

Report:

Midterm Review (MTR) of the Project 'Development for Renewable Energy Applications Mainstreaming and Market Sustainability (DREAMS)' (PIMS # 5194)

June 2020

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Disclaimer

Please note that the analysis and recommendations of this report do not necessarily reflect the views of the United Nations Development Programme, its Executive Board or the United Nations Member States. This publication reflects the views of its authors.

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LIST OF ACRONYMS

| Acronym | Meaning |
|---------|----------------------------------------------------------------------|
| AGMO | Autonomous Group Market Operator |
| APEC | Association of Philippine Electric Cooperatives |
| APR | Annual Progress Report |
| 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 |
| СТА | 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 |
| 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 |
| 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 |
| GoP | Government of the Philippines |
| GJ | Gigajoules |

| Acronym | Meaning |
|----------|------------------------------------------------------------|
| 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 |
| MI | Megaioules |
| Mtonnes | Million tonnes |
| MW | Megawatt |
| MWh | Megawatt - hour |
| NAMA | Nationally Appropriate Mitigation Actions |
| NCIP | National Commission on Indigenous Peoples |
| NEA | National Electrification Administration |
| NGCD | National Crid Corporation of the Dhilippines |
| NGO | Non Government Organizations |
| NDC | Notional Dower Composition |
| NPC SDUC | National Fower Corporation |
| NPC-SPUG | NPC - Sman Power Oundes Group |
| NPD | National Project Director |
| NPM | National Project Manager |
| NKEB | National Renewable Energy Board |
| NKEL | National Renewable Energy Laboratory |
| NKEP | National Renewable Energy Program |
| NWKB | National water Resources Board |
| PEMC | Philippine Electricity Market Corporation |
| PIR | Project Implementation Report |
| PMU | Project Management Unit |
| PPA | Power purchase agreement |
| PPP | Public private partnership |
| ProDoc | UNDP Project Document |
| PSALM | Power Sector Assets and Liabilities Management Corporation |
| PSC | Project Steering Committee |
| PV | Photovoltaic |
| QTP | Qualified Third Party |
| RE | Renewable energy |
| REC | Renewable Energy Certificate |
| REM | Renewable Energy Market |
| RES | Renewable Energy Sources |
| RET | Renewable Energy Technology |
| RPS | Renewable Portfolio Standards |
| SEF | IFC Philippine Sustainable Energy Finance Program |
| SNC | Second National Communication |
| TJ | Terajoules |
| TOE | Tons of oil equivalent |
| ToR | Terms of Reference |

| Acronym | Meaning |
|---------|-------------------------------------------------------|
| 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 |

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1. EXECUTIVE SUMMARY

| | Development for Denowable Energy Applications Mainstreaming and Market | | | | | |
|-------------------------|------------------------------------------------------------------------|---------------------------|---------------------|------------------------------|--|--|
| Project Title: | Sustainability (DDE A MS) | | | | | |
| | Sustainability (DREAM | 3) | | | | |
| | | | <u>Committed at</u> | <u>Realised co-financing</u> | | |
| CEE Project ID: | 5104 | | <u>endorsement</u> | / spent GEF budget | | |
| GEF Hoject ID. | 5194 | | (USD Million) | at MTR (USD | | |
| | | | | Millions) | | |
| UNDP Project ID: | 00088788 | GEF financing: | 5.200 | 0.976 | | |
| Country: | Philippines | IA/EA own: | 0.200 | | | |
| Region: | South East Asia | Government: | 6.222 | 0.100 | | |
| Focal Area: | Climate Change | Others | 21.000 | 0.000 | | |
| | Mitigation | (private): | 51.880 | 0.000 | | |
| Expected CO | Otcome3. Energy and | Total co- | | | | |
| Outcome (s) | Environment: Improved | financing: | | | | |
| | environmental | J | 38.302 | 0.100 | | |
| | sustainability of | | 00.002 | | | |
| | development processes | | | | | |
| | development processes | T (1 D) (| | | | |
| Executing Agency: | UNDP under NIM | Total Project | 43.5.2 | | | |
| g; | Modality | Cost: | | | | |
| | Department of Energy | GEF | CEO | ProDoc Signaturo | | |
| Other Partners | Department of Energy | endorsement: | Endorsement | Prodoc Signature: | | |
| | (DOE)/ Renewable | | 10 Feb, 2016 | 24 June, 2016 | | |
| involved: | Energy Management | (Operational) | Closing Date | Expected | | |
| | Board (REMB), | Closing Date: | 30 June | $\frac{2}{1}$ | | |
| | Philippines | Closing Dule. | 20211 | 20 June 2022 | | |
| | | | 2021 | 50 June, 2022 | | |

Table 1: Project Information Table

1.1 Introduction and brief description of the project

One of the significant threats to the economic growth of 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. To support future economic growth, 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.

The Philippines has some of the most expensive electricity in Southeast Asia. This is despite it 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). Significant proportion of primary fuels for power generation in the Philippines come from imported fossil fuels. The continued reliance on fossil fuels for power generation are rising GHG emissions. With fluctuating global fossil fuel prices, Philippines is vulnerable to sudden price spikes, a situation the country hopes to mitigate through the development of domestic renewable energy.

With this background, the interest in Renewable Energy (RE) in the Philippines has been quite strong in the past. The development of RE in the country will not only address the issue of high import bill for the fossil fuels, but will also lead to reduction in the emission of GHGs. 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

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 is seeking a no cost extension of one year

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 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 have contributed in creating substantial interest in RE based power generation projects. Through successful implementation of NREP and enforcement of the RE Act, the Government targets an increase in RE based power capacity in Philippines to 12,683 MW by 2020 and 15,236 MW by the year 2030³.

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 the 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 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.

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.

The Project is targeted to lead to; direct lifetime GHG emission reductions of 2445 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.

³ As per Project Document

Table 2, provides the Project Objectives along with the summary of different Outputs for the four planned outcomes of the project. At the time of MTR, recommendations had been made to carry out some modifications in the log-frame of the project. The suggested modifications are also highlighted in the Table. The Table also provides the indicators to monitor and verify the achievement of the planned Objectives and the Outcomes of the project.

| Objective/Outcome | Indicator ⁴ | Baseline | Targets End of Project |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------|
| Project Objective: To promote and facilitate the commercialization of the | • Indicator A: Cumulative direct project CO ₂ emission reductions from RE development by end-of-project (EOP), ktonnes CO ₂ | 0 | 205 |
| renewable energy (RE) | • Indicator B: % share of RE in the power generation mix of the Philippings | 14.4 | 35 |
| of barriers to increase 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 | 0 | 20,000 |
| | • Indicator D: Total project direct GHG emissions reductions over the lifetime of the RE capacity created (ktonnes CO2eq) | 0 | 2440 |
| Outcome 1: Enforcement of a supportive policy and regulatory | • Indicator 1.1: Number of approved and enforced policies and guidelines for leveraging RE investments by Year 2 | 0 | 8 |
| environment for leveraging investment in RE | • Indicator 1.2: Number of sitios ⁵ with off-grid rural | 0 | 12 |
| development and applications at the local level | Indicator 1.3: Number of businesses who have accreditation or applied for DOE accreditation by EOP to manufacture, fabricate or supply locally-produced DE components. | 0 | 50 |
| Outcome 2: Strengthened institutional | • Indicator 2.1: Number of funded and implemented RE projects championed or facilitated by LGU-based RE | 0 | 5 |
| increased RE investment at the local level | Indicator 2.2: Number of RE projects facilitated by operational provincial-level RE market service centers | 0 | 5 |
| | • 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 |
| Outcome 3: Capitalized RE market leads to an increased share of RE | • Indicator 3.1: Cumulative MW of installed capacity registered in the RER established in the "capitalized" RE market | 0 | 10 |
| based power capacity | • Indicator 3.2: Number of RE developers registered in the RER | 0 | 15 |
| Outcome 4a: Enhanced confidence of | • Indicator 4.1: MW of RE projects that are being davalaned through the PPE | 0 | 15 |
| project developers on the viability of RE projects at the | Indicator 4.2: Number of bankable RE plans completed by other LGUs who were interested in RE- | 0 | 3 |
| | 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 | 10 |
| Outcome 4b: Increased number of operational RE projects using | • 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 |
| proven and emerging RE technologies that boosts successful replication | • Indicator 4.5: MW of installed capacity of RE projects resulting from accelerated expediting of RE service contracts by EOP. | 0 | 75 |

Table 2: Project Results Framework

(modifications recommended out at the time of MTR are shown in a different colour and style

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

⁴ The numbering of the indicators has been done at the MTR to ease discussion and reference in the report

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

are to be achieved by carrying out specific set of activities (specified in the Project Document).

The budget of the project, the sources of the funds and the date of signing of the Project Document are as given in Table 1 above. Although, the 'Project Document' got signed in June 2016, actual implementation of the project could start much later in July 2017 (with the establishment of the PMU). Considering the gap between the time, when the project was planned and the actual start of the project implementation, the project 'Implementation Partner' decided to conduct an internal pre-inception workshop (20 Sept 2017) to validate the Activities (for achieving the Outputs) provided in the 'Project Document' vis a vis the situation regarding the current and future plans of the DOE. Accordingly, at the time of the inception of the project corrections/ modifications were carried out in the activities for some of the Outputs. Thus, the full inception planning involving the stakeholders was conducted. The first PSC meeting followed on 21 Dec 2017. The project closure date as per the Project Document is 30 June 2021, however, the project is seeking an extension in the implementation time lines by one year.

1.2 MTR Ratings & Achievement Summary Table

Following Table provides a summary of the ratings for;

a) Progress towards results

b) Project Objectives

c) Implementation and Adaptive Management

d) Sustainability.

| Main criteria | Rating ⁶ | Explanation |
|------------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Project Strategy | NA | In Philippines, from the year 2002 to 2010, GEF supported the project "Capacity Building to Remove Barriers to Renewable Energy Development (CBRED)". 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 provided 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 result 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. Despite these efforts to catalyse RE development, the barriers still existed at the program and project levels that constrained RE development in the country, notably at the local level where the RE Act has not been effectively implemented. |
| | | The DREAMS Project was 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. These are issues that have emerged with the Government of Philippine'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 includes operationalization of the remaining implementation mechanisms under the RE Act that were introduced through CBRED including the establishment of the RE Market and Registrar, which are |

| Table | 3: | Mid-tern | ı review | ratings | and | achievemen | ts summarv |
|-------|----|------------|----------|----------|-----|---------------|------------|
| Iunic | •• | tilla cern | | i atings | unu | ucine , cinci | us summing |

⁶ HS: Highly Satisfactory, S: Satisfactory, MS: Moderately Satisfactory, MU: Moderately Unsatisfactory, U: Unsatisfactory, HU: Highly Unsatisfactory, L: Likely, ML: Moderately Likely, MU: Moderately Unlikely, U: Unlikely

| | | components of the Renewable Portfolio Standards (RPS), designed to accelerate development of RE resources in the country. |
|-------------------|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | The strategy of the project as discussed above was the result of consultations and background analysis during project design stage and relevance to Philippines's development context. |
| Progress towards | | |
| Project Objective | MS | 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. |
| | | One of the barriers which is to be removed is 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) that are 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 'Philippine RE Market System (PREMS)', the progress towards results for Outcome of the project is Satisfactory. |
| | | One of the other barriers which the DREAMS project is addressing is the lack of co-ordination and lack of clarity regarding the roles and responsibilities in the overall development of a RE project. Particularly, regarding the provisions in the RE Act. The DREAMS project was to support selected RE projects in the overall approval process leading to creation of RE capacity of about 75 MW, which was supposed to lead to the direct GHG emission reductions of 205 ktonnes CO2e within the implementation timelines of the DREAMS project. As the work on this from is lagging, the RE capacity would get created towards to end of the implementation timelines of the project, leading to direct GHG emission reductions. However, such direct GHG emission reductions would happen after the end of the DREAMS project. |
| | | The DREAMS project is targeting enhancing the capacity of the institutions at the local level to increase investment in the RE projects at local level (Outcome 2). Under the 'Local RE Planning Capacity Building Program (LREP Cap Build)' being implemented by the project, the activities to achieve this objective are being undertaken successfully. However, when it comes to creating longer term impacts by way of creation of knowledge platforms, the progress is still lagging behind. The DREAMS project has provision to support development of the RE projects using the 'Project Preparation Fund (PPF)'. Creation of PPF is |
| | | one of the provisions in the project design. Utilisation of the funds provided for PPF is still to be carried out in an effective manner. |
| - Outcome 1 | MS | This Outcome of the project pertains to enforcement of the supportive policy and regulatory environment that will leverage increased investment in RE development and application at the local level. This was to be achieved within the first year of the project implementation, so these policies and regulations can support achievement of the other outcomes of the project. Although, the objective of creation of conducive conditions for investment in RE is likely to be achieved, there would a time lag. |
| | | One of the other objectives within this Outcome was the promotion of manufacturing, fabrication and supply of locally produced components for RE applications. Till the time of MTR, the project could not make much progress towards achievement of this objective. |

| - Outcome 2 | MS | Under Outcome 2 of the project, it 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 project is doing this under its 'Local RE Planning Capacity Building Program (LREP Cap Build)'. The activities to achieve this objective are being undertaken successfully. In order to facilitate large-scale implementation of the RE projects, there is a provision of a knowledge sharing platform. The activities towards this are yet to implemented. At the time of MTR, the project was in the process of procuring the services to implement the hardware and software part of the knowledge platform. |
|----------------------------------------------|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| - Outcome 3 | S | Outcome 3 of the project addresses the barrier relating to the absence of a functional RE Market that represents tangible government measures to ensure compliance with the mandated utilization of RE generation and spur the growth of the RE industry. The outcome resulting from the outputs from this component will be a "capitalized" RE Market and an accompanying RE registrar that will contribute to an increased share of RE based power capacity, and an increased number of RE project developers at the local level. There is good progress towards implementation of 'Philippine RE Market System (PREMS)'. |
| Outcome 4a | MU | The Outcome 4a of the project is to address the barriers related to the lack of successful RE projects in the country. The project has provision to support development of the RE projects using the 'Project Preparation Fund (PPF)'. Creation of PPF is one of the provisions in the project design. Utilisation of the funds provided for PPF is still to be carried out in an effective manner. Under this Outcome the DREAMS project is also to support creation of bankable RE plans for the LGUs. Under its 'Localized RE Planning (LREP)' the project is discussing preparation of bankable RE plans, with five LGUs in the province of Palawan and three LGUs in Iloilo. One of the other objectives for the activities under Outcome 4a is to ensure availability of certified technicians for RE technologies at the local level. The project plans to deliver this by providing local training to community based RE technicians and LGU engineers for micro-hydro power maintenance and management. |
| Outcome 4b | S | This Outcome of the DREAMS project is to address the barriers of lack of co-ordination and lack of clarity regarding the roles and responsibilities in the overall development of a RE project. Particularly, regarding the provisions in the RE Act. Towards this the DREAMS project was to support selected RE projects in the overall approval process leading to creation of RE capacity of about 75 MW. Outcome 4b is expected to lead to increased number of RE projects using proven and emerging RE technologies thus boosting successful replication. Somehow, these selected RE projects did not go ahead with implementation. The DREAMS project is identifying another set of RE projects, which would need support in the process of clearances and would eventually provide the required support. |
| Implementation and adaptive management | S | As and when needed, the project team has responded to changing conditions and risks, to take advantage of opportunities for partnerships |

