.3.8. Gender equality and women's empowerment

Provision of adequate resources for integrating gender equality and human rights in the project is an investment with short-term, medium-term and long-term benefits. The extent to which the allocation of resources to targeted groups takes into account the need to prioritize those most marginalized.

Per the MTR, at the time of project design, gender issues as required under the 'UNDP Social and Environmental Screening Procedure (SESP)' were conducted. This included the 'Social and Environmental Risk Screening Checklist'. Gender benefits due to the project were expected for marginal income households that will benefit from an expected reduction of electricity costs from renewable energy. The Project was expected to deliver multiple development benefits by way of improved impacts on gender and women such as opportunity to engage in productive activities thereby enhancing household income. The project design includes a provision to monitor renewable energy availability within sitio households as a means of monitoring contributions of this Project to improving gender equality. The results framework of the project however does not have gender segregated targets for the indicators. However, the adaptive measure was to ensure an almost equal participation of women in all the training and capacity building initiatives of the project.

Gender Monitoring

A DREAMS Gender Analysis was conducted in July 2022 that assessed how gender was relevant to the project. This analysis drew data from a wider literature review, and the following sources:

- Regular project reports – annual and quarterly progress reports (APR and QPR), project implement report (PIR) from 2018 – 2021;
- Quantitative data from partner and beneficiary organizations (e.g. Department of Energy Renewable Energy Management Bureau, Provincial Governments of Iloilo and Palawan); and
- DREAMS Support Facility for RE project proposals.

Gender in DREAMS identifies entry points for gender issues and impact in DREAMS project activities. The formulated recommendations later on outline project actions to sustain and expand gender mainstreaming efforts in the last project year.

Findings of Gender Assessment

Project design: The DREAMS project document (ProDoc) and its inception report did not include a gender assessment, an analysis and an action plan to support its outputs. There is no explicit gender output, and activity in its results framework. On January of 2022, a gender expert from the UNDP Country Office conducted a Gender Analysis, tagged the project as GEN 01 and recommended the conduct of a gender analysis for the project. Despite the lack of gender mainstreaming at the planning level, the DREAMS project has gender integration during project implementation.

Project Management:

1. *Gender in Monitoring & Evaluation*
   Mainstreaming gender in project activities are regularly documented in regular reporting, including in the Quarterly Progress Report, Annual Progress Reports, and the Project Implementation Report. The reports include a UNDP Gender Marker, qualitative description of results, and quantitative disaggregated data of beneficiaries/participants.
2. *Project Management and Governance*
   The Project Management Unit (PMU) is headed by the National Project Director who is a former chairperson for the Department of Energy's (DOE) Gender and Development (GAD). The project's Implementing Partner is the DOE, through its Renewable Energy Management Bureau (REMB). The PMU has a designated the Capacity Development Associate (CDA) as the gender focal. As the gender focal, the CDA represents the PMU in gender activities, and integrates gender in the implementation of project activities. REMB has a designated GAD focal, incompliance with Philippine government policy. The focal is responsible for spearheading gender-related activities of the Bureau. Both the PMU and REMB gender focal points have simultaneous functions, and are not dedicated to gender focal functions.
3. *Gender training for IP, PMU in January 2022*
   In January 2022, the UNDP Country Office engaged a contracted Gender Expert to mainstream gender in its projects. The DREAMS project participated in a 1-on-1 consultation with the gender expert, and attended the CO-wider gender mainstreaming capacity building session.

Macro-level gender integration: DREAMS provides technical support to national policy mechanisms for the RE Law. Gender-disaggregated data or indicators are typically not relevant to policy development, as relevant data are non-human in nature (greenhouse has emissions, energy mix, market indicators).

1. *Women participation in national policymaking*
   As part of its technical assistance, DREAMS supports public consultations during policy development, and information campaigns during policy implementation. In this way, women are effectively engaged as stakeholders to RE policy. The table below summarizes the gender-disaggregated participation in these activities.

Number of Participants to DREAMS Policy Activities

Year	Activity	Female/Male ratio	% of Female participants
2018	DREAMS Stakeholders' meetings	69/148	32%
2019	NREP Technical Consultations	32/44	42%
	RE Omnibus Guidelines Public Consultations	98/120	45%
	PREMS UAT	9/12	43%
	PREMS Launching	53/79	40%
2020	REMB-TSMD-DREAMS Planning Workshop	16/8	67%
	Localized RE Planning – Iloilo MOU signing and stakeholders' consultations	15/29	34%
	FGD on RE Manufacturing	15/13	54%
	FGD on Ocean Energy	6/8	43%
	RE Market Manuals Public Consultation	184/334	36%
2021	Draft NREP 2020-2040 Public Consultation	141/303	32%
2022	Draft Department Circulars on a.) Preferential Dispatch of all RE Plants in the WESM, b.) RE Trust Fund Guidelines, c.) Opt-In Mechanism, and d.) Adopting Amendments to the Renewable Energy Market (REM) Rules Public Consultations	141/200 56/66	41% 46%
	Public consultations for draft DC on RPS in Off-grid Areas	Zamboanga – 8/31 Cebu – 42/85	21% 33%
Total		**885/1480**	**37%**

Meso-level gender integration:

1. *Women participation and leadership in community organizations*

DREAMS partners with local communities and organization for the implementation of the Local RE Capacity Building Program (LREP)[23], and the Support Facility for RE.[24] There are two partnerships, which resulted in explicit engagement of women in community affairs, through their participation in the project's activities and outcomes.

- *Pamilacan Solar Credit Cooperative.* The community cooperative handles the operations and maintenance of the solar PV system, including the anticipated DREAMS-supported expansion of the solar facility. The cooperative also collects payment for solar energy. The organization empowers the women of the community as four of the five members of the board of directors, including the president, are women from the local community.
- *Katablangan Indigenous Farmers Association*. Women in the Isneg indigenous community will play part in decision making related to the SF4RE-supported rehabilitation of the local micro-hydro power plant. Isneg women are also included in the hauling of materials and providing needs for construction teams during the facility installation.

2. *Women education and capacity building in STEM and climate change fields*

To strengthen institutions for RE, DREAMS supports Renewable Energy related capacity building trainings for various organizations. The table below summarizes training activities and its corresponding women participation.

Number of Participants to DREAMS Capacity Building Activities

Year	Activity	Female/Male ratio	% of Female participants
2019	Palawan Local RE Capacity Building Program (LREP) Planning Workshop	18/32	36%
	Palawan LREP San Vicente Consultative Meeting	16/12	57%
	Iloilo LREP ILECO III Total Electrification Planning Workshop	11/7	61%
	LREP Module 1	29/60	33%
	REMB MIS Learning Event	13/17	43%
2021	Oriental Mindoro RE Project Development Workshop	30/55	35%
	Lanao del Sur Provincial Government and Electric Cooperative RE 101 Training	9/13	41%
2022	Solar Energy Orientation	5/9	36%
	REMB Hydrology Training	6/14	30%
	Regional Development Council 6: RE 2022 & Beyond Conference-Workshop	66/131	34%
	Meeting on GEOP in Mactan Ecozones	15/33	31%
	Solar PV Training for Iloilo Municipal Engineers	22/72	23%
	Working for an Empowered Pilipinas: A BiGSHOW on RE Development – MOU signing and learning session for SF4RE partners	34/77	31%
Total		**274/532**	**34%**

Micro-level gender integration: The Support Facility for RE (SF4RE) provides goods, services and installation of RE facilities for LGU partners, which leads to electrification and welfare outcomes that in turn, touch on women issues as discussed below. The table below shows gender disaggregation of SF4RE beneficiary communities.

1. *Women's livelihood*

SF4RE projects enable access to electricity and appliances that support women livelihood such as sari-sari stores, sewing machines, freezers. Electrification outcomes are anticipated to support the sari-sari store enterprises of women in Pamilacan and Polillo, handicraft weaving in Aborlan, and bioethanol product packaging and marketing in Aparri, fishery enterprises in Carles. In Pamilacan and Aborlan project sites, the payment/credit system for the installed electricity is operationalized through women-ran cooperatives or sari-sari stores.

[23] The Localized RE Planning Capacity Building Program (LREP) assists local government units (LGUs) and electric cooperatives in integrating RE to development plans, local policies, and processes, and provides technical assistance and capacity building.
[24] The US$ 1 M Support Facility for RE (SF4RE) funds services and goods for RE modeling and projects at the local level. SF4RE partners with local government units (LGUs), electric cooperatives (ECs), new power producers (NPPs), qualified third parties (QTPs), non-profit/ community-based organizations/ enterprises and academic institutions.

2. *Women's access to public welfare, health and security services*
   SF4RE projects in Tamparan, Pototan and Concepcion give RE access to public buildings that cater to women's needs. Buildings include hospitals, maternity lying-in centers, social work centers, women's crisis center, and evacuation centers. Electrification in public buildings in Oriental Mindoro also improves lighting during night, which may increase public security outcomes for the community.
3. *Women's role in children's education*
   In general, SF4RE projects that increase hours of electrification aims to create a conducive environment for children to do homework and study even during the night.
4. *Women's role in water fetching*
   Water fetching is culturally assigned to women and children. In Goa, water fetching is a 3-hour task. RE Water Systems in Goa, Tapaz, and Carles helps alleviate this burden.

Final Year Steps

With its final Annual Work Plan finalized, the project can no longer pursue and allocate funds for gender-specific activities. The Project Management Unit can pursue gender mainstreaming through the following:

- Maintain continued engagement with its current partnerships with women-led and women-focused organizations (e.g. DOE REMB, Lanao del Sur Electric Cooperative, Pamilacan Solar Credit Cooperative);
- Sustain the monitoring and reporting of gender-disaggregated data on event attendance;
  - Gather missing gender-disaggregated data for SF4RE projects
- Ensure the integration of gender in the Terminal Evaluation.

Available Gender Population data of SF4RE sites as of Q1 2022

Project	Municipality	Province	Households Outreach	Women outreach (Some reported as % of women, some as Number of Women)
Pamilacan Island Community Solar Expansion Project	Baclayon	Bohol	357 HHs	52%
Concepcion LGU Rooftop Solar Generation Project	Concepcion	Iloilo	No data available	289
Household Electrification (DC Smart Grid System) and Solar Powered Irrigation Pump for Barangay Apurawan	Aborlan	Palawan	No data available	66%
Polillo Island Solar Energy Solutions for Off-grid Island Community	Bordeos	Quezon	No data available	No data available
Deployment of Solar Powered Distiller for Bioethanol Production used as a Main Agent for Bio-based Products in Response to COVID-19 Emerging Needs	Aparri	Cagayan	No data available	No data available
Solar PV Powered Potable Water Systems	Goa	Camarines Sur	No data available	No data available
Iloilo Provincial Hospital Rooftop Solar PV Project	Pototan	Iloilo	120 HHs	
Brgy Agbobolo Redevelopment of Ajuy Micro-Hydropower Plant and Grid Interconnection Project	Ajuy	Iloilo	No data available	24,325
Rehabilitation of Amanjuray Mini-Hydro Power Plant	Lawaan	Eastern Samar	No data available	26,311

Upgrading and rehabilitation of 10 kW Micro Hydro Power Plant in Upper Katablangan	Conner	Apayao	300 HHs	40%
Electrification of Sitio Calusa and Sitio Cawili, Bgy. Magsaysay, Cagayancillo, Palawan	Cagayancillo	Palawan	No data available	No data available
Brgy Proper, Panpanan 1 Redevelopment of 15kWp Micro-Hydropower Plant	San Remigio	Antique	No data available	No data available
Construction of Solar PV Powered Potable Water Systems	Tapaz	Capiz	No data available	1,796
Oriental Mindoro Green Energy Pilot Project for 7 Municipal Buildings, 7 Faith Based Buildings and 1 livelihood center in Oriental Mindoro	All municipalities	Oriental Mindoro	No data available	49.3%
Solar Powered Aquatic Life Support System	Currimao	Ilocos	Not Applicable (University beneficiary)	No data available
Solar PV-powered Fish Processing. Social Services, and Water System	Carles	Iloilo	Brgy. Gabi - 634 Brgy. Granada - 820 Brgy. Asluman - 884 Brgy. – Lantangan – 1148	1221 (47%) 1644 (47%) 1779 (48%) 2504 (48%)
Solar for Tamparan District Hospital, Lanao Del Sur	Tamparan	Lanao del Sur	No data available	No data available

4.3.9. Cross-cutting issues

The TE team considered the following cross cutting issues: Gender Issues, Marginalized and Vulnerable Groups, and Poverty Alleviation.

Gender Issues

Per the MTR, at the time of project design, gender issues as required under the 'UNDP Social and Environmental Screening Procedure (SESP)' were taken care of. This included the 'Social and Environmental Risk Screening Checklist'. Gender benefits due to the project are expected for marginal income households that will benefit from an expected reduction of electricity costs from renewable energy. The Project however is expected to deliver multiple development benefits by way of improved impacts on gender and women such as opportunity to engage in productive activities thereby enhancing income.

The project design included a provision to monitor renewable energy availability within sitio households; as a means of monitoring contributions of this Project to improving gender equality. The results framework of the project however does not have gender segregated targets for the indicators. The adaptive measure was ensuring almost equal participation of women in all the training and capacity building initiatives.

The positive or negative effects of the project on local populations (e.g. income generation/job creation, improved natural resource management arrangements with local groups, improvement in policy frameworks for resource allocation and distribution, regeneration of natural resources for long-term sustainability) are also taken into account under these cross-cutting issues, as follows:

Indigenous People. *Five (*5) SF4RE projects benefit communities with Indigenous People residents, namely the projects in. Cagayancillo, Oriental Mindoro, San Remigio, Tapaz, Upper Katablangan. For the SF4RE Project in Upper Katablangan, the project partner organization is an organization of the community's indigenous people farmers.

Disadvantaged or marginalized groups. In proposal selection, SF4RE prioritizes rural, off-grid areas without access to stable electricity. SF4RE is particularly impactful here, as SPUG areas are otherwise reliant subsidy and limited diesel generators. Due to these areas' small economy and demand, these areas have difficulty attracting investors and other electricity providers. SF4RE demonstrates how RE models could be an answer to address these market failures and reach these disadvantaged areas.

Income generation and job creation. The rolling out of RE policy mechanisms (with support from the project) creates an enabling environment for a growing RE economy in the country, with corresponding anticipated growth in RE jobs. The growing interest in RE and demand for RE labor made evident the need for capacity building of technicians. The project provided several of these trainings (*refer to list of capacity building*)**.** Lastly, SF4RE projects enabled electrification, which supported community livelihood and economies (e.g. electricity for bakers in Aborlan, see list of project sites). There are also SF4RE projects that applied RE to productive uses – using RE to power biodistiller production (Aparri), irrigation (Aborlan and San Remigio), fisheries processing (Gigantes), fisheries education (MMSU), livelihood centers (Oriental Mindoro).

Poverty and Environment Nexus

Poverty-environment nexus. The project outcomes also target how the environmental conservation activities contributed to poverty reduction and sustaining livelihoods. In a much wider lens, the project's main contribution to environmental conservation is enabling access to clean energy and transition from fossil-fueled power generation. The resulting installation of RE Facilities for on-grid and off-grid areas has demonstrated the Productive Uses of RE (PURE) beyond household electrification and has various poverty reduction and livelihood outcomes.

The resulting electrification has various poverty reduction and livelihood outcomes:

- ***Improved national resource management arrangements with local groups***. The DREAMS-supported National RE Program 2020-2040 outlines RE mainstreaming among local stakeholders, including the local RE planning process, and the Renewable Portfolio Standards requiring mandatory RE participants to source from RE. Using the 2022 budget, that could amount to 21 million pesos a year (*refer to provincial/municipal ordinance as example*)**.**
- ***Improvement in Policy Frameworks for Resource Allocation and Distribution***. The local RE Planning Capacity Building program capacitates LGUs to integrate RE in their policies, including their budgets. One manifestation of this is the pledged counterpart resources local partners have programmed for SF4RE projects. Another landmark manifestation of this is Iloilo Province's passage of a provincial ordinance allocating 0.05% of their annual budget for RE investments, such as investments actualizing the DREAMS-supported Iloilo Provincial RE Plan (refer to annual budget).

Human rights-based approach. The ProDoc Social and Environmental Screening Procedure narrates DREAMS' human rights-based approach. The project promotes the expansion of clean energy access and scale up efforts to increase the electrification rate in the Philippines. Provision of electricity is viewed as a fundamental human right. Improving access to modern, clean energy is an essential enabler of inclusive development and poverty reduction. By ensuring access to reliable, affordable and clean energy the Project is envisaged to uphold the basic human rights of the peoples of the Philippines through the delivery of interrelated positive consequences – such as improved living standards, livelihoods opportunities, enhanced human health, improved education and reduced level of GHG emissions and environmental degradation.

A portion of the project's technical assistance was provided to remote far-flung communities with very limited access to electricity that are more dependent on costly fossil-fueled power generation. The development of indigenous renewable energy will reduce electricity costs to these communities and increase access for even households with marginal incomes. Additionally, the project engages, incentivizes, and optimizes the participation of local governments, rural electric cooperatives, civil society organizations, academe, and communities including indigenous peoples in the integration of RE policies in local development planning. Project implementing agency, partners, and participating local government units, RE project proponents are accountable in the observance of human rights approach during project implementation. Through these subprojects, renewable sources are mainstreamed as potential means to augment power scarcity, especially in far-flung areas. With the 24/7 access to electricity at a lower cost, which is one of the basic social needs, the local government units and communities could be empowered to pursue other endeavors such as improvements in education, livelihood, health, and social welfare – progressing human rights at the community level.

Disaster Risk Reduction and Mitigation

The project outcomes target to contribute to better preparations to cope with disasters or mitigate risk, and/or address climate change mitigation and adaptation, as relevant. As a whole, the project is designed towards climate mitigation, with the overall objective of reducing GHG emissions. On a policy level, the project's supported RE Law's policy mechanisms, which ultimately paves the way for the country's energy transition. Key among these policy mechanisms are the Philippine RE Market System, the Green Energy Option Program (GEOP), and the National RE Program 2020-2040 (*refer to Policy list document*)**.** On a

community level, the project's SF4RE RE facilities enable communities to transition from diesel generator sets and other sources of electricity, to clean and reliable RE (*refer to SF4RE master list and database*). On an activity level, SF4RE project partners update their local disaster risk reduction management and waste management plans to consider new RE facilities in their communities, as prescribed in the SESP and to be guided by the Environmental and Social Management Plan (to be drafted this October 2022, *document to be reviewed*).

• Positive or negative effects of the project on local populations (e.g. income generation/job creation, improved natural resource management arrangements with local groups, improvement in policy frameworks for resource allocation and distribution, regeneration of natural resources for long-term sustainability);

Income generation/job creation. The rolling out of RE policy mechanisms (with support from the project) creates an enabling environment for a growing RE economy in the country, with corresponding anticipated growth in RE jobs. The growing interest in RE and demand for RE labor made evident the need for capacity building of technicians. The project provided several of these trainings (See list of capacity building) Lastly, SF4RE projects enabled electrification, which supported community livelihood and economies (e.g. electricity for bakeries in Aborlan). There are also SF4RE projects that applied RE to productive uses – using RE to power biodistiller production (Aparri), irrigation (Aborlan and San Remigio), fisheries processing (Gigantes), fisheries education (MMSU), livelihood centers (Oriental Mindoro).

Improved national resource management arrangements with local groups. The DREAMS-supported National RE Program 2020-2040 outlines RE mainstreaming among local stakeholders, including the local RE planning process, and the Renewable Portfolio Standards requiring mandatory RE participants to source from RE. Using the 2022 budget, that could amount to 21 million pesos a year. See attached ordinance.

Improvement in Policy Frameworks for Resource Allocation and Distribution. The Local RE Planning Capacity Building program capacitates LGUs to integrate RE in their policies, including their budgets. One manifestation of this is the pledged counterpart resources local partners have programmed for SF4RE projects. Another landmark manifestation of this is Iloilo Province's passage of a provincial ordinance allocating 0.05% of their annual budget for RE investments, such as investments actualizing the DREAMS-supported Iloilo Provincial RE Plan. See attached annual budget.

• Extent to which the project objectives conform to agreed priorities in the UNDP Country Programme Document (CPD) and other country programme documents;

• Whether project outcomes have contributed to better preparations to cope with disasters or mitigate risk, and/or address climate change mitigation and adaptation, as relevant

As a whole, the Project is designed towards climate mitigation, with the overall objective of reducing GHG emissions. On a policy level, the Project's supported RE Law's policy mechanisms, which ultimately paves the way for the country's energy transition. Key among these policy mechanisms are the Philippine RE Market System, and the National RE Program 2020-2040 (See Policy list document). On a community level, the Project's SF4RE RE facilities enable communities to transition from diesel generator sets and other sources of electricity, to clean and reliable RE (reference on SF4RE database). On an activity level, SF4RE project partners will update their local disaster risk reduction management and waste management plans to consider new RE facilities in their communities, as prescribed in the SESP and to be guided by the Environmental and Social Management Plan to be drafted this October 2022.

• Extent to which poor, indigenous, persons with disabilities, women, and other disadvantaged or marginalized groups benefited from the project;

Reference is the Gender Analysis document for outcomes for women stakeholders.

Indigenous People 5 SF4RE Projects benefit communities with Indigenous People residents, namely the projects in. Cagayancillo, Oriental Mindoro, San Remigio, Tapaz, Upper Katablangan. For the SF4RE Project in Upper KAtablangan, the project partner organization is an organization of the community's indigenous people farmers. See SF4RE database for details

Disadvantaged or marginalized groups – In proposal selection, SF4RE prioritizes rural, off-grid areas without access to stable electricity. SF4RE is particularly impactful here, as SPUG areas are otherwise reliant subsidy and limited diesel generators. Due to these areas' small economy and demand, these areas have difficulty attracting investors and other electricity providers. SF4RE demonstrates how RE models could be an answer to address these market failures and reach these disadvantaged areas. See SF4RE database for details

• Poverty-environment nexus: how the environmental conservation activities of the project contributed to poverty reduction and sustaining livelihoods

In a much wider lens, the Project's main contribution to environmental conservation is enabling access to clean energy and transition from fossil-fueled power generation. The resulting electrification has various poverty reduction and livelihood outcomes already detailed earlier.

• Extent to which the project contributed to a human rights-based approach.
The Project Document's Social and Environmental Screening Procedure narrates DREAMS' human rights-based approach. The Project promotes the expansion of clean energy access and scale up efforts to increase the electrification rate in the Philippines. Provision of electricity is viewed as a fundamental human right. Improving access to modern, clean energy is an essential enabler of inclusive development and poverty reduction. By ensuring access to reliable, affordable and clean energy the Project is envisaged to uphold the basic human rights of the peoples of the Philippines through the delivery of interrelated positive consequences – such as improved living standards, livelihoods opportunities, enhanced human health, improved education and reduced level of GHG emissions and environmental degradation.

A portion of the Project's technical assistance was provided to remote far-flung communities with very limited access to electricity that are more dependent on costly fossil-fueled power generation. (See SF4RE files for evidence) The development of indigenous renewable energy will reduce electricity costs to these communities and increase access for even households with marginal incomes. Additionally, the Project engages, incentivizes and optimizes the participation of local governments, civil society organizations, and communities including indigenous peoples in the integration of RE policies in local development planning. (See files on capacity building, and stakeholder list) Project implementing agency, partners, and participating local government units, RE project proponents are accountable in the observance of human rights approach during project implementation and as promulgated in the Philippine Constitution.

Through these subprojects, renewable sources are mainstreamed as potential means to augment power scarcity, especially in far-flung areas. With the 24/7 access to electricity at a lower cost, which is one of the basic social needs, the local government units and communities could be empowered to pursue other endeavors such as improvements in education, livelihood, health, and social welfare – progressing human rights at the community level.

4.3.10. GEF Additionality

Per ProDoc, under an alternative scenario with GEF support, the barriers described would be lowered. The key issue for the DREAMS Project will be to assist the GOP in meeting its RE targets of 12,683 MW by 2020 and 15,236 MW by 2030. With the rate at the time of design of approvals for RE projects, the GOP was challenged to meet these targets. Resources from the DREAMS Project were thus used to accelerate the current pace of renewable energy development in the Philippines through actions that are designed to increase investor confidence in RE projects.

For example, through components designed to streamline a tedious regulatory process for RE projects, DREAMS resources had targeted specific barriers in the process that were identified by DOE and other key stakeholders during the PPG phase. This included assistance to fill in policy gaps (such as one on RE projects providing electricity supply directly to local utilities or generators), clarification on institutional responsibilities, assistance with local ordinances to align with national RE objectives, strengthening guidelines for RE developers on assurances on system security with RE, and strengthening financing mechanisms that will minimize developmental and construction delays on an RE project.

In addition the project resourcing and technical assistance supported barriers identified related to a lack of institutional capacity and awareness to process applications related to RE approvals. This lack of institutional capacity and awareness is mainly at the local levels of government, was not conducive to an investor-friendly environment. The alternative scenario under DREAMS was to provide assistance to LGUs to harmonize their RE activities more closely with national RE programmes and objectives; streamline the process of permits and licenses at the national level; build more capacity at the local level to liaise with RE investors and monitor RE project development; provide assistance to broker coordination agreements between national and local agencies; and provide assistance for the establishment of an operational RE knowledge platform that can benefit local groups as well as RE practitioners in the Philippines.