| | | and actions that support the overall project objective. Overall, the management of the project is rated as Satisfactory. |
|----------------|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | Quarterly progress reports and the annual progress reports are prepared and shared in accordance with UNDP / GEF requirements. The monitoring reports do not cover the co-financing aspects. The reporting aspect of the project management has been rated as Satisfactory |
| | | At the time of MTR, the project did not have a website of its own. No mechanism was in place to disseminate the information about the work carried out under the project. The project is regularly disseminating the information about the project and the results through the news channels (both online and print media). Apart from this the project is making the effective use of the capacity building, training, and awareness creation activities for targeted stakeholders, under different components of the project as a means of communication. The communications aspect of the project management has been rated as Moderately Satisfactory. |
| | | The main formal platform for engaging the stakeholders is the Steering Committee (SC). 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 the two provinces of Palawan and Iloilo. Although, the PSC has representatives from different concerned ministries and departments, it doesn't have members from civil society, NGOs, research institutions, development agencies, trade & industry bodies or academia. In the absence of formal communication channels, the participation of the larger stakeholders is not there. Stakeholder engagement at an aggregate level has been rated as Moderately Satisfactory. |
| | | There is significant co-financing which was committed at the time of project design. Apart from Government departments, co-financing was to come from the private sector by way of their investment in the RE projects which were to be supported by the DREAMS project. The private sector RE projects which were identified for support at the time of PPG, got scraped on a later date due to a variety of reasons. The DREAMS project is in the process of identifying and supporting another set of RE projects, which would require such a support. Once the investment in the newly identified RE set of projects get implemented, the co-financing part of the private sector would get realised. |
| Sustainability | L | At an aggregate level, technical risks to sustainability of the project are considered low. The financial sustainability of the project is assessed to be likely. At this mid-point in project implementation, socioeconomic sustainability is considered as likely. From the view point of institutional framework and governance risks, the sustainability of the project is Moderately Likely. From the view point of environmental risk, sustainability of the project is Likely. |

1.3 Summary of conclusions

The DREAMS project is a follow up project, to the GEF supported project "Capacity Building to Remove Barriers to Renewable Energy Development in the Philippines (CBRED)". CBRED lead to Renewable Energy Act (RE Act) of 2008 in Philippines. In the RE Act there are provisions for fiscal and non-fiscal incentives (such as the Renewable Portfolio Standard, Net Metering and Green Energy

Option, among others) for promoting the investment in the RE sector. Despite the past efforts under the RE Act to catalyze RE development in the Philippines, barriers still exist, such barriers include;

- a. 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. At the local level, there is also lack of capacity and understanding regarding the provisions in the RE Act
- b. 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
- c. There is a lack of demonstration of successful implementation of the RE projects under the new regime following the RE Act.

The idea of the DREAMS project was to address these barriers, 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 implementation of RE projects at the local level (addressing barrier a. above); creation of RE Markets and its implementation (addressing barrier b. above); facilitating implementation of the RE project using 'project preparation fund' created under the project (addressing barrier c. above). As per the project design, these three main work tracks under the DREAMS project were to be supported by a number of enabling activities e.g. development of policies and regulations, promotion of local production of RE equipment etc.

In accordance with the provisions in the 'Project Document' and in line with the three work tracks mentioned above the project team is working the three specific programs under the project, namely, 'Local RE Planning Capacity Building Program (LREP)'; 'Philippine RE Market System (PREMS)'; 'Project Preparation Fund (PPF). At the MTR, while the work on the LREP and PREMS is progressing well, the work on utilization of large funds under PPF is still to be initiated. Successful implementation of the recommendation at the MTR, to utilize the PPF to implement RE facilities will ensure attainment of the project objectives and the desired results by the end of the project.

1.4 Recommendations

Mid-term review questions (see Annex B)

- Corrective actions for the design, implementation, monitoring and review of the project
- Actions to follow- up or reinforce initial benefits from the project
- Proposals for future directions underlining main objectives

| Recommendation | Issues |
|-----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. In the results frame-work of the project, include direct GHG emission reductions as one of the Indicator | It is recommended that the projected direct reduction in the emission of GHG, due to the project be taken in the results framework of the project as an additional Indicator (Indicator D) with its corresponding Target. The figures of the projected direct GHG emissions due to the project are already provided in the project document, but it has not been taken to the results framework as an indicator and the target. As most of the direct GHG emission reduction would happen beyond the implementation timelines of the project, it would not be possible to monitor the achievement by measurement of the RE power generated. The monitoring of the achievement in this case may be done by estimating the 'Capacity Utilization Factor (CUF)' of the RE capacity created. |
| 2. In the results frame work for the project, review the target value of the indicator '% share of RE in the power generation mix of | The target value for the Indicator '% share of RE in the power generation mix of the Philippines' is a bit over ambitious. As per the workings provided in the 'Project Document', in order to |
| the Philippines'. | achieve the target, the total RE capacity addition required during the implementation timelines of the project would be 4866 MW. This is |

| Recommendation | Issues | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| | against the required total power generation capacity addition of 4275 MW during the same period. Thus, the entire electricity generation capacity addition required during the implementation period of the project would need to be essentially from renewable sources. This is not a practical thing to do, particularly considering that generally speaking RE is an intermittent source of power and needs to be supported by non-RE sources of supply to ensure continuous supply of electricity. | |
| | The project document itself has suggested (footnote 66 of project document) that this target should be reviewed during the project, to ensure it is commensurate with DOE's targets which are reviewed annually. It is recommended that the target value for this Indicator be reviewed and if needed revised. | |
| 3. Extent the project implementation timelines by one year | Actual implementation of the project started late (by about one year). Although, the implementation is happening as required, it would not be possible to complete some of the important activities within the remaining project implementation timelines, hampering the achievements of the project (e.g. Creation of the RE capacities). It is recommended that a no cost extension of one year be provided to the project. | |
| 4. Expedite the use of resources of the project for the creation of financial instruments | recommended that a no cost extension of one year be provided to the project. Under outcome 4a, there is a provision for US\$1 million to design financial instruments to facilitate funding of RE projects by the banks. Somehow, this provision could not be implemented till the time of MTR. It is recommended that the available funds may be utilized in an expeditious manner. Some of the ways which are in line with the overall project objectives and outcomes in this regard are as follow a. Grant part capital subsidy for RE projects in non-viable/difficult areas established by private sector parties competitive bidding basis invited by LGUs or Electric cooperatives b. Provide part grants to LGUs (balance coming from LGUs for establishing community managed small RE projects c. Provide 'interest rate drawdown support' to the RE project being established in difficult areas d. Provide performance-based incentives (in terms of P/kWH for RE based projects. The selection of projects to be supported maybe done while inviting the parties to establis RE based power projects e. Available resources may also be used for some of the other appropriate measures to support overall objective of the project recommended under recommendations 6. | |
| 5. Support creation of financial models and also studies to determine the cost of generation of electricity out of different RE resources | Project document already has provision for these activities under Outcome 3 (Output 3.1, activity 3.1.3). The project team already has plans to carry out these activities. It is recommended that these activities may be carried out in expeditious manner to realize the benefits towards achieving the objective of the project. One of the models which may be examined is the possibility of conversion of existing diesel-based standalone generators to RE- Diesel Hybrid. Financial feasibility study in this case would consider CAPEX as the cost of RE component, OPEX as 1% to 2.5% of CAPEX and Revenue is the Diesel Saved due to introduction of the | |

| Recommendation | Issues |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | RE component. Project may support development of standard simple Excel based financial model to support this. |
| 6. Develop and enforce performance standards for RE equipment (Solar PV, Wind turbines etc.) and components like inverters, meters, control | Enforcement of performance of standards will ensure that only equipment of good quality gets imported in the country. This over a period of time will increase the confidence level of the investors in the RE technology. |
| systems. Support this initiative with the establishment of accredited testing facilities. | Project already have some provisions towards such activities under Outcome 1.5 (activities 1.5.2, 1.5.3, 1.5.4). It is recommended that implementation of these activities be expedited. |
| | For the additional suggestion to support creation of an accredited testing facility some of the funds under recommendation 3 may also be utilized. Accredited lab may be established within an appropriate government/institution owned facility. |
| For work plan pick activities from the project document | Some of the activities provided in the project design has not been taken up in the workplans. MTR team is of the view that one of the reasons for this is that while preparing the workplans, the activities mentioned in the 'Project Document' are not referred. Thus, implementation of many activities which are required as per 'Project Document' don't get included in the work plan and hence doesn't get carried out. |
| | It is recommended that while preparing the workplans and budget, a reference from the activities provided in the Project Design maybe drawn. This will ensure that any activity specified in the Project Design does not get missed out due to oversight. |
| 8. Communication regarding the upcoming policy instrument for RE promotion | It is recommended that in order to increase the awareness amongst stakeholders, the project may come out with simple communication products (e.g. newspaper articles, communication in magazine of trade associations, online media) informing the changing landscape for doing business in the power sector in general and in the RE space in particular. |
| 9. Study regarding the potential demand for RE under the RE | The study may include an exercise to determine the likely price band for Green Energy Certificates. |
| corresponding supply of RE for the compliance market to see the gap in demand and supply over a period of time | Examine the possibility to come out with regulations regarding 'Floor Price' and a 'Cap Price' for Green Energy Certificates. |
| 10. Capacity building of private sector investors, RE equipment manufacturers and banks regarding the opportunities available under the RE portfolio standards and RE Certificates regime | Utilize the results of recommendation 5 and recommendation 9 to inform the prospective private sector investors regarding the opportunities available for the RE business under the new policy regime for the RE sector. |
| 11. In the guidelines by DOE for competitive bidding there should be directive to procure separate quantities for RE and for fossil- | With the RPS in force, the electric co-operative/distribution utilities would need to attempt procuring a part of the electricity from RE sources. |
| fuel based power | From time to time depending upon the expected demand for electricity, the electric co-operatives invite the competitive bids for procurement of power. It is recommended that while inviting the bids there should be separate quantity mentioned for RE sources and |

| Recommendation | Issues | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| | the evaluation of bids for RE part of the quantity should be done separately. | | |
| 12. Introduce training modules on RE in the Industrial training institutes | Under outcome 4a, one of the targets is to ensure sufficient availability of certified technicians for RE. It is recommended that a RE specific training module be introduced in a some of the existing modules of TESDA and be available as a regularly course offered. | | |
| 13. Facilitate the capacity building assistance to the LGUs in harmonizing the energy components (with RE applications) of Local Development plans (Comprehensive Development Plans, Annual Investment Plans and Comprehensive Land Use Plans) | The local development plans of provinces (Iloilo and Palawan) and municipal level LGUs lacks details in the energy sector application of renewable energy. The local planning process feeds into the Regional Development Plan that incorporates the local energy plans. Technical Assistance inputs needs to be mobilized to assist the LGUs (provincial and municipal) through a participatory approach in developing their local energy plans. Review and streamline the process and develop guidelines on the local energy planning that will be incorporated the HLURB local planning guidelines. | | |
| 14. Capacity building of regulatory authorities | Study tour based on opportunities to participate in international workshops (separately for higher official and for managerial level officials) Consultancy for International Best Practices and case studies provided under dedicated sessions by the consultants | | |

2. INTRODUCTION

2.1 Purpose of the Mid Term Review and Objectives

With the project 'Development for Renewable Energy Applications Mainstreaming and Market Sustainability (DREAMS)' in Philippines reaching mid-term of its implementation, a 'Mid Term Review (MTR)' of the project has been carried out, findings of which are given in this report. The target audience for the Mid Term Review are the funding agencies, GEF Operational Focal Point, project partners and beneficiaries, UNDP CO Philippines, UNDP at regional and HQ levels, UNDP Evaluation Office.

The objective of the mid-term review (MTR) was to assess progress towards achievement of the project objectives and outcomes as specified in the Project Document. It was also meant to evaluate early signs of project success or failure, with the goal of identifying required changes that should be made in order to set the project on-track, so that the intended results are achieved. The Mid Term Review has been carried out by a team of consultants comprising of an independent international consultant (Mr. Dinesh Aggarwal, India) and a National Consultant (Mr. Felicisimo David Jr., Philippines). The MTR has been carried out in close cooperation with the project team and UNDP CO at Philippines. The MTR has been carried out in compliance with the monitoring and evaluation plan as elaborated in the project document, and in line with GEF/UNDP policies.

2.2 Scope and methodology

The design of the MTR is based on the requirements set out in the TOR prepared by the UNDP CO (please see Annex A). Before undertaking the MTR, an Inception Report was presented, including the proposed tasks, activities and deliverables, as well as a table of main review questions that need to be answered to determine and assess project results, and to identify where the information is expected to come from (e.g. documents, interviews and field visits). The review efforts have been focused on the following four categories of project progress;

- Project strategy
- Progress towards results
- Project implementation and adaptive management
- Sustainability

The table of mid-term review criteria and questions is presented in Annex B.

Sources of data and data collection

Data have been collected through an extensive desk review of all relevant documents, meetings and interviews with key stakeholders and site visits to answer the MTR review questions. The sources of data were carefully identified, in order to obtain useful evidence-based information that is credible and reliable.

- A desk review of the following documents was carried out (see Annex C):
 - Progress reports and project documents; such as the UNDP Project Document (ProDoc), Project Information Form (PIF), Baseline GEF Tracking Tool, Project Inception Report.
 - Project Monitoring documents, namely the Annual UNDP/GEF Project Implementation Reviews (PIRs); Annual Performance Reviews (APRs): Combined Delivery Reports (CDRs): Minutes of the Steering Committee meetings, Quarterly Project Reports, Quarterly Work Plans, Financial reports.
 - Project Outcome documents; consultancy reports generated through Project activities, TORs and RFPs prepared by the project team.
 - Background information (websites, reports, national policy papers, or other written information)

from relevant Government ministries and institutions, as well as other stakeholders; background information on technology and application of different RE sources; technical reports; project manuals and guidelines.