Additionally, the alternative scenario under GEF was to provide assistance to RE projects that are currently stranded under the process, in obtaining the necessary approvals for implementation. GEF assistance was to be used as outputs from the other components of DREAMS, namely regulatory and institutional strengthening components to increase the likelihood of an accelerated RE approval process. A functional RE market and other financial incentives under the RE Act would then provide additional financial incentives for smaller less experienced RE developers, thereby creating a larger pool of RE developers, a more thriving wholesale electricity market and ultimately lower electricity prices for end consumers in the Philippines. With some of the infrastructure for the development of an RE market already conceptualized and partially developed, RE market is currently not fully operational. Until there is a critical mass of RE developers in the RE market, there is a strong likelihood that

the RE Market will not be fully functional in the near-term. An alternative scenario under DREAMS is to provide assistance towards:

- Making provisions in the RE Act more efficient (such as net metering, green energy options and FiT qualification and payments) that will increase the number of RE developers generating RE into the Philippines grid; and
- A functional RE market that would ensure the inclusion of a critical number of RE developers in the market. With the functional market, RE developers will be able to forecast more secure and increased revenue streams coming from the registration of the RE project with a new RE registrar, and the awarding and sale of RE certificates.

With this financial incentive as well as a streamlined regulatory process and improved institutional capacities, more players will willingly enter the RE market creating more competition and pressure for reduced electricity prices. Thus, for global impacts, with more RE projects being approved and implemented under GEF Project support, the power sector should experience a decline in GHG emissions.[25]

4.3.11. Catalytic/Replication Effect

A key feature of DREAMS was the intention to scale out nationally in terms of the knowledge and good practice of SAFRE and learning and knowledge training outcomes to other provinces, and to entice a larger interest of the private sector into a health market place promoting products and services pertaining to RE.

Knowledge has been transferred and through key Knowledge Products. Examples of which are:

- Compendium of RE Law, Policies, and Guidelines. The last compendium of RE Laws in 2012 was done through the Capacity Building to Remove Barriers in for Renewable Energy Development (CBRED), also a UNDP-GEF supported Project. This 3rd compendium would include new policies passed after 2011. Completed, published and copies are being distributed.
- Three (3) audiovisual productions about the Omnibus Guidelines were completed and published online to support the implementation of the guidelines.
- Support Services Facilities for RE - an inventory and analysis of existing sources of financing for RE projects in the Philippines and potential areas for interventions. Completed in March 2020.
- Empowered: A Decade Report. This report captured the accomplishment, milestones and challenges in the implementation of the RE Law from 2008 to 2018. Completed and released in January 2020. E-copy is uploaded.
- Report on the Status of the Implementation of the Renewable Energy Act of 2008 for the period covering January 2018 to December 2018 for the joint congressional power committee (JCPC). Completed and released in July 2019.
- Print publication of the OMNIBUS - ongoing, final draft being reviewed.
- Updated micro-hydro power development guidebook - ongoing, final draft being reviewed.

Knowledge Products of the DREAMS Project

#	Knowledge Product/IEC	Date	Link (if online)	Target Audience
1	Local RE Development: Lessons from Region 6	Jun-22		
2	DREAMS Transition Report	May-22		DOE officials (new)
3	Press Release: Making REMpossible: The Launch of the Philippine Renewable Energy Market Interim Commercial Operations	Jul-22	https://www.undp.org/philippines/press-releases/making-rempossible	UNDP website
4	Press Release: 12th Project Steering Committee Meeting	Apr-22		DOE media pages
5	Press Release: Iloilo Provincial Hospital Switch-On Ceremony and Memorandum of Agreement Signing	Apr-22		DOE media pages
6	Press Release: RE Market Asia Conference	Apr-22		DOE media pages
7	Press Release: Mayor Pan Shares Goa's Experience in Implementing SF4RE-Supported Solar PV Potable Water Systems Project	Jun-22		DOE media pages

[25] The GEF Project support during the period of 2016 to 2020, the power sector in the Philippines can work towards reducing the GHG emission forecast in 2020 of 75 million tonnes CO2eq to the 2020 low carbon scenario of 31 million tonnes CO2eq as shown on Table 3. A portion of these GHG emissions will be reduced through the Project interventions of the DREAMS. As such, in the alternative scenario, the direct emissions reductions by the end of the project (EOP) will be 205,181 tonnes of CO2eq. This translates to GHG emissions reductions of approximately 2.44 million tonnes CO2eq (over the lifetime of these RE projects) from successfully piloting RE technologies during the Project period through a streamlined regulatory process under which many RE projects are currently being delayed for implementation. This would be based on an annual electricity generation of 338,002 MWh per year from 75 MW of installed capacity of hydropower, solar PV and biomass gasification.

8	Press Release: DOE signs MOU with 11 SF4RE Partner Organizations to further joint collaboration in renewable energy development	Jun-22	https://www.doe.gov.ph/press-releases/doe-signs-mou-11-partner-organizations-further-joint-collaboration-renewable-energy	DOE media pages
9	Press Release: LGU-initiated hydropower in Western Visayas pushed in RE applications seminar-workshop	Apr-22		DOE media pages
10	Press Release: LGU-initiated Solar Energy in Western Visayas Pushed in RE Applications Seminar-Workshop	Apr-22		DOE media pages
11	Press Release: LGU-initiated Biomass and Geothermal Energy in Western Visayas Pushed in RE Applications Seminar-Workshop	4/7/2022		DOE media pages
12	Guide on Micro-Hydropower Plant Development	12-Dec-20	Physical publication	
13	Compendium RE Laws and Policies	12-Dec-20	Physical publication	
14	Step-by-Step Instructional Audio-Visual Presentation for the Omnibus Guidelines Governing the Award and Administration of Renewable Energy Service and Operating Contracts and the Registration of Renewable Energy Developers	12-Dec-20	Department of Energy Philippines (doe.gov.ph)	RE Stakeholders
15	EMPOWERD: Renewable Energy Decade Report 2008-2018	Dec-19	empowered-re-decade-report-2008-2018.pdf (doe.gov.ph)	
16	Support Facility for RE Brief	As of July 2022	Presentation materials - https://docs.google.com/presentation/d/1Wr6hXmbmkfX--6v4wdrytSLMgYMwWCg2/edit?usp=sharing&ouid=118223624675676455649&rtpof=true&sd=true	Project Stakeholders, fora presentations, etc.
17	DREAMS Project Brief	As of January 2022	Presentation materials - https://docs.google.com/presentation/d/1Nl_FzKpU9ykx1oLRhjxnTZj6pJLFveh5/edit?usp=sharing&ouid=118223624675676455649&rtpof=true&sd=true	Project Stakeholders, fora presentations, etc.
18	RE Branding Comms Firm - contracted mid-2022, the comms firm will produce IEC materials for RE, NREP Rollout and the DREAMS Project throughout the latter 2022	Jun-22	Various Media	RE Stakeholders
19	Guidelines on Dam Safety and Safe Operation of Dams and Reservoirs in the Philippines	Jun-22	To be published	RE Stakeholders

Project Policy Support/Refinement

The DREAMS Project provides Technical Experts/Consultants to assist in the drafting of policy guidelines and mechanisms to support the implementation of the RE Law. DREAMS also sponsored nationwide public consultations (Pub cons) before the passage and publication of Department Orders and Circulars. The development of digital information and advocacy materials was effective due to the ban on large public forum during the Covid 19 pandemic

The nationwide Pub on ensures transparency and inclusiveness in energy policy and planning and enforcement. The drafting and passage of the **following policy instruments were supported by the project from 2018 to 2021:**

a. Policies to Enhance the Net-Metering Program for Renewable Energy Systems and Other Mechanisms to Ensure Energy Security (Enhanced Net-Metering Program) - approved in December 2020;
b. Guidelines governing the issuance of operating permits to renewable energy suppliers under the Green Energy Option Program (GEOP) - approved in April 2020;
c. Renewable Energy Market (REM) Rules - approved in December 2020;
d. Omnibus guidelines governing the award and administration of renewable energy service and operating contracts and the registration of renewable energy developers (OMNIBUS Guidelines) - approved in October 2019;
e. Guidelines governing the development, registration and administration of distributed and small-grid renewable energy projects and facilities - integrated in the OMNIBUS Guidelines;
f. Assessment of the 2011-2030 National Renewable Energy Program (NREP) - completed. And updating of the NREP to 2020-2040 (ongoing);
g. Development of the Philippine Dam Safety Guidelines – ongoing; and

h. Code of Practice on Renewable Energy Safety, Health and Environment Rules and Regulations (RESHERR) - pending approval.

4.3.12. Progress to Impact

In order to assess Global environmental impacts, the TE for example, considered results in terms of contribution to sustainable development benefits, as well as global environmental benefits (direct and indirect GHG emission reductions). The evaluation compared and analyses the GEF Tracking Tool at the Baseline with the one completed at the time of mid-term review and final scores. The evaluation answered question about the status and issues with employing RE technologies for electricity generation. It considered the remaining barriers to achieving the project objective in the remainder of the project and finally asked what are the aspects of the project that have already been successful and what are the ways in which the project can further expand these benefits?

5. MAIN FINDINGS, CONCLUSIONS, RECOMMENDATIONS, and LESSONS LEARNED

5.1. Main Findings

The following main findings are presented based on the evaluation criteria of this TE report.

5.1.1. Monitoring and Evaluation (M & E)

The project was appropriately designed to address the identified problem with four interlinked components. It would operationalize and further refine Energy Policies based on earlier collaborative UNDP GOP work. The overall strategy was to advance work on the four perceived key barriers, which were translated into project component-outcomes, namely: 1. To operationalize and refine energy policies including tithe local levels; 2. Support local governments with local RE planning (LREPs); 3. Establish and support a register to promote compliance and monitoring of the RE market (PREMS); 4. Undertake a series of small grants -renewable energy projects, which include a focused demonstration of the larger on-grid and off-grid projects (SF4RE).

The evaluation reaffirmed a key MTR finding that the project's expected outcome target was overambitious as well as its assumption about monitoring the targets within the timeframe. In this sense, the project design was somewhat flawed. For instance, firstly the DREAMS project was to support selected RE projects in the overall approval process leading to the creation of an **RE capacity of about 75 MW, which was supposed to lead to the direct GHG emission reductions of 205 ktonnes CO_{2eq} within the implementation timelines of the DREAMS project.** Such direct GHG emission reductions would happen after the DREAMS project. It is a much longer-term expected outcome to be realized only after the main project work areas are completed. Another instance is that while the RE market register is complete and working, it needs at least another year to allow the data to be gathered and monitored. In addition, the pilot (catalytic) Support Facility for RE (SF4RE) micro- or mini-grid projects are just starting to be implemented and need to be fully installed, operationalized, monitored, and assessed in order to calculate their contribution to the reduction in GHG emissions.

Furthermore, the three cited instances were envisioned with an underlying assumption that procurement would be swift and forthcoming from operators and implementers in the energy market; however, the market for renewable energy projects was still undeveloped and required more convincing evidence particularly on the cost-effectiveness of implementing RE projects as a key expected output of this project. This was a chicken-before-the-egg scenario. The expected outcomes promoting the growth of the renewable energy market will come after the project period when the consolidated investments show evidence-based cases to demonstrate its policy clarity.

In this sense, the project was correctly designed to provide knowledge inputs, generate evidence including conducting the key research outputs, develop assessment tools and provide guidance and capacity building/training support towards a systems approach to sustaining the work and monitoring the renewable energy targets.

These UNDP-supported GEF-financed projects are key elements in UNDP country programming. As such, the objectives and outcomes of the DREAMS project are also found to be completely in line with the UNDP country program and safeguard strategies, SDGs, as well as with GEF-required global environmental benefits as outlined in global environmental conventions.

Financing local demonstration with a focus on the micro- and mini-grid projects serving underserved areas (SF4RE) was also a key adaptation as the original project intended to implement demonstration of larger grid renewable energy projects.

The Project document stipulated some project monitoring protocols for M&E activities. The platform for engaging in the monitoring of the implementation and inter-sectoral government-level stakeholders is the Project Steering Committee (PSC). The project in addition to the engagement of the government stakeholders at the PSC level managed to bring on board many other beneficiaries and decision-makers, including the provincial governments of Palawan, Iloilo, and the LGUs in these two provinces of. Although the PSC has representatives from different concerned ministries and departments, it does not have a more inclusive membership especially those from civil society organizations (CSOs), NGOs, academe and research & development institutions (RDIs), development agencies, and trade & industry bodies. Limited or inactive participation of private sector or business organizations were noted. In the absence of formal communication channels, the participation and inclusion in monitoring by the broader level of stakeholders were missing. That is a key lesson learned.

The Project Steering Committee (PSC) was strong as a management/monitoring mechanism, especially for decisions concerning the procurement and the normative inputs (guidance and tools development) as well as the capacity development goals of the project. Major decisions were taken to adapt to changes and the dynamic implementation contexts were taken and supported actual project implementation on the ground towards achieving results.

The Project document M and E was detailed and it was adapted appropriately using normal UNDP and GOP monitoring mechanisms including quarterly, annual, Mid-term, and regular Project Board meetings. While monitoring was generally conducted as per the project plan, the project plan was adapted due to significant operating challenges about COVID-19 travel and issues on procurements of goods and services.

Using the original indicator framework, an adaptive accelerated project strategy was employed. For instance, the project developed a PIF facility, which became the SF4RE implementation process. In terms of the unrealized project plan based on the PIF, the government pushed forward with the design of 18 SF4RE demonstration projects, which was commended as this project was supporting the government in reaching its last mile constituents with more capacities on the ground in off-grid locations; and as such was supporting key national targets around a difficult problem concerning how to provide energy access for all.

Critically, the public institutions that are members of the PSC are key regulatory authorities of the Philippine Renewable Energy sector. The project did not engage as the broader stakeholder groups as envisioned (beyond government officials) with the absence of CSOs, NGOs, PS, academe and RDIs, etc. As a lesson learned, this is recommended in near future endeavors, e.g. in sustaining the project forward.

COVID-19 impacted the execution of project activities; there was a communication from GEF approving the extension of the DREAMS Project from **July 28, 2021 to January 28, 2023.**

5.1.2. Implementing Agency (IA) Implementation & Executing Agency (EA) Execution

UNDP provided excellent day-to-day project implementation assistance. Through the assistance deployed to the PMU, UNDP also provided financial and technical oversight services with the program team deputy and program manager and analyst directly involved in all project steering committee meetings and critical procurement events. The UNDP and DOE have expressed a constructive partnership and joint oversight of the implementation in a meaningful and highly constructive manner. This relationship was verified in all interviews.

This was a NIM project and located in the heart of DOE where there was a very strong country ownership and relevance. The project was led by the Assistant Secretary of the DOE and the work was embedded in the DOE policy offices, suitably in the RE Management Bureau (REMB). The project was implemented through a learning-by-doing approach, which was most appropriate for the expressed needs of the target beneficiaries, the implementation strategies as well as for constructive adaptive management, amidst the disruption and challenges caused by the COVID-19 pandemic.

5.1.3. Assessment of Outcomes

Relevance. The Project has become increasingly relevant and is fully aligned with the needs and priorities (providing technical support, knowledge inputs, tools, and capacity building) of the GOP. It was designed based on early UNDP-GOP collaboration on RE policy. The current focus was operationalizing the growing enabling environment and policies, especially at the local levels and stimulating the market through demonstrations (showing the investment case) and the development of an RE compliance register. The relevance has increased during implementation with the passing of new national laws concerning microgrids and a national focus on electrification and poverty reduction in unserved and underserved areas. It is fully aligned with national policies including the recent development of the national renewable energy plan (NREP, supported by this project) as well as new targets concerning climate change, energy security, and poverty alleviation. To cite a few examples, these breakthroughs are as follows:

- Microgrid Systems Act (RA 11646) passed in 2022 provides attention to off-grid areas.
- Energy Transition-Energy Security-High Cost of Energy in a public building (new energy efficiency law became operational in 2022)
- Energy security and DRR continuity in critical infrastructures such as schools and hospitals
- Focus on last mile electrification
- Addressing SDGs

Design. The project had an overambitious design with a longer-term GHG expected outcome, i.e. %GHG target to be realized after the implementation of the four interlinked components on Policies, Institutional LREPs, Compliance thru PREMS and demonstration of the market investment case (including the private sector and government actors) through SF4RE. Additionally, this was intended to be a **catalytic work** – intended to showcase the viability and reliability of RE – however, the SF4RE work is high risk as it did not provide 100 percent coverage in the communities in which it worked with (e.g. 100% last

mile electrification). These areas must become the focus for completion by the government shortly.

- Four interlinked components – needed an overarching **knowledge management platform**, i.e. with a dedicated budget for scaling up and replication of the project learnings to other provincial, municipal, and barangay LGUs and the broader stakeholders.
- Determine the indicators and targets where appropriate per the issues identified.
- Thematic Focus – The design includes a holistic RE (on-grid and off-grid) view but during the project, private sector (PS) adaptations moved focus towards demonstration (SF4RE) to showcase investment cases on small-scale off-grid RE systems. This project focus was learning about how to implement small-scale projects in rural off-grid small islands and areas which is favorable in terms of the focus on rural unserved and underserved communities.
- The design could have been more explicit in terms of the targeting needed to support the knowledge case around benefits of key cross-cutting areas i.e. RE/DRR/CC/GE linkages, women's economic and empowerment in small businesses through renewable energy, youth (skills development for maintaining energy systems, socio-cultural development) and capacity building for the national engineers and technicians.
- The design called for a partnership approach but this was unrealized, i.e. with more UN, private sector, and CSOs on PSC - involvement in the monitoring of the implementation. One entity (NEA) could also be included in the PSC as it provides supervision to about 120 electric cooperatives.
- No PS or CSO involvement in the steering committee
- The actual focus of the project on micro-off-grid supports hard GOP last-mile electrification work.
- SF4RE was designed later during implementation – this was delayed – it was also only catalytic support - so this must be continued to avoid if not eliminate the risks associated with its stoppage; endeavor for 100 % completion and full electrification coverage in partner beneficiary villages.
- Project needs documentation, codification, and consolidation of the cases and lessons learned to provide scientific, technical, and evidence-based knowledge case studies.

Emerging Issues. COVID 19 pandemic disrupted and delayed project implementation and interrupted the procurement and supply chain for import of key materials for project installations.

The defined objective of the Project is to reduce GHG emissions through the promotion and facilitation of the commercialization of renewable energy (RE) markets by removing the barriers towards investments in RE-based power generation projects.

A key barrier was the lack of demonstration of RE projects, established using the de-risking mechanisms (**Renewable Portfolio Standards, establishment of RE markets for trading of RE certificates**) provided in the RE Act. The action for this is being carried out under Outcome 3 of the project. With good progress towards implementation of the 'Philippine RE Market System (PREMS)', the progress towards results and its completion for the Outcome of the project is Highly Satisfactory.

Another key barrier that the DREAMS project addressed was the **lack of coordination and lack of clarity regarding the roles and responsibilities in the overall development of an RE project,** particularly, regarding the provisions in the RE Act. This DREAMS project targeted enhancing the capacity of the institutions at the local level to increase investment in the RE projects at the local level (Outcome 2). **Under the 'Local RE Planning Capacity Building Program (LREP Cap Build)', the activities to achieve this objective were implemented successfully and Iloilo expressed a good practice that can be further improved, codified, and scaled.** Such LREP capacity building program across all provinces of the Philippines needs to be replicated and sustained for the longer term.

Global relevance – GEF contributed significantly to the targeted 205 tons of CO_2 reduction by the end of the project. There has been a significant improvement in RE share in the power generation mix as of December 2021, increasing to 29.44% from 14.4% as baseline, with a total RE installed capacity of 7,914 MW. The project has provided RE access to 357 sitio households out of the target of 20,000. With the completion of approved RE pilot projects under SF4RE, particularly solar, hybrid and micro-hydro cases, the target number of households may have been achieved at end of the project.

Nearing its closure, the evaluation team has found that the DREAMS Project has made significant accomplishments in supporting its high-priority national relevance. The project supported the finalization of the National RE Plan 2020-2040 (NREP 2020-2040), which has been officially signed on 30th June 2022. It establishes the Philippine government's pathways toward increasing the RE generation mix in the succeeding years. It institutionalizes the Philippines' target of 35% RE by 2035 and 50% by 2040.

A key feature of the DREAMS project has been to provide support development of the RE projects using the '**Project Preparation Fund (PPF**)'. The creation of PPF was a provision in the project design. Utilization of the funds provided for PPF was to be carried out through the **SF4RE initiative** and is still to be finalized and completed. This project must not end before these small grants' demonstration projects are all completed. The project has approved 18 RE sub-projects under the

Support Facility for Renewable Energy (SF4RE). Out of this, eight solar/hydro/hybrid sub-projects have completed installation, with 328.95 KW-installed capacity. One was under rehabilitation due to a fire incident. The rest of the projects are expected to complete installation/commissioning by end of the project, which will benefit households, livelihoods, and delivery of social services. Linked to these sub-projects is support for the development of local RE plans and capacity building for local stakeholders.

Effectiveness. The Project was implemented efficiently through a learning-by-doing approach working closely with the DOE RE Management Bureau. Project management and all activities were fully integrated with DOE oversight - coordination and technical monitoring i.e., project approvals and decision-making done with the support of relevant DOE departments, i.e. solar and hydro, wind biomass bureaus.

Despite the past efforts under the RE Act to catalyze RE development in the Philippines, barriers still exist, such barriers include the following:

- At the local level where the RE Act has not been effectively implemented, there are issues with the approval process for the RE project. At the local level, there is also a lack of capacity and understanding regarding the provisions of the RE Act and how this is operationalised and implemented.
- The implementation mechanisms for some of the provisions in the RE Act, like RE Markets and Register which is a component of RPS, were not in place.
- There is a lack of demonstration of the successful implementation of the RE projects under the new regime following the RE Act.

The idea of the DREAMS project was thus to address these barriers directly, and accordingly, the project design had the provision to work on the three main tracks, namely: capacity building/training at the local level along with supporting the implementation of RE projects at the local level (addressing barrier a. above); creation of RE Markets and its implementation (addressing barrier b. above); facilitating the implementation of the RE project using 'project preparation fund' created under the project as SF4RE (addressing barrier c. above). As per the project design, these three main work tracks under the DREAMS project were to be supported by several enabling activities e.g. development of policies and regulations, promotion of local production of RE equipment, etc.

By the provisions in the 'Project Document' and in line with the three work tracks mentioned above the project team had been working on the three specific programs under the project, namely, 'Local RE Planning Capacity Building Program (LREP)'; 'Philippine RE Market System (PREMS)'; 'Project Preparation Fund (PPF), also known as SF4RE. There are comprehensive work contributions across four key components on policy interventions, institutional strengthening, capitalized market, and commercialization thru the demonstration case studies and proofs-of-concept.

Key Results based on Strategies in 2022

1. Policy Interventions

Indicators

- Number of approved and enforced policies and guidelines for leveraging RE investments: from 0 to a target of 8, actual achievement is 15 (8-15).
- Number of sitios with off-grid rural electrification plans using RE: 12-28
- Number of businesses who have accreditation or applied for DOE accreditation to manufacture, fabricator supply locally produced RE components: 50-2

Results /Strategies for the end of 2022

- Development and operationalization of RE Trust Fund and voluntary REM, rollout of NREP 2020-2040 and GEOP, RE Branding Campaign, others
- LREP, SF4RE, and RE Modelling
- RE Manufacturer's registration booths during project events

2. Institutional Strengthening

Indicators

- Number of funded and implemented RE projects championed or facilitated by LGU-based RE focal points: 5-9
- Number of RE projects facilitated by operational provincial-level RE market service centers: 5-7
- Number of RE projects that were designed based on the information and technical advice obtained from the established RE knowledge platform: 6-0

Results/ Strategies for end 2022

- LREP (MHP capacity building and stock-taking for MHP Devolution, Iloilo Investment Forum)
- SF4RE with LGU partners
- RE Management Information System (RIS) for contract completion; will serve as a reference for MMSU RE Short Course for 25 Ilocos Norte LGUs in November 2022

3. Capitalized Market

Indicators

- Cumulative MW of installed capacity registered in the RER established in the "capitalized" RE market: 10 - 2,833.25 MW
- Number of RE developers registered in the RER: 15-136

Results

- Market register fully developed, installed, and running with 98% subscribed under mandated compliance
- Developed the operational plan for the voluntary compliance

4. Commercialization

Indicators

- MW of RE projects that are being developed through the PPF (SF4RE): 15 – 12.697 MW (upon SF4RE completion)
- Number of bankable RE plans completed by other LGUs who were interested in RE-based energy systems: 3-5
- Number of certified technicians for RE equipment assembly and supply working with locally DOE accredited RE manufacturing entities by EOP: 10-45
- MW of installed capacity of RE projects being implemented that received support from new or improved RE financial mechanisms by EOP: 5-0
- MW of installed capacity of RE projects resulting from accelerated RE projects resulting from accelerated expediting of RE service contracts by EOP: 75-TBD

Results/Strategies for end 2022

- Completion of all SF4RE demonstration projects, documentation, codification, monitoring, assessment, and evaluation
- Completion of the operations manual and guidelines of the RE Trust Fund

Efficiency. The project was implemented efficiently through a learning-by-doing approach with the PMU embedded within and working closely with DOE REMB. Project management and all activities were fully integrated with close UNDP-DOE oversight - coordination and technical monitoring, i.e., project approvals and decision-making done with the support of relevant DOE departments i.e., solar and hydro. The structural changes envisioned by the operationalization of the policy environment will take some time and more dissemination of project learning and evidence-based case studies must be done in order for it to be realized, i.e., market growth and technical capacities for practical implementation of projects on the ground.

Structural changes envisioned

In terms of cost-effectiveness, the DREAMS project has managed to effectively contribute to the overall aim of operationalizing the policies and to promulgate the implementation of learning across the key government stakeholder groups at national and subnational levels. The 18 demonstration projects (SF4RE) are uniquely aimed at last-mile electrification areas and therefore have unearthed holes in policies and standards in terms of the following: 1. The market register (need for voluntary market register), and 2. The need for standards for implementing micro off-grid project implementation. Additionally, the idea that the project would stimulate the market is dependent on the evidence-based case studies arising from this project such that work is still needed to propagate the knowledge products, tools, lessons, and learning to the broader group of stakeholders. The DOE, supported by the DREAMS project is finalizing the development of an RE information management system and this will be a key platform for scaling up the lessons learned and cases from the project to the localities, as it will consolidate in one place all DREAMS work for further scale-up and replication to other provinces and municipalities.

Project monitoring expansion

The platform for engaging the implementation and inter-sectoral government-level stakeholders has been the Project Steering Committee (PSC). The project in addition to the engagement of the government stakeholders at the PSC level managed to

bring on board many other beneficiaries and decision-makers, including the provincial governments of Palawan, Iloilo, and the LGUs in these two provinces.

Although the PSC has representatives from different concerned ministries and departments, it did not have members from civil society organizations (CSOs), NGOs, academe and research & development institutions (RDIs), development agencies, trade & industry bodies, others. In the absence of formal communication channels, the participation of the broader level stakeholders is missing.

Sustainability. There is a growing demand for renewable energy projects and everything that goes with it, i.e. manufacturing, skills development, etc. The country will need to consider the financial resources needed to continue to provide catalyzing inputs including public-public partnerships with LGUs, joint ventures, etc. The DOE RE Trust fund is currently being operationalized with the operations manual and guidelines being developed. In the future, more focus is needed on partnerships with foreign investment and the private sector.

Additionally, financial sustainability pertains to increasing productive uses of RE and include a focus on uplifting persons from poverty, a focus on increasing RE in public buildings for cost effectiveness, more promotion of the knowledge products in terms of the benefits to energy security, energy equity, as well as the economic investment case.

The government may choose to develop a fund for continuing the small projects (SF4RE) to target 100% last mile electrification and achieve crosscutting benefits on rural off-grid small islands and areas.

The focus on off-grid project implementation has demonstrated the linkage to the crosscutting sectors including the linkages to national DRR, poverty alleviation, and gender equity goals, youth development and others. The continued support of standards for off-grid implementation and also on a voluntary market register will feed the likelihood of social policy sustainability which could eventually become the substantive focus of a third phase rollout of the project.

There is a growing demand for technical support in the government, CSOs, and private sector for the operationalization of the RE policy environment. DOE will have to reconsider the internal institutional capacity needed to support the surge in demand for the RE project as the knowledge of the good practices is rolled out.

RE initiatives that mitigate GHG emissions is environmentally impactful. This is an environmentally supportive project where policies and enabling environment for RETs and EE areas offer a great entry point for moving towards a low-carbon more sustainable development pathway. The knowledge and technical inputs provided to the government have been supportive to grow the enabling environment of green Philippines in line with its agenda to be carbon neutral.

5.2. Conclusions

Generally, the project team has been working on four key areas, namely: 1. Policy (NREP and others), 2. LREPs (Local RE Planning), 3. PREMs (RE Market register), and 4. SF4RE (Demonstrations and Proof-of-Concept). The project has strategically planned and supported the project steering committee in making key adaptations towards results in these areas despite difficult times, i.e., COVID-19 pandemic, rising prices due to war in Ukraine, and supply chain issues and challenges.

As to the relevance of the project, the strategic integration of cross-cutting issues is increasingly relevant with high impact-oriented content across the four components and the national development targets. The DOE-based project is witnessing a unique window of opportunity for project content acceleration towards the interlinked development goals: sustainable national development, carbon neutrality, environment and risk reduction, gender, and poverty alleviation targets, amongst others.

The project was focused on upstream support to planning RE and successfully rolled out the NREP and supported a model planning exercise in the provinces of Iloilo and Palawan. The plans will need further targeting, alignments with the NREP goals, and continued support but concerted solid show nonetheless.

In terms of the PREMs, the project team has made a key contribution toward the formalization of the RE market with a regularity and certification system up and running at 98% completion of the sector registration. The project work had also unearthed a key policy gap in term of the need for a voluntary compliance register and standards for non-formal market entrants such as the needed off-grid projects to target last mile electrification. The project has also surfaced gaps in RE policies and standards in terms of the microgrid and off-grid areas. Consequently, it has shown the need for more work on the market register (by including voluntary compliance registry) and on the minimum standards for implementing microgrid off-grid project

implementation. It is also highlighting the need for further DOE engineering resources to serve the increasing demand for RE development in communities.

The 18 demonstration projects (SF4RE component) are uniquely aimed at the last-mile development goals particularly in rural and often marginalized remote off-grid places, which are classified as geographically isolated and depressed areas (GIDAs). A core idea was that the project would stimulate the market, however this is a strategy dependent on the evidence case arising from the project outputs and outcomes, and so work is needed to continue to propagate the knowledge products, tools, lessons, and learning insights to the broader group of stakeholders.

While knowledge management was not built into the project design, which is a major lesson learned and oversight of the project designers, it was implicit in the overall project result. The DOE, supported by the DREAMS project is finalizing the development of an information management system and as such will be a key platform for scaling the lessons learned and case studies from the project for wider dissemination and sharing to other provinces and localities in the country. The knowledge management work base is needed to consolidate the lessons and learning insights from the project, especially the investment cases which can trigger private sector investments and financing in the RE market across the various provinces and municipalities.

5.3. Recommendations

Based on the main findings and the evaluation of such findings, the following recommendations are put forward for further consideration:

Category 1 The project needs to complete its technology and knowledge management work.

The project is given a tentative satisfactory (S) rating from the TE, for its modalities as well as treatment of the content, its high level of country ownership, and solid adaptive management. This rating can be raised to highly satisfactory (HS) in July 2023 with a granted extension to allow the completion of outstanding areas that required careful attention, namely:

1. Full implementation of remaining SF4RE projects with post-mortem monitoring, assessment and evaluation;
2. Launching and operationalization of RE Information Management System serving as the Knowledge Management platform;
3. Consolidation, documentation, codification, and sharing of knowledge products to its direct and indirect stakeholders; and
4. Operationalization of RE Trust Fund.

Otherwise, the project will end (after the second extension) rated as Unsatisfactory (U). The incomplete work poses a very high risk to the communities as beneficiaries - with the unfinished RE pilot projects.

The slow procurement and bottlenecks in procurement processes including project management recruitment and staff turnover were raised as common issues. This was for two main reasons, namely:

1. The absence of a developed RE market for its bids to do related work – notably a problem that this project intended to address and support, and
2. Bottlenecks in the supply chain due to COVID-19 pandemic. The project team and steering committee recognized these concerns to be out of their control and so the project was adapted accordingly and granted an extension.

The project is a high risk to the indigenous, remote, off-grid, and rural communities it is piloting in, it is technically- and infrastructure-heavy in terms of its content and would reasonably need a short extension of at least six months to oversee the full installation of the SF4RE projects with technical and programming oversight and to provide a consolidation of the knowledge output for scaleup and replication nationally and internationally (as a good practice).

Category 2 **Consolidation, Documentation, Codification and Sharing of all Knowledge and Learning Products generated by the Project.**

The project is catalytic normative, thus, learning and capacity building are seen as necessary for the project to perform with the full intention of scaling up and replication: i.e. learning about RE within the private sector and local governments (as good investments), rural remote communities (particularly the micro- and mini-grids) and other communities and provinces (for developing and sharing LREPs) and as a global showcase of good practice (technical, social, economic, cost-effectiveness, environmental, and energy transition). The project did not design with a knowledge management component and needs

sufficient time to properly document, consolidate and share the case studies and knowledge products in formats targeted to their specific audiences for the best effect. A preliminary list of all knowledge products of the project is included in this report. The communications (media) work is also still in progress, which will form part of the knowledge products envisioned. The project learning and knowledge work needs further refinements and consolidation (work on case studies and investment cases) and is to be uploaded in the RE information management system (also a work still in contract) and to be presented in a sustainable manner for further scale up and replication as intended. The project needs to have a final national workshop in the last period (during the requested extension) to disseminate its outputs and further raise awareness of its intended outcomes and impacts. It is a good idea to invite friendly neighboring countries to learn about the experience, e.g. other ASEAN member states.

The project needs to develop a solid template for its further investment arguments, including a showcase of the cost benefits of investment to the cross-cutting areas (education, poverty, health, DRR, GENDER, climate change) and as case documents for each of its SF4RE projects. It should produce a flagship investment case that outlines the cost-benefit analysis in a way that makes completing an agreement with the various stakeholders including the international community, the private sector, the local governments, and the communities (as partners and beneficiaries), as a way of strengthening the RE value chain and resolve procurement issues down the road. The informational management system is a key sustainability measure and needs to be designed and rolled out as the knowledge-sharing interface of the DREAMS works.

The project needs to complete the Operations Manual and initiate the operationalization of the RE Trust Fund. There is an expressed need and felt demand from direct stakeholders (e.g., communities and private sector) for further replication and scale up of SF4RE projects, especially in addressing last mile electrification, cross-cutting issues, and in productive uses of electricity, in the short- and medium-term. The RE Trust Fund can be tapped to mobilize efforts to address such identified needs.

Category 3 (Way Forward Work) recommendation:
Post-project, there is a need to continue the further implementation of the **RE Operations Manual**, institutionalize and implement fully the **RE Trust Fund** to enable the continued support for the **SF4RE program** and other activities to achieve the GOP targets on last-mile electrification and plans for 35% RE by 2035 and 50% RE by 2040. It is important to continue the project activities on **PREMS** and **LREPs** to achieve its full implementation and the full participation of LGUs. The SF4RE projects need to be sustained, replicated, and scaled-up as a way to further promote RE mainstreaming and intensify the RE market development. The full implementation of PREMS would lead to an impactful contribution to the GOP's nationally determined contribution (NDC) to GHG emission reduction and avoidance. The replication of LREPs in all LGUs is a desired output which would lead to dramatic achievement of the project outcomes. The intended project outcomes need to be monitored to ensure its achievement many years down the road. For instance, the calculation of GHG emissions during the lifetime of the SF4RE projects must be monitored and managed properly, as this would contribute to the GOP's nationally determined contribution to GHG emission reduction and avoidance.

To emphasize further, there is a need to **continue the support for the SF4RE facility** in order for the country to achieve 100% household electrification rate, reaching all the off-grid areas and tapping existing natural and renewable resources such as solar, hydro, and biomass, amongst others. Thus, the proposed **RE Trust Fund would strategically serve this purpose**. More specifically,

1. The call for intensive and extensive market development for RE systems and products is urgent.
2. There is a need to establish the standards for implementing projects involving the RE system, especially for micro-grids and off-grid systems.
3. In establishing the standards for micro-grid and off-grid RE systems thru the SF4RE facility and other means, the following must be considered:
    a. Technical design and specifications, which should include context and realities on the ground, considering household electrification and productive uses of RE to support livelihood and improve quality of life
    b. Appropriate business model considering cost-benefit analysis, financial management structures
    c. Capacity building of partners and stakeholders, including beneficiaries
    d. Diffusion of appropriate technologies, including Internet of things, fintech, AI, and others; procurement processes which can be enhanced thru extensive market development
    e. Provision of a variety of good operation and maintenance approaches
    f. Disaster and risk management
    g. Grievance management mechanisms
    h. Environmental and social impact assessment, mitigation, monitoring and management
    i. Sustainability, which includes replication and scaleup

4. Consolidation, documentation, and knowledge management of all case studies and projects involving RE systems to provide educational learning materials, promote awareness and further innovation, thereby supporting the RE mainstreaming strategy of the country.

Moving forward, procurement is an important challenge to be addressed, resolved and improved further so as to ascertain the achievement of project targets, outputs, and outcomes.

Design a new project concept note and endeavor to do resource mobilization with potential donors for financing the remaining bottlenecks unearthed while implementing the DREAMS project. The big areas of outstanding work include continued knowledge generation and management work with the private sector, academe and RDIs, local government units, and CSOs, to further strengthen the RE value chain, i.e. to enter the market, work on practical-based capacity building with regional and local engineers, minimum standards for microgrids, and work on a voluntary market register. This work will complete the enabling environment for the potential scale-up to full market readiness for RE.

5.4. Lessons Learned

In terms of lessons learned, a few critical ones around the project cycle criteria are as follows:

- **Design.** Knowledge management and communications are critical in the cross-cutting components that need to be included in the catalytic and replication effect of any given project.

- **Implementation.** Adaptive management and strong country ownership are critical for results in a dynamic and changing context of a given project. Specifically, the following lessons learned are:
  1. Knowledge management. Documentation and proper dissemination of processes, steps, results, and lessons learned are a necessary exercise in further scale-up and replication works.
  2. Stakeholder engagement. Careful selection of key stakeholders is crucial for any project to succeed; however, a more holistic and inclusive partnership with a broader group of stakeholders (i.e. academe and RDIs, private sector, communities, and government sectors) is indispensable in sustaining project outcomes and achieving long-term targets and goals.

- **Results.** The lessons in reflecting the results by component are as follows:
  1. RE policy is comprehensive, which involves on-grid and off-grid markets across sectors as well as cross-cutting many relevant issues for sustainable and holistic development. It takes time to go through the RE policy ecosystem and determine the correct policy mix across sectors and for operationalization down to the community level.
  2. Getting a seat in the local planning process and building local capacities involves trust. The project team was able to gain the trust of the local government units and the local engineering staff to provide technical assistance and to help guide the process in their own time. More is now needed to continue to build up the skills and capacities for local engineers through practicum-based capacity building. Technical assistance in design and implementation is crucial.
  3. RE Market register. Swift and quality (technical design) procurement were critical in securing a good vendor and receiving the software output on time. Additionally, with regard to the private sector's involvement in the regulation of the RE market, more work is needed to complete the registry terms of setting up a voluntary market register which makes up a considerable (and otherwise unaccounted) percentage of the players.
  4. Small grants are a good way to generate RE local solutions and a good practice to demonstrate examples in providing proof-of-concepts. However, the examples must also have management and livelihood complements to complete the good practices intended for scaleup and replicability.
  5. Social preparation by way of developing communities as stakeholders in stimulating the RE market is a necessary component in deploying demonstration projects, which are cross-cutting in nature.
  6. Capacity building in technical and financial management is important in mainstreaming and sustaining RE projects in communities, particularly in targeting last mile electrification and integrating cross-cutting issues such as poverty alleviation, DRR, and gender sensitivity.

- **Sustainability.** Commitment and strong project ownership coupled with adaptive management and proactive, holistic, and broader stakeholder engagement is key towards attaining sustainable project outcomes across different sectors (socially and politically, financially, institutionally, and environmentally).

6. ANNEXES

6.1. TE ToR (excluding ToR annexes)

Terminal Evaluation for the Development for Renewable Energy Applications Mainstreaming and Market Sustainability (DREAMS) Project
Terms of Reference

1. INTRODUCTION

In accordance with UNDP and GEF M&E policies and procedures, all full- and medium-sized UNDP-supported GEF-financed projects are required to undergo a Terminal Evaluation (TE) at the end of the project. This Terms of Reference (ToR) sets out the expectations for the TE of the full-sized project titled Development for Renewable Energy Applications Mainstreaming and Market Sustainability Project (PIMS 5194) implemented through the Department of Energy. The project started on 28 July 2016 and is in its 6th year of implementation. The TE process must follow the guidance outlined in the document 'Guidance For Conducting Terminal Evaluations of UNDP-Supported, GEF-Financed Projects' (http://web.undp.org/evaluation/guideline/documents/GEF/TE_GuidanceforUNDP-supportedGEF-financedProjects.pdf).

2. PROJECT BACKGROUND AND CONTEXT`

The Development for Renewable Energy Applications for Mainstreaming and Market Sustainability (DREAMS) Project's objective is to reduce GHG emissions through the promotion and facilitation of the commercialization of renewable energy (RE) markets and the removal of barriers to increase investments in RE-based power generation projects in the Philippines. This will be achieved through 4 components:

a. Enforcement of a supportive policy and regulatory environment for leveraging investment in RE development and applications at the local level;
b. Strengthened institutional capacity that leads to increased RE investment at the local level;
c. Increased share of RE-based power capacity; and
d. Enhanced confidence of local RE developers that leads to an enhanced uptake of RE projects and successful replication using proven and merging RE technologies.

The Project will lead to direct lifetime GHG emission reductions of 2.445 ktonnes of carbon dioxide reduction ranging from 4,889 to 141,000 ktonnes of carbon dioxide, and some 20,000 sitio-based households in far flung areas will obtain access to reliable sources or renewable energy by end of the project.

Project Start Date	28 July 2016
Project End Date	28 January 2023
Total resources	US$ 43,502,222
GEF	US$ 5,200,000
Co-financing	US$ 38,302,222
Project Implementing Partner	Department of Energy
Project Location	National and project sites, including 1. Baclayon, Bohol 2. Concepcion, Iloilo 3. Aborlan, Palawan 4. Bordeos, Quezon 5. Aparri, Cagayan 6. Goa, Camarines Sur 7. Pototan, Iloilo 8. Ajuy, Iloilo 9. Lawaan, Eastern Samar 10. Apayao, Mountain Province 11. Cagayancillo, Palawan 12. San Remigio, Antique 13. Tapaz, Capiz 14. Batac, Ilocos Norte 15. Oriental Mindoro 16. Lanao del Sur

The COVID-19 pandemic coincided with the Project's fourth year of implementation. Since March 2020, the government has implemented varying levels of lockdowns and inter and intra-country travel restrictions. In September 2021, the government quarantine system has transitioned to an alert level system where restrictions in an area will depend on a prevailing alert level. This alert level quarantine system remains in place as of March 2022. The pandemic resulted in limited operation of offices, re-prioritization of activities of the Project's local partners, travel bans and cancellation of public fora and capacity building, especially in the first six months of the pandemic. Citing COVID-19 constraints among other reasons, the Project requested for and was granted a project extension until January 2023. The Project has since adapted hybrid modes of project delivery and remote local coordination.

3. TE PURPOSE

The TE report will assess the achievement of project results against what was expected to be achieved and draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming. The TE report promotes accountability and transparency and assesses the extent of project accomplishments.

The DREAMS Project is ending in January 2o28 and the TE will have to be completed three months before the project end date. The TE is being conducted in fulfillment of the project's Monitoring and Evaluation framework and in accordance with UNDP and GEF guidance. The final evaluation will look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental benefits/goals. The TE should also provide recommendations for follow-up activities/steps with corresponding management response, including to ensure sustainability and promote replicability of project results. This will be used by all main parties (UNDP, GEF, and partner government agencies and stakeholders) to assess their approaches and to inform the design of future interventions.

4. TE APPROACH & METHODOLOGY

The TE report must provide evidence-based information that is credible, reliable and useful.

The TE team will review all relevant sources of information including documents prepared during the preparation phase (i.e. PIF, UNDP Initiation Plan, UNDP Social and Environmental Screening Procedure/SESP) the Project Document, project reports including annual PIRs, project budget revisions, lesson learned reports, national strategic and legal documents, and any other materials that the team considers useful for this evidence-based evaluation. The TE team will review the baseline and midterm GEF focal area Core Indicators/Tracking Tools submitted to the GEF at the CEO endorsement and midterm stages and the terminal Core Indicators/Tracking Tools that must be completed before the TE field mission begins.

The TE team is expected to follow a participatory and consultative approach ensuring close engagement with the Project Team, government counterparts (the GEF Operational Focal Point), Implementing Partners, the UNDP Country Office(s), the Regional Technical Advisor, direct beneficiaries and other stakeholders.

Engagement of stakeholders is vital to a successful TE. Stakeholder involvement should include interviews with stakeholders who have project responsibilities, including but not limited to*:* executing agencies, senior officials and task team/component leaders, key experts and consultants in the subject area, Project Board, project beneficiaries, academia, local government and CSOs, etc. Additionally, the TE team is expected to conduct field missions to the Philippines, including the following project sites:

- UNDP Philippines Office: 15th Floor, North Tower, Rockwell Business Center Sheridan St. corner United St., Highway Hills, Mandaluyong City

- DOE DREAMS Office: 2F PNOC Building V, Energy Center, Rizal Drive, 34th St, Taguig City

DREAMS is implementing activities in the following sites in the Philippines: 1) Baclayon, Bohol; 2) Concepcion, Iloilo; 3) Aborlan, Palawan; 4) Bordeos, Quezon; 5) Aparri, Cagayan; Goa, Camarines Sur; Pototan, Iloilo; Ajuy, Iloilo; Lawaan, Eastern Samar; Apayao, Mountain Province; Cagayancillo, Palawan; San Remigio, Antique; Tapaz, Capiz; Batac, Ilocos Norte; Oriental Mindoro; Lanao del Sur

The specific design and methodology for the TE should emerge from consultations between the TE team and the above-mentioned parties regarding what is appropriate and feasible for meeting the TE purpose and objectives and answering the evaluation questions, given limitations of budget, time and data. The TE team must, however, use gender-responsive methodologies and tools and ensure that gender equality and women's empowerment, as well as other cross-cutting issues and SDGs are incorporated into the TE report.

The final methodological approach including interview schedule, field visits and data to be used in the evaluation must be clearly outlined in the TE Inception Report and be fully discussed and agreed between UNDP, stakeholders and the TE team.

The final report must describe the full TE approach taken and the rationale for the approach making explicit the underlying assumptions, challenges, strengths and weaknesses about the methods and approach of the evaluation.

An Evaluation Reference Group (ERG) will be established to ensure that the Terminal Evaluation will undergo a peer review process that will assure the quality of the report before it is finalized. The ERG is composed of select representatives from UNDP CO and GEF Regional Technical Advisor, key project stakeholders, including Department of Energy, National Economic and Development Authority and Department of Environment and Natural Resources.

The ERG is expected to: 1) recommend and share information sources needed in the evaluation; 2) review and provide inputs to the evaluation inception report; 3) act as key informants in the data collection phase; 4) review and provide inputs to the draft evaluation report, especially the conclusions, findings, and recommendations; and 5) review and comment on the evaluation management response. The final TE Report will be presented to the project steering committee.

In light of the global COVID-19 pandemic, the TE team should plan for contingencies in the case of local and national government health restrictions that may affect data gathering activities. Consideration should be taken for stakeholder/respondent availability, ability, and/or willingness to be interviewed virtually. No stakeholders, consultants or UNDP staff should be put in harm's way and safety is the key priority. A short validation mission may be considered if it is confirmed to be safe for staff, consultants, stakeholders and if such a mission is possible within the TE schedule. These contingencies and anticipated limitations should be detailed in the Inception report.

5. DETAILED SCOPE OF THE TE

The TE will assess project performance against expectations set out in the project's Logical Framework/Results Framework (see ToR Annex A). The TE will assess results according to the criteria outlined in the Guidance for TEs of UNDP-supported GEF-financed Projects *(http://web.undp.org/evaluation/guideline/documents/GEF/TE_GuidanceforUNDP-supportedGEF-financedProjects.pdf)*. The Findings section of the TE report will cover the topics listed below.

A full outline of the TE report's content is provided in ToR Annex C.

The asterisk "(*)" indicates criteria for which a rating is required.

Findings

i. Project Design/Formulation

- National priorities and country driven-ness
- Theory of Change
- Gender equality and women's empowerment
- Social and Environmental Safeguards
- Analysis of Results Framework: project logic and strategy, indicators
- Assumptions and Risks
- Lessons from other relevant projects (e.g. same focal area) incorporated into project design
- Planned stakeholder participation
- Linkages between project and other interventions within the sector
- Management arrangements

ii. Project Implementation

- Adaptive management (changes to the project design and project outputs during implementation)
- Actual stakeholder participation and partnership arrangements
- Project Finance and Co-finance
- Monitoring & Evaluation: design at entry (*), implementation (*), and overall assessment of M&E (*)
- Implementing Agency (UNDP) (*) and Executing Agency (*), overall project oversight/implementation and execution (*)
- Risk Management, including Social and Environmental Standards

iii. Project Results

- Assess the achievement of outcomes against indicators by reporting on the level of progress for each objective and outcome indicator at the time of the TE and noting final achievements
- Relevance (*), Effectiveness (*), Efficiency (*) and overall project outcome (*)
- Sustainability: financial (*) , socio-political (*), institutional framework and governance (*), environmental (*), overall likelihood of sustainability (*)
- Country ownership
- Gender equality and women's empowerment
- Cross-cutting issues (poverty alleviation, improved governance, climate change mitigation and adaptation, disaster prevention and recovery, human rights, capacity development, South-South cooperation, knowledge management, volunteerism, etc., as relevant)
- GEF Additionality
- Catalytic Role / Replication Effect
- Progress to impact

Main Findings, Conclusions, Recommendations and Lessons Learned

- The TE team will include a summary of the main findings of the TE report. Findings should be presented as statements of fact that are based on analysis of the data.
- The section on conclusions will be written in light of the findings. Conclusions should be comprehensive and balanced statements that are well substantiated by evidence and logically connected to the TE findings. They should highlight the strengths, weaknesses and results of the project, respond to key evaluation questions and provide insights into the identification of and/or solutions to important problems or issues pertinent to project beneficiaries, UNDP and the GEF, including issues in relation to gender equality and women's empowerment.
- Recommendations should provide concrete, practical, feasible and targeted recommendations directed to the intended users of the evaluation about what actions to take and decisions to make. The recommendations should be specifically supported by the evidence and linked to the findings and conclusions around key questions addressed by the evaluation.
- The TE report should also include lessons that can be taken from the evaluation, including best and worst practices in addressing issues relating to relevance, performance and success that can provide knowledge gained from the particular circumstance (programmatic and evaluation methods used, partnerships, financial leveraging, etc.) that are applicable to other GEF and UNDP interventions. When possible, the TE team should include examples of good practices in project design and implementation.
- It is important for the conclusions, recommendations and lessons learned of the TE report to include results related to gender equality and empowerment of women.