Mission: Prior to the mission to Philippines, stakeholders were contacted by UNDP CO
Philippines/Project team to schedule meetings and site visits in an optimum way in order to meet
with a maximum of relevant stakeholders. During the mission, interviews were held with the Project
Team, UNDP CO, and a wide range of identified stakeholders, beneficiaries and key informants
which included steering committee members, senior officials of various ministries, academia, local
Government. The mission was carried out during the period 20 January 2020 to 31 January 2020,
and included visits to Palawan and Iloilo provinces. The mission schedule is given in Annex D.

The review of documents provided the basic facts and information for developing a first draft mid-term review (MTR) report, while the mission was needed to verify the basic facts, obtain missing data and to learn the opinions of respondents to help interpret the facts. The individual interviews with key informants were based on open discussion to allow respondents to express what they feel as main issues, followed by more specific questions on the issues mentioned. The list of mid-term review questions of Annex B was used as a checklist to raise relevant questions and issues during the interviews that correspond to the level and type of involvement of the interviewe or the organisation visited.

Regarding the data analysis and methods for analysis, the documents listed in Annex C were reviewed and analysed. The notes of the interviews with key informants were used to verify facts and information presented in reports and documents and helped to formulate the conclusions and recommendations. A twelve-day mission has the limitation of potentially giving a snapshot impression only. Nonetheless, the mid-term reviewers feel that this mix of data collection and analysis tools has yielded viable answers to the review questions within the limits of available time and budget resources.

This review has been conducted in accordance with the principles outlined in the United Nations Evaluation Group 'Ethical Guidelines for Evaluation' (see Annex G).

2.3 Structure of the mid-term review report

The review has been undertaken in accordance with the UNDP guidelines on mid-term reviews (UNDP, 2014)⁷ as well as general criteria of UNDP evaluations. This report is structured according to the table of contents that is given in Annex B of the MTR guidelines (UNDP, 2014), and the Terms of Reference issued by UNDP Country Office. The report is organised as follows;

- Chapter 1 contains the Executive Summary
- Chapter 2 provides an Introduction to the project
- Chapter 3 covers the Project Description and background context.
- Chapter 4: Findings project strategy
- Chapter 5: Findings progress towards results
- Chapter 6: Findings project implementation
- Chapter 7: Findings sustainability
- Chapter 8 provides Conclusions and Recommendations

For easy and ready reference, Annex B shows where the main review criteria and questions of the MTR can be located in different sections of the report.

⁷ Project-Level Monitoring: Guidance for Conducting Mid-term Reviews of UNDP-supported, GEF-financed projects (UNDP, 2014), also taking into account elements of the Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed projects (UNDP, 2012)

3. PROJECT DESCRIPTION AND CONTEXT

3.1 Development context; problems that the project sought to address⁸

One of the most significant threat to the economic growth 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. To support future economic growth, 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.

The Philippines has one of the most expensive electricity in Southeast Asia. This is despite, it 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). 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 rising 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.

With this background, the interest in renewable energy (RE) in the Philippines has been quite strong in the past. The development of RE in the country will not only address the issue of high import bill for the fossil fuels, but will also lead to reduction in the emission of GHGs. 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 also 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 have contributed in creating substantial interest in RE based power generation projects. Through successful implementation of NREP and enforcement of the RE Act, the Government targets an increase in RE based power capacity in Philippines to 12,683 MW by 2020 and 15,236 MW by the year 2030.

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

⁸ Based on the information in the Project Document

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.

3.2 Description of the project: objective, outcomes and outputs

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.

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.

Table 4, below provides the Project Objectives along with the summary of different planned outcomes of the project. The Table also provides the indicators to monitor and verify the achievement of the planned Objectives Outcomes and the Outcomes of the project.

| Objective/Outcome | Indicator ⁹ | Baseline | Targets End of Project |
|-------------------------------|-------------------------------------------------------------------|----------|---------------------------|
| Project Objective: | • Indicator A: Cumulative direct project CO ₂ emission | 0 | 205 |
| To promote and facilitate the | reductions from RE development by end-of-project | | |
| commercialization of the | (EOP), ktonnes CO_2 | | |
| renewable energy (RE) | • Indicator B: % share of RE in the power generation mix | 14.4 | 35 |
| markets through the removal | of the Philippines | | |
| of barriers to increase | • Indicator C: Number of sitio households in far-flung | 0 | 20,000 |
| investments in RE based | areas that have obtained access to reliable sources of | | |
| power generation projects | renewable energy due to the Project | | |
| Outcome 1: | • Indicator 1.1: Number of approved and enforced | 0 | 8 |
| Enforcement of a supportive | policies and guidelines for leveraging RE investments | | |
| policy and regulatory | by Year 2 | | |
| environment for leveraging | • Indicator 1.2: Number of sitios10 with off-grid rural | 0 | 12 |
| investment in RE | electrification plans using RE | | |
| development and applications | • Indicator 1.3: Number of businesses who have | 0 | 50 |
| at the local level | accreditation or applied for DOE accreditation by EOP | | |
| | to manufacture, fabricate or supply locally-produced RE | | |
| | components | | |

 Table 4: Project Results Framework (as per Project Document)

⁹ The numbering of the indicators has been done at the MTR to ease discussion and reference in the report

¹⁰ A sitio typically consists of 20-50 households with an average of 5 persons per household

| Objective/Outcome | Indicator ⁹ | Baseline | Targets End of Project |
|-----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------|
| Outcome 2: Strengthened institutional | • Indicator 2.1: Number of funded and implemented RE projects championed or facilitated by LGU-based RE facel points | 0 | 5 |
| increased RE investment at the local level | Indicator 2.2: Number of RE projects facilitated by operational provincial-level RE market service centers | 0 | 5 |
| | • 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 |
| Outcome 3: Capitalized RE market leads to an increased share of RE | • Indicator 3.1: Cumulative MW of installed capacity registered in the RER established in the "capitalized" RE market | 0 | 10 |
| based power capacity | • Indicator 3.2: Number of RE developers registered in the RER | 0 | 15 |
| Outcome 4a: Enhanced confidence of | • Indicator 4.1: MW of RE projects that are being developed through the PPF | 0 | 15 |
| project developers on the viability of RE projects at the local level | • 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 |
| | • 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 |
| Outcome 4b: Increased number of | • Indicator 4.4: MW of installed capacity of RE projects being implemented that received support from new or | 0 | 5 |
| operational RE projects using proven and emerging RE | improved RE financial mechanisms, by EOP Indicator 4.5: MW of installed capacity of RE projects | 0 | 75 |
| successful replication | resulting from accelerated expediting of RE service contracts by EOP. | | |

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

| Component / | Output | Activities ¹¹ | Modifications/ Corrections in |
|----------------------|--------------|--------------------------|---------------------------------|
| Outcome | | | Activities at Project Inception |
| Component 1: RE | | | |
| Policy and | | | |
| Planning. The | | | |
| outputs from this | | | |
| component will lead | | | |
| to the outcome of | | | |
| enforcement of the | | | |
| supportive policy | | | |
| and regulatory | | | |
| environment that | | | |
| will leverage | | | |
| increased investment | | | |
| in RE development | | | |
| and application at | | | |
| the local level. | | | |
| | Output 1.1: | | |
| | Approved and | | |
| | enforced | | |

Table 5: Outputs and Activities for different Outcomes of the project

¹¹ Activities has been numbered at the time of MTR for the sake of easy reference in the MTR report

| Component / Outcome | Output | Activities ¹¹ | Modifications/ Corrections in Activities at Project Inception |
|------------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | cohesive national RE policy, implementing rules and mechanisms. | | |
| | | 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 Bureau of Internal Revenue formulating revenue regulations on implementing 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 | 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) |
| | | Environmental Compliance Certificate (ECC) process for RE; 1.1.2 Amending of Fuel Mix Policy for Demon Comparison in the | Support CCC is conducting a |
| | | 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 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 | 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 |
| | | 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. |
| | | 1.1.4 Revise and prepare updated and enforced guidelines of REMB on RE national/local contract | 1.1.4 will include activities that will lead to automation of service contracts. awarding, permitting. |

| Component / Outcome | Output | Activities ¹¹ | Modifications/ Corrections in Activities at Project Inception |
|------------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | awarding, permitting and administration. This would contribute to streamlining approvals of RE Service Contracts 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; | |
| | | 1.1.5 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. |
| | | 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, |
| | | | Additional Activity under 1.1 Note1 ASEP completed 3 studies (submitted to DOE; DOE has still to act on the reports: Encouraging private sector participation in Off grid missionary areas: improving regulatory governance for QTPs and NPP leading to a joint resolution between ERC and DOE on the rules for the conduct of competitive selection process in missionary areas Rationalization of Missionary Electrification Subsidy program leading to a Department Circular prescribing a new subsidy policy |

| - | for the Missionary Electrification |
|---|--------------------------------------|
| | Program |
| | Designed of the DE Lesses and |
| | Review of the RE Laws and |
| | Policy gaps |
| | Upon DOE's acceptance of these |
| | reports, DREAMS may provide |
| | technical support to ERC and |
| | DOE to formulate relevant |
| | resolutions, guidelines and policy |
| | frameworks based on these |
| | studies. Public consultations if |
| | needed will be handled by ASEP. |
| | Note2: |
| | In 2015, European Chamber of |
| | Commerce in the Philippines |
| | published an assessment of |
| | business climate issues in the |
| | field of operate and repeatedle |
| | The account was he |
| | energy. The assessment may be |
| | updated. |
| | Note3: |
| | The Phil. Electricity Market |
| | Corporation (PEMC) also has a |
| | scientific journal that published |
| | case on studies Fa and RPS, e g. |
| | impact on energy cost on the |
| | integration of FIT Resources. |
| | Note 4: |
| | The International Renewable |
| | Energy Agency published the |
| | 'Renewables Readiness |
| | Assessment for the Philippines |
| | (2017)? It recommended actions |
| | (2017) . It recommended actions |
| | to fine tune the Philippine RE |
| | policy, regulatory and |
| | institutional framework. The |
| | policy studies of DREAMS may |
| | be reviewed vis a vis the |
| | recommendations. |
| | Note 5: |
| | The Ateneo School of |
| | Governance published policy |
| | briefs to create an enabling |
| | environment to support an |
| | optimal energy mix for a climate |
| | smart Philippines (2014). |
| | Note 6: |
| | The Climate Change Commission |
| | completed its public consultations |
| | on the National Energy Policy |
| | Bayiaw A droft incontion report |
| | (as of August 2017) is available |
| | (as of August 2017) is available. |
| | The ten (10) policy issues |
| | contained in the inception report |
| | may be reviewed vis a vis the |
| | outputs under Component 1. |
| | |
| | DOE via the DREAMS project |
| | could take the lead in addressing |
| | or responding to the outcome of |
| | the consultation. |
| | A compendium and review of |
| | studies on RE may be an |
| | additional activity for DRFAMS |
| | (see output 4.5) for Vear 1 prior |
| | (see output 7.5) for fear 1 prior |

| Component / | Output | Activities ¹¹ | Modifications/ Corrections in |
|-------------|------------------|-----------------------------------------|--------------------------------------------|
| Outcome | | | to the start of any study or as part |
| | | | to the start of any study of as part |
| | | | the DE A state DE AMS shall to |
| | | | conduct under component 1 |
| | Output 1 2: | | Activities 1.2.1 to 1.2.5 will |
| | Approved and | | continue but the selection of |
| | enforced local | | partner I GUs will be expanded |
| | ordinances and | | A selection criterion will be |
| | policies aligned | | developed in the selection of |
| | with national RE | | partner LGUs. |
| | objectives. | | The DILG and European |
| | 5 | | Chamber of Commerce of the |
| | | | Phil a list of LGUs assessed both |
| | | | their vulnerability to climate |
| | | | change and energy needs (for |
| | | | item 1.2.1) and transparency and |
| | | | governance systems respectively |
| | | | (for item 1.2.3 and 1.2.2). |
| | | | The training workshops in item |
| | | | 1.2.2 will include: capacity |
| | | | training to LGUs in the areas of |
| | | | local taxation, economic |
| | | | valuation of public assets. e.g. |
| | | | land. |
| | | | The Comprehensive Land Use |
| | | | Program (CLUP) of LGUs will |
| | | | explored as an entry point in the |
| | | | preparation of local energy plans. |
| | | | EPPB conducts LGU capacity |
| | | | building on energy planning and |
| | | | policy development (both RE and |
| | | | Non-RE). The module may be |
| | | | enhanced to strengthen its RE |
| | | | component Note1 |
| | | | Note1. A stivity 1.2.1 will include the |
| | | | activities under Output 2.1. |
| | | 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 | |
| | | DOE to prepare local energy | |
| | | plans Preparetions of these local | |
| | | ordinances are being made with | |
| | | the assistance of DILG; | |
| | | 1.2.2 Conduct training workshops (2 per | |
| | | year over a 5-year period) for | |
| | | augment DOE efforts to enhance | |
| | | LGU capacities to leverage RF | |
| | | projects in meeting local | |
| | | development goals, using clear | |
| | | implementation guidelines from | |
| | | the RE Act; | |
| | | 1.2.3 Facilitation of the active | |
| | | engagement of the LGUs at all | |
| | | stages of RE project through the | |
| | 1 | conduct of meetings and working | |

| Component / Outcome | Output | Activities ¹¹ | Modifications/ Corrections in Activities at Project Inception |
|------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | with designated focal points in the LGU; | |
| | | 1.2.4 Harmonization of the RE approval process that encompasses both national and local requirements; and | |
| | | 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). | |
| | Output 1.3: Strengthened and approved guidelines on RE penetration into grids. | | Activities 1.3.1 to 1.3.3 will continue. Note1: There are promotional materials at DOE produced by GIZ on Net Metering guidelines, manual for inter connection of rooftop systems and distribution impact study guidelines. |
| | | 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- 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; | |
| | | 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; 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 | |

| Component / Outcome | Output | Activities ¹¹ | Modifications/ Corrections in Activities at Project Inception |
|------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | "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 | |
| | | 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. | |
| | Output 1.4: Completed assessments on real cost of RE for formulation of tariffs | | Activities to 1.4.1, 1.4.3 and 1.4.4 will continue except 1.4.2. 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 For Item 1.3.3 and 1.3.4 the study of ASEP on Encouraging private sector participation in Off-grid missionary areas: improving regulatory governance for QTPs and NPP serve as inputs to the workshons |
| | | 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 of electricity where these types of cooperatives and entities do not have the capacity to deal | |