The TE report will include an Evaluation Ratings Table, as shown below:

ToR Table 2: Evaluation Ratings Table for the DREAMS Project

Monitoring & Evaluation (M&E)	Rating[26]
M&E design at entry	
M&E Plan Implementation	
Overall Quality of M&E	
Implementation & Execution	Rating
Quality of UNDP Implementation/Oversight	
Quality of Implementing Partner Execution	
Overall quality of Implementation/Execution	
Assessment of Outcomes	Rating
Relevance	
Effectiveness	
Efficiency	
Overall Project Outcome Rating	
Sustainability	Rating
Financial resources	
Socio-political/economic	

[26] Outcomes, Effectiveness, Efficiency, M&E, I&E Execution, Relevance are rated on a 6-point rating scale: 6 = Highly Satisfactory (HS), 5 = Satisfactory (S), 4 = Moderately Satisfactory (MS), 3 = Moderately Unsatisfactory (MU), 2 = Unsatisfactory (U), 1 = Highly Unsatisfactory (HU). Sustainability is rated on a 4-point scale: 4 = Likely (L), 3 = Moderately Likely (ML), 2 = Moderately Unlikely (MU), 1 = Unlikely (U)

Institutional framework and governance	
Environmental	
Overall Likelihood of Sustainability	

6. TIMEFRAME

The total duration of the TE will be approximately 35 working days over between 20 June to 15 October 2022. The tentative TE timeframe is as follows:

Timeframe	Activity
June 2022	Selection of TE team
June 2022	Preparation period for TE team (handover of documentation)
June-July 2022 (4 days)	Document review and preparation of TE Inception Report
20 July 2022 (2 days)	Finalization and Validation of TE Inception Report; latest start of TE mission
July-August 2022 (15 days)	TE mission: stakeholder meetings, interviews, field visits, etc.
20 August 2022	Mission wrap-up meeting & presentation of initial findings; earliest end of TE mission
August-September 2022 (10 days)	Preparation of draft TE report
5 September 2022	Circulation of draft TE report for comments
20 September 2022 (4 days)	Incorporation of comments on draft TE report into Audit Trail & finalization of TE report
September 2022	Preparation and Issuance of Management Response
1st week October 2022	Concluding Stakeholder Workshop (optional)
15 October 2022	Expected date of full TE completion

Options for site visits should be provided in the TE Inception Report.

7. TE DELIVERABLES

#	Deliverable	Description	Timing	Responsibilities
1	TE Inception Report	TE team clarifies objectives, methodology and timing of the TE	No later than 2 weeks before the TE mission: *(5 July 2022)*	TE team submits Inception Report to Commissioning Unit and project management
2	Presentation	Initial Findings	End of TE mission: *(20 August 2022)*	TE team presents to Commissioning Unit and project management
3	Draft TE Report	Full draft report *(using guidelines on report content in ToR Annex C)* with annexes	Within 3 weeks of end of TE mission: *(5 September 2022)*	TE team submits to Commissioning Unit; reviewed by BPPS-GEF RTA, Project Coordinating Unit, GEF OFP
5	Final TE Report* + Audit Trail	Revised final report and TE Audit trail in which the TE details how all received comments have (and have not) been addressed in the final TE report *(See template in ToR Annex H)*	Within 1 week of receiving comments on draft report: *(20 September 2022)*	TE team submits both documents to the Commissioning Unit

*All final TE reports will be quality assessed by the UNDP Independent Evaluation Office (IEO). Details of the IEO's quality assessment of decentralized evaluations can be found in Section 6 of the UNDP Evaluation Guidelines.[27]

[27] Access at: http://web.undp.org/evaluation/guideline/section-6.shtml

8. TE ARRANGEMENTS

The principal responsibility for managing the TE resides with the Commissioning Unit. The Commissioning Unit for this project's TE is the UNDP Country Office in the Philippines through the Monitoring and Evaluation Analyst of the Results and Quality Team and the Programme Analyst of the Climate Action Programme Team.

The Commissioning Unit will contract the evaluators and ensure the timely provision of per diems and travel arrangements within the country for the TE team. The Project Team will be responsible for liaising with the TE team to provide all relevant documents, set up stakeholder interviews, and arrange meetings and field visits.

An Evaluation Reference Group (ERG) shall be formed composed of principal representatives from project stakeholders (government partners, donor, representatives from the Project Board) that will perform an advisory role throughout the process, ensure that evaluation standards as provided by the United Nations Evaluation Group (UNEG) are adhered to, including safeguarding transparency and independence, advise on the relevance and appropriateness of questions, and support and provide input into the development of the management responses and key actions.

9. TE TEAM COMPOSITION

A team of two independent evaluators will conduct the TE – one team leader (international, with experience and exposure to projects and evaluations in other regions) and one team expert (national).

- The TE team leader (international consultant) will be mainly responsible for initiating and managing the TE process and leading the overall design and writing of the TE report, maintaining the integrity and independence of the process, and in accordance with the UNDP-GEF guidelines
- The TE team expert (national consultant) will provide support to the team leader and serve as the subject matter expert at the national level. S/he will assess emerging trends with respect to regulatory frameworks, budget allocations, capacity building, work with the Project Team in developing the TE itinerary, among others. S/he should have a strong background on the subject and will mainly be responsible for studying the dynamics among stakeholders and how it affects project performance, progress and results achievement, and potential development pathways for the country, highlighting gains, uncovering gaps, and proposing appropriate corrective measures that the project can take.

The evaluator(s) cannot have participated in the project preparation, formulation and/or implementation (including the writing of the project document), must not have conducted this project's Mid-Term Review and should not have a conflict of interest with the project's related activities.

The selection of evaluators will be aimed at maximizing the overall "team" qualities in the following areas:

1. TE Team Leader (International)

Education

- Master's degree in energy, engineering, environmental management, climate change, industrial development, economics, or other closely related field;
  (8 points for Master's degree, maximum of 10 points)

Experience

- At least 10 years relevant experience with results-based management evaluation methodologies; application of SMART indicators and reconstructing or validating baseline scenarios; remote evaluation and project evaluation/review experiences within the United Nations system will be considered an asset
  (10 points for 10 years of experience, maximum of 14 points)
- At least 5 years of specific experience in conducting gender-sensitive evaluations and analyses
  (7 points for 5 years of experience, maximum of 10 points)
- At least 10 years of relevant experience and demonstrated competence in adaptive management, as applied to Climate Change, Energy, Infrastructure, and/or Technology (i.e. climate change mitigation, decarbonization/emissions reduction, technology incubation and transfer, commercialization, market development, and sustainability in relation to the renewable energy sector);
  (8 points for 10 years of experience, maximum of 12 points)
- Experience working in at least 5 evaluations within the Asia-Pacific region;
  (8 points for 5 evaluations, maximum of 12 points)
- Experience in project evaluation/review with at least 4 GEF projects and projects within the UN system
  (8 points for 4 evaluations, maximum of 12 points)

Language

- Fluency in written and spoken English.

2. TE Team Expert (National)

Education

- Master's degree in energy, engineering, environmental management, climate change, industrial development, economics, or other closely related field;

Experience

- At least 5 years relevant experience with results-based management evaluation methodologies; application of SMART indicators and reconstructing or validating baseline scenarios; remote evaluation and project evaluation/review experiences within the United Nations system will be considered an asset
  (10 points for 5 years of experience, maximum of 14 points)
- At least 3 years of specific experience in conducting gender-sensitive evaluations and analyses
  (7 points for 3 years of experience, maximum of 10 points)
- At least 5 years of relevant experience and demonstrated competence in adaptive management, as applied to Climate Change, Energy, Infrastructure, and/or Technology (i.e. climate change mitigation, decarbonization/emissions reduction, technology incubation and transfer, commercialization, market development, and sustainability in relation to the renewable energy sector);
  (8 points for 5 years of experience, maximum of 12 points)
- Experience working in at least 5 evaluations in the Philippines;
  (8 points for 5 evaluations, maximum of 12 points)
- Experience in project evaluation/review with at least 2 GEF projects and projects within the UN system
  (8 points for 2 evaluations, maximum of 12 points)

Language

- Fluency in written and spoken English and FIlipino.

10. EVALUATOR ETHICS

The TE team will be held to the highest ethical standards and is required to sign a code of conduct upon acceptance of the assignment. This evaluation will be conducted in accordance with the principles outlined in the UNEG 'Ethical Guidelines for Evaluation'. The evaluator must safeguard the rights and confidentiality of information providers, interviewees and stakeholders through measures to ensure compliance with legal and other relevant codes governing collection of data and reporting on data. The evaluator must also ensure security of collected information before and after the evaluation and protocols to ensure anonymity and confidentiality of sources of information where that is expected. The information knowledge and data gathered in the evaluation process must also be solely used for the evaluation and not for other uses without the express authorization of UNDP and partners.

11. PAYMENT SCHEDULE

- 20% payment upon satisfactory delivery of the final TE Inception Report and approval by the Commissioning Unit
- 40% payment upon satisfactory delivery of the draft TE report to the Commissioning Unit
- 40% payment upon satisfactory delivery of the final TE report and approval by the Commissioning Unit and RTA (via signatures on the TE Report Clearance Form) and delivery of completed TE Audit Trail

  Criteria for issuing the final payment of 40%:
  - The final TE report includes all requirements outlined in the TE TOR and is in accordance with the TE guidance.
  - The final TE report is clearly written, logically organized, and is specific for this project (i.e. text has not been cut & pasted from other TE reports).
  - The Audit Trail includes responses to and justification for each comment listed.

In line with the UNDP's financial regulations, when determined by the Commissioning Unit and/or the consultant that a deliverable or service cannot be satisfactorily completed due to the impact of COVID-19 and limitations to the TE, that deliverable or service will not be paid.

Due to the current COVID-19 situation and its implications, a partial payment may be considered if the consultant invested time towards the deliverable but was unable to complete to circumstances beyond his/her control.

12. APPLICATION PROCESS[28]

Recommended Presentation of Proposal:

a) **Letter of Confirmation of Interest and Availability** using the template[29] provided by UNDP;
b) **CV** and a **Personal History Form** (P11 form[30]);
c) Brief description **of approach to work/technical proposal** of why the individual considers him/herself as the most suitable for the assignment, and a proposed methodology on how they will approach and complete the assignment; (max 1 page)
d) **Financial Proposal** that indicates the all-inclusive fixed total contract price and all other travel related costs (such as flight ticket, per diem, etc), supported by a breakdown of costs, as per template attached to the Letter of Confirmation of Interest template. If an applicant is employed by an organization/company/institution, and he/she expects his/her employer to charge a management fee in the process of releasing him/her to UNDP under Reimbursable Loan Agreement (RLA), the applicant must indicate at this point, and ensure that all such costs are duly incorporated in the financial proposal submitted to UNDP.

All application materials should be submitted to the address (insert mailing address) in a sealed envelope indicating the following reference "Consultant for Terminal Evaluation of DREAMS Project" or by email at the following address ONLY: *(insert email address)* by *(time and date)*. Incomplete applications will be excluded from further consideration.

Criteria for Evaluation of Proposal: Only those applications which are responsive and compliant will be evaluated. Offers will be evaluated according to the Combined Scoring method – where the educational background and experience on similar assignments will be weighted at 70% and the price proposal will weigh as 30% of the total scoring. The applicant receiving the Highest Combined Score that has also accepted UNDP's General Terms and Conditions will be awarded the contract.

[28] Engagement of evaluators should be done in line with guidelines for hiring consultants in the POPP https://popp.undp.org/SitePages/POPPRoot.aspx

[29]https://intranet.undp.org/unit/bom/pso/Support%20documents%20on%20IC%20Guidelines/Template%20for%20Confirmation%20of%20Interest%20and%20Submission%20of%20Financial%20Proposal.docx

[30] http://www.undp.org/content/dam/undp/library/corporate/Careers/P11_Personal_history_form.doc

6.2. TE Mission Itinerary including summary of field visits, Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs)

Date/Time	Activities	Participants/Respondents
September 29, 2022 (Thu) 9:30 am – 10:30 am	Kickoff meeting-discussion on TE field missions with DREAMS Project team: UNDP and PMU	Ms. Floradema Eleazar Ms. Gwyneth Anne Palmos Mr. Ricardo Torres Ms. Tea Jalin Ty Mr. Paul Villarico Mr. Bishnu Chettri Stephanie J. Hodge, TE consultant Evelyn B. Taboada, TE consultant
October 4, 2022 (Tue) 9:30 am – 10:30 am	Meeting-discussion and planning of TE field missions with DREAMS PMU	Mr. Ricardo Torres Ms. Tea Jalin Ty Ms. Hyacynth Rivera Evelyn B. Taboada
October 5, 2022 (Tue) 9:00 am – 10:30 am	Meeting-discussion and focus group discussion with DREAMS PMU	Mr. Ricardo Torres Ms. Tea Jalin Ty Ms. Hyacynth Rivera TE team (SJH & EBT)
October 10, 2022 (Mon) 8:00 am – 12:00 noon 2:00 pm – 4:00 pm	 Departure from Cebu, Travel to Puerto Princesa, Palawan Meeting-discussion with PALECO	 Evelyn B. Taboada Ms. Divine Grace Palanca, Special Project Officer, Palawan Electric Cooperative (PALECO) Mr. Crizaldy Felicisimo Venus, DDP & Rates Section Head, PALECO
October 11, 2022 (Tue) 8:00 am 10:00 am – 11:00 am 11:00 am – 12:00 noon 12:00 noon – 1:00 pm 2:00 pm – 3:00 pm 3:00 pm – 4:30 pm 4:30 pm – 6:00 pm	 Travel to Aborlan, Palawan Meeting-discussion with representatives of Municipality of Aborlan, Palawan Meeting-discussion, interview with Municipality of Aborlan Travel to Bubusawin, Apurawan, Aborlan, Palawan Meeting-discussion with Bubusawin Farmers Association and community beneficiaries; Site visits to the ***29.3 KW Smart Grid Solar PV Home Electrification and Irrigation System for 120 Households in Apurawan, Aborlan, Palawan*** Meeting-discussion with Mayor of Aborlan and Bubusawin community representatives Travel back to Puerto Princesa, Palawan	 Evelyn B. Taboada and Hyacynth Rivera (PMU) Ms. Gildaelda Rabaya, PDO, Municipality of Aborlan Mr. Salvador Cotamco, Municipal Planning & Development Coordinator, Municipality of Aborlan Mr. Jaime Ortega, Mayor, Municipality of Aborlan Representatives of Bubusawin Farmers Association and community-beneficiaries Mayor Jaime Ortega and representatives of community association of farmers

Date/Time	Activities	Participants/Respondents
October 12, 2022 (Wed) 9:00 am – 10:30 am 10:30 am – 11:30 am 12:00 noon	 Meeting-discussion with the Province of Palawan Meeting-discussion with representative involved in DREAMS project, Province of Palawan Travel back to Manila	 Mr. Ryan Dagsa Maminta, Provincial Board Member, Province of Palawan Mr. Roque De La Pena, Program Manager for SF4RE project, Province of Palawan
October 13, 2022 (Thu) 7:00 am – 11: 00 am 2:00 pm – 4:00 pm 4:30 pm – 5:00 pm	 Travel to Bohol; checkin in Bohol Meeting-discussion with BOHECO-I representatives Travel back to hotel	 Mr. Algerico Siga, Chief Corporate Planning and IT, Bohol Electric Cooperative-I (BOHECO-I) Danilo Quidlat, SEEAD Manager, BOHECO-I
October 14, 2022 (Fri) 7:00 am – 9:00 am 9:00 am – 12:00 noon 12:00 noon – group lunch 1:00 pm – 3:00 pm 3:00 pm – 4:30 pm	 Travel to Pamilacan Island, Bohol Site visit to Pamilacan Elementary School, Site Visit to the **39.65 KW Community Solar PV Mini-grid for 357 households**; Meeting-discussion with barangay officials, community representatives and WeGen officials Travel back to Bohol from Pamilacan Island	 Evelyn B. Taboada, Tea Jalin Ty Ms Chona Dalumbar, Project Head, WeGen Laudato Si Mr. George Arcona, Technical Engineering, WeGen Laudato Si Brgy Pamilacan officers, WeGen representatives and community-beneficiaries
October 15, 2022 (Sat) 11am – 3:00 pm	 Travel back to Cebu	 Evelyn B. Taboada
October 17, 2022 (Mon) 8:00 am – 12:00 noon 2:00 pm – 3:00 pm 3:30 pm – 5:00 pm	 Travel to MMSU, Laoag, Ilocos Norte Meeting with officials from Mariano Marcos State University (MMSU) Meeting-discussion with project team for DREAMS at NBREC, Mariano Marcos State University (MMSU)	 Evelyn B. Taboada Louise Isabelle Manalo, PMU Dr. Nathaniel Alibuyog, VP Research and Extension, MMSU Dr. Bjorn Santos, Director of Research, MMSU Engr. Thomas Ubina, Project Lead DREAMS, MMSU Engr. Thomas Ubina, Project Lead DREAMS, MMSU Dr. Bjorn Santos, Director of Research, MMSU Dr. Edmund Edison Esteban, Dean, College of Engineering, MMSU Engr. Salustino Morales, Chair, EE Dept, MMSU Engr. Roque Ulip, Director, NBREC

Date/Time	Activities	Participants/Respondents
		Christopher Baga, SRS, NBREC Psalm Pastor, SRS, NBREC
October 18, 2022 (Tue) 8:00 am – 9:00 am 9:00 am - 12:00 noon 12:00 noon – lunch break 1:30 pm – 4:00 pm 4:000 pm – 6:00 pm	Meeting with the University President, MMSU; discussion about DREAMS project activities and plans Travel to MMSU Currimao Campus, Site visit to the **22KW Solar-powered Aquatic Life Support System, CASAT, MMSU** and Meeting-discussion with project team Travel back to MMSU, Main Campus Meeting-discussion with DREAMS project team at MMSU to discuss RE Executive Program Site visit to the Commercial Installation of 68 MW Currimao Solar Power Plant	Dr. Shirley Agrupis, President, MMSU Engr. Thomas Ubina, Project Lead DREAMS, MMSU Dr. Veronica Goronde, Dean CASAT Dr. Ernesto Del Rosario, Chair, CASAT, and team members Engr. Thomas Ubina, Project Lead DREAMS, MMSU Dr. Bjorn Santos, Director of Research, MMSU Engr. Salustino Morales, Chair, EE Dept, MMSU Engr. Roque Ulip, Director, NBREC Christopher Baga, SRS, NBREC Psalm Pastor, SRS, NBREC Christopher Baga, SRS, NBREC Psalm Pastor, SRS, NBREC Louise Isabelle Manalo, PMU
October 19, 2022 (Wed) 6:00 am – 11:00 am 11:00 am – 8:00 pm	Visit to commercial-scale Bangui and Burgos Wind Farms and Agua Grande Mini Hydro Power Plant Facility Travel back from Laoag to Cebu	Mr. Christopher Baga, SRS, MMSU Mr. Psalm Pastor, SRS, MMSU Louise Isabelle Manalo, PMU
October 24, 2022 (Mon) 10:00 am – 12:00 nn	Online Interview-meeting-discussion with representative, DOE Visayas Field Office	Ms. Lourdes Arciaga Chief SRS, DOE Visayas Field Office, Cebu City
October 25, 2022 (Tue) 10:00 am – 11:00 am	Online Interview-meeting-discussion with private sector representative	Mr. Charlie Ayco, Chairman and President, WeGen Laudato Si
October 26, 2022 (Wed) 5:00 am – 3:00 pm	Travel to Goa, Camarines Sur via Manila and Naga City Stand by in Manila due to cancelled flight to Naga City (bad weather)	Evelyn B. Taboada
October 27, 2022 (Thu) 10:00 am – 1:30 pm 2:00 pm – 3:00 pm 3:00 pm – 4:30 pm 5:30 pm – 6:30 pm 6:30 pm – 9:00 pm	Travel to Naga City Travel to Goa, Camarines Sur Meeting-discussion with the Barangay officials and LGU Goa representatives; Site visit at **Catagbacan Solar-powered Water System for Household use** Meeting-discussion with Mayor of Goa, Camarines Sur	Evelyn B. Taboada Tea Jalin Ty Mr. Ronilo Alarcon, Municipal Engineer, Goa, Camarines Sur Representative Officials of Barangay Catagbacan, Goa, Camarines Sur Mr. Marcel Pan, Mayor of Goa, Camarines Sur

Date/Time	Activities	Participants/Respondents
	Dinner and meeting-discussion with Municipality of Goa, Camarines Sur	Mayor of Goa, Mr. Marcel Pan and team
October 28, 2022 (Fri) 8:00 am – 12:00 noon 12:30 – 2:00 pm 4:00 pm onwards	Site visits and meeting-discussion with barangay officials and community beneficiaries of Goa, Camarines Sur: **Solar-powered Water Systems for Household and School use in additional three (3) sites of Barangays Maymatan, Cagaycay, Salog.** Lunch-meeting-exit conference with Municipal officials of Goa, Camarines Sur Checkout from Goa and travel back to Manila	Mr. Ronilo Alarcon, Municipal Engineer, Goa, Camarines Sur Respective Barangaty officials, elementary school principal and teachers, and community beneficiaries Municipal mayor's administrators, municipal engineers and team
October 29, 2022 (Sat)	Standby in Manila due to cancelled flight to Cebu (bad weather)	Evelyn B. Taboada
October 30, 2022 (Sun) 7:00 am – 11:00 am	Travel back to Cebu	Evelyn B. Taboada
November 8, 2022 (Tue) 5:00 am – 5:00 pm	Travel from Cebu to Manila; then Manila-Tuguegarao; then Conner, Apayao Checkin at Conner, Apayao	Evelyn B. Taboada Tea Jalin Ty
November 9, 2022 (Wed) 7:00 am – 5:00 pm 6:00 pm – 8:00 pm	Travel to Upper Katablangan, Conner, Apayao; Site visit to the **10 KW Rehabilitated Microhydro Power facility for 62 Households and Community Facilities** and meeting-discussion with Barangay Officials and community beneficiaries Dinner and meeting-discussion with Mayor of Conner and his team of councilors	Mr. Benito Lugayan and team, community beneficiaries, Upper Katablangan, Conner, Apayao Atty. Jorico Bayauan and team of councilors
November 10, 2022 (Wed) 7:00 am – 8:00 pm	Travel back from Conner, Apayao to Tuguegarao, then Manila; Travel back to Cebu	Evelyn B. Taboada Tea Jalin Ty
November 12, 2022 (Sat)	Arrival Manila	Stephanie J. Hodge, TE consultant
November 13, 2022 (Sun), 4pm 6:00 pm – 9:00 pm	Arrival Manila Meeting-discussion TE mission	Evelyn B. Taboada, TE consultant Stephanie J. Hodge Evelyn B. Taboada
November 14, 2022 (Mon) 9:30 am – 2:00 pm 3:00 pm – 5 :00 pm	Meeting-discussion UNDP team TE work-discussion	Gwyneth Anne Palmos Paul Villarico TE team (SJH, EBT)
November 15, 2022 (Tue) 9:00 am – 10:00 am 10:00 am – 12:00 noon 2:00 – 4:00 pm	DOE REMB DREAMS PMU visit DOE REMB Meeting-discussion with Project Steering Committee members and Support Group (Technical team **PEMC Site visit** and meeting-discussion	Ricardo Torres and Tea Jalin Ty Mr. Gaspar Escobar Mr. Andresito Ulgado Mr. Arnulfo Zabala

Date/Time	Activities	Participants/Respondents
5:00 pm 10:00 pm	Departure for Iloilo Arrival in Iloilo, checkin at hotel	Mr. Clares Loren Jalocon, Corporate Planning and Communications Head, PEMC Ms. Emma Garrido, PEMC Mr. Eldin Paulo Reyes, PEMC Ms Janeth Ceniza, PEMC TE team and PMU (Tea Jalin Ty)
November 16, 2022 (Wed) 8:00 am – 11:00 am 11:00 – 11:30 am 11:30 am – 12:30 noon 2:00 pm – 3:00 pm 3:00 pm – 4:00 pm 5:00 pm	 Departure for Carles, Iloilo Meeting with LGU, Municipality of Carles Travel to Gigantes Island Site visit at Lantangan Elem School and meeting-discussion with partners Site visit and meeting-discussion with the community of fisher folks End of day; checkin at Gigantes Island	 TE team and PMU (Tea Jalin Ty) Mr. Melvin Purzuelo, RDC, Green Forum Western Visayas Mr. Siegfredo Batita and team Principal and teachers, Lantangan Elem School, Gigantes Island, Iloilo Lizilyn Legayu, Treasurer, DapWA, GIFFS, Gigantes Island
November 17, 2022 (Thu) 8:00 am 1:30 pm 4:00 pm – 5:00 pm	 Travel back to Iloilo from Gigantes Island Arrival and checkin at hotel in Iloilo City Meeting-discussion with Province of Iloilo	 TE team and PMU (Tea Jalin Ty) Mr. Melvin Purzuelo Mr. Rolly Depakakibo, PPDO, Province of Iloilo Mr. Rey Victor Gorin Mr. Mario Nillos Ms. Anne Marie Doromal
November 18, 2022 (Fri) 8:00 – 9:00 am 9:00 – 10:00 am 10:00 – 11:00 noon 11:00 – 12:00 noon 1:30 – 3:00 pm 6:00 pm onwards	 Travel to Pototan, Iloilo Site visit and observation at the **75KW Solar PV Rooftop System of Iloilo Provincial Hospital** Travel back to Iloilo City Presentation of LREP Province of Iloilo Meeting-discussion, presentation of TE impressions, initial findings Travel back to Manila/Cebu	 TE team, PMU, PSC, others Mr. Mario Nillos, PPDO, Provincial Government of Iloilo TE team, PSS, PMU TE team, PSC, PMU
November 21, 2022 (Mon) 11:00 – 12:00 noon	 Online Meeting-discussion with ESAMELCO representatives	 Atty. Jose Michael Edwin Amancio, General Manager, ESAMELCO Ms. Ayesa Grace Abing, Copr Planning Division Chief, ESAMELCO

Summary of Field Visits to SF4RE projects

Date/Time	Participants/Respondents/Key Discussion Points
October 10, 2022 (Mon), 2:00 pm – 4:00 pm, Meeting-discussion with **PALECO representatives** The meeting started by making an introduction and explaining the purpose of the TE for the DREAMS project. Following the outline of the key stakeholder questionnaire prepared beforehand as indicated in Annex 6.6, but conducting the interview in a conversational manner, the following key points were noted: • The involvement of PALECO in the DREAMS project is a welcomed event for the electric cooperative. • The RE projects undertaken via the SF4RE facility are very useful and demonstrative of how RE can be beneficial to the people and communities, especially those who are not yet connected to the grid of PALECO. • The PALECO representatives working with the SF4RE projects have some difficult challenges and issues as follows: a. Determining the appropriate electricity tariffs and the corresponding billing and collection system for the beneficiaries of SF4RE RE system installed, for example, in Bubusawin, Apurawan, Aborlan. b. Suitable business model in dealing with RE systems installed in the communities under the PALECO jurisdiction, since these are all off-grid, and PALECO has no mechanism or system in place yet for such situations. c. How expansion of such RE system can be implemented for the remaining unelectrified households in areas benefiting from the SF4RE facility and in other remote areas under the PALECO jurisdiction, in order to achieve the 100% household electrification target? d. How to resolve and address the common issues experienced by households with RE systems (solar PVs), that require technical assistance? • The PALECO representatives working with the SF4RE projects require technical training as regards to the various skills and knowledge required in managing RE systems. • Coordination and communication of PALECO representatives working with the PMU are notably very good, considering the challenges experienced during the pandemic.	
October 11, 2022 (Tue), 10:00 am – 11:00 am, Meeting-discussion with **representatives of Municipality of Aborlan, Palawan and the mayor of the Municipality of Aborlan** at 11am-12nn. Following the normal protocol for the KII and conducting the interview in a conversational manner, the following key points were noted during this meeting: • The Municipality of Aborlan is very appreciative of the assistance extended to the beneficiaries of the SF4RE project, especially the communities and households of Bubusawin, Apurawan, Aborlan. • The RE program is very well-appreciated and the mayor vowed to work intensely towards implementing more RE projects in the municipality, for example, installing solar PVs in municipal buildings, and providing more assistance to the communities which are yet off-the-grid, by providing funds for more RE installations; thus, improving the household electrification rate of the municipality. • The RE system installation in Bubusawin, Apurawan, provided an excellent demonstration model for learnings and insights as to the benefits of solar PVs especially in remote off-grid areas. • The municipality desires to have more trainings, educational awareness campaigns, and workshops on the proper guidance and benefits of RE systems.	
October 11, 2022 (Tue), 2:00 pm – 3:00 pm, Meeting-discussion with Bubusawin Farmers Association and community beneficiaries; Site visits to the ***29.3 KW Smart Grid Solar PV Home Electrification and Irrigation System for 120 Households in Bubusawin, Apurawan, Aborlan, Palawan; further meeting with the municipal mayor at 3-4:30pm together with the Bubusawin Farmers Association*** Following the normal protocol for the FGD and conducting the interview in a conversational manner, the following key points were noted during this meeting: • The members of the Bubusawin Farmers Association, especially the households electrified with the RE systems thru the SF4RE facility, are very appreciative and have expressed sincere gratitude for being the beneficiaries of the project. • The interviewees have expressed their happiness of benefiting from the electricity provided for them for their basic household use and for productive uses in their livelihood. • The beneficiaries expressed some concerns on the following: electricity fees and the collection system, operation and maintenance of the RE systems, trainings and seminars on how to troubleshoot the RE system in case of malfunction or emergency, repair and maintenance issues, labor costs of technicians providing assistance, depreciation costs to cover replacement and maintenance of the RE systems in their respective households.	

- With these concerns, there is a need for further explanation as to the costs and benefits of the system and how to prolong its use with proper maintenance and replacement programs.
- The discussion with the mayor centered on how to expand the implementation of the RE systems in households which are not yet beneficiaries of the RE systems under the SF4RE project.
- Further, the solar-powered irrigation system provided by the SF4RE project needs to be operational as soon as possible in order for the farmers to use it for their agricultural activities.

October 12, 2022 (Wed), 9:00 am – 10:30 am, Meeting-discussion with the **Province of Palawan representatives involved in DREAMS project**

Following the normal protocol for the KII and conducting the interview in a conversational manner, the following key points were noted during this meeting:

- The Province of Palawan is very keen on preparing their LREP and implementing it phase-by-phase.
- As of the visit, the Governor has already appointed the members of the committee on energy, who will work with the RE program of the province.
- The province has expressed their commitment to work closely with DOE and its partner agencies in achieving 100% household electrification in the province of Palawan and in implementing RE technologies wherever possible to contribute to the national target of 35% RE in the power mix by 2035 and 50% by 2040.
- The province has expressed the desire to receive more guidance and support from the national government (thru DOE and the DREAMS project) in the various steps of planning and implementation of their provincial LREP.
- The current coordination and communication practices with the DREAMS PMU is notably good and they have expressed appreciation of the many consultation and discussion meetings to fully implement the SF4RE projects in the various sites of Palawan.
- The province expressed concern on timelines and procurement challenges for the installation of the RE systems under the SF4RE facility, since the beneficiaries of the project also expressed urgency of their needs, especially for the household electrification.

October 13, 2022 (Thu), 2:00 pm – 4:00 pm, Meeting-discussion with **BOHECO-I representatives**

Following the normal protocol for the KII and conducting the interview in a conversational manner, the following key points were noted during this meeting:

- BOHECO-I expressed sincere appreciation and gratitude to be chosen as beneficiary of the SF4RE project thru the RE installation in Pamilacan Island, Bohol.
- The representatives further expressed their positive experiences on how RE can benefit their constituencies and how this can also help them achieve their mandate as an EC to include RE in the power mix.
- Further, BOHECO-I representatives shared that further educational and awareness campaigns need to be done in order to raise the number of applicants for the net metering system where RE (solar PVs) systems are installed in the households or building rooftops.
- There is a need to conduct more trainings and workshops in order to better appreciate the costs and benefits of the RE systems for both the consumers and providers of electricity (e.g., ECs).
- Further, there is a need to closely study the business models which are appropriate for certain situations and conditions on the ground, especially in off-grid remote islands, where resources are difficult to access and the people needs further assistance in understanding and appreciating the value of RE systems and its operations.
- The challenge on how to repair the damages from the fire incident in Pamilacan and also expand the installation of the RE system, for example, in Pamilacan Island and in other areas where such RE systems are very applicable.
- It was recommended that grievance and risk management should be included in the RE program of DOE SF4RE project.

October 14, 2022 (Fri), Site visit to Pamilacan Elementary School and the **39.65 KW Community Solar PV Mini-grid for 357 households**; Meeting-discussion with barangay officials, community representatives and WeGen representatives

During this visit, the following key points are noted:

- The stakeholders in Pamilacan Island expressed their appreciation and gratitude as beneficiaries of the SF4RE facility. Although, they were deeply saddened by the fire incident which destroyed the solar PV system which provides electricity to the households.
- There is a need to ascertain the roles of beneficiaries, partners, and stakeholders in the operation and management of the RE system in Pamilacan Island, Bohol.

- Further trainings and workshops on technical and financial management are necessary for the beneficiaries and stakeholders to better manage the RE system and determine what appropriate business model can be implemented to sustain the said installation for the long-term.
- Of immediate concern is the process of rehabilitation of the damaged RE system due to the fire incident, as this caused a lot of havoc in their household and livelihood activities, especially those that require 24/7 electricity access.
- The beneficiaries are requesting for more educational and awareness campaigns on electricity from RE systems and how to maintain such systems for long-term use and sustainability; in addition, there is a need to scaleup the RE system to achieve 100% electrification in the island.

October 17-18, 2022 (Mon-Tue), Mariano Marcos State University (MMSU), Batac, Ilocos Norte: Meetings with officials and project team of DREAMS SF4RE facility at NBREC and site visit to the Currimao Campus where the **22KW Solar-powered Aquatic Life Support System, CASAT,** is located.

The following are the key points during the interviews of key officials and the FGDs with the project team:

- MMSU is committed to champion RE in their programs and activities. The establishment of NBREC is an important milestone whereby R&D and extension activities are planned and implemented.
- They are committed to support and implement all the RE trainings, workshops, and courses under the DREAMS project. The preparation and planning of the Executive Program for the LGU officials is underway. Hopefully, the first round of implementation will be completed before the EOP.
- The solar-powered bioethanol production is well-supported and would continue its implementation with their partner communities in Aparri.
- The installation of the 22KW Solar-powered Aquatic Life Support System, CASAT, MMSU is completed and now operational.
- The main challenges of the project team are the documentation and preparation of research papers and case studies showcasing the RE systems under experimentation and demonstration.
- Ilocos Norte is the seat of all RE projects (solar, wind, hydropower, biomass, bioethanol) and can serve as model for the rest of the country in terms of learning insights; there is a need to document and showcase these examples for educational and awareness campaigns, as well as for sustainability purposes.

October 27-28, 2022 (Thu-Fri), Meeting-discussion with **barangay officials and municipality of Goa mayor and representatives**; site visits to **4 (out of 10) solar-powered water supply system for household and school use, Municipality of Goa, Camarines Sur**

The following are the key points during the interviews of key officials of the LGU of Goa and the FGDs with the barangay officials of the 4 sites:

- All key municipal and barangay officials of Goa, Camarines Sur have expressed their sincere gratitude and appreciation of the DREAMS SF4RE facility – for them being recipients and beneficiaries of the 10 units of solar-powered water supply systems for household and school use.
- The RE system serves a model for all other barangays to follow; the mayor is working very hard to implement similar RE systems in as many barangay constituencies of Goa. In fact, there are now 39 installation of Solar-powered water supply systems in Goa, with funding from various sources, including the 10 from the DREAMS SF4RE project.
- The challenges and concerns expressed during the visits are the following, which are applicable to all their 39 units:
  a. Operation and maintenance; management of the system
  b. Appropriate business model that would work in their context
  c. Scaling up of the system to reach as many beneficiaries and communities, replication in other places
  d. Educational and awareness campaigns on the benefits of RE system and the importance of water conservation.
  e. Expanding of the RE system to include electrification of households and schools especially in far-flung areas

November 9, 2022 (Wed), Meeting-discussion with **barangay officials and community beneficiaries of the 10 KW Rehabilitated Micro-hydro Power facility for 62 Households and Community Facilities in Upper Katablangan, Conner** and with **Mayor of Conner, together with his team of councilors**

The following are the key points during the interviews of key barangay officials and the mayor of Conner with his team of councilors:

- All of them expressed sincere appreciation and heartfelt gratitude to the DREAMS project thru the SF4RE facility for funding the rehabilitation of the 10KW micro-hydropower facility in Upper Katablangan, Conner.
- The 62 household-beneficiaries have already enjoyed the 24/7 electricity access and have used it for productive uses and livelihood purposes.
- The barangay has also managed to organize the community so they can address the financial viability and sustainability of the system, thru collection of electricity bills, for operation and maintenance.
- One major concern is the expansion and scaleup of the micro-hydro power to include in the electrification the other half of the population in Katablangan, including the elementary schools.

November 16, 2022 (Wed), Meeting with LGU, Municipality of Carles; Travel to Gigantes Island, Site visit at Lantangan Elem School and meeting-discussion with partners and the community of fisher folks

The project under SF4RE in Gigantes Island still has to install the solar-powered system for fish processing, water supply, and social services. Meeting-discussion with the partners centered on the challenges and concerns pertaining to the details of the system installation. Nevertheless, the beneficiaries and partners are grateful for the support provided by the DREAMS project to improve their livelihood thru the SF4RE facility.

November 18, 2022 (Fri), Site visit and observation of the **75KW Solar PV Rooftop System of Iloilo Provincial Hospital.**

This RE system is already fully operational and the hospital is enjoying the benefits of clean electricity supply. Of important note is the 24/7 uninterrupted electricity supply to the Covid-19 Molecular Laboratory, Intensive Care Unit, vaccine cold chain, and other critical facilities of the hospital, which is very important in enabling the continued analysis of samples and Covid tests, especially during the pandemic. The important lesson learned from this demonstration system is the use of clean energy for health services and the continuous availability of clean power thru the RE system.

COST-BENEFIT ANALYSIS (CBA)

In all project sites under the SF4RE facility, the conduct of cost-benefit analysis is very important to provide learning insights and further areas for improvement in sustaining such RE systems in the long term. This also provides guidance to all RE producers and consumers on its cost efficiency and positive environmental impact.

For example, in Upper Katablangan, Conner, Apayao, the rehabilitation of a 10 KW micro-hydro power facility which provides 24/7 electricity to 62 households and 5 community facilities only costs P1M. The households pay an electricity tariff of P5.5 per KWh. With an efficiency of 70%, which is typical for hydropower generators, the investment can be recouped in 3 years. With proper technical and financial management, the micro-hydropower facility can last for long; such that aside from all the benefits of electricity access for communities in remote areas, this would actually lead to improved quality of life for the households. Thus, the call for replication and scaleup is the next challenge of the SF4RE program, as electrification rate is still about 50% in this area in Katablangan, Conner, Apayao. The dream of the other 50% is to also avail of the benefit of having 24/7 electricity access while tapping the rich water resource for hydropower.

In another example, the Iloilo Provincial Hospital installed its 75 KW rooftop solar PV system thru the SF4RE facility costing P6.8M. The hospital report shows an average of PhP 113,839 in monthly savings. The investments can be recovered in 5 years. With proper technical and financial management, the hospital can enjoy long-term savings from using clean power. As it is a government hospital, the savings can be spent for additional equipment, health care staff, and expanded solar-powered facilities, thus, providing better services and facilities to the customers.

For productive uses of RE, the 10 units of installed solar-powered water supply facilities in the Municipality of Goa would be a good example. Each unit can generate 2.2 KW per day, which serves a total of 820 households and several schools. The system costs a total of P6.2M. One of the current challenges of the communities is on how to establish a fair and appropriate tariff of water supply that households would pay for operation and maintenance of the system. From the KII of the stakeholders, the households are willing to pay for water supply and the barangay officials are also keen on implementing water tariff in order to promote proper water use and conservation as well as raise funds for operation and maintenance. Assuming that each household would pay a minimum of P100 per month for water supply, a monthly savings of P82,000 is obtained, which can recoup the investments in about 6.3 years. With proper management of the water supply system, the barangays would be able to expand the system using the

funds collected from the tariff in order to cater to all households in the community. As it is right now, not all households benefit from the current solar-powered water supply installation and the call to already increase the capacity is urgent to cater to 100% of the households.

The cost-benefit analysis (CBA) could be conducted and documented for all SF4RE projects as demonstration case studies providing proof-of-concepts (POC). This would be a rich knowledge resource for RE developers, investors, and costumers, and would open up avenues for an organic RE mainstreaming across the Philippines.

SF4RE FACILITY: FINDINGS

1. The SF4RE facility is an important achievement of the DREAMS project which provides the demonstration case studies of RE mainstreaming, alongside providing electricity access to the target beneficiaries, even reaching the remote, off-grid and far-flung communities of the country; thus, uniquely aiming at last-mile electrification.
2. The facility provides concrete examples of the effectiveness and efficiency of RE systems, especially in tapping natural resources such as solar energy and hydropower, in these off-grid areas.
3. The RE systems, even how small, can actually facilitate electrification in off-grid areas and can provide 24/7 electricity access to households and improve livelihood opportunities with the productive uses of electricity.

RECOMMENDATIONS

5. There is a need to **continue the support for the SF4RE facility** in order for the country to achieve 100% household electrification rate, reaching all the off-grid areas and tapping existing natural and renewable resources such as solar, hydro, and biomass, amongst others. Thus, the proposed **RE Trust Fund would strategically serve this purpose**.
6. The call for intensive and extensive market development for RE systems and products is urgent.
7. There is a need to establish the standards for implementing projects involving the RE system, especially for micro-grids and off-grid systems.
8. In establishing the standards for micro-grid and off-grid RE systems thru the SF4RE facility and other means, the following must be considered:
   j. Technical design and specifications, which should include context and realities on the ground, considering household electrification and productive uses of RE to support livelihood and improve quality of life
   k. Appropriate business model considering cost-benefit analysis, financial management structures
   l. Capacity building of partners and stakeholders, including beneficiaries
   m. Diffusion of appropriate technologies, including Internet of things, fintech, AI, and others; procurement processes which can be enhanced thru extensive market development
   n. Provision of a variety of good operation and maintenance approaches
   o. Disaster and risk management
   p. Grievance management mechanisms
   q. Environmental and social impact assessment, mitigation, monitoring and management
   r. Sustainability, which includes replication and scaleup
9. Consolidation, documentation, and knowledge management of all case studies and projects involving RE systems to provide educational learning materials, promote awareness and further innovation, thereby supporting the RE mainstreaming strategy of the country.

6.3. List of Persons Interviewed, Actual Project Stakeholders, Project Steering Committee Members, Project Support Group, and PMU Staff

A. List of Persons Interviewed

Name	Designation/Position	Organization
Ms. Floradema Eleazar	Team Leader Climate Action Programme Team	UNDP Philippines
Ms. Gwen Anne Palmas	Project Associate	UNDP Philippines
Mr. Paul Villarico	Project Support Staff	UNDP Philippines
Mr. Bishnu Chettri	M&E Officer	UNDP Philippines
Mr. Ricardo Torres	Project Manager	GEF-UNDP-DOE DREAMS
Ms. Tea Jalin Ty	M&E Officer	GEF-UNDP-DOE DREAMS
Ms. Hyacynth Rivera	Capacity Dev Associate	GEF-UNDP-DOE DREAMS
Ms. Louise Isabelle Manalo	Research Assistant	GEF-UNDP-DOE DREAMS
Ms. Mylene Capongcol	National Project Director, GEF-UNDP-DOE DREAMS	Assistant Secretary, Department of Energy, Renewable Management Bureau (DOE-REMB)
Mr. Roderick Planta	Asset, Secretary, Investment Programming Group	National Economic and Development Authority (NEDA)
Mr. Emmanuel Jauriza	NEA Administrator	National Electrification Administration
Mr. Gaspar Escobar Jr.	Division Chief, NREB TSMD	DOE-REMB
Mr. Andresito Ulgado	Chief SRS, HOEMD	DOE-REMB
Mr. Arnulfo Zabala	Supv SRS, SWEMD	DOE-REMB
Mr. Clares Loren Jalocon	Corp. Planning and Communications Head	Philippine Electricity Market Corporation (PEMC)
Ms Emma Garrido	IT Section, PREMS	PEMC
Mr. Eldin Paulo Reyes	IT Section, PREMS	PEMC
Ms Janeth Ceniza	IT Section, PREMS	PEMC
Ms. Divine Grace Palanca	Special Project Officer	PALECO, Palawan
Mr. Crizaldy Felicisimo Venus	DDP & Rates Section Head	PALECO, Palawan
Mr. Ryan Dagsa Maminta	Provincial Board Member	Palawan Provincial Government Unit
Mr. Roque De La Pena	Program Manager, PGO	Palawan Provincial Government Unit
Mr. Jaime Ortega	Mayor	Municipality of Aborlan, Palawan
Mr. Lito Tito	Vice Mayor	Municipality of Aborlan, Palawan
Ms. Gildaelda Rabaya	PDO III	Municipality of Aborlan, Palawan
Mr. Salvador Cotamco	Mun Planning & Dev Coord	Municipality of Aborlan, Palawan
Ms. Eden Alcala	Secretary	Bubusawin, Apurawan, Aborlan, Palawan
Ms. Nelia Casanas	BOD	
Ms. Luzelle Pandino	Treasurer	
Ms. Olivia Pandino	BOD	
Ms. Mardilyn Yanong	Auditor	
Ms. Imelda Piano	Member	
Mr. Andro Antipuesto	President	
Mr. Algerico Siga	Chief, Corp Planning & IT	BOHECO-I, Bohol
Mr. Danilo Quidlat	SEEAD Manager	BOHECO-I-Bohol
Ms. Saturnina Quiles	Secretary	Brgy Pamilacan, Bohol
Mr. Crispo Valeroso	Captain	
Ms. Melanie Bano	Treasurer	
Mr. Primitivo Pioquinto	Kagawad	
Ms. Maria Guingay	Member/Beneficiary	
Mr. Charlie Ayco	Chairman and President	WeGen Laudato Si
Ms. Chona Dalumbar	Project Head	WeGen Laudato Si
Engr. George Arcona	Technical Engineer	WeGen Laudato Si
Dr. Shirley Agrupis	President	MMSU, Ilocos Norte
Dr. Nathaniel Alibuyog	VP Research & Extension	MMSU, Ilocos Norte
Dr. Bjorn Santos	Director for Research	MMSU, Ilocos Norte
Engr. Thomas Ubina	Project Lead, DREAMS	MMSU, Ilocos Norte
Dr. Edmund Edison Esteban	Dean, COE	MMSU, Ilocos Norte
Engr. Salustino Morales	Chair, EE Dept	MMSU, Ilocos Norte
Engr. Roque Ulip	Director NBREC	MMSU, Ilocos Norte
Dr. Veronica Goronde	Dean, CASAT	MMSU, Ilocos Norte