| Component / Outcome | Output | Activities ¹¹ | Modifications/ Corrections in Activities at Project Inception |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | 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: | |
| | | 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; | |
| | | 1.4.4 Conduct studies for DOE on policies to encourage RE development including a study of off-grid tariffs and RECs. | |
| | Output 1.5: Approved policy recommendations for promoting local manufacturing and assembly of quality RE systems. | | Activities 1.5.1 to 1.5.4 will continue. Output 1.5 will read "Enhance or create the enabling environment for promoting local manufacturing, fabrication. supply and assembly of quality RE systems" The assessment must review, update or enhance the current Department Circular 2009-07- 0010: Guidelines for locally produced energy components. Note: Output 1.1 and Output 1.5 are both on Policy. Recommendations: Output 1.1 refers to national level RE policies. Output 1.5 is specific to local level manufacturing industry. |
| | | 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. | |

| Component / Outcome | Output | Activities ¹¹ | Modifications/ Corrections in Activities at Project Incention |
|------------------------|---------------|--------------------------------------|------------------------------------------------------------------|
| Outcome | | Recommendations for follow-up | recivities at 110jeet meepuon |
| | | will be provided; | |
| | | 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 | |
| | | standards. The activities will be | |
| | | executed by Years 1 and 2 | |
| | | Recommendations for follow-up | |
| | | will be provided; | |
| | | 1.5.3 Review and strengthen power | |
| | | meter quality standards by Year 1. | |
| | | While it is in the interest of the | |
| | | auality 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 | |
| | | support an up-scaled RE market: | |
| | | 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 | |
| | | of RE equipment DOE will adopt | |
| | | these standards and AREC | |
| | | officers will be targeted to carry | |
| | | out the recommendations of the | |
| <u> </u> | | assessment. | |
| Component 2: | | | |
| Strengthening for | | | |
| RE Mainstreaming. | | | |
| This component is | | | |
| intended to address | | | |
| the barriers | | | |
| associated with the | | | |
| capacity in the | | | |
| Philippines, mainly | | | |
| at the local level on | | | |
| RE issues and the | | | |
| development, | | | |
| operation and | | | |
| management of RE | | | |
| | Output 2.1: | | Activities 2.1.1 to 2.1.3 will |
| | Harmonized | | continue. |
| | local level | | The planned activities under 2.1.1 |
| | development | | and indicators will be subsumed |
| | programs with | | An added activity is facilitating |
| | national DOE | | regional level energy planning in |
| | programs. : | | <i>c c c c c c c c c c</i> |

| Component / Outcome | Output | Activities ¹¹ | Modifications/ Corrections in Activities at Project Inception |
|------------------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | partnership with selected Regional Development Councils. The criteria for the selection of the pilot region has to be developed by Yr1. |
| | | | DREAMS will set the criteria in the selection of other interested or potential LGUs aside from Iloilo and Palawan. Note2: New partner companies need to identified by Yr1 |
| | | | See output 4.6 on status of the list of private companies that offered CO-financing but whose projects are by now terminated |
| | | 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; | |
| | | 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 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. Early lessons learned from the implementation of the energy plans will be incorporated during the review and update of the plans. Accordingly, technical assistance will be provided to DOE in supporting additional LGUs in the formulation of local energy plans; | |

| Component / Outcome | Output | Activities ¹¹ | Modifications/ Corrections in Activities at Project Inception |
|------------------------|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Output 2.2: Streamlined | 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 and could include: Timing of the RE applications to partially mitigate the risks of local elections and possible administrative changes in LGUs every 3 years; Conducting meetings on the contents mechanisms and policy actions to improve LGU efficiency for approvals and permits for RE-based projects in cooperation with the private sector that will be drafted, established and adopted by the LGU; Screening of RE projects to prevent LGUs from pursuing RE projects whose capacity may not be compatible for feeding into the grid; Conducting workshops with other LGUs to share the lessons learned on the streamlining the LGU regulatory processes, and applying them or replicating to other LGUs. | Activities 2.2.1, 2.2.2 and 2.2.5 are being done by the Energy |
| | Streamlined system of issuance of permits and licenses | | are being done by the Energy Investment Coordinating Council under EO 30. The EICC is currently drafting IRR for the EO. Activities 2.2.3 and 2.2.4 will continue Note 1: As indicated in activity 1.2.1 DREAMS will support the consultations. IEC and advocacy activities of E030 but pertaining only to those related to rules and guidelines related to the promotion or implementation of RE technologies and projects_ The activities will include public consultations, information materials. workshops to provide inputs that will support legislations being field by |

| Component / | Output | Activities ¹¹ | Modifications/ Corrections in |
|-------------|--------|-------------------------------------|------------------------------------|
| Outcome | | | Activities at Project Inception |
| | | | 'political champions' in congress |
| | | | that are pushing for RE related |
| | | | projects and bills e.g. see Output |
| | | | for DE |
| | | 2.2.1 Consists development of DOE | IOF RE. |
| | | 2.2.1 Capacity development of DOE | |
| | | issuance of RE Service contracts | |
| | | In addition to ongoing DOF | |
| | | 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 | |
| | | be streamlined (e.g. 20 day | |
| | | posting of water rights application | |
| | | in I GUs 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 | |
| | | due to its perceived overlaps with | |
| | | the Environmental Impact | |
| | | Statement (EIS) System: | |
| | | 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) | |
| | | compliance of the RE project | |
| | | Boople's (IBs) Pight Act, as well | |
| | | as (ii) the Environmental | |
| | | Clearance Certificate (FCC) under | |
| | | the EIS, respectively: | |
| | | 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; | |
| | | 2.2.4 Assessment and provision of | |
| | | recommended measures to | |
| | | streamine the long process at | |

| Component / | Output | Activities ¹¹ | Modifications/ Corrections in |
|-------------|-------------------|-----------------------------------------------------|---------------------------------|
| Outcome | | | Activities at Project Inception |
| | | provincial offices to convert | |
| | | public tentified failed to | |
| | | projects are located; and | |
| | | 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 | |
| | | including: | |
| | | • Plans to implement accelerated | |
| | | development of RE investment | |
| | | facilitation centers or market | |
| | | service centers (MSCs) that | |
| | | would provide assistance to RE | |
| | | developers for streamlined | |
| | | processing of RE projects; | |
| | | • A signed coordination | |
| | | agreement between DOE, DILG, | |
| | | TPANSCO and NGCD This | |
| | | agreement will assist in the | |
| | | streamlining of the joint | |
| | | approval of permits for | |
| | | transmission and distribution | |
| | | connections as well as obtaining | |
| | | an ECC with approvals from | |
| | | DENR, NWRB and NCIP; | |
| | | • Studies on the realities of | |
| | | securing and implementing the | |
| | | "Right of Way" policy and to | |
| | | include the role of DPWH in the | |
| | | study; | |
| | | • Coordination agreement with | |
| | | DOE and NWRB on | |
| | | sustainability plan guidelines | |
| | | This would involve discussions | |
| | | with members of NWRB Board | |
| | | on progress and usage of | |
| | | streamlined process to secure | |
| | | water rights; and | |
| | | Coordination agreement | |
| | | between DOE and transmission | |
| | | companies. Under the RE Act, | |
| | | transmission companies are | |
| | | obligated to connect all RE | |
| | | projects. With transmission now | |
| | | instead of the national | |
| | | nisicau UI lie nauoliai government's TRANSCO the | |
| | | coordination agreement will | |
| | | clarify TRANSCO's obligation | |
| | | to connect RE projects through | |
| | | the use of NGCP lines under a | |
| | | "sub-transmission" arrangement | |
| | | for use of NGCP facilities. | |
| | Output 2.3: Focal | | Activities 2.3.1 and 2.3.2 will |
| | points | | continue. |
| | established | | Note 1: |
| | within LOUS | | |

| Component / | Output | Activities ¹¹ | Modifications/ Corrections in |
|-------------|------------------|-----------------------------------------|-------------------------------------|
| Outcome | | | Activities at Project Inception |
| | | | 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 I as part |
| | | | of activity 2.3.1 |
| | | 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 (see Output 2.4); | |
| | | 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; 11) | |
| | | DOE M&E systems for RE | |
| | | project monitoring (including | |
| | | contract milestones, facets of | |
| | | establishing electro-inechanical | |
| | | Output 1.1 and other aspects of | |
| | | MeE systems); iii) normitting | |
| | | maximum systems); iii) permitting | |
| | | requirements and obligations by | |
| | | as well as legal enforcement | |
| | | as well as legal enforcement | |
| | | Output 2.2: and iv) best practices | |
| | | for maintaining community | |
| | | relations | |
| | Output 2.4: | Totutions. | Activities 2.4.1 and 2.4.2 will |
| | Operational | | continue but subject to an |
| | provincial-level | | evaluation of the status of the |
| | market service | | MSC that will be completed in |
| | centers | | Year 1. |
| | | | Activities 2.4.3 to 2.4.5 will |
| | | | continue. |
| | | | Note1: |
| | | | There are 3 provincial offices of |
| | | | DOE. These 3 offices may serve |
| | | | as pilot area for establishment and |
| | | | maintenance of the RE website at |
| | | | the provincial level. |
| | | | L |
| | | 2.4.1 Conduct business planning for the | |
| | | setup of strategically located MSC | |
| | | locations during Years 1, 2 and 3 | |
| Component / Outcome | Output | Activities ¹¹ | Modifications/ Corrections in Activities at Project Inception |
|------------------------|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | for the purposes of providing regulatory guidance to private sector investors and project developers getting into a provincial RE market: | |
| | | 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 | |
| | | 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; 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 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 that their RE project applications will be efficiently processed. Information from the RE resource assessments will be made available on the website. | |
| | Output 2.5: Established and operational RE knowledge platforms | | Activities A to D will continue Note1: The preparation and sourcing of knowledge materials will be done in collaboration with other DOE projects on RE like those being produced by ASEP and Support CCC. |
| | | 2.5.1 Formulation of a communication strategy for the Project;2.5.2 Production and screening of 2 | |
| | | Public Service Announcements by Year 3; | |
| | | 2.5.4 Production and screening of a Project Documentary by EOP; 2.5.4 Production of communication | |
| | | pieces, short stories, and knowledge pieces to be published | |

| Component / Outcome | Output | Activities ¹¹ | Modifications/ Corrections in Activities at Project Incention |
|-----------------------------------------|---------------|------------------------------------------------------------------------|------------------------------------------------------------------|
| Outcome | | in newspaper, websites, | Activities at 1 roject inception |
| | | newsletters (at least 1 each year | |
| Component 3: | | with cumulative 4 by EOT). | |
| Capitalized RE | | | |
| Market Development: This | | | |
| component will | | | |
| address the barrier | | | |
| absence of a | | | |
| functional RE | | | |
| Market that | | | |
| government | | | |
| measures to ensure | | | |
| compliance with the | | | |
| of RE generation | | | |
| and spur the growth | | | |
| of the RE industry. | | | |
| RE Market are to | | | |
| fall within standards | | | |
| of the Renewable Portfolio Standards | | | |
| (RPS) that provide | | | |
| clarity on rules and | | | |
| regulations that | | | |
| projects for RE | | | |
| Certificates (RECs) | 0 | | |
| | Completed | | continue. |
| | comprehensive | | Activity 3.1.4 will be expanded to |
| | market | | include all forms of energy |
| | assessments. | 3.1.1 Forecasting of energy mix and | storage systems |
| | | determination of the infrastructure | |
| | | 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 | |
| | | energy (VRE) inputs into the grid. | |
| | | Information regarding the | |
| | | proportions of solar, wind, | |
| | | RE sources into the grid will assist | |
| | | in the forecasts of RE inputs and | |
| | | the energy mix over the short and long term: | |
| | | 3.1.2 Benchmarking on forecasting | |
| | | standards that will require foreign | |
| | | country experience; 3.1.3 Evaluating the economics of RF | |
| | | plant operations and the projected | |

| Component / Outcome | Output | Activities ¹¹ | Modifications/ Corrections in Activities at Project Inception |
|------------------------|----------------------------|---------------------------------------------------------------------|------------------------------------------------------------------|
| | | impact of market settlements from | Č. Č. |
| | | REC on the RE project; | |
| | | 3.1.4 Studying battery storage of energy from solar PV and other PE | |
| | | technologies | |
| | | 3.1.5 Developing a voluntary RE market | |
| | | where the voluntary purchase of | |
| | | renewable energy certificates | |
| | | (RECs) by private companies that | |
| | | can contribute to reduction in the | |
| | | cost of RE and boost corporate | |
| | | social responsibilities (CSR); | |
| | | 3.1.6 Developing market monitoring | |
| | | tools and compliance mechanisms | |
| | | competitive behavior such as | |
| | | hoarding of RECs; | |
| | | 3.1.7 Developing options for alternative | |
| | | compliance payment mechanisms | |
| | | in the event that a RE power | |
| | | producer has a shortfall of RE | |
| | | 3.1.8 Assessing the requirement of | |
| | | ancillary services; | |
| | | 3.1.9 Monitoring methodologies for co- | |
| | | gen/hybrid systems. The RE | |
| | | Policy does not yet cover the issue | |
| | | hybrid system: | |
| | | 3.1.10 Expanding the implementation of | |
| | | the Green Energy Options and | |
| | | assistance to Electricity Suppliers | |
| | | that market RE-based electricity | |
| | | 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 | |
| | | studies noting that NGCP would | |
| | | not be able to integrate all RE | |
| | | technologies without securing | |
| | | transmission line stability. | |
| | Output 3.2: Established | | Activities 3.2.1 to 3.2.4 will be |
| | "capitalized" RE | | presented. |
| | markets complete | | F |
| | with RE | | |
| | Registrar and | | |
| | operational | | |
| <u> </u> | support. | 3.2.1 Review and enhance existing | |
| | | implementing guidelines for | |
| | | "capitalized" RE market | |
| | | development policy. | |
| | | details of how RECs are issued | |
| | | sold and traded, how transaction | |
| | | information is disseminated using | |
| | | a website bulletin posting, how | |

| Component / Outcome | Output | Activities ¹¹ | Modifications/ Corrections in Activities at Project Inception |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| | | RECs are transferred to REC buyers, and monitoring industry compliance to the RPS. These need to be completed and approved by Year 2; | |
| | | 3.2.2 Conduct training sessions for PEMC personnel on the assembly, operations and management of the REM; | |
| | | 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 | |
| | | 3.2.4 Conduct trials of the capitalized RE market mechanisms during Year 3. | |
| Component 4: RE Commercialization: This component will address barriers related to the lack of successful RE projects in the Philippines. There are two outcomes resulting from the outputs of this component: a) increased confidence of local RE developers that leads to an enhanced uptake of RE projects at the local level; and b) increased number of RE projects using proven and emerging RE technologies thus boosting successful replication. | | | |
| | Output 4.1: Financing mechanisms to enhance local RE investment. | | Activities 4.1.1 to 4.1.3 will continue Note1: Financial institution is not limited to banking institutions_ |
| | | 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 | |