Name	Designation/Position	Organization
Dr. Ernesto Del Rosario	Chair, FISH, CASAT	MMSU, Ilocos Norte
Engr. Christopher Baga	SRS	MMSU, Ilocos Norte
Engr. Psalm Pastor	SRS	MMSU, Ilocos Norte
Mr. Eugenio Manarpac Jr.	Contractor	EBM Solar, Ilocos Norte
Ms. Clarita de Jesus	REMB	DOE
Mr. Ronron Madera	REMB	DOE
Ms. Quennie Gumanoy	REMB	DOE
Mr. Ferdinand Binono	REMB	DOE
Ms. Hidelita Villanueva	REMB	DOE
Ms. Lourdes Arciaga	Visayas Field Office	DOE
Mr. Marcel Pan	Mayor	Goa, Camarines Sur
Engr. Ronilo Jose Alarcon	Municipal Engineer	Goa, Camarines Sur
Mr. Jose Pena	Punong Barangay	Catagbacan, Goa, Camarines Sur
Mr. Alejandro Pagador	Brgy Kagawad	Catagbacan, Goa, Camarines Sur
Ms. Felina Sulpicio	Brgy Kagawad	Catagbacan, Goa, Camarines Sur
Ms. Zenaida Arila	Brgy Kagawad	Catagbacan, Goa, Camarines Sur
Ms. Juliet Ababa	Brgy Kagawad	Catagbacan, Goa, Camarines Sur
Ms. Liezel Obias	Brgy Secretary	Catagbacan, Goa, Camarines Sur
Mr. Noel Aquino	Punong Barangay	Maymatan, Goa, Camarines Sur
Mr. Edilberto Asol	Brgy Kagawad	Maymatan, Goa, Camarines Sur
Mr. Allen Tadeo	Brgy Kagawad	Maymatan, Goa, Camarines Sur
Mr. Mario Grejalno	Brgy Kagawad	Maymatan, Goa, Camarines Sur
Ms. Elvie Bigcas	Brgy Kagawad	Maymatan, Goa, Camarines Sur
Ms. Jean Gonzaga	Brgy Secretary	Maymatan, Goa, Camarines Sur
Ms. Cecilia Dulfo	School Head	Maymatan Elem School, Goa, Camarines Sur
Mr. Nolito Delfino	Punong Barangay	Cagaycay, Goa, Camarines Sur
Mr. Mark Gilder Pasiowa	Brgy Kagawad	Cagaycay, Goa, Camarines Sur
Ms. Ginalyn Lasala	Brgy Treasurer	Cagaycay, Goa, Camarines Sur
Ms. Rosalie Delfino	Brgy Secretary	Cagaycay, Goa, Camarines Sur
Mr. Gil Vivo	ESP-1	Cagaycay, Goa, Camarines Sur
Ms. Cecille Louise Abad	Administrative Officer	Cagaycay, Goa, Camarines Sur
Ms. Marilou Brecino	BHNSW	Cagaycay, Goa, Camarines Sur
Ms. Leslie Uno	Master Teacher	Cagaycay Elem School, Goa, Cam Sur
Ms. Edna Camano	Teacher	Cagaycay Elem School, Goa, Cam Sur
Mr. Michael Mendoza	Punong Barangay	Salog, Goa, Camarines Sur
Ms. Leny Bergonio	Brgy Kagawad	Salog, Goa, Camarines Sur
Ms. Lynlyn Salcedo	Brgy Kagawad	Salog, Goa, Camarines Sur
Mr. Elmer Verdeso Jr.	Brgy Kagawad	Salog, Goa, Camarines Sur
Mr. Alvin Bergonio	Brgy Kagawad	Salog, Goa, Camarines Sur
Atty. Joric Bayauan	Mayor	Conner, Apayao
Mr. Alexander Aswigue	Vice Mayor	Conner, Apayao
Mr. Justin Begtang	Municipal Councilor	Conner, Apayao
Mr. Jason Loyon	Municipal Councilor	Conner, Apayao
Mr. Saul Delwasen	Municipal Councilor	Conner, Apayao
Mr. Artemio Gonayn	Municipal Councilor	Conner, Apayao
Mr. Abraham Sanchez	Municipal Councilor	Conner, Apayao
Mr. Benito Lugayan	Punong Barangay	Upper Katablangan, Conner, Apayao
Mr. Luis Lugayan	Brgy Kagawad	Upper Katablangan, Conner, Apayao
Mr. Arnel Manglugay	Brgy Kagawad	Upper Katablangan, Conner, Apayao
Mr. Delmacio Lugayan	Brgy Kagawad	Upper Katablangan, Conner, Apayao
Mr. Ibarra Sibayan	Brgy Kagawad	Upper Katablangan, Conner, Apayao
Mr. Marlon Wandisan	Beneficiary	Upper Katablangan, Conner, Apayao
Mr. Rolly Depakakibo	PPDO-Iloilo	Provincial Government Iloilo
Ms. Anne Marie Doromal	HMO	Iloilo Provincial Hospital
Mr. Rey Victor Gorin	PPDO-Iloilo	Provincial Government Iloilo
Mr. Mario Nillos	PPDO-Iloilo	Provincial Government Iloilo
Engr. Melvin Purzuelo	RDC	Green Forum, Western Visayas
Mr. Siegfredo Betita	Mayor	Municipality of Carles, Iloilo
Mr. Julieto Manggasang	MPDO	Municipality of Carles, Iloilo
Mr. Guillermo Pamplona Jr.	Communications Officer	Municipality of Carles, Iloilo
Mr. Marlon R. Macalino	Principal, Lantangan Elem School	Gigantes Island, Iloilo
Ms. Hope Gallardo	Teacher, Lantangan Elem School	Gigantes Island, Iloilo

Name	Designation/Position	Organization
Lizilyn Legayu	Treasurer, DapWA, GIFFSC	Gigantes Island, Iloilo
Atty Jose Michael Edwin Amancio	General Manager	ESAMELCO, Eastern Samar
Ms Ayesa Grace Abing	Corp Planning Division Chief	ESAMELCO, Eastern Samar

In summary, a total of 116 individuals, with 44 females (38%) and 72 males (62%), were meet and interviewed during the TE field missions and site visits. These composed of 27 key informant interviews (KIIs), both online and onsite, and 18 focus group discussions (FGDs) onsite in seven (7) SF4RE project sites visited.

B. List of Actual Project Stakeholders

Stakeholder	Type of Stakeholder	Project Document Role	Role in implementation
Department of Energy (DOE)	Government	The DOE's **Renewable Energy Management Bureau** (**REMB)** will serve as the key subordinate bureau and serve as the implementing entity for the DREAMS Project. It will also be responsible for the overall management of the Project including communication and coordination with UNDP and key partners, providing staff and administrative support, liaison with local governments, monitoring and project financial management. DOE will chair the NSC.	**Implementing Partner -** The REMB Director and Technical Services Management Division Chief serve as the National Project Director and Assistant National Project Director, both of whom provide direction for the Project. The divisions of the bureau provide technical support to Project activities, i.e. review of RE project proposals, technical inspections, and policy development guidance. DOE also acts as the **Project Steering Committee Chair.** The members of the PSC oversee the policy and decision making for project implementation, as conceptualized in the ProDoc. The Project maintains engagement through regular PSC meetings. Critically, the public institutions that are members of the PSC are key regulatory authorities of the Philippine Renewable Energy sector. Thus, they are regularly consulted and engaged in the Project's policy support (Component 1) activities, through email communication and event invitations.
Department of Interior and Local Government (DILG)	Government	Provide guidance to LGUs on implementing the Local Philippines Government Code in the context of local RE projects, and in the preparation of local ordinances (Output 1.2). Liaise between DOE as the IP for this Project and LGUs on streamlining the system for permit and license issuance (Output 2.2). DILG will be a member of the NSC.	**PSC Member -** The members of the PSC oversee the policy and decision making for project implementation, as conceptualized in the ProDoc. The Project maintains engagement through regular PSC meetings. Critically, the public institutions that are members of the PSC are key regulatory authorities of the Philippine Renewable Energy sector. Thus, they are regularly consulted and engaged in the Project's policy support (Component 1) activities, through email communication and event invitations. DILG was a partner for an RE Conference Workshop in Region VI, particularly to promulgate the implementation of the Local Energy Code.
National Economic and Development Authority (NEDA)	Government	Not identified in Project Document	**PSC Member -** See roles of PSC Members above

National Transmission Corporation (TRANSCO)	Civil Society Organization	Undertaking of the approval, management, and administration of FiT-ALL applications and disbursements (Output 1.1), and clarification of the role of TRANSCO in streamlining joint approvals for transmission and distribution connections (Output 2.2). TRANSCO will be a member of the NSC.	**PSC Member -** See roles of PSC Members above
National Grid Corporation of the Philippines (NGCP)	Government	Strengthening oversight of RE project development and ensuring its integration with the plans and operations of NGCP for the delivery of electricity to consumers. This would include NGCP's role in strengthening and approving guidelines on RE penetration into grids (Output 1.3). NGCP will be a member of the NSC.	**PSC Member -** See roles of PSC Members above
National Power Corporation (NPC) and NPC - Small Power Utilities Grid (NPC-SPUG)	Government	Both NPC and NPC-SPUG will coordinate with LGUs to discuss electric power requirements and electrification concerns, improve integration of small RE projects with RE development entities and source increased RE in all SPUG areas where feasible as a part of the Project assistance to prepare bankable RE project plans (Output 4.2). NPC-SPUG will be a member of the NSC.	**PSC Member -** See roles of PSC Members above
Philippine Electricity Market Corporation (PEMC)	Private Sector	Operationalization of an RE Market as a sub-market to the WESM as a part of Outputs 3.1 and 3.2. PEMC will be a member of the NSC.	**PSC Member -** See roles of PSC Members above. PEMC is also instrumental in DREAMS **Component 3** activities towards the establishment of the RE Market and the Philippine RE Market System (PREMS).
National Electrification Administrations (NEA)	Government	Not identified in Project Document	**Component 4 -** The NEA maintains its guidance with the Project's RE localization output, through identification of possible project activities and coordination with Electric Cooperatives
National Renewable Energy Board (NREB)	Government	Management of NREP activities to accelerate the pace of RE approval, enforce the RPS and increase development of RE generation in off-grid areas. This will be done through NREB leading a biennial review of the NREP.	**Component 1 -** The NREB maintains its guidance with the Project's policy support output, central of which is the NREP 2020-2040.
Department of Environment and Natural Resources (DENR)	Government	DENR will work with DOE to improve efficiencies of environmental regulatory approvals of RE projects.	**PSC Member -** See roles of PSC Members above
National Water Resources Board (NWRB)	Government	NWRB will work with DOE to improve integration of water sustainability plans with RE project approvals.	SF4RE Projects with water components have ongoing consultations regarding exemption from securing water permits.

Iloilo Provincial Government - Local Government Unit (LGU)	Government	Selected LGUs will work with DOE to improve integration of local ordinances and local energy plans with national RE approvals and plans, and coordinate with the DUs and/or NPC-SPUG (for Missionary Areas) to discuss electric power requirements and electrification concerns (activities as specified under Outputs 2.3, 2.4 and 4.2). LGUs from Palawan and Iloilo Provinces will serve as members of the NSC.	**Component 2 -** Iloilo participated in the Local RE Planning Capacity Building Program (LREP), which resulted into a draft resolution to allocate 5% of the provincial budget for RE, the Iloilo Province RE Plan, 3 Feasibility Studies, and 3 SF4RE supported RE Projects. Iloilo is also a **PSC Member** and a **SF4RE Proponent/Partner.**
Palawan Provincial Government - Local Government Unit (LGU)	Government	Selected LGUs will work with DOE to improve integration of local ordinances and local energy plans with national RE approvals and plans, and coordinate with the DUs and/or NPC-SPUG (for Missionary Areas) to discuss electric power requirements and electrification concerns (activities as specified under Outputs 2.3, 2.4 and 4.2). LGUs from Palawan and Iloilo Provinces will serve as members of the NSC.	**Component 2 -** Palawan participated in the LREP, which resulted into 2 RE Proposal and 2 SF4RE supported RE projects. Talks are ongoing to update the Palawan Development Plan with RE integration. Palawan is also a **PSC Member.**
The World Wildlife Fund (WWF)-Philippines	Civil Society Organization	WWF will augment capacity building activities at the local level with LGUs and other community groups	No activities materialized.
Renewable Energy Association of the Philippines (REAP)	Civil Society Organizations	REAP will assisting with the promotion of renewable energy throughout the country in tandem with DOE and LGUs.	No activities materialized.
Cordillera Hydroelectric Power Corporation (COHECO)	Private Sector	COHECO will support efforts to pilot the accelerated regulatory approval process for this 60 MW hydropower plant. COHECO will install and commission the hydro power plant. A representative from the private sector will be engaged in the NSC.	No activities materialized. The ProDoc identified RE Projects that will receive technical assistance to expedite securing permits and service contracts. These projects will result in 75 MW newly installed RE capacity, 205 ktonnes cumulative direct project emission reductions, and $31.9 million private sector counterpart. However, during the inception planning of the Project, it was revealed that the projects have been either discontinued, or already completed. From 2018-2022, the IP endorsed at least 10 RE projects with a potential capacity of more than 100MW encountering barriers on project implementation. However, none of the assessed projects have qualified for assistance or have pushed through. Most of the barriers assessed are beyond DREAMS Project capability to resolve within the Project timeline (e.g. boundary disputes, political issues, relocation of affected communities, lack of FPIC from Indigenous Peoples).
Enfinity Philippines Renewable Resource Inc.	Private Sector	Enfinity will support efforts to pilot the accelerated regulatory approval process for the 1.0 MW solar plant. It will install and commission the Solar power plant	
Solarus Partners Inc.	Private Sector	Solarus will support efforts to pilot the accelerated regulatory approval process for a 12 MW solar plant. Solarus will invest in, install and commission the Solar power plant	
First Envirotech Alliance Corporation	Private Sector	First Envirotech will support efforts to pilot clarifications for RE developers on FiT payments, wheeling fees and grid impact studies. It will install and commission the biogas power plant	
Regional Development Council VI	Government	Not identified in Project Document	Requested and co-organized the conduct of an RE Conference Workshop for LGU officers in Region VI

Green Forum Western Visayas	Civil Society Organization	Not identified in Project Document	Co-organized the conduct of an RE Conference Workshop for LGU officers in Region VI
NEDA Region VI	Government	Not identified in Project Document	Co-organized the conduct of an RE Conference Workshop for LGU officers in Region VI
Social Action Center of Legazpi	Civil Society Organizations	Not identified in Project Document	Solar Energy Orientation was conducted to assist the NGO to install RE system (household solar PV rooftop) in a resettlement community affected by a typhoon. The assistance will lead to additional new RE capacities and will contribute to the DREAMS' leveraged investments as the NGO has already funds for the housing and community facility component.
Social Action Center of Oriental Mindoro	Civil Society Organization	Not identified in Project Document	**SF4RE Project Proponent/Partner -** Oriental Mindoro Green Energy Pilot Project for 7 Municipal Buildings, 7 Faith Based Buildings and 1 livelihood center
Alterplan	Civil Society Organization	Not identified in Project Document	Solar Energy Orientation was conducted to assist the NGO to install RE system (household solar PV rooftop) in a resettlement community affected by a typhoon. The assistance will lead to additional new RE capacities and will contribute to the DREAMS' leveraged investments as the NGO has already funds for the housing and community facility component.
Mariano Marcos State University	Academic Institution	Not identified in Project Document	**SF4RE Project Proponent/Partner -** MMSU Solar Powered Aquatic Life Support System and Solar PV powered Bioethanol Distiller for 3 barangays in Aparri. The Project also supported the design of an **MMSU Net Zero Campus Feasibility Study** for RE **Modeling.** The MMSU has also requested support for the conduct of an **RE Executive Course for Ilocos Norte LGU Officers** later of this year 2022.
Franfurt School of Finance & Management	Academic Institution	Not identified in Project Document	The Project provides technical assistance and advisory guidance to the Frankfurt School of Finance & Management following their request for support. The School is appointed as a NAMA Support Organization for preparing the detail preparation for the NAMA Support Project "Philippines – Decarbonization of Electricity Generation on Philippine Islands Using Tidal Stream and Solar PV."
WeGen Laudato Si	Private Sector	Not identified in Project Document	**SF4RE Project Proponent/Partner -** Community Solar PV Mini-grid for 357 HHs in Pamilacan, Bohol and Oriental Mindoro Green Energy Pilot Project for 7 Municipal Buildings, 7 Faith Based Buildings and 1 livelihood center

Bohol 1 Electric Cooperative	Private Sector	Not identified in Project Document	**SF4RE Project Proponent/Partner -** Community Solar PV Mini-grid for 357 HHs in Pamilacan, Bohol
Pamilacan Solar Community Cooperative	Civil Society Organizations	Not identified in Project Document	**SF4RE Project Proponent/Partner -** Community Solar PV Mini-grid for 357 HHs in Pamilacan, Bohol
Concepcion Baranggay LGU	Government	Not identified in Project Document	**SF4RE Project Proponent/Partner -** Solar PV Rooftop for 10 LGU Buildings in Concepcion, Iloilo
Iloilo III Electric Cooperative	Private Sector	Not identified in Project Document	**SF4RE Project Proponent/Partner -** Solar PV Rooftop for 10 LGU Buildings in Concepcion, Iloilo **and Mainstreaming Renewable Energy in Small Island Communities, Gigantes Island, Carles, Iloilo**
Bureau of Fisheries and Aquatic Resources - Region 6	Government	Not identified in Project Document	**SF4RE Project Proponent/Partner -** Mainstreaming Renewable Energy in Small Island Communities, Gigantes Island, Carles, Iloilo
Carles Municipality LGU	Government	Not identified in Project Document	**SF4RE Project Proponent/Partner -** Mainstreaming Renewable Energy in Small Island Communities, Gigantes Island, Carles, Iloilo
Iloilo II Electric Cooperative	Private Sector	Not identified in Project Document	**SF4RE Project Proponent/Partner - Iloilo Provincial Hospital**
Aborlan Municipality LGU	Government	Not identified in Project Document	**SF4RE Project Proponent/Partner -** Smart Grid Solar PV Household Electrification and Irrigation for 120 HHs in Brgy. Apurawan, Aborlan
Palawan Electric Cooperative	Private Sector	Not identified in Project Document	**SF4RE Project Proponent/Partner -** Smart Grid Solar PV Household Electrification and Irrigation for 120 HHs in Brgy. Apurawan, Aborlan and Smart Grid Solar PV Household Electrification for 165 HHs in Cagayancillo, Palawan
Apurawan Farmer's Association	Civil Society Organizations	Not identified in Project Document	**SF4RE Project Proponent/Partner -** Smart Grid Solar PV Household Electrification and Irrigation for 120 HHs in Brgy. Apurawan, Aborlan
Entrepreneurs du Monde	Civil Society Organizations	Not identified in Project Document	**SF4RE Project Proponent/Partner -** Smart Grid Solar PV System for 300 HHs in Burdeos, Quezon
Aparri Municipal LGU	Government	Not identified in Project Document	**SF4RE Project Proponent/Partner -** Solar PV powered Bioethanol Distiller for 3 barangays in Aparri, Cagayan
Goa Municipal LGU	Government	Not identified in Project Document	**SF4RE Project Proponent/Partner -** 10 Potable Water Systems with 2.2 kW per Solar PV water pump serving 820 HHs in Goa, Camarines Sur
Ajuy Municipal LGU	Government	Not identified in Project Document	**SF4RE Project Proponent/Partner -** Micro-Hydropower Plant Rehabilitation for 9984 HHs in Ajuy, Iloilo
Eastern Samar Electric Cooperative	Private Sector	Not identified in Project Document	**RE Modeling and SF4RE Project Proponent/Partner -** Mini-hydropower Plant Rehabilitation for 11,035 HHs in Lawaan, Samar

Katablangan Indigenous Farmers Association	Civil Society Organizations	Not identified in Project Document	**SF4RE Project Proponent/Partner -** Micro-Hydropower Plant Rehabilitation for 62 HHs and 5 community facilities in Upper Katablangan, Apayao
Apayao Municipal LGU	Government	Not identified in Project Document	**SF4RE Project Proponent/Partner -** Micro-Hydropower Plant Rehabilitation for 62 HHs and 5 community facilities in Upper Katablangan, Apayao
Cagayancillo Municipal LGU	Government	Not identified in Project Document	**SF4RE Project Proponent/Partner -** Smart Grid Solar PV Household Electrification for 165 HHs in Cagayancillo, Palawan
Antique Provincial LGU	Government	Not identified in Project Document	**SF4RE Project Proponent/Partner -** Rehabilitation of Bun-acan Micro-Hydropower Plant for 60 HHs in San Remigio, Antique
San Remigio Municipal LGU	Government	Not identified in Project Document	**SF4RE Project Proponent/Partner -** Rehabilitation of Bun-acan Micro-Hydropower Plant for 60 HHs in San Remigio, Antique
Panpanan 1 Baranggay LGU	Government	Not identified in Project Document	**SF4RE Project Proponent/Partner -** Rehabilitation of Bun-acan Micro-Hydropower Plant for 60 HHs in San Remigio, Antique
Tapaz Municipal LGU	Government	Not identified in Project Document	**SF4RE Project Proponent/Partner -** 4 Potable Water Systems with 1.22 kW per Solar PV Water Pump serving 128 HHs in Tapaz, Capiz
Oriental Mindoro Provincial LGU	Government	Not identified in Project Document	**Component 2 -** The Province participates in the LREP activities. **SF4RE Project Proponent/Partner -** Oriental Mindoro Green Energy Pilot Project for 7 Municipal Buildings, 7 Faith Based Buildings and 1 livelihood center in Oriental Mindoro
Lanao del Sur Provincial LGU	Government	Not identified in Project Document	**Component 2 -** The Province participates in the LREP activities. **SF4RE Project Proponent/Partner - Productive Use of RE in Lanao del Sur**
Carles Municipal LGU	Government	Not identified in Project Document	**SF4RE Project Proponent/Partner -** Solar PV Installations and Productive Use of RE in Carles, Iloilo

C. Project Steering Committee (PSC) Members

The members of the PSC oversee the policy and decision making for project implementation, as conceptualized in the ProDoc. The Project maintains engagement through regular PSC meetings. Critically, the public institutions that are members of the PSC are key regulatory authorities of the Philippine Renewable Energy sector. Thus, they are regularly consulted and engaged in the Project's policy support (Component 1) activities, through email communication and event invitations.

Agency	Agency	Primary Representative	Alternate Representative 1	Alternate Representative 2
National Transmission Corporation	TransCo	Rowena Cristina L. Guevara President and CEO	Ms. Dinna O. Dizon Vice President, Transmission Management Group	-
Provincial Government of Palawan	PGP	Hon. Victorino Dennis M. Socrates Governor	Ceasar Sammy A. Magbanua Chief of Staff/ Executive Assistant V	Orphy Ordinario OIC, Provincial Employment Services Office
Provincial Government of Iloilo	PGI	Hon. Arthur R. Defensor, Jr. Governor	Atty. Dennis T. Ventilacion Acting Provincial Administrator	Mr. Mario N. Nillos Department Head, Provincial Planning and Development Office Mr. Rolle H. Depakakibo Project Development Officer IV
Philippine Electricity Market Corporation	PEMC	Mr. Elvin Hayes E. Nidea OIC President	Engr. Clares Loren C. Jalocon Head Corporate Planning and Communications Department	-
National Power Corporation	NPC	Fernando Martin Y. Roxas President and CEO	Rene B. Barruela Vice President, CAG	Rommel U. Mamangun Department Manager, CPD-CAG
National Grid Corporation of the Philippines	NGCP	Anthony Almeda President and CEO	Redi Allan B. Remoroza Assistant Vice President and Head, Transmission Planning Department	Vicente N. Loria Transmission Development Senior Manager TDD-TPD P&E NGCP
National Economic and Development Authority	NEDA	Arsenio M. Balisacan Secretary	Undersecretary Joseph J. Capuno Investment Programming Group (IPG)	Assistant Secretary Roderick M. Planta Infrastructure Development, IPG
Department of Interior and Local Government	DILG	Atty. Benjamin C. Abalos, Jr. Secretary	Undersecretary Mario L. Iringan Undersecretary for Local Government	Anna Liza F. Bonagua DirectorBureau of Local Government Development
United Nations Development Programme	UNDP	Selva Ramachandran Resident Representative	Edwine Carrie Deputy Resident Representative	Floradema C. Eleazar Team Leader Climate Action Programme Team
Department of Environment and Natural Resources	DENR	Atty. Analiza Rebuelta- Teh Undersecretary for Climate Change and GEF Operational Focal Point		

D. Project Support Group (PSG) of the Project Steering Committee

The PSG was constituted to provide technical advice and support to the Project Steering Committee. Among their key roles is the review of SF4RE Proposals (Component 4).