| Component / Outcome | Output | Activities ¹¹ | Modifications/ Corrections in Activities at Project Inception |
|------------------------|--------|-----------------------------------------|------------------------------------------------------------------|
| Outcome | | to increase the utility of the | reuvilles at 110jeet meeption |
| | | 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); | |
| | | 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 | |
| | | instance consideration to make the | |
| | | current funding limit for PE | |
| | | project proponents and promoting | |
| | | the use of the fund to a diverse | |
| | | number of small-scale RF | |
| | | 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 | |
| | | for PE agginment installation | |
| | | (through other activities such as | |
| | | Outputs 1.5 and 4.3). | |
| | | 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 | |

| Component / Outcome | Output | Activities ¹¹ | Modifications/ Corrections in Activities at Project Inception |
|------------------------|--------|---------------------------------------|------------------------------------------------------------------|
| | | implementation. This activity | ř ř |
| | | 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 a RE proponent | |
| | | successfully accessing finance | |
| | | from existing RE funds; | |
| | | 4.1.4 A comprehensive fund | |
| | | management and implementation | |
| | | plan will be prepared detailing the | |
| | | fund capital structure, terms, | |
| | | 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 | |
| | | implementation phase will be | |
| | | sought before the fund is adopted: | |
| | | 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. | |
| | | 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 | |
| | | 4.1./ Organizing and conducting | |
| | | seminars and workshops (2 | |
| | | Broiget period) to improve | |
| | | Project period) to improve | |

| Component / Outcome | Output | Activities ¹¹ | Modifications/ Corrections in Activities at Project Inception |
|------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | 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. | |
| | Output 4.2: Bankable RE project plans through financial mechanisms. | | Activities 4.2.1 to 4.2.3 will continue Note: Link Output 4.2 to Output 1.4, 2.2, 4.1, 4.3 |
| | | 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; 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 their RE project; | |
| | | personnel to assist and process service contracts for these RE projects. | |
| | Output 4.3: Rural electrification models incorporating innovative RE market services for off-grid areas | | Activities 4.2.1 to 4.2.4 will continue. Note1: The study will look at the framework and methodology of the rural electrification study conducted for San Vicente Palawan under Support CCC Phase 1 |
| | | 4.3.1 Selection of a pilot area for a rural electrification study in Year 3 that is underserved and cross- subsidized for electricity delivery and where the potential for RE can reduce electricity costs; | |
| | | 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, | |

| Component / Outcome | Output | Activities ¹¹ | Modifications/ Corrections in Activities at Project Inception |
|------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | drought, etc.). The model should be consistent with DOE policies that encourage RE development and assessments of off-grid electrification using RE; | |
| | | 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; | |
| | | 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. | |
| | Output 4.4: Training and certification programs for local technical experts: | | Activities 4.4.1 to 4.4.4 will continue. Note1: Activity 4.4.1 and 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. |
| | | 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; | |
| | | 4.4.2 Conduct training of trainers' workshops during Years 1 and 2 (4 per year) towards certification of local technical experts; | |
| | | 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; | |
| | | 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 | |

| Component / Outcome | Output | Activities ¹¹ | Modifications/ Corrections in Activities at Project Inception |
|------------------------|-----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | 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. | |
| | Output 4.5: Site- specific RE resource databases | | This activity was not listed for assistance under the project. This will be a new activity. There will be no additional studies. Since the data base is fragmented, i.e. located in different units. Budget is needed for the inventory and compilation of the studies for easy tracking and retrieval. e.g. compilation of hydropower resource assessment, geological recon, biomass inventory, wind resource assessment. The compilation will be lodged in a RE portal hosted by DOE website. Note 1: Revisit existing database from IT and work with UP LIDAR project. |
| | | 4.5.1 Management and compilation of hydropower resource assessments from stream gauging and other reconnaissance-level information; | |
| | | 4.5.2 Collection and compilation of biomass resource information into an inventory including waste streams from agricultural processes and municipal solid waste; | |
| | | 4.5.3 Collection and compilation of geological and reconnaissance- level information to develop an inventory of potential low enthalpy geothermal project sites; and | |
| | | 4.5.4 Conducting locally-financed detailed wind resource assessments through measurements from wind masts and computer-generated wind models. | |

| Component / | Output | Activities ¹¹ | Modifications/ Corrections in |
|-------------|--------------------|-------------------------------------------|-------------------------------------|
| Outcome | | | Activities at Project Inception |
| | Output 4.6: | | Activity will continue but identify |
| | Expedited RE | | new projects that will yield the |
| | service contracts: | | same MW outputs. |
| | | | The status of the following |
| | | | projects: |
| | | | At COHECO (60MW), Kapangan |
| | | | Hydro Electric Power: internal |
| | | | company problem |
| | | | Enfinity MW), Camotes Solar |
| | | | since no market |
| | | | Sun Asia and Solarus (12MW) |
| | | | Mogpog Solar PV Marinduque: |
| | | | No service contract. Project |
| | | | terminated |
| | | | First Envirotech Alliance (2MW). |
| | | | Tarlac City: Terminated |
| | | 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 | |
| | | 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 | |
| | | usil follow. The banefit 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; | |
| | | 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 | |
| | | Properting decomposited in for | |
| | | • Preparing documentation for | |
| | | support interconnection as well | |
| | | as the technical and feasibility | |
| | | studies: | |
| | | • DOE review of the proposal to | |
| | | decide if the proposed to | |

| Component / | Output | Activities ¹¹ | Modifications/ Corrections in |
|-------------|--------|------------------------------------------------|---------------------------------|
| Outcome | | | Activities at Project Inception |
| | | 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; | |
| | | • 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 | |
| | | EBC and MARELCO that | |
| | | requires MARELCO to hid out the | |
| | | PE project prior to the award of | |
| | | the hildered agreement for | |
| | | nurchase 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: | |
| | | 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 | |

3.3 Project Implementation Arrangement

The project is being executed according to UNDP's National Implementation Modality (NIM). UNDP is the GEF Executing Agency (EA) for the project. All components of the Project are being implemented by 'Renewable Energy Management Board (REMB)' under the DOE, which has the overall responsibility for the achievement of project results as the Implementing Partner (GEF Implementing

Agency). REMB has designated a senior official as the National Project Director (NPD) for the Project. The Implementing Partner has the overall responsibility of ensuring that all activities are executed as per the approved Project Document. The Project Board (PB) established at the inception of the project plays the role of policy and decision-making body for the project implementation. The NPD is 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 of the Philippines.

The organization structure of project is given in the Figure below.



The PB comprising of a Chairperson (REMB/DOE); with PSC members from other stakeholders (PEMC, DILG, TRANSCO, NGCP, NPC-SPUG, LGUs, UNDP Philippines) is in place. The primary functions of the PB is to provide the necessary policy and strategic direction that allows the Project to function and achieve its policy and technical objectives, and to approve the annual Project plans and M&E reports. One of the key tasks of the PB is to ensure coordination and synchronization of all activities supported by the Project and it serves as a platform for key project stakeholders and beneficiaries to share experience and design joint strategies on the Project.

The Project Management Unit (PMU) comprising of a Project Manager (PM), Monitoring and Evaluation Officer (M&EO), a Finance Officer (FO), and an Administrative Officer (AO) looks after the day to day operations of the project. PB have the oversight of the Project Management Unit (PMU) and monitors the progress of the project, guide implementation and support the project in achieving its overall outputs, outcomes and objective.

3.4 Main stakeholders

Table 6 provides the list of the main stakeholders of the project long with their respective roles.

| Table 6: Stakeholders of the project |
|--------------------------------------|
|--------------------------------------|

| Stakeholder | Mandate | Role in DREAMS Project |
|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Department of Energy (DOE) | Energy sector reform and responsible for formulating and implementing energy policies and programs, coordinating the government's energy programs, facilitating the implementation of sector reform, and encouraging private sector participation in the energy sector. | REMB serves as the key subordinate bureau and serve as the implementing entity for the Project. It is also 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. |
| Department of Interior and Local Government (DILG) | Amongst other responsibilities, DILG strengthens local government capabilities aimed towards the effective delivery of basic services to the citizenry. This may include assistance to improve LGU capacities to develop and operate RE projects. | Provides 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 the Project and LGUs on streamlining the system for permit and license issuance (Output 2.2). |
| National Transmission Corporation (TRANSCO) | Provides oversight of the electrical transmission system operations in the Philippines, and administration of the FiT-ALL financial mechanism that will promote the development of RE ¹² . | 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). |
| National Grid Corporation of the Philippines (NGCP) | System operator of the Philippine power grid that balances the supply and demand of electricity to efficiently serve all customers including power generators, private distribution utilities, electric cooperatives, and government-owned utilities. | 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. |
| National Power Corporation (NPC) and NPC - Small Power Utilities Grid (NPC-SPUG) | Responsible for power generation in off- grid and un-electrified areas (more than 80 SPUG areas all of which are powered with fossil fuels) that are not serviced by DUs and other qualified third parties (QTPs). It has been explicitly stated in the RE Law that whenever feasible, <u>NPC-SPUG shall</u> <u>utilize RE resources</u> | Both NPC and NPC-SPUG coordinates 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. |
| Philippine Electricity Market Corporation (PEMC) | Responsible for establishing, maintaining, and governing the "Wholesale Electricity Spot Market" (WESM), an efficient, competitive, transparent and reliable market for the wholesale trade of electricity and ancillary services that will encourage competition in the sector and reduce the cost of energy | Operationalization of the 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. |

¹² Includes processing of FiT-ALL applicants, monitoring development of RE projects for eligibility, granting of FiT-ALL to RE project proponents, and disbursal of FiT payments

| Stakeholder | Mandate | Role in DREAMS Project |
|-----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| National Renewable Energy Board (NREB) | Provides recommendations to the DOE on mandated RPS and minimum RE generation capacities in off-grid areas, as it deems appropriate; specific actions to facilitate the implementation of NREP in a manner with no overlapping institutional functions; monitoring implementation of the NREP including compliance with the RPS and minimum RE generation capacities in off- grid areas; and oversight of the utilization of a Renewable Energy Trust Fund | 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. |
| Department of Environment and Natural Resources (DENR) | Responsible for the conservation, management, development, and proper use of the country's environment and natural resources, including the ensuring of compliance of energy projects to environmental regulations and standards. | DENR works with DOE to improve efficiencies of environmental regulatory approvals of RE projects. |
| National Water Resources Board (NWRB) | Oversight of "water sustainability plans", a requirement for NWRB approval of hydropower projects, amongst other responsibilities. | NWRB works with DOE to improve integration of water sustainability plans with RE project approvals. |
| Local Government Unit (LGU) | To advance the public good or welfare that includes involvement in the development of renewable energy sources to reduce the cost of electricity to its constituents | Selected LGUs works 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 Iliolo Provinces will serve as members of the NSC. |
| Civil Society Organi | zations (CSOs) | |
| The World Wildlife Fund (WWF)- Philippines | An international organization in sustainable development that focuses on, among others, local stakeholder engagement, capacity- building exercises, public-private cooperation and policy-making that is consistent with GoP policies and programs to ensure that these are implemented on the ground. | WWF was to augment the capacity building activities at the local level with LGUs and other community groups |
| Renewable Energy Association of the Philippines (REAP) | A prominent non-stock, non-profit organization of companies and private individuals committed to the nationwide development, promotion, utilization and commercialization of renewable energy technologies/systems for sustainable energy generation | REAP was to assist with the promotion of renewable energy throughout the country in tandem with DOE and LGUs. |
| Private Sector RE de | velopment entities | |
| Cordillera Hydroelectric Power Corporation (COHECO) | Owners of a Service Contract who were developing a 60 MW run-of-river hydropower plant in Benguet, were at the time of project design engaged in a long regulatory compliance process for the right to complete the project | COHECO was to support efforts to pilot the accelerated regulatory approval process for this 60 MW hydropower plant. COHECO was to install and commission the hydro power plant. A representative from the private sector was to be engaged in the NSC. |

| Stakeholder | Mandate | Role in DREAMS Project |
|------------------|---------------------------------------------|----------------------------------------------|
| Enfinity | Owners of a Service Contract who were | Enfinity was to support the efforts to pilot |
| Philippines | developing a 1.0 MW Camotes Solar Plant | the accelerated regulatory approval |
| Renewable | in Barangay Tiguis | process for the 1.0 MW solar plant. It was |
| Resource Inc. | | to install and commission the Solar power |
| | | plant |
| Solarus Partners | Owners of a Service Contract in partnership | Solarus was to support the efforts to pilot |
| Inc. | with SunAsia Energy who were developing | the accelerated regulatory approval |
| | a 12 MW off-grid solar PV project on | process for a 12 MW solar plant. Solarus |
| | Marinduque Island | was to invest in, install and commission |
| | | the Solar power plant |
| First Envirotech | Developers of plans to DOE for obtaining a | First Envirotech was to support the efforts |
| Alliance | Service Contract for a 2.0 MW biogas plant | to pilot clarifications for RE developers |
| Corporation | in Barangay Armenia, Tarlac City | on FiT payments, wheeling fees and grid |
| | | impact studies. It was to install and |
| | | commission the biogas power plant |

4. **FINDINGS: PROJECT STRATEGY**

The findings are based on the review criteria and questions (see Annex B), so that a link can be made between what was asked and what was found. In this Chapter a review of the strategy of the Project, in terms of its design and results framework, has been presented. The strategy of the project was the result of consultations and background analysis during project design stage and relevance to Philippines's development context.

4.1 Project design

Mid-term review questions (see Annex B)

- What is the problem being addressed by the project and are the underlying assumptions correct?
- Does the project strategy provide the most effective route towards expected/intended results?
- Were lessons from other relevant projects properly incorporated into the project design?
- How the project addresses priorities of Philippines?
- Was the project concept in line with the national sector development priorities and plans of Philippines?
- Were perspectives of those who would be affected by project decisions, those who could affect the outcomes, and those who could contribute information or other resources to the process, taken into account during project design processes?
- To what extent relevant gender issues were raised in the project design.
- Are there major areas of concern? Recommend areas for improvement.
- Does the project adequately take into account the national realities, both in terms of institutional and policy framework in its design and implementation?
- Is the project country-driven?
- If the project progress is not good, what changes could have been made (if any) to the project design in order to improve the achievement of the project's expected results during rest of the project implementation period.