DOE Office	Contact Person	Position
Hydropower & Ocean Energy Management Division	Andresito Ulgado	Division Chief
Biomass Energy Management Division	Ruby De Guzman	Division Chief, currently ERMB OIC Assistant Director
Biomass Energy Management Division	Romeo M. Galamgam	OIC Division Chief
Geothermal Energy Management Division	Ariel Fronda	Division Chief
Solar and Wind Energy Management Division	Ferdinand Binondo, REE, MBA, CSC-CPro, CPCM, CPPP	Division Chief
Solar and Wind Energy Management Division	Jimmy Planas	Supervising Science Research Specialist
Information Technology and Management Services	Herminio A. Ariola, CESO IV.	Director III
Electric Power Industry Management Bureau	Eduardo B. Fernandez	Supervising Science Research Specialist
Energy Policy and Planning Bureau	Mike Sinocruz	Director
Policy Formulation and Research Division, Energy Policy and Planning Bureau	Lilibet T. Morales	Senior Science Research Specialist
Electric Power Industry Management Bureau	Luningning G. Baltazar	OIC-Director III
Energy Utilization Management Bureau	Patrick T. Aquino, CESO III	Director
Information & Data Management Division	Danilo N. Javier	Division Chief
Energy Resource Development Bureau	Cesar G. Dela Fuente III	Director
Office of the Assistant Secretary	Mario C. Marasigan	OIC-Assistant Secretary

E. Project Management Unit (PMU) Staff from 2017-present

ACTIVE STAFF					
Name	**Functions**	**ID**	**Contract**	**Starting Date**	**Expiration date**
TORRES, Ricardo	Project Manager	N000067151	NPSA-Regular	24-Jul-17	29-Jan-23
CAGUIOA, Myrna	Admin & Finance Assistant	N000065933	NPSA-Regular	3-Mar-20	28-Jan-23
BUCASAS, Aileen	Administrative Assistant	N000093852	NPSA-Regular	1-Dec-21	30-Nov-22
RIVERA, Hyacynth	Capacity Development Associate	N000072161	NPSA-Regular	2-Jul-18	28-Jan-23
TY, Tea Jalin	Monitoring and Evaluation Officer	N000099427	NPSA-Regular	29-Nov-21	28-Nov-22
PANGILINAN, Joseph	Procurement Assistant	N000072987	NPSA-Regular	27-Aug-18	31-Jan-23
MANALO, Lou Isabelle	Research Assistant	N000100477	NPSA-Regular	24-Jan-22	23-Jan-23

SEPARATED STAFF						Remarks
Name	**Functions**	**ID**	**Contract**	**Starting Date**	**Separation Date**	**Reason for Separation**
CAOILI, Marc Dizer	Monitoring and Evaluation Office	N000069600	Service Contract	22-Jan-18	21-Jul-21	Accepted better opportunity with alternate international donor organization (USAID)
LEE, Camille Anne	Administrative Assistant	N000072961	Service Contract	15-Aug-18	14-Feb-19	Contract not renewed
LIM, Brigitte	Capacity Development Associate	N000079071	Service Contract	24-Jun-19	23-Dec-20	Pursued graduate studies in renewable energy
LOSEA, Aurelia	Finance Officer	N000067083	Service Contract	1-Aug-17	31-Jul-19	Accepted better opportunity with alternate international donor organization (USAID)
PAYUMO, Annechielli	Administrative Assistant	N000068170	Service Contract	16-Oct-17	16-Jul-18	Accepted better opportunity with alternate international donor organization (WHO)
VITAN, Jan Ranizen	Administrative Assistant	N000077373	Service Contract	1-Apr-19	15-Feb-21	Accepted better opportunity with previous international donor organization (USAID) employer for a renewable energy
CALDERON, Aniniano	Capacity Development Associate	N000072963	NPSA-Regular	1-Sep-21	13-Sep-21	Terminated contract due to COVID concerns

6.4. List of Documents Reviewed

1	Project Identification Form (PIF)
2	UNDP Initiation Plan
3	Final UNDP-GEF Project Document with all annexes
4	CEO Endorsement Request
5	UNDP Social and Environmental Screening Procedure (SESP) and associated management plans (if any)
6	Inception Workshop Report
7	Mid-Term Review report and management response to TR recommendations
8	All Project Implementation Reports (PIRs)
9	Progress reports (quarterly, semi-annual or annual, with associated work plans and financial reports)
10	Oversight mission reports
11	Minutes of Project Board Meetings and of other meetings (i.e. Project Appraisal Committee meetings)
12	GEF Tracking Tools (from CEO Endorsement, midterm and terminal stages) Completed
13	GEF/LDCF/SCCF Core Indicators (from PIF, CEO Endorsement, midterm and terminal stages); for GEF-6 and GEF-7 projects only
14	Financial data, including actual expenditures by project outcome, including management costs, and including documentation of any significant budget revisions
15	Co-financing data with expected and actual contributions broken down by type of financing, source, and whether the contribution is considered as investment mobilized or recurring expenditures
16	Audit reports
17	Electronic copies of project outputs (booklets, manuals, technical reports, articles, etc.)
18	Sample of project communications materials
19	Summary list of formal meetings, workshops, etc. held, with date, location, topic, and number of participants
20	Any relevant socio-economic monitoring data, such as average incomes / employment levels of stakeholders in the target area, change in revenue related to project activities
21	List of contracts and procurement items over ~US$5,000 (i.e. organizations or companies contracted for project outputs, etc., except in cases of confidential information)
22	List of related projects/initiatives contributing to project objectives approved/started after GEF project approval (i.e. any leveraged or “catalytic” results)
23	Data on relevant project website activity – e.g. number of unique visitors per month, number of page views, etc. over relevant time period, if available
24	UNDP Country Programme Document (CPD)
25	List/map of project sites, highlighting suggested visits
26	List and contact details for project staff, key project stakeholders, including Project Board members, RTA, Project Team members, and other partners to be consulted
27	Project deliverables that provide documentary evidence of achievement towards project outcomes
	Additional documents, as required

List of documents uploaded in suggested formats on a shared google document file for the evaluation.

1. Priority – Colour-coded status of project results matrix – develop a matrix (see final report template format attached) for the report effectiveness section. This is absolute and needed before the start of the data collection process. The status of the GEF project results against the agreed and or changed GEF indicator framework. Provide a rationale for any changes in indicators and targets during implementation and state whether these changes to log frame were agreed upon during TR.
2. Evaluation TOR in word format.
3. The original TA agreement - GEF Project Document ProDoc in word format.
4. The MTR in word format.

5. List of current national and regional priorities (the international and national policies and laws, frameworks this project is contributing) - i.e. relevance –
6. List of all laws and policies the GEF project support has contributed to and or developed by the project with a summary of institutional results. (Also refer to any current mainstreaming results)
7. GEF project 'final' inception report and approved original logical framework (if it exists)
8. Priority - All TA - GEF project Steering Committee (Project Board Meeting Minutes). Include a cover page and detail the venue and participants with meeting dates. Include column for all major decisions for adaptation of project, dates and who participated and any major decisions
9. Priority - All of the GEF Annual Project Reviews APRs and Project Implementation Report (PIRs)
10. Priority - GEF Mid-Term Evaluation Report
11. Priority -All GEF project supported Technical and Research Reports (Develop a cover list of all consultancies and procurements and include dates and work costs)
12. Priority - Matrix for report or annex –List of all knowledge products and communications produced i.e. project brochures and public awareness materials.
13. Priority for report Annex-Final GEF tracking tools – FINAL METTs post TR -Capacity Development Scorecard and Financial Scorecard
14. Priority -List with a description of all the GEF-supported capacity building and learning activities disaggregated by gender and conducted by the project since the beginning. This should be in a matrix with a breakdown of venues, dates, participant's gender, and results, etc.
15. Priority –Matrix or List of synergistic ongoing and in the pipeline GEF projects i.e. linked to this project and a short explanation of all synergistic donor activities.
16. Matrix or List of the project supported research scientific and or policy-related studies (enabling activities)
17. Priority – Provide a neat list of actual stakeholder involvement. Develop a TER report-ready matrix with the role and actual involvement of Stakeholders – Delineate and include project implementing partners and other stakeholders by groups that have been active (describe how and how this differed from what was planned in the Project document. Include etc. Government, Donors, Private Sector and NGOs supported by the project –Sustainability
18. Priority – Provide a list of all UNDP/GEF funded and or supported staff attached to the project from inception – position and reason for leaving.
19. Priority- Table and a short narrative explaining the gender-related disaggregated results
20. Priority –Co-financing table making up the total and all donors? Prepared in the get format - SEE inception report.

6.5. Evaluation Question Matrix (Evaluation Criteria with key questions, indicators, sources of data, and methodology)

The evaluation approach will follow tasks and phases as per the TOR (Annex 1). For instance, the evaluation analyses the level of achievement of project results at the level of outcome, making use of the project results framework and the adequacy of the theory of change(see below), implementation processes and contextual factors, establishing as much as possible causal linkages guided by the evaluation criteria and questions. As such, the evaluation will be theory and principle-based. It will be guided by the latest GEF UNDP ME policy guidelines and implemented according to standards and criteria of the OECD-DAC - relevance, efficiency, effectiveness, sustainability and lesson learned (guidelines/standards for conducting evaluation of development and humanitarian projects). It will employ a range of qualitative and quantitative data collection techniques and methodologies (see section on data collection and table below). It will be participatory and ensure the inclusion of all relevant stakeholders' perspectives. The evaluators (international and national) aim to make an unbiased, objective, evidence-based assessment of the project's stated achievements and results.

Strategic Evaluation Question Topics:

- Was DREAMS project design needs and priority based and did the project continue to be relevant in light of emerging issues and priorities?
- Did the DREAMS project meet all its expected outcomes and targets? Did the project deliver all of its planned activities? Why and or why not?
- Was the DREAMS project efficient and present value for money in terms of the actual results achieved?
- How much local and global impact did this project actually achieve?
- How sustainable are the result of DREAMS including the institutional, operational and financial support?
- What are the next steps for DREAMS post project in 2023?

Evaluability Analysis

The following is a brief overview of the evaluability assessment (the rating of evaluability and assessment is attached in the table below) using the evaluability diagnostic instrument (EDI), which served to identify the strengths and weaknesses in the capacity to measure, to monitor, to evaluate and to report on the DREAMS progress at regional and country level. EDI is a systematic process that helps identify whether program evaluation is justified, feasible, and likely to provide useful information.

Results from evaluability assessments are used to build the capacity of DREAMS to implement and report on the DREAMS framework as a tool for monitoring of results. The following are the dimensions employed by the evaluators used to measure the readiness of DREAMS for final evaluation:

1. Understanding and awareness of process for linking DREAMS, SDGs, national country development strategies, and DREAMS goals and targets into development;
2. Understanding and awareness of approach for developing a Theory of Change that incorporates DREAMS, SDGs, national development strategies and the UNDS – SP goals and targets;
3. Process used for developing the DREAMS results framework;
4. Adequacy of the Theory of Change (see further analysis below) detail for the DREAMS project;
5. Validation performance measurement framework;
6. Validation monitoring and Evaluation Strategy and Plan for DREAMS, development strategies, DREAMS, NSPs & SDGs; and
7. Validation reporting on DREAMS progress & performance.

<u>In general, the EDI tool takes into consideration the following key evaluability questions:</u>

1. Are the project indicators SMART and available to measure progress and expected project results?
2. Is there in place a monitoring system to gather and systematize the information with defined responsibilities, sources and periodicity?
3. Is there any indicators/baseline area, which requires additional information?
4. What is the likely cost of such data collection and analysis in terms of financial and human resources?

The checklist applied (EDI-below) supports review of the DREAMS evaluation in terms of:

- Internal logic and assumptions
- Quality of indicators
- Feasibility of means of verification/measurement and methods
- Overview of resources and inputs

- Partners' participation and use of information.

Based on the following scale, the evaluation readiness was rated against each of the criteria listed in the enclosed tables:

- Unsatisfactory/Low quality
- Satisfactory/Medium quality
- High quality
- Not relevant to project

The current EDI result:

For the Evaluability assessment (final assessment provide in table 2 below), the TE assessment of the general evaluability and performance monitoring systems was considered. This prior analysis provided the evaluator with a basic assessment of the monitoring system and the coordination setup and will be vetted once again. The current EDI is based on the project formulation and rationale. The DREAMS is a follow-up project that deals with an operationalization knowledge gap concerned with interlinked themes such as Gender, RE, and CC. The outcomes (outputs 5, see results framework in Annex 2) were designed intentionally broad and developed to provide support for operationalizing and putting in place remaining by-laws and regulation as well as build capacity for the cross-cutting thematic dimensions with government, private sector and community level users.

Evaluability Assessment

1. Internal logic and assumptions		
Questions	**Quality assessment criteria**	**My Rating**
Does the DREAMS (strategy) logically match the problem analysis	• The strategy has intention on addressing target groups, in order to deal with root causes (causal logic established based on gender problem analysis). • There is a strong causal argument put forward between outputs and outcomes. • The logic is based on sound assumption and problem analysis	Medium quality
Comments: **The DREAMS strategy logically matches the problem analysis - the gender analysis is provided by the project document. The TOC was broadly defined and has missing intermediary expected results.**		
Are outcomes relevant, precise, and verifiable?	• Outcomes clearly state the final situation to be achieved. • The concrete benefits and situations to be achieved are possible to verify. • There is evidence of a common understanding of the outcomes amongst partners involved in the DREAMS.	Medium quality
Comments: **The attributions to the output level result are clear. The strategy and linkages between the projects four broad outputs towards change level "transformations" and expected outcome level results are clear. The project team (based on PI reports) have a common understanding of what they are contributing as knowledge products towards the expected outcome but the level of focused activities towards transformation based on changes in the Renewable Energy operating environment, policy and general understandings is ___?. The project focus is broader and based on community mobilization, knowledge linkages and evidence gap for gender response, RE, CC, policy in general, and included mapping out a plan for gender equality and poverty alleviation mainstreaming.**		
Are assumptions important and has the DREAMS have control or influence over them?	• The assumptions included in the TOC are specific, relevant, and adapted to the context in which the DREAMS will be implemented. • No assumptions are too uncertain to severely stall or stop implementation (risk rating).	Medium quality

2. Quality of indicators, baselines and targets		
Questions	**Quality assessment criteria**	**Rating**
Are performance indicators appropriate proxies of outcomes in terms of capturing relevant changes?	• There is a logical fit between indicators and outcomes. • Outcome indicators identify quantitative or qualitative measures of the expected changes to outcome intended to bring.	Medium
Comments: **The DREAMS results and indicators are broad. The targets are defined broadly. The baseline (for impact level changes are clearly established).**		
Are the indicators, milestones, and targets well defined and capable of measuring progression towards results?	• The indicators included in the DREAMS are broad, ambitious, but SMART. • The output indicators clearly specify expected target levels during and at the end of cycle. • The monitoring plan describes how baseline information will be established.	Medium
Comments: **The DREAMS results and indicators are broad. The targets are also defined broadly. The baseline (for impact level changes are not established). These are being established through project activities.**		
Does the DREAMS summarize what DREAMS and its constituents and others want to monitor – how, when and for whom?	• Preparation of the monitoring plan was done in consultation with constituents and partners.	Medium to High
Comments: **Yes, the preparation of the inception work and monitoring plan was done in consultation with constituent and partners.**		

Do the indicators support performance reporting on gender equality, disability inclusion, poverty, and social dialogue?	• One or more indicators support performance reporting on cross-cutting issues. • Sufficient gender-focused problem and baseline analysis is in place. • Indicators are framed in a manner that would inform the gender equality and disability inclusion related results.	Medium to High

3. Means of verification/measurement and methodologies		
Questions	**Quality assessment criteria**	**Rating**
Have adequate mechanisms for M&E been identified?	• Information needs for performance and results indicators are well identified	Medium
Comments: **Yes, the project has developed a plan and mechanisms for M&E. For instance, project is dealing with building operational capacities, knowledge gap, and undertaking cost benefits analysis of the solar solutions.**		
Are the methods and frequency for data collection specified (validity, reliability, affordability, robustness)?	• Methods are technically and operationally feasible with appropriate levels of effort and cost for the value added by the information.	Medium
Comments: **The ME system is clear and the project has protocols for inception planning, monitoring and quarterly, annually reporting and with MTR and TE. The MTR was conducted in 2020.**		
Is analysis and use of data well understood and the form and timing of outputs specified?	• Storage and analysis software/systems are identified. • Roles and responsibilities are clearly specified. • Type, form, frequency, and circulation of reports/products are clearly stated.	Medium
Comments: **As mentioned, the project focus is on a regional (or sub-national) knowledge gap, evidence for policy as well as data concerning Gender, DRR, and CC linkages.**		
Do data collection methods support gender – disaggregated monitoring and reporting?	• Sufficient gender-focused problem and baseline analysis is in place. • Data collection methods would inform disability inclusion related matters. • There is sufficient gender-specific data collected at activity output and outcome levels.	Medium

Evaluation Methodology

Per the TOR, the TE report must provide evidence-based information that is credible, reliable and useful. The TE team will review all relevant sources of information including documents prepared during the preparation phase (i.e. PIF, UNDP Initiation Plan, UNDP Social and Environmental Screening Procedure/SESP) the Project Document, project reports including annual PIRs, project budget revisions, lesson learned reports, national strategic and legal documents, and any other materials that the team considers useful for this evidence-based evaluation. The TE team will review the baselines information provided as well as base and midterm GEF focal area Core Indicators/Tracking Tools submitted to the GEF at the CEO endorsement and midterm stages and the terminal Core Indicators/Tracking Tools. The final report must be completed before the TE field mission begins. The TE team (one international consultant and one national expert) is expected to follow a participatory and consultative approach ensuring close engagement with the Project Team, government counterparts (the GEF Operational Focal Point), Implementing Partners, the UNDP Country Office(s), the Regional Technical Advisor, direct beneficiaries, and other stakeholders. Engagement of stakeholders is vital to a successful TE.

Methodologies (including data collection from national and sub-national levels) and sampling of project site visits)

The international evaluation specialist IES supported by an expert national consultant responsible for the conduct and the overall implementation across the four sequential phases: inception report writing/ framework development, desk study research, fieldwork and data collection, data analysis and final report writing.

The team aims to produce a professionally edited final TE report. The IES supported by the national expert will review the original against the adapted project indicator framework and test the theory of change (see TOC above). The IES supported by the national expert will assess whether the logical framework and indicators/target had been useful as a tool for monitoring and will test the data collected against the planned expected outcomes. The evaluation will include scrutiny on the design assumptions as part of management and implementation.

Given the large scope of review for the numerous partnerships involved at national and sub national levels as well as the SF4RE pilot sites (mentioned above), the iES will begin with a lengthy inception period (August 2022) in order to do in-depth study of the project documentation (see list of Documents to be reviewed in Annex) and draft the report before a final data collection and validation mission to project sites is conducted by the national expert consultant in September –October 2022. The national consultant will proceed to review the linkages between the sub-national and national level and also review the project sites technically with the relevant project experts and develop a short cost benefit analysis and do a technical review of the RE systems, the activity in the market and regulatory environment. This will be conducted in September-October 2022. During inception period, IES will review the project's theory of change. The national experts will

develop the graphic with the project team for the inception work. It will then be tested through the evaluation. The home-based work will also embark on key online conversations with key stakeholders considering the complex operating context.

As a strategic evaluation considering impact level results and scale up potentials, the evaluation will focus on the following six elements (just examples):

1. GEF Project design and relevance to actual needs and demand for technical assistance, knowledge, and capacity building support.
2. GEF Project management and institutional aspects.
3. GEF Project governance, technical and financial oversight and decision-making arrangements
4. GEF Project execution and assumptions around the capacity, monitoring and learning elements
5. GEF Project UNDP implementing partner comparative advantages (per NIM)
6. Project Results – Qualification of the capacity building targets and vetting of the quantification of the cost and benefits of the RE installations project sites.

The TE report will provide evidence-based information that is credible, reliable, and useful. The TE team is expected to follow a participatory and consultative approach ensuring close engagement with the Project Team, government counterparts (the GEF Operational Focal Point), Implementing Partners, the UNDP Country Office(s), the Regional Technical Advisor, direct beneficiaries, and other stakeholders.

Engagement of stakeholders is vital to a successful TE. Stakeholder involvement will include key informant interviews with stakeholders who have project responsibilities, including but not limited to: executing agencies, senior officials and task team/component leaders, key experts and consultants in the subject area, project board, project beneficiaries, academia, local government and CSOs, etc. The IES will conduct field mission to the following.

- UNDP Philippines Office: 15th Floor, North Tower, Rockwell Business Center Sheridan St. corner United St., Highway Hills, Mandaluyong City
- DOE DREAMS Office: 2F PNOC Building V, Energy Center, Rizal Drive, 34th St, Taguig City

Additionally, DREAMS is implementing sub-national activities in five provinces and RE pilot activities in various sites in the Philippines. The national consultant will conduct the technical and cost-benefit analysis of the regulatory environment expected results and report on-the site level implementation work. The national consultant will also make an assessment of the facility and the validation of sustainability of the facility–SF4RE and how this contributes to the achievement of the project outcomes. It will outline the history including the decision behind it and the sustainability and impact.

Evaluation Criteria Matrix

The following questions will be used as a guide to assess the project results and performance. These will be augmented with strategic questions designed during the desk study. The partnerships and project performance based on actual results will be considered.

Evaluative Criteria Questions	Indicators	Sources	Methodology
Relevance: How does the project relate to the main objectives of the GEF focal area, and to the environment and development priorities at the local, regional and national levels?			
Does the project relate to the GEF Climate Change focal area and has it been designed to deliver global environmental benefits in line with relevant international climate change objectives?	The project includes the relevant GEF outcomes, outputs and indicators The project makes explicit links with global climate action goals	Project Document GEF 5 Focal Area Strategies PIF	Desk Review of Documents
Is the project aligned to national development objectives, broadly, and to national energy transition priorities specifically?	The project design includes explicit links (indicators, outputs, outcomes) to the national development policy/national energy policies.	Project Document National development strategies, energy policies, Nationally Determined Contributions, etc. PIF	Desk Review of Documents

Evaluative Criteria Questions	Indicators	Sources	Methodology
Is the project relevant to stated regional development objectives as defined by regional frameworks?	Explicit links are made within the project to regional development policies, action plans and associated initiatives	Project Document PIF	Desk Review of Documents
Is the project's Theory of Change relevant to addressing the development challenge(s) identified?	The Theory of Change clearly indicates how project interventions and projected results will contribute to the reduction of the three major barriers to low carbon development (Policy, institutional/technical capacity and financial)	Project Document PIF	Desk Review of Documents
Does the project directly and adequately address the needs of beneficiaries at local and regional levels?	The Theory of Change clearly identifies beneficiary groups and defines how their capabilities will be enhanced by the project.	Project Document PIF	Desk Review of Documents
Is the project's results framework relevant to the development challenges and are results at the appropriate level?	The project results framework adequately measures impact The project indicators are SMART Indicator baselines are clearly defined and populated and milestones and targets are The results framework is comprehensive and demonstrates systematic links to the theory of change	Project Document PIF	Desk Review of Documents
Is the project appropriately aligned with relevant UN system priorities, including thematic objectives at the national/regional and international levels?	The project's results framework includes relevant thematic outcomes and indicators from the UNDP Strategic Plan, the UNDAF, UNDP CPD and other relevant corporate objectives	Project Document UNDP CPD, UNDAF, SP	Desk Review of Documents
Have the relevant stakeholders been adequately identified and have their views, needs, and rights been considered during design and implementation?	The stakeholder mapping and associated engagement plan includes all relevant stakeholders and appropriate modalities for engagement. Planning and implementation have been participatory and inclusive	Stakeholder mapping/engagement plan and reporting Quarterly Reports Annual Reports (PIR) Stakeholder Consultation Reports	Desk Review of Documents Stakeholder Interviews
Have the interventions of the project been adequately considered in the context of other development activities being undertaken in the same or related thematic area?	A Partnership framework has been developed that incorporates parallel initiatives, key partners and identifies complementarities	Project Document Quarterly Reports Annual Reports (PIR) Stakeholder mapping/engagement plan and reporting	Desk Review of Documents Stakeholder Interviews
Have relevant lessons learned from previous projects informed the design, implementation, risk management and monitoring of the project?	Lessons learned are explicitly identified and integrated into all aspects of the Project Document	Project Document PIF	Desk Review of Documents
Did the project design adequately identify, assess and design appropriate mitigation actions for the potential social and	The SES checklist was completed appropriately and all reasonable risks were identified with appropriate impact	Project Document SES Annex	Desk Review of Documents

Evaluative Criteria Questions	Indicators	Sources	Methodology
environmental risks posed by its interventions?	and probability ratings and risk mitigation measures specified		
Effectiveness: To what extent have the expected outcomes and objectives of the project been achieved?			
Has the project achieved its output and outcome level objectives?	The project has met or exceeded the output and outcome indicator end-of-project targets	Quarterly Reports Annual Reports (PIR) Monitoring Reports Beneficiary testimony Site visit/field reports Pilot Data Analysis/Reports	Desk Review of Documents Interviews with project staff, stakeholders and beneficiaries Site visits
Were lessons learned captured and integrated into project planning and decision-making?	Lessons learned have been captured periodically and/or at project end	Steering Committee Meeting Minutes Quarterly Reports Annual Reports (PIR)	Desk Review of Documents Interviews with project staff, stakeholders and beneficiaries
How well were risks (including those identified in the Social and Environmental Screening (SES) Checklist), assumptions and impact drivers being managed?	A clearly defined risk identification, categorization and mitigation strategy (updated risk log in ATLAS)	ATLAS Risk Log M&E Reports	Desk Review of Documents Interviews with project staff, stakeholders and beneficiaries
How were risks related to COVID19 managed?	COVID-related risks were defined against project activities with mitigating actions proposed	PME COVID-updated	Desk Review of Documents Interviews with project staff, stakeholders and beneficiaries
Were relevant counterparts from government and civil society involved in project implementation, including as part of the project steering committee?	The steering committee participation included representatives from key institutions in Government	Steering Committee Meeting Minutes	Interviews with project staff, stakeholders and beneficiaries
Has the project contributed directly to any changes in legislation or policy in line with the project's objectives?	Draft legislation has been developed or enacted to catalyze the reduction of barriers to the increased penetration of renewable energy/energy efficient technologies	Draft legislation Policy Documents Action/Implementation Plans	Desk Review of Documents
Is there evidence that the project outcomes have contributed to better preparations to cope with natural disasters?	The project has directly contributed to reductions in one or more vulnerabilities associated with natural disasters	Quarterly Reports Annual Reports (PIR) Stakeholder/beneficiary testimony	Desk Review of Documents Interviews with project staff, stakeholders and beneficiaries
Has the project carefully considered the thematic issues related to human rights? In particular, has the project sought to and actively pursued equality of access to clean energy services and opportunities for women and men (i.e. project team composition, gender-related aspects of pollution impacts, stakeholder outreach to women's groups, etc.)	A gender mainstreaming plan was completed The project results framework has incorporated gender equality considerations, as relevant. Multi-dimensional poverty reduction is an explicit objective	Gender Mainstreaming Plan Project Document Stakeholder analysis and engagement plan	Desk Review of Documents