4.1.1 Problem being addressed

Philippines has significant geothermal, hydropower and other renewable energy resources as well as a deregulated and privatized power industry under the Electric Power Industry Reform Act (EPIRA) in 2001. Still a significant proportion of primary fuels for power generation in the Philippines come from imported fossil fuels. One of the consequences of continued reliance on fossil fuels for power generation are rising GHG emissions. The country's grid emissions factor increased from 0.463 tonnes CO2eq/MWh in 1995 to 0.492 tonnes CO2eq/MWh in 2011. 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.

The interest in renewable energy (RE) in the Philippines has been strong since 2008. The Renewable Energy Act of 2008 and the National Renewable Energy Program (NREP) of 2011 have contributed in creating substantial interest in RE based power generation projects. Through successful implementation of NREP and enforcement of the RE Act, the Government of the Philippines targets an increase in RE based power capacity to 12,683 MW by 2020 and 15,236 MW by the year 2030¹³ which is almost triple its 2010 capacity level.

DOE circulars provide guidelines for implementing various provisions of the RE Act. RE development at the local level is framed within the Local Government Code (LGC) of 1991, enacted to "provide for a more responsive and accountable local government structure". Within this Code, there is provision for the "Government Share in the National Wealth" that defines the national levy from the development and utilization of the national wealth generated from the right of the Local Government Unit (LGU) to

¹³ As per Project Document

benefit from local RE projects. The DOE Law (RA 7638), provides for direct benefits to pertinent LGUs hosting energy resource development projects or energy generating facilities within their jurisdiction.

In Philippines, from 2002 to 2010, GEF supported the project "Capacity Building to Remove Barriers to Renewable Energy Development (CBRED)". 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 result 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. Despite these efforts to catalyse 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 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. These are issues that have emerged with the GOP'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 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.

During the PPG phase of the project, through the stakeholder consultation process specific barriers towards higher uptake of the RE in the country were identified. There is no evidence to support that the other discussions and consultations were held with the stakeholders to take into account their perspectives. However, it is implicit that such discussion would have taken place during PPG phase of the project.

4.1.2 Relevance and country drivenness

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 in section 4.1.1, 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.

At the time of project design gender issues as required under the 'UNDP Social and Environmental Screening Procedure (SESP)' were taken care. 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, 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 has the 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 doesn't have gender segregated targets for the indicators. The project as an adaptive measure is ensuring almost equal participation of women in all the training and capacity building initiatives. The project is country driven and takes into account the national realities, both in terms of institutional and policy framework in its design and implementation.

4.2 Results framework / Log-frame

Mid-term review questions (see Annex B)

- How 'SMART', (Specific, Measurable, Attainable, Relevant, Time-bound), the midterm and end-of-project targets are.
- Are the project's objectives and outcomes or components clear, practical, and feasible within its time frame?
- Has the progress so far led to, or could in the future catalyse, beneficial development effects (i.e. income generation, gender equality and women's empowerment, improved governance etc...) that should be included in the project results framework and monitored on an annual basis?
- Are the broader development and gender aspects of the project being monitored effectively?

The Results Framework / Log-frame of the project as given in the 'Project Document' was presented in Chapter 3 of the report (Table 4). Table 5 provided set of different Outputs (along with the list of activities to be performed) for each of the project Outcome of the project.

The Project Document is concise and encompasses the required details. It addresses the barriers towards larger uptake of RE in its different components and addresses 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 Results Framework of the project is being reproduced as Table 7 for easy reference.

| Objective/Outcome | Indicator ¹⁴ | Baseline | Targets End of Project |
|---------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------|
| Project Objective: To promote and facilitate the commercialization of the | • Indicator A: Cumulative direct project CO ₂ emission reductions from RE development by end-of-project (EOP), ktonnes CO ₂ | 0 | 205 |
| renewable energy (RE) markets through the removal | • Indicator B: % share of RE in the power generation mix of the Philippines | 14.4 | 35 |
| of barriers to increase 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 | 0 | 20,000 |
| | • Indicator D: Total project direct GHG emissions reductions over the lifetime of the RE capacity created by the project (ktonnes CO2eq) | 0 | 2440 |
| Outcome 1: Enforcement of a supportive policy and regulatory | • Indicator 1.1: Number of approved and enforced policies and guidelines for leveraging RE investments by Year 2 | 0 | 8 |
| environment for leveraging investment in RE | • Indicator 1.2: Number of sitios ¹⁵ with off-grid rural electrification plans using RE | 0 | 12 |
| development and applications at the local level | 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 |
| Outcome 2: Strengthened institutional | Indicator 2.1: Number of funded and implemented RE projects championed or facilitated by LGU-based RE food points. | 0 | 5 |
| increased RE investment at the local level | Indicator 2.2: Number of RE projects facilitated by operational provincial-level RE market service centers | 0 | 5 |
| | • 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 |
| Outcome 3: Capitalized RE market leads to an increased share of RE | • Indicator 3.1: Cumulative MW of installed capacity registered in the RER established in the "capitalized" RE market | 0 | 10 |
| based power capacity | • Indicator 3.2: Number of RE developers registered in the RER | 0 | 15 |
| Outcome 4a: Enhanced confidence of | • Indicator 4.1: MW of RE projects that are being developed through the PPF | 0 | 15 |
| project developers on the viability of RE projects at the local level | Indicator 4.2: Number of bankable RE plans completed by other LGUs who were interested in RE- based ensurements by Yan 2; | 0 | 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 | 10 |
| Outcome 4b: Increased number of | • Indicator 4.4: MW of installed capacity of RE projects being implemented that received support from | 0 | 5 |
| operational RE projects using proven and emerging RE technologies that boosts successful replication | Projects schig 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 | 75 |

Table 7: Results Framework / Log-Frame of the project

(modifications recommended out at the time of MTR are shown in a different colour and style

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

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

For the project objectives, when it comes to the indictors and the targets to be achieved, the level of ambition is a bit higher, particularly regarding Direct GHG emission reductions¹⁶ by the end of the project (Indicator A in the above Table) and the targeted share or RE in the generation mix (Target B in the above Table) in Philippines.

Establishment of RE plants requires a number of sequential time-consuming activities. Some of the activities required for establishing a utility scale RE facilities are identification of the location, resource assessment, identification of land, acquisition of the land, plan design, feasibility study, arrangement and mobilisation of the funds required, procurement of capital equipment etc. Many of these activities can't be carried out in parallel. The project design has envisaged cumulative direct GHG emission reduction of 205 thousand tonnes of CO2 equivalent by the end of the project. Given the time required for implementation of a RE facility, much of envisaged RE capacity would get realised only towards the end of the project implementation timelines. Such newly created RE capacity would lead to direct GHG emission reductions, but the direct GHG emission reductions will be achieved after the implementation timelines of the project. The project document mentions that the total project direct GHG emission reduction due to the project would be about 2.44 million tonnes CO2eq (over the lifetime of the RE projects supported by the DREAMS project). The 'GEF climate change mitigation tracking tool' at the time of CEO endorsement has also provided the projected figure for direct GHG emission reductions as 2.44 million tonnes of CO2eq. This projection is based on projected generation of electricity from 75 MW of installed capacity of hydropower, solar PV and biomass gasification which is envisaged to be supported under the DREAMS project. It is recommended that the projected direct reduction in the emission of GHG be taken in the results framework of the project as an additional Indicator (Indicator D) with its corresponding Target (please see recommendation 1).

Most of the direct GHG emission reductions would happen beyond the implementation timelines of the project. Thus, monitoring of the achievement of the target for this indicator would be in terms of the RE capacity created and the expectations regarding the generation of electricity due to the RE capacity created.

In case of Indicator B, footnotes 64 and 66 in the project document provides the basis for the target value of the indicator. Workings based on these footnotes are provided in Table 8 below.

| Tuble of Bubls for Turger B (us per Troject B ocument) | | | | | | |
|--------------------------------------------------------|----|-----------|----------|-----------------|-------------------|-------------------|
| | | Base year | EOP | NREB RPS target | Capacity Addition | Capacity Addition |
| | | Yr. 2014 | Yr. 2020 | Target Yr. 2030 | Base Yr. to EOP | Base Yr. to 2030 |
| Total Capacity | MW | 16200 | 20475 | 27600 | 4275 | 11400 |
| RE Capacity | MW | 2326 | 7192 | 15304 | 4866 | 12978 |
| Share of RE | % | 14.36% | 35.13% | | | |

Table 8: Basis for Target B (as per Project Document)

As can be seen from the Table the total RE capacity addition required during the implementation timelines of the project is 4866 MW. This is against the required total power generation capacity addition of 4275 MW. Thus, the entire electricity generation capacity addition required during the implementation period of the project would need to be essentially from renewable sources. This is not a practical thing to do, particularly considering that generally speaking RE is an intermittent source of power and needs to be supported by non-RE sources of supply to ensure continuous supply of electricity. The project document itself has suggested (footnote 66 of project document) that this target should be reviewed during the project, to ensure that it is commensurate with DOE's targets which are reviewed annually. It is recommended that the target value for Indicator B be reviewed and if needed revised (Please see recommendation 2).

¹⁶ Direct GHG emission reductions are those emission reductions attributable to the investments made during the project's supervised implementation period, totalled over the respective lifetime of the investments.

Except for the issues mentioned above, the log-frame given in the 'Project Document' is quite robust and serves the purpose to effectively monitor the achievement of the project objectives. Other than what has been mentioned in the above two paragraphs, the process/achievement indicators for different outcomes of the project are comprehensive and meet the standard of 'SMART'¹⁷ indicators.

As the project will remove the barriers towards RE based power generation, more such systems will get installed in future. Thus, the project in future would lead to creation of opportunities for the enterprises in the small and medium scale to become IPP, by putting up RE based power generation systems.

The development benefits of the project in terms of creation of SME enterprises for putting up RE based power generation facilities, servicing of such facilities, etc. is already visible with the GEF project supporting RE based IPPs. Although, RE based electricity generation does not provide additional benefits to women, the benefits of RE based electricity generation will be available to all the sections of the society including women. There will also be creation of more opportunities in the services sector for repair and maintenance RE based power generation facilities. Most of these beneficial impacts of the project are likely to happen over a longer period of time, beyond the project implementation time frame. Thus, monitoring of such beneficial impacts during the project implementation period is neither practical nor feasible.

¹⁷ SMART', (Specific, Measurable, Attainable, Relevant, Time-bound)

5. FINDINGS: PROGRESS TOWARDS RESULTS

This chapter of the report provides the findings of the Mid-Term Review, regarding progress made towards achievement of the results of the project in terms of different outcomes and outputs. The start date of the project is June 2016 (the date of singing of the project document). Actual implementation of the project started much later in July 2017 (with the establishment of the PMU). Considering the gap between the time, when the project was planned and the actual start of the project implementation, the project 'Implementation Partner' decided to conduct an internal pre-inception workshop (20 Sept 2017) to validate the Activities (for achieving the Outputs) provided in the 'Project Document' vis a vis the situation regarding the current and future plans of the DOE. Accordingly, at the time of the inception of the project corrections/ modifications were carried out in the activities for some of the Outputs. Thus, the full inception planning involving the stakeholders was conducted. The first PSC meeting followed on 21 Dec 2017. The project closure date as per the Project Document is 30 June 2021¹⁸. As the project is seeking a no cost extension by one year the expected operational closure¹⁹ of the project is 30 June 2022. During the initial period of project implementation there was not much progress. However, subsequently the project implementation team took the adaptive measures to do the catching up.

As mentioned in the above paragraph, during the inception meeting of the project, some changes in the activities to be carried out for attaining the Outputs and Outcomes of the were carried out. These changes have been taken into account, while assessing the progress towards achievements of the results. As a part of MTR, a couple of recommendations has been made in the log-frame of the project (in the previous chapter of the report). As these recommendations are still to be approved, they have not been considered while reviewing the progress towards achievements of the results. As part the procedures the rating for the progress towards achievements needs to be done as per the approved (in this case the original indicators and targets provided in the 'Project Document') indicators and the corresponding targets.

During the MTR, review of progress towards results has been done in terms of indicators for different outcomes in the log-frame of the project as provided in the 'Project Document' as reproduced below as Table 9 and the corresponding set of Outputs (please see Table 5).

| Objective/Outcome | Indicator ²⁰ | Baseline | Targets End of Project |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------|
| Project Objective: | • Indicator A: Cumulative direct project CO ₂ emission | 0 | 205 |
| To promote and facilitate the | reductions from RE development by end-of-project | | |
| renewable energy (RE) markets through the removal | (EOP), ktonnes CO₂ Indicator B: % share of RE in the power generation mix of the Philippines | 14.4 | 35 |
| of barriers to increase investments in RE based | • Indicator C: Number of sitio households in far-flung areas that have obtained access to reliable sources of | 0 | 20,000 |
| power generation projects | renewable energy due to the Project | | |
| | • Indicator D: Total project direct GHG emissions reductions over the lifetime of the RE capacity created by the project (ktonnes CO2eq) | 0 | 2440 |
| Outcome 1: | • Indicator 1.1: Number of approved and enforced | 0 | 8 |
| Enforcement of a supportive | policies and guidelines for leveraging RE investments | | |
| environment for leveraging investment in RE | by rear 2 | 0 | 12 |

Table 9: Results Framework / Log-Frame of the project

(modifications recommended at the time of MTR are shown in a different colour and style

¹⁸ 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

¹⁹ The project is seeking a no cost extension of one year

²⁰ The numbering of the indicators has been done at the MTR to ease discussion and reference in the report

| Objective/Outcome | Indicator ²⁰ | Baseline | Targets End of Project |
|---------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------|
| development and applications at the local level | Indicator 1.2: Number of sitios²¹ 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 | 50 |
| Outcome 2: Strengthened institutional capacity that leads to | • Indicator 2.1: Number of funded and implemented RE projects championed or facilitated by LGU-based RE focal points | 0 | 5 |
| increased RE investment at the local level | 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 | 0 | 5 |
| | designed based on information and technical advice obtained from the established RE knowledge platform | 0 | 6 |
| Outcome 3: Capitalized RE market leads to an increased share of RE | • Indicator 3.1: Cumulative MW of installed capacity registered in the RER established in the "capitalized" RE market | 0 | 10 |
| based power capacity | • Indicator 3.2: Number of RE developers registered in the RER | 0 | 15 |
| Outcome 4a: Enhanced confidence of | • Indicator 4.1: MW of RE projects that are being developed through the PPF | 0 | 15 |
| project developers on the viability of RE projects at the local level | • 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 |
| | 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 |
| Outcome 4b: Increased number of | • Indicator 4.4: MW of installed capacity of RE projects being implemented that received support from | 0 | 5 |
| operational RE projects using proven and emerging RE technologies that boosts successful replication | 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 | 75 |

Mid-term review questions (please see Annex B)

Progress towards results

• Review the log-frame indicators against the progress made towards the end-of-project targets using the 'Progress Towards Results Matrix', with progress indicators for outcomes/outputs, indicating baseline and target levels, as well as current level and/or reported in PIR linked with ratings for each outcome.

Global environmental impacts

- Results in terms of contribution to sustainable development benefits, as well as global environmental benefits (direct and indirect GHG emission reductions)
- Compare and analyse the GEF Tracking Tool at the Baseline with the one completed at the time of mid-term review
- What is the status and issues with employing RE technologies for electricity generation?
- What are the remaining barriers to achieving the project objective in the remainder of the project?
- 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?

5.1 **Progress towards attainment of outcomes and outputs**

This section of the report provides an overview of the progress towards results for different Outcomes of the project. In the Tables below, the column with 'Level at PIR' is based on the second PIR (for the year 2019. Although, the Guidance for Conducting Mid-term Reviews of UNDP-Supported, GEF-

²¹ A sitio typically consists of 20-50 households with an average of 5 persons per household

Financed Projects specifies that the level at first PIR be reported, we have chosen to provide the values of the second PIR. This is considering that there was not much progress at the time of preparation of first PIR (for the year 2018) as the actual project implementation started late. Further, the project is requesting an extension for one year to fully achieve the results and benefits of the project.

The progress towards results have been assessed for different Outcomes first, 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 frame-work and in terms of the progress towards achievement of results 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 for the Outcomes.

5.1.1 Progress towards results – Outcome 1

The Outcome 1 of the project pertains to enforcement of the supportive policy and regulatory environment that will leverage increased investment in RE development and application at the local level. Table 10 below provides an overview of the progress towards achievement of results for Outcome 1 of the project against the set of indicators and the targets as listed in Table 9.

| Indicator | Baseline Level ²² | Target ²³ | Level at PIR ²⁴ | Status at MTR ²⁵ | Rating at MTR ²⁶ |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|---------------------------------------------------------------------------|
| • Indicator 1.1: Number of approved and enforced policies and guidelines for leveraging RE investments by Year 2 | 0 | 8 | 6 | 6 Ongoing activities for others | MS (Pl. see the write up for justification of the Rating) |
| • Indicator 1.2: Number of sitios with off-grid rural electrification plans using RE | 0 | 12 | 0 | 0 | S (Pl. see the write up for justification of the Rating) |
| • 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 RE manufacturing industry study will be conducted to identify industry needs, gaps and opportunities | 0 | MU (Pl. see the write up for justification of the Rating) |

Table 10: Progress towards results: Outcome 1

Indicator 1.1

The project supported development /approval of the following six policies for levering investments in RE projects.

²² As per Project Document

Yellow= On target to be achieved Red= N

²³ End of Project Target unless specified otherwise (As per Project Document)

²⁴ As reported in PIR for the year 2019 (Self-Assessment)

²⁵ Indicator Assessment Key: Green= Achieved

²⁶ HS= Highly satisfactory, S= Satisfactory, MS= Moderately Satisfactory, MU= Moderately Unsatisfactory, U= Unsatisfactory, HU= Highly Unsatisfactory

- RE Market (REM) Rules approved in December 2019. The REM is a market for the trading of RE Certificates (RECs) and is intended as a venue for RPS mandated participants to comply with their RPS requirements by enabling them to buy and sell RECs.
- Omnibus Guidelines Governing the Award and Administration of Renewable Energy (RE) Service and Operating Contracts and the Registration of RE Developers (approved in 2019). This will further mainstream the applications of RE projects in the country.
- Guidelines Governing the Issuance of Operating Permits to Renewable Energy Suppliers under the Green Energy Option Program (GEOP)
- Enhanced Net Metering: public consultations completed, finalised for approval. To further increase RE projects in the variable RE sector.
- The Guidelines for the Green Energy Option Program and RE Safety; Code of Practise on Renewable Energy Safety, Health and Environment Rules and Regulations (RESHERR Code of Practice) are being finalized for approval.
- The updating of the National RE Program through the project is continuing and recently completed a technical workshop with the National Renewable Energy Board.

The progress towards achievement of the target for Indicator 1.1 is there. However, considering that the target for the indicator was to be achieved by the end of the second year of project implementation, progress is delayed. The delay is partially due to the delayed start of the project. The project is continuing the work to support development of more policies and guidelines to leverage the investment in the RE projects in the country. Due to delay in the achievement of the target value for the indicator, the benefits of the developed guidelines/policies would get realised only partially. Due to this reason the progress towards results for indicator 1.1 is rated as Moderately Satisfactory.

Indicator 1.2

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. The project has carried out consultations with the electricity distribution companies in the two provinces. Discussions were also carried out with 9 municipalities in these two provinces. The progress towards results for Indicator 1.2 is rated as Satisfactory.

Indicator 1.3

At the time of MTR, there is no activity towards achievement of the target for Indicator 1.3. The project design has provided for the activities to support achievement of the target for this indicator under Output 1.5. The DREAMS project is in the process of hiring a consultant to carry out RE manufacturing industry study to identify industry needs, gaps and opportunities. The report from the consultant is expected to be available by June 2020. Rest of the activities under Outcome 1.5 will be carried out once the report is available. Thus, the achievement of targets for Indicator 1.3 is unlikely. Accordingly, the progress towards results for the target for indicator 1.3 is being rated as Moderately Unsatisfactory.

The project design has provided a set of Outputs along with the matching set of activities for achieving Outcome 1 of the project. Different Outputs for Outcome 1 as per Project Documents are:

Output 1.1: Approved and enforced cohesive national RE policy, implementing rules and mechanisms.

- Output 1.2: Approved and enforced local ordinances, and policies aligned with national RE objectives.
- Output 1.3: Strengthened and approved guidelines on RE penetration into grids.
- Output 1.4: Completed assessments on real cost of RE for formulation of tariffs
- Output 1.5: Approved policy recommendations for promoting local manufacturing and assembly of quality RE systems.

The following paragraphs and tables provide the details of the activities and the status of implementation of the activities at the time of MTR.

Output 1.1: Approved and enforced cohesive national RE policy, implementing rules and mechanisms

Output 1.1 is to be delivered through the formulation, promotion, awareness raising, lobbying for approval and enforcement of clear policy directions on RE electricity market development. To deliver this output, the project design has provided for specific set of activities. Table 11 provides the details of the activities for Output 1.1, along with the status of implementation of the activities at the time of the MTR. The Table also provides details of the corrections/modifications in the activities done at the time of the inception of the project.

| Activities" | Modifications at Project | Status at MIIR |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.1.1 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 | 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 Act for One Stop Shop for RE is already 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. |
| 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 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 | 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 | Not done |
| 1.1.3 Drafting of policy, by Year I, 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 1.1.5 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. | capacity building for LGUs on LREP are ongoing |
| 1.1.4 Revise and prepare updated and enforced guidelines of REMB on RE | 1.1.4 will include activities that will lead to automation of | Permitting was transferred from REMB to the office of Secretary. |

Table 11: Status of Activities for different Activities for Output 1.1 of the project

²⁷ Activities has been numbered at the time of MTR for the sake of easy reference in the MTR report

| Activities ²⁷ | Modifications at Project | Status at MTR |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Inception | |
| national/local contract awarding, permitting and administration. This would contribute to streamlining approvals of RE Service Contracts 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; | service contracts awarding and permitting. | Now it has been rolled back to REMB. TOR has been prepared for appointment of a consultant for automation of service contracts. The activity on the revised guidelines was completed via 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. |
| 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. | 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 | DOE decided to conduct the revision in two stages A review of the 10-year of RE Act in Philippines (RE Decade Report) (completed) 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. |

The progress towards results for Output 1.1 is rated as **Satisfactory**.

Output 1.2: Approved and enforced local ordinances, and policies aligned with national RE objectives

The delivery of this output involves coordination and technical assistance to prepare local ordinances that will be enforced to increase the confidence of the RE developers to obtain RE project approvals in a timely manner at the local level. To deliver this output, the project design has provided for specific set of activities. Table 12 provides the details of the activities for Output 1.2 along with the status of their implementation. The Table also provides details of the corrections/modifications in the activities

carried at the time of the inception of the project.

| Activities | Modifications/ Corrections in | Status of Implementation |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Activities at Project Inception | |
| 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 | 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. |
| 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; 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: | The training workshops will include: capacity training to LGUs in the areas of local taxation, economic valuation of public assets. e.g. land. | 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 This is being done as a part of 'Localized RE Planning Capacity Building program' |
| 1.2.4 Harmonization of the RE approval process that encompasses both national and local requirements; and | | Resolutions by LGUs for Palawan and Iloilo is already in place. More work is being done |
| 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). | | This is being done as a part of 'Localized RE Planning Capacity Building program' |

Table 12: Status of Activities for different Activities for Output 1.2 of the project

The progress towards results for Output 1.2 is rated as Satisfactory.

Output 1.3: Strengthened and approved guidelines on RE penetration into grids.

The delivery of Output 1.3 will involve coordination and technical assistance to prepare clear guidelines that will define mechanisms to assure grid security with the injection of power from a new RE project. The provision of clear guidelines will accelerate NGCP approval of grid impact studies.

To deliver this Output, the project design has provided for specific set of activities. Table 13 provides the details of the activities for Output 1.3 along with the status of their implementation. The Table also provides details of the corrections/modifications in the activities carried at the time of the inception of the project.

Table 13: Status of Activities for different Activities for Output 1.3 of the project

| Activities | Modifications at Project | Status of Implementation |
|------------------------------------------|--------------------------|---------------------------------------|
| | Inception | |
| 1.3.1 Organize and conduct outreach and | | NGCP is carrying out this activity on |
| stakeholder coordination activities with | | its own. The DREAMS project |
| NGCP and local DUs (to provide more | | participates in the meetings and |

| Activities | Modifications at Project Inception | Status of Implementation |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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-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: | | 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. |
| 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; | | NGCP is carrying out this activity on its own. The DREAMS project participates in the meetings and consultations organized by NGCP |
| 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 |

As the activities for Output 1.3 are being conducted by NGCP on its own, the progress towards results for Output 1.3 is not assessed as part of MTR,

Output 1.4: Completed assessments on real cost of RE for formulation of tariffs.

The delivery of Output 1.4 involves study of more realistic costs of RE and electricity in off-grid areas and the development of a strategy for the development of RE in these areas. To deliver this output, the activities which are to be carried out are provided on Table 14. The Table 14 also provides the status of their implementation. The Table also provides details of the corrections/modifications in the activities to be carried out, at the time of the inception of the project.

Table 14: Status of Activities for different Activities for Output 1.4 of the project

| Activities | Modifications at Project Inception | Status of Implementation |
|-------------------------------------|------------------------------------|-----------------------------------------------------|
| 1.4.1 Conduct a study during Year 3 | | As per project document, this activity |
| that involves the collection of all | | is to be carried out in the 3 rd year of |
| technical specifications and | | project implementation. |

| Activities | Modifications at Project Inception | Status of Implementation |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 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; | | Planned under the workplan 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. |
| 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 |
| 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; | | This is no longer applicable since the policy for the RPS Off-grid was already in place. |
| 1.4.4 Conduct studies for DOE on policies to encourage RE development including a study of off-grid tariffs and RECs. | | A consultant will be hired for this activity. TOR for the consultancy are being worked out |

The progress towards results for Output 1.4 is rated as Satisfactory.

Output 1.5: Approved policy recommendations for promoting local manufacturing and assembly of RE

The delivery of this output involves implementation of the activities that enhances the national supply chain for RE equipment. Successful local manufacture and supply of RE equipment is expected to reduce RE electricity costs. As per the 'Project document' to deliver this output, the activities which are to be carried out are provided in Table 15. The Table also provides details of the corrections/modifications in the activities carried at the time of the inception of the project.

| Activities | Modifications at Project Incontion | Status of Implementation |
|---------------------------------------|------------------------------------|------------------------------------------|
| 1.5.1 Can dust an assessment of the | Woull cations at Project Inception | A second tent will be bined for this |
| 1.5.1 Conduct an assessment of the | | A consultant will be filled for this |
| manufacturing industry by Voor 1 | | heing worked out |
| to develop a strategy to improve | | being worked out. |
| the least manufacturing industry | | |
| for DE agginment and parts. This | | |
| for RE equipment and parts. This | | |
| in continue and their subsequent | | |
| anhancement to estaluze | | |
| enhancement to catalyze | | |
| manufacturara Special | | |
| considerations will be taken for | | |
| considerations will be taken for | | |
| there is a high cost of transporting | | |
| acuipment and where | | |
| consignment arrangements must | | |
| be considered to reduce the cost | | |
| Pacommandations for follow up | | |
| will be provided: | | |
| 1.5.2 Assessment of the conscitut for | | Still to be done |
| testing of new PE products on the | | The activity is included with 1.5.1 |
| market as well as quality of | | The activity is included with 1.5.1. |
| 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: | | |
| 1.5.3 Review and strengthen power | | Still to be done |
| meter quality standards by Year 1 | | It is recommended to fast track this |
| While it is in the interest of the | | activity. Please see recommendation |
| RE developer to procure the best | | 6 |
| quality meters, those that are | | 0. |
| 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: | | |
| 1.5.4 Conduct a workshop for DOE in | | The report from the consultant for |
| Year 2 to present a summary of | | activity 1.5.1 will be available by June |
| recommendations to improve the | | 2020. This activity will be carried out |
| involvement of local businesses in | | after that. |
| 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. | | |

Table 15: Status of Activities for different Activities for Output 1.5 of the project

It is recommended to develop and enforce performance standards for RE equipment (Solar PV, Wind turbines etc.) and components like inverters, meters, control systems. Support this initiative with the establishment of accredited testing facilities (please see recommendation 6). Enforcement of performance standards will ensure that only equipment of good quality gets imported in the country. This over a period of time will increase the confidence level of the investors in the technology. The project already has some provisions towards such activities under Outcome 1.5. It is recommended that implementation of these activities be expedited. For the additional suggestion to support creation of an accredited testing facility some of the funds under recommendation 3 may also be utilized. Accredited

lab may be established within an appropriate government/institution owned facility. The performance of activities for Output 1.5 is directly related to Indicator 1.3. The progress towards results for Output 1.5 is rated as Moderately Unsatisfactory.