Evaluative Criteria Questions	Indicators	Sources	Methodology
	The project prioritized the most vulnerable as key beneficiaries		
Efficiency: Was the project implemented efficiently, in-line with international and national norms and standards?			
Did the project adjust dynamically to reflect changing national priorities/external evaluations during implementation to ensure it remained relevant?	The project demonstrated adaptive management and changes were integrated into project planning and implementation through adjustments to annual work plans, budgets and activities Changes to AWP/Budget were made based on mid-term or other external evaluation Any changes to the project's planned activities were approved by the Steering Committee Any substantive changes (outcome-level changes) approved by the Steering Committee and donor, as required	Annual Work Plans Steering Committee Meeting Reports Quarterly Reports Annual Reports (PIR) Stakeholder/beneficiary testimony Revised Project Results Framework	Desk Review of Documents Interviews with project staff, stakeholders and beneficiaries
To what extent were the project results delivered with the greatest value for money?	Value for money analyses, requests for information, market surveys and other market intelligence were undertaken for key procurements. Procurement is done on a competitive basis, where relevant.	VFM, RFI, Market Surveys Procurement Evaluation Documents	Desk Review of Documents Interviews with project staff and government stakeholders
Was co-financing adequately estimated during project design (sources, type, value, relevance), tracked during implementation and what were the reasons for any differences between expected and realized co-financing?	Co-financing was realized in keeping with original estimates Co-financing was tracked continuously throughout the project lifecycle and deviations identified and alternative sources identified Co-financiers were actively engaged throughout project implementation	Annual Work Plans Steering Committee Meeting Reports Quarterly Reports Annual Reports (PIR)	Desk Review of Documents Interviews with project staff, stakeholders and beneficiaries
Was the level of implementation support provided by UNDP adequate and in keeping with the implementation modality and any related agreements (i.e. LOA)?	Technical support to the Executing Agency and project team were timely and of acceptable quality. Management inputs and processes, including budgeting and procurement, were adequate	LOA (s)/Cooperation Agreement(s) UNDP project support documents (emails, procurement/recruitment documents) Quarterly Reports Annual Reports (PIR)	Desk Review of Documents Interviews with project staff, UNDP personnel
Have the capacities of the executing institution(s) and counterparts been properly considered when the project was designed?	An ex-ante analysis was undertaken of the internal control framework and internal capacities of the IP An ex-ante capacity analysis was undertaken of key partners with explicit responsibilities for implementation of project funds The cash transfer modality and implementation modality appropriately	HACT Assessment(s) Capacity Assessments	Desk Review of Documents

Evaluative Criteria Questions	Indicators	Sources	Methodology
	reflected the findings of any ex-ante analyses		
Has the M&E plan been well-formulated, and has it served as an effective tool to support project implementation.	The M&E plan has an adequate budget and was adequately funded The logical framework was used during implementation as a management and M&E tool There was compliance with the financial and narrative reporting requirements (timeliness and quality) Monitoring and reporting has been at both the activity and results levels	Project Document M&E Plan AWPs FACE forms Quarterly Narrative Reports Site visit reports	Desk Review of Documents Interviews with project staff and government stakeholders
Has the project adequately used relevant national systems (procurement, recruitment, payments) for project implementation where possible?	Use of national systems was in keeping with relevant national requirements and internal control frameworks Management of financial resources has been in line with accounting best practice Management of project assets has been in line with accounting best practice	Procurement/Recruitment reports FACE forms CDRs	Desk Review of Documents Interviews with project staff and government stakeholders
Were financial audit/spot check findings adequately addressed and relevant changes made to improve financial management?	Appropriate management responses and associated actions were taken in response to audit/spot check findings. Successive audits demonstrated improvements in financial management practices	Project Audit Reports	Desk Review of Documents
Sustainability: To what extent are there financial, institutional, social-economic, and/or environmental risks to sustaining long-term project results?			
Are there financial risks that may jeopardize the sustainability of project outcomes?	The exit strategy includes explicit interventions to ensure financial sustainability of relevant activities	Project Exit Strategy Risk Log	Desk Review of Documents
Do the legal frameworks, policies, and governance structures and processes within which the project operates pose risks that may jeopardize sustainability of project benefits?	The exit strategy identifies relevant socio-political risks and includes explicit interventions to mitigate same	Project Exit Strategy Risk Log	Desk Review of Documents
Have key stakeholders identified their interest in project benefits beyond project-end and accepted responsibility for ensuring that project benefits continue to flow?	Key stakeholders are assigned specific, agreed roles and responsibilities outlined in the exit strategy MOU(s) exist for on-going monitoring, maintenance and oversight of phased down or phased over activities	Project Exit Strategy Risk Log MOU(s)	Desk Review of Documents
Are there ongoing activities that may pose an environmental threat to the sustainability of project outcomes?	The exit strategy identifies relevant environmental risks and includes explicit interventions to mitigate same	Project Exit Strategy Risk Log	Desk Review of Documents
Impact: Are there indications that the project has contributed to, or enabled progress toward, reduced environmental stress and/or improved ecological status?			
Are there verifiable improvements in ecological status, or reductions in ecological	The project has contributed directly to improved ecological conditions, including	Quarterly Reports	Desk Review of Documents

Evaluative Criteria Questions	Indicators	Sources	Methodology
stress that can be linked directly to project interventions?	through reduced GHG emissions for energy generation and transportation	Annual Reports (PIR) Monitoring Reports Pilot Data Analysis/Reports	Site visits

6.6. Questionnaires used

EXAMPLE QUESTIONNAIRE OR INTERVIEW GUIDE USED FOR DATA COLLECTION

Questionnaire for Project Management

Please answer according to the main heading and use the sub questions as guides. Please provide concrete example to illustrate your answers and main points with evidence i.e. statistics, date, actual events, consultancies, policies etc.

1. PROJECT DESIGN, LOGIC AND STRATEGIES

Formulation/ Priorities

- How did the project contribute to the national, regional, and international priorities?
- What national, regional, and international directives and policy/laws are (include any since project signing) did this project contribute to?
- Have any of the stated priorities changed as a result of or in the background of this project?
- Describe details about the relevance to international national policy and enabling context: SDGs, CC, DRR (2015), Biodiversity, etc.

Design Process

- Were you involved in the project design? What was the process? Has the policy context changed? What are your thoughts on the project design in relation to the political operating context? How might the design been more relevant?
- What were the main national drivers for developing this project?

Strategy/ Logic

- Is the project's rationale and logical framework smart, and as the theory of change in line with the actual problems at the national level and sub-regional level?
- Did the project have a clear theory of change? Did the project document provide you with a strong monitoring framework for results? Did you understand the strategies in the document and how these would lead to results? Why or why not? Was the results framework logical and smart? Was there a good baseline?
- Were the expected results logical and clear to all stakeholders? How?
- Do you think the outputs link to the expected outcomes? Why or why not?
- Has the casual pathway to results been clear and concise?
- Any lessons learned?

2. PROJECT IMPLEMENTATION AND MANAGEMENT:

- What was the project's overall approach to capacity building?
- How did you use the mechanism for adaptive management? What was the role of the PSC in guiding the project to results? Was it useful for deciding on work plans and implementation strategies? Why or why not? How were the work plans developed and rolled out? Who was there? Who was not there that should have been?
- Did you have a technical committee? How did that work out?
- What was the capacity building approach taken nationally? Please provide details of the approaches for training, learning, knowledge sharing, and policy advocacy. Did you have a CB strategies and strong stakeholder analysis?
- How many CB workshops did the project have? List them. Were they useful? Why?
- How many consultancies and consultations have been implemented? What were they? If you could do the project over what would you drop? And add?

Management and Oversight Arrangements

- Describe the project management and implementation and oversight arrangements, i.e. where is the PMU situated in government and is it the right place?
- How many staff was hired since the start? Are there any challenges to report concerning staffing and procurement? Any lesson learned?
- How did UNDP support the NIM work? What was UNDPs role in oversight and in implementation? How did UNDP support your do your work? Any challenges? Describe how the project was coordinated daily at the national level? Any lessons learned? Did the UNDP knowledge platform support the project implementation and results? How? Why or why not?
- How often did the UNDP RTA visit or interact? What were the results of those visits?
- How did UNDP Barbados help monitor this project? Was the support effective and or useful?
- Did you have a partnership strategy?

- Did the project management, oversight, and work planning arrangements work out? Why or why not?
- What was human resources and organizational set-up?
- How did you do work planning at the national level? Describe the process.
- What were the day-to-day coordination, reporting, and monitoring mechanisms? To whom did you report? When? How? Did this system work? Why or why not?
- What was the role of the project secretariat in results monitoring, oversight, and management?

Work Planning and Procurement Processes

- What was the process for work planning and budgeting?
- Did UNDP support work planning – how? Did the UNDP CO and or RTA support work planning? How?
- How did you facilitate intersectoral national work planning?
- How did you present the ongoing implementation of this project to PSC meetings and policy level persons? Was this effective? Why or why not?
- Did you have a procurement plan?
- How did the government procurement process work?

Finance and Co –Finance

- How were the project finances monitored? What was UNDPs role in this? Provide all details of expenditure per year and final?
- Did you track co-financing why or why not? Provide the table in the format requested.
- Please provide the overall expenditure per outcome per year in chart and tables for the report?
- Provide a breakdown of expenditure by the outcome and by year until the end of the project.

Monitoring and Evaluation systems

- Describe the project monitoring and evaluation system? What are the main lessons learned?
- How was the technical aspects monitored and facilitated by the project. Describe.

Gender Mainstreaming

- Did you have gender results and monitoring plan? What was it? How would you do this if you could do it again?
- What are the gender related results?
- Did you have a gender mainstreaming and or safeguards plan?

Other factors influencing Results

- Were there any unintended consequences and unexpected results of the project's work?
- What were the key factors influencing this project implementation?
- How did management employ adaptive management at the national and sub-regional levels? Can you provide a few examples?
- Any lesson learned?

Governance and oversight

- What were the main mechanisms for project oversight? i.e., UNDP, RTA, meetings with the director of the department, project boards, and national workshops?
- How many steering committee meetings have there been? Who attended and when? Were these meetings useful? Why or Why not?
- Any lesson learned?

Synergies

- Did the project support any synergies with ongoing related community-level, local, regional or national projects and initiatives? How? Why or why not?
- What were the related projects?
- Any lesson learned?

Technical inputs

- What were the main technical consultancies and inputs?
- What were the bases in deciding which RE system is implemented in the project site?
- Are the direct stakeholders and beneficiaries consulted on what RE system to implement on the site?
- What were the identified needs by the beneficiaries which were addressed by the RE system implementation?
- Is the RE system chosen, implemented and operated suitable and appropriate based on community's (target beneficiaries) needs?
- Did the project, project management, GEF support and monitor the implementation of technical consultancies, and provide you with sufficient technical support to enable the implementation of new approaches and tools? How? Why or why not? Any lesson learned?
- What was the CTA role? Was the CTA input useful for monitoring support? How? How can it be improved? Any Lessons?
- What are the main or key hurdles and challenges in implementing the RE system? Are these challenges resolved on time? How? Why or why not?

- What improvements can be made in the process of implementing the RE project on the site?
- Who is(are) managing the implementation, operation, maintenance of the RE system on site? How is this carried out? Who are the direct stakeholders? How are the benefits of the RE system shared?
- How does this RE system benefit the targeted communities? Provide examples?
- What major benefits does this RE system provide?
- How is the life of the beneficiaries changed during the use/after the implementation of the RE system? Did it provide better use of tools, better income, better facilitation of activities, improved operation of livelihood (farming, fishing, etc), better quality of life?

Partnerships

- Who were the main partners to implementation?
- Who were your regional and national implementing partners? List them?
- Did the original partnership strategy play out? Why or why not?
- What might be improved?

Financial management and co-financing results

- Did the government commit all expected co-financing? Why or why not? Please provide this number and include all the in-kind and cash resources.
- Provide the final national project expenditure by the outcome and by year.

Communication and KM

- How did you employ knowledge management and use communication in this project as an enabler for results? Did you have a plan and supportive staff managing these aspects? Did this contribute to policy and learning results? How?
- Provide a highlight list of knowledge products developed by the project?
- Provide comments: communications, knowledge management, and capacity building approach, how communications supported the policy level expected results.

Monitoring and Evaluation

- Describe the monitoring and evaluation systems at the national level?
- How did you monitor and report your results- weekly, monthly, yearly, and to whom?
- What were the internal project results reporting mechanisms? How often did you discuss national-level results internally and where?
- How did you monitor the capacity development work? (i.e., evidence of program-level assessments)
- Any lessons learned?

Other factors influencing implementation

3. PROJECT RESULTS

- Did the project reach its goal, expected outcomes? Why or why not. Were certain areas easy to do than others –why?
- What has been the policy level results of this project?
- Which national and regional outcomes and targets were most difficult to meet? Why?
- Which national and regional outcomes and targets were the easiest to achieve? Why?
- Are any of the national project targets outstanding? Why?
- What might have been done differently to meet all targets and goals? Why
- What do you think are the project's greatest results? At the sub-regional level, at the national level?
- How did you facilitate collaboration between sectors in project activities, Give examples?
- What is the value added of inter-project level collaboration?
- Any lessons learned?

Sustainability

- What is the overall likelihood of this project's sustainability? Why?
  - Economic sustainability
  - Political sustainability
  - Environmental sustainability
  - Social sustainability

Impact Level Results

- What do you think were the main achievement and the impact level results?

4. LESSON LEARNED AND NEXT STEPS

- What are the main lessons learned based on the following?
  - Design
  - Management and Implementation Approach
  - Finance

- Results

5. NEXT STEPS

- What are the next steps? What are your key recommendations to share?

Draft questions for other stakeholders and implementing partners

Stakeholder Interview Questions and Templates

a. National Focal Point Questionnaire

Country:		**Date/time:**	
Name of Respondent:		**Interviewer:**	

National Focal Point Questionnaire	
Project Benefits and Results	
1. Was the project design in line with national sector development priorities and plans of participating countries?	•
2. Were you consulted during the design of the project?	•
3. What benefits have already been seen from the project activities implemented in <COUNTRY> to date?	•
4. How has the project helped to develop the capacity of <COUNTRY> to continue the project activities after the close of the project?	•

Project Achievability	
5. How successful do you think the project has been at delivering results to date?	•
6. Were any unforeseen delays experienced during project start up?	•
7. How achievable do you think the project results are in <COUNTRY> within the time remaining for the project?	•
8. Could improvements be made to make delivery more effective?	•
9. What barriers have you identified to achieving the outcomes and objectives of the project?	•
10. To what extent has the involvement of local partners contributed to the success of the site-specific projects?	

Project Management Arrangements	
11. Has communication between PIU and <COUNTRY> been clear, effective and on time?	•
12. Do you provide feedback to PIU when you receive communications from them?	•
13. Are you aware of who at PIU you should be communicating with regarding project management?	•

14. Does PIU share the annual Project Implementation Reviews with you and do you have an opportunity to provide feedback?	•
15. How well do you think PIU has communicated the project to countries and local project partners? Can you suggest any ways to improve this communication?	•

Sustainability	
16. What does <COUNTRY> expect to happen at the end of the current project to sustain the project results?	•
17. How important is it to <COUNTRY> that the programme continues after September 2019? or EOP?	•
18. How relevant is PIU to the continuation of project results after September 2019? Or EOP?	•
19. What could <COUNTRY> do to make to ensure that results continue after September 2019? Or EOP?	•
20. What could <COUNTRY> do to make to ensure that PIU continues after September 2019? Or EOP?	•

b. Non-Country Partners Questionnaire

Non-Country Partner:		**Date/time:**	
Name of Respondent:		**Interviewer:**	

Non-Country Partner Questionnaire	
Project Benefits and Results	
1. How familiar are you with the project?	•
2. Were you consulted during the design of the project?	•
3. What benefits have already been seen from the project activities implemented in to date?	•

Project Achievability	
4. How successful do you think the project has been at delivering results to date?	•
5. Were any unforeseen delays experienced during project start up?	•
6. Could improvements be made to make delivery more effective?	•

Project Management Arrangements	
7. Has communication between PIU and <PARTNER> been clear, effective and on time?	•
8. Do you provide feedback to PIU when you receive communications from them?	•
9. How well do you think PIU has communicated the project to countries and local project partners? Can you suggest any ways to improve this communication?	•

Sustainability	
10. What does <PARTNER> expect to happen at the end of the current project to sustain the project results?	•
11. How relevant is PIU to the continuation of project results after September 2019? Or EOP?	•
12. How do you see your relationship with PIU continuing after the project end?	•

c. Local Stakeholder Questionnaire

Country/Project Site:		Date/time:	
Name of Respondent:		Interviewer:	

Non-Country Partner Questionnaire	
Local Benefits and Results	
1. How would you rate your knowledge about the project? (H/M/L)	•
2. How important do you think this project is, and why? (Very/moderately/less)	•
3. Were you consulted during the design of the project?	•
4. What benefits have already been seen from the project activities implemented to date.	•
5. Is equal representation and participation of women and men in project activities encouraged? Please elaborate.	•

Progress Towards Results	
6. How successful do you think the project has been at delivering results so far in your area? (Excellent/Good/Poor)	•
7. Were any delays experienced during project start up? Have you experienced any other problems?	•
8. How achievable do you think the project results are in your area within the time remaining for the project? (H/M/L)	•
9. What improvements could be made to make delivery more effective?	•

Project Management Arrangements	
10. How do you rate PIUs' Project management, communications, efficiency & general administration: (Excellent/Adequate/Poor). Please elaborate	•
11. Have you been kept informed about the progress of the project? (Y/N)	•
12. How well do you think PIU has communicated the project to local project partners?	•
13. Can you suggest any ways to improve this communication?	•

Sustainability	
14. How has the project helped to develop capacity to continue the project activities after the close of the project?	•

15. How important is it to you that the programme continues after September 2019? [for higher level interviewees]	•
16. Do you plan to continue with the activities after the programme finishes in September 2019? (Y/N)	•
17. How important is Piu to the continuation of project results after September 2019?	•
18. How successful do you think the project has been at delivering results so far in your area? (Excellent/Good/Poor)	•

General Feedback	
19. Please list 1 or 2 major strengths of the project	•
20. Please list any major weaknesses	•
21. What are the lessons learnt to date?	•
22. What message would you like conveyed in the TR?	•

6.7. Details of Project Co-financing

Project Co-financing as of September 2022.

Source of Co-financing	Name of Co-financer	Type of Co-financing	Investment mobilized	Amount ($)
GEF	GEF	Grant	Investment mobilized	5,200,000.00
UNDP	Donor Agency	Grant	Investment mobilized	50,000.00
UNDP	Donor Agency	In-Kind	Recurrent expenditure	150,000.00
DOE*	Government	In-Kind	Recurrent expenditure	4,040,559.61
PEMC	Private Sector	In-Kind	Recurrent expenditure	136,486.38
PEMC	Private Sector	In-Kind	Investment mobilized	365,816.71
Provincial Government of Iloilo**	Government	In-Kind	Recurrent expenditure	19,666.67
Provincial Government of Iloilo	Government	In-Kind	Investment mobilized	957,407.41
Provincial Government of Palawan	Government	In-Kind	Recurrent expenditure	580,611.11
Sub-total of Materialized Pro-doc Planned Co-financing				**6,300,547.88**
WeGen Laudato Si	Private Sector	In-Kind	Investment mobilized	11,870.70
Eastern Samar Electric Cooperative	Private Sector	In-Kind	Investment mobilized	589,172.95
Iloilo II Electric Cooperative**	Private Sector	In-Kind	Investment mobilized	22,388.89
Palawan Electric Cooperative	Private Sector	In-Kind	Investment mobilized	18,937.04
Bohol Electric Cooperative	Private Sector	In-Kind	Investment mobilized	1,327.76
Social Action Center - Apostolic Vicariate of Calapan	CSO	In-Kind	Investment mobilized	4,370.37
Entrepreneurs du Monde	CSO	In-Kind	Investment mobilized	157,475.57
Pamilacan Solar Cooperative	CSO	In-Kind	Investment mobilized	1,969.43
Katablangan Indigenous Farmers Association	CSO	In-Kind	Investment mobilized	12,129.63
Bureau of Fisheries and Aquatic Resources	Government	In-Kind	Investment mobilized	9,259.26
Municipal Government of Carles	Government	In-Kind	Investment mobilized	58,207.41
Municipal Government of Concepcion	Government	In-Kind	Investment mobilized	57,023.15
Municipal Government of Ajuy	Government	In-Kind	Investment mobilized	27,580.81
Municipal Government of Aborlan	Government	In-Kind	Investment mobilized	5,259.26
Municipal Government in Oriental Mindoro	Government	In-Kind	Investment mobilized	1,777.78
Provincial Government of Oriental Mindoro	Government	In-Kind	Investment mobilized	2,037.04
Municipal Government of Aparri	Government	In-Kind	Investment mobilized	8,248.15
Municipal Government of Tapaz	Government	In-Kind	Investment mobilized	11,953.06
Provincial Government of Antique	Government	In-Kind	Investment mobilized	8,888.89
Municipal Government of San Remigio	Government	In-Kind	Investment mobilized	27,777.78
Baranggay Panpanan I LGU	Government	In-Kind	Investment mobilized	1,851.85
Municipal Government of Apayao	Government	In-Kind	Investment mobilized	6,203.70
Municipal Government of Goa	Government	In-Kind	Investment mobilized	39,009.26
Marcos Mariano State University***	Government	In-Kind	Investment mobilized	127,863.14
Asian Development Bank	Donor Agency	Other	Investment mobilized	450,000.00
Department of Energy	Government	In-Kind	Investment mobilized	67,786,021.80
GIZ CASE PROJECT	Donor Agency	In-Kind	Investment mobilized	997.31
Total Co-financing				**75,750,149.87**

Notes: *Additional Data on DOE co-financing office space rental to follow. **The following sources will continue to co-finance their respective activities beyond the Project's end date.

- Provincial Government of Iloilo: amounting to $ 3,721,111.11 (recurring yearly) for RE projects and RE related PPAs
- Iloilo II Electric Cooperative: amounting to $12,696,009.49 (recurring yearly) for post commissioning, operation and management costs of the Concepcion LGU Rooftop Solar Generation Project

***The Project is expecting MMSU counter-funding for the proposed Renewable Energy Executive Competency Program (REECP) for Agriculture and Fishery in Ilocos Norte. Data to follow.

6.8. TE Rating Scales

Rating Scale for: Monitoring and Evaluation, Implementation/Oversight and Execution, and Outcomes (Relevance, Effectiveness, Efficiency)

RATINGS	DESCRIPTION
6 = Highly Satisfactory (HS)	Level of outcomes achieved clearly exceeds expectations and/or there were no shortcomings
5 = Satisfactory (S)	Level of outcomes achieved was as expected and/or there were no or minor shortcomings
4 = Moderately Satisfactory (MS)	Level of outcomes achieved more or less as expected and/or there were moderate shortcomings.
3 = Moderately Unsatisfactory (MU)	Level of outcomes achieved somewhat lower than expected and/or there were significant shortcomings
2 = Unsatisfactory (U)	Level of outcomes achieved substantially lower than expected and/or there were major shortcomings.
1 = 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

Rating Scale for Sustainability:

RATINGS	DESCRIPTION
4 = Likely (L)	There are little or no risks to sustainability
3 = Moderately Likely (ML)	There are moderate risks to sustainability
2 = Moderately Unlikely (MU)	There are significant risks to sustainability
1 = Unlikely (U)	There are severe risks to sustainability
Unable to Assess (UA)	Unable to assess the expected incidence and magnitude of risks to sustainability

6.9. Signed Evaluation Consultant Agreement Form

Stephanie J. Hodge - International Evaluation Specialist (ES)

Evaluators/Consultants:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.
8. Must ensure that independence of judgement is maintained, and that evaluation findings and recommendations are independently presented.
9. Must confirm that they have not been involved in designing, executing or advising on the project being evaluated and did not carry out the project's Mid-Term Review.

Evaluation Consultant Agreement Form

Agreement to abide by the Code of Conduct for Evaluation in the UN System:

Name of Evaluator: Stephanie

Name of Consultancy Organization (where relevant): N/A

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at New York City (Place) on 4/19/23 (Date)

Signature: Stephanie Hodge

Evelyn B. Taboada – National Consultant

Evaluators/Consultants:

10. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
11. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
12. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
13. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
14. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
15. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
16. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.
17. Must ensure that independence of judgement is maintained, and that evaluation findings and recommendations are independently presented.
18. Must confirm that they have not been involved in designing, executing or advising on the project being evaluated and did not carry out the project's Mid-Term Review.

Evaluation Consultant Agreement Form

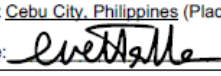
Agreement to abide by the Code of Conduct for Evaluation in the UN System:

Name of Evaluator: **DR. EVELYN B. TABOADA**

Name of Consultancy Organization (where relevant): _____

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at Cebu City, Philippines (Place) on March 1, 2023 (Date)

Signature: 

6.10 Signed TE Report Clearance Form

TE Report Clearance Form

Terminal Evaluation Report for the *Development for Renewable Energy Applications for Mainstreaming and Market Sustainability (DREAMS)/UNDP PIMS ID: 5194* Reviewed and Cleared By:

Commissioning Unit (Programme Focal Point)

Name: Gwyneth Anne Palmos, Programme Analyst

Signature: DocuSigned by: AC1CD33CAFFA40B... Date: 19-Apr-2023

Commissioning Unit (M&E Focal Point)

Name: Kathleen Ivy Custodio, RBM Analyst

Signature: DocuSigned by: B11F0C4EEC7A4E5... Date: 26-Apr-2023

Regional Technical Advisor (Nature, Climate and Energy)

Name: Bahtiyar Kurt, Regional Technical Adviser

Signature: DocuSigned by: 8CD90396275549F... Date: 28-Apr-2023

6.11 Annexed in a separate file: TE Audit Trail

6.12 Annexed in a separate file: relevant GEF/LDCF/SCCF Core Indicators or Tracking Tools