Table 16 provides the Summary of the ratings for different Outputs for Outcome 1 of the project.

| Table 10: Summary of the Katings for unterent Outputs of Outcome 1 | | | |
|--------------------------------------------------------------------------------|-----------------------------------------------------------|--|--|
| Output | Rating at MTR for progress towards achievement of results | | |
| Output 1.1: Approved and enforced cohesive national RE policy, | Satisfactory | | |
| implementing rules and mechanisms. | | | |
| Output 1.2: Approved and enforced local ordinances, and policies | Satisfactory | | |
| anglied with hational KE objectives. | | | |
| 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 | Satisfactory | | |
| tariffs | | | |
| Output 1.5: Approved policy recommendations for promoting local | Moderately Unsatisfactory | | |
| manufacturing and assembly of quality RE systems. | | | |

Table 16: Summary of the Ratings for different Outputs of Outcome 1

In view of the achievements for the indicators (Indicators 1.1, 1.2 and 1.3) and keeping in mind the progress towards results for different Outputs, the progress towards results for Outcome 1 of the project is rated as Moderately Satisfactory.

5.1.2 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 increased RE investment at the local level. Table 17 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 in Table 9.

| Indicator | Baseline Level | Target | Level at PIR | Status at MTR | Rating at MTR |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------|--------------|---------------------|------------------------------------------------------------------------------|
| • Indicator 2.1: Number of funded and implemented RE projects championed or facilitated by LGU-based RE focal points | 0 | 5 | 0 | 0 | S (Pl. see the write up for justification of the Rating) |
| • Indicator 2.2: Number of RE projects facilitated by operational provincial-level RE market service centers | 0 | 5 | 0 | 0 | Not Assessed (Pl. see the write up for justification of the Rating) |
| • Indicator 2.3: Number of RE projects that were designed based on information and technical advice obtained from the established RE knowledge platform | 0 | 06 | | | MU (Pl. see the write up for justification of the Rating) |

Table 17: Progress towards results: Outcome 2

Indicator 2.1

As mentioned before (please see the paragraph above for Output 1.2), the Local RE Planning Capacity Building Program (LREP Cap Build) being run by the DREAMS project is engaging with the Provincial Government Units of Iloilo and Palawan. There are five municipalities in Palawan and three in Iloilo that will be the focal points to champion RE projects. The project is engaging with these Local Government Units (municipalities) and the two Electric Cooperatives (responsible for power distribution activities in the provinces). This will lead to identification of RE projects in the LGUs that will need technical assistance on resource assessment. The priority RE projects that will be championed by RE focal points is yet to start (scheduled for the year 2020). The progress towards results for Indicator 2.1 is rate as Satisfactory.

Indicator 2.2

Affiliated RE centres (25 numbers) were established by the DOE to help promote and provide technical assistance to RE projects in their respective areas of coverage. However, most of these centres are not functional due to non-fulfilment of the condition that the 50% of the funds required for the operations were to be provided by the host institutions (balance 50% was to come from DOE).

The establishment of Market Service Centres (MSCs) did not take off and the operation of Affiliated RE Centres (ARECs) dwindled. The DOE policy on supporting ARECs changed several times from providing specific funding support to conditional funding to no funding to divulging the ARECs function to DOE field offices. A new policy was recently issued by the DOE to revitalize the ARECs but will be on a need basis of the DOE and will be under competitive selection process. Redefinition of the structure and function of the MSCs as far as the DREAMS project is concerned is needed. The project is currently treating existing ARECs, ECs, LGUs Renewable Energy Expert Group (Municipal and provincial level) as MSCs.

The Affiliated RE Centre for Palawan hosted by Central Philippines University and is engaged in RE technology development. However, this AREC is no more being supported by DOE, based on the Commission of Audit's finding that private universities may not receive funding from the DOE support. As the ARECs are no more functional, **the progress towards progress for this indicator has not been assessed.**

Indicator 2.3

At the time of MTR, the RE knowledge platform was not in place. The project was discussing the modalities for the establishment of the RE knowledge platform. At the time of MTR, consultations were being held with web and system developers to gather information on the state of the art in web/KM portal development. Even if the procurement of the services of web and system developments is completed at the earliest still the desired results due to creation of the RE knowledge platform would significantly fall short of the expectations. **The progress towards results for Indicator 2.3 is rated as Moderately Unsatisfactory.**

The project design has provided a set of Outputs along with the matching set of activities for achieving Outcome 2 of the project. Different Outputs for Outcome 2 as per Project Documents are;

Output 2.1: Harmonized local level development plans and RE programs with national DOE programs

Output 2.2: Streamlined system of issuance of permits and licenses

Output 2.3: Focal points established within LGUs

Output 2.4: Operational provincial-level market service centres

Output 2.5: Established and operational RE knowledge platforms

The following paragraphs and tables provide the details of the activities and the status of implementation of the activities at the time of MTR.

Output 2.1: Harmonized local level development plans and RE programs with national DOE programs

The delivery of this output will involve coordination and technical assistance to integrate local RE and economic development plans with national RE plans for a selected number of pilot provinces and their LGUs. Table 18 provides the details of the activities for Output 2.1 along with the status of implementation of the activities at the time of the MTR. The Table also provides details of the corrections/modifications in the activities carried at the time of the inception of the project.

| Activities | Modifications at | Status at MTR |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Project Inception | |
| 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. | 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. |
| 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 | The project is in the process of identifying new partner companies as the projects of the private companies which were initially taken on board are no more working. 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) |
| 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 | | 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 |

Table 18: Status of Activities for different Activities for Output 2.1 of the project

The progress towards results for Output 2.1 is rated as Satisfactory.

Output 2.2: Streamlined system of issuance of permits and licenses

RE project developers are required to obtain multiple number of permits. The delivery of this output entails streamlining the permitting process to provide confidence to RE developers in the entire permitting process for the commercial application of RE resources. To deliver this output, the project design has provided for specific set of activities. Table 19 provides the details of the activities for Output

2.2 along with the status of their implementation. The Table also provides details of the corrections/modifications in the activities carried at the time of the inception of the project.

| Activities | Modifications/ Corrections in | Status of Implementation |
|-------------------------------------------------------------|----------------------------------------|-----------------------------------------|
| | Activities at Project Inception | |
| 2.2.1 Capacity development of DOE | This Activity is already being done by | Although this activity is being carried |
| personnel on the evaluation and | the Energy Investment Coordinating | out by the Energy Investment |
| issuance of RE Service contracts. | Council | Coordinating Council, the project |
| In addition to ongoing DOE | | supported preparation of an updated |
| training for the issuance and | | guide book on micro-hydro |
| management of Service Contracts, | | development. |
| incremental workshops will be | | |
| conducted with NWRB and | | |
| DENR, as well as the analysis of | | |
| the recently imposed | | |
| (2 workshops in Years 1 and 2 | | |
| (2 workshops in Tears 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 | | |
| for DE projects A polyais and | | |
| clarification on a recently | | |
| imposed requirement for RF | | |
| developers due to its perceived | | |
| overlaps with the Environmental | | |
| Impact Statement (EIS) System; | | |
| 2.2.2 Conduct coordination meetings | This Activity is being done by the | With the changes made at the time of |
| among agencies such as National | Energy Investment Coordinating | inception, the project is no more |
| Commission on Indigenous | Council | supporting this activity |
| Peoples (NCIP) and Environment | | |
| Management Bureau (EMB) of | | |
| the DENR on streamlining the | | |
| approval process for (i) | | |
| compliance of the RE project | | |
| application to the Indigenous | | |
| People's (IPs) Right Act, as well | | |
| as (11) the Environmental Classropae Cartificate (ECC) | | |
| under the FIS respectively: | | |
| 2.2.3 Assessing and clarifying the | | With the changes made at the time of |
| consistency in the determination | | inception, the project is no more |
| of Government and IP share of | | supporting this activity. |
| revenues generated by RE | | |
| resources that are developed and | | |
| utilized from national wealth. | | |
| This will be completed in Year 1; | | |
| 2.2.4 Assessment and provision of | | With the changes made at the time of |
| recommended measures to | | inception, the project is no more |

Table 19: Status of Activities for different Activities for Output 2.2 of the project
| Activities | Modifications/ Corrections in Activities at Project Inception | Status of Implementation |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| streamline the long process at provincial offices to convert public tenured lands to commercial land on which RE projects are located; and | | supporting this activity. |
| 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. |

Almost all the activities under Output 2.2 are now being done by Energy Investment Coordinating Council. The progress towards results of Output 2.2 is not assessed at the time of MTR.

Output 2.3: Focal points established within LGUs.

The delivery of this output entails the implementation of activities to augment DOE's M&E capacity in the field offices or MSCs and strengthen linkages with LGUs. To deliver this output, the specific set of activities which ae required to be carried out are given in Table 20. The Table also provides details of the corrections/modifications in the activities carried at the time of the inception of the project.

| Activities | Modifications at Project Inception | 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 (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 | 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. |
| 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. | | This activity is yet to be carried out. |

Table 20: Status of Activities for different Activities for Output 2.3 of the project

The progress towards results for Output 2.3 is rated as Moderately Satisfactory.

Output 2.4: Operational provincial-level market service centers

This output is to be produced through the conduct of activities for revitalizing the DOE-supported MSCs that would assist RE project developers with a "one-stop shop" facility providing services to expedite the RE approval process and accelerate RE project development in concert with LGUs and local partners. To deliver this output, the activities which are to be carried out are provided in Table 21. The Table xx also provides the status of their implementation. The Table also provides details of the corrections/modifications in the activities to be carried out, at the time of the inception of the project.

| Activities | Modifications at | 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; | | 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. |
| 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; | | MSCs are not working. |
| 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; | | 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 |
| 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 | | 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. Stakeholders 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. |
| 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 that their RE project applications will be efficiently processed. Information from the RE resource assessments will be made available on the website. | | No progress reported To be included in the REMB MIS and RE Knowledge Portal. Stakeholders 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. |

Table 21: Status of Activities for different Activities for Output 2.4 of the project

The progress towards results for Output 2.4 is rated as Moderately Unsatisfactory.

Output 2.5: Established and operational RE knowledge platforms

This output will be delivered through activities that will augment DOE efforts to raise awareness of RE development in the Philippines. As per the 'Project document' to deliver this output, the activities which

are to be carried out are provided in Table 22. The Table also provides details of the corrections/modifications in the activities carried at the time of the inception of the project.

| Activities | Modifications at Project Inception | Status of Implementation |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2.5.1 Formulation of a communication strategy for the Project; | | This activity is still be to done. It is planned under the workplan for the year 2020. |
| 2.5.2 Production and screening of 2 Public Service Announcements by Year 3; | | To be scheduled |
| 2.5.3 Production and screening of a Project Documentary by EOP; | | To be scheduled |
| 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). | | Yet to be done To be included in the REMB MIS and RE Knowledge Portal. Stakeholders 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. |

Table 22: Status of Activities for different Activities for Output 2.5 of the project

The progress towards results for Output 2.5 is rated as Unsatisfactory.

Table 23 provides the Summary of the ratings for different Outputs for Outcome 2 of the project.

Table 23: Summary of the Ratings for different Outputs of Outcome 2

| Output | Rating at MTR for progress |
|----------------------------------------------------------------------|--------------------------------|
| | towards achievement of results |
| Output 2.1: Harmonized local level development plans and RE programs | Satisfactory |
| with national DOE programs | |
| 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 centres | Moderately Unsatisfactory |
| Output 2.5: Established and operational RE knowledge platforms | Unsatisfactory |

In view of the achievements for the indicators (Indicators 2.1, 2.2 and 2.3) and keeping in mind the progress towards results for different Outputs, the progress towards results for Outcome 2 of the project is rated as Moderately Satisfactory.

5.1.3 Progress towards results – Outcome 3

The Outcome 3 of the project addresses the barrier relating to the absence of a functional RE Market that represents tangible government measures to ensure compliance with the mandated utilization of RE generation and spur the growth of the RE industry. The outcome resulting from the outputs from this component will be a "capitalized" RE Market and an accompanying RE registrar that will contribute to an increased share of RE based power capacity, and an increased number of RE project developers at the local level. Table 24 below provides an overview of the progress towards achievement of results for Outcome 3 of the project against the set of indicators and the targets as listed in Table 9.

| Indicator | Baseline Level | Target | Level at PIR | Status at MTR | Rating at MTR |
|----------------------------------------------------------------------------------------------------------------------------|-------------------|--------|--------------|------------------|--------------------------------------------------------------------------|
| Indicator 3.1: Cumulative MW of installed capacity registered in the RER established in the "capitalized" RE market | 0 | 10 | 0 | 0 | S (Pl. see the write up for justification of the Rating) |
| Indicator 3.2: Number of RE developers registered in the RER | 0 | 15 | 0 | 0 | S (Pl. see the write up for justification of the Rating) |

Table 24: Progress towards results: Outcome 3

Indicator 3.1

The procurement for the development of the RE Register (RER) named 'Philippine RE Market System (PREMS)' has been carried out. A team has been formed to oversee the development and deployment of PREMS. The team has representatives from the relevant stakeholders (DOE-REMB, DOE-EPIMB, DOERELS, PEMC). Delivery and installation of the hardware completed. On the software side of PREMS, the exercise of functional validation has already been carried out. The approval of the Renewable Energy Market (REM) Rules and the identification of the final institution that will operate the PREMS is still pending and affecting the deployment of PREMS. PREMS will issue, manage and verify RE Certificates (RECs) corresponding to the energy generated by eligible RE facilities. The Registrar will be the platform to initiate the buying and selling of RECs for RE Market operations. Once the PREMS is operational RE based facilities will be registered. **The progress towards results for Indicator 3.1 is rated as Satisfactory.**

Indicator 3.2

Once the PREMS is operational, RE suppliers with eligible RE facilities and other mandated participants will register to the PREMS. The progress towards results for Indicator 3.2 is rated as Satisfactory.

The project design has provided a set of Outputs along with the matching set of activities for achieving Outcome 3 of the project. Different Outputs for Outcome 3 as per Project Documents are;

Output 3.1: Completed comprehensive market assessments

Output 3.2: Established "capitalized" RE markets complete with RE Registrar and operational support

The following paragraphs and tables provide the details of the activities and the status of implementation of the activities at the time of MTR.

Output 3.1: Completed comprehensive market assessments

The "market assessments" is expected to integrate renewables in the electricity markets and market policy mechanisms of the RPS to develop the "capitalized" RE Market. Table 25 provides the details of the activities for Output 3.1 along with the status of implementation of the activities at the time of the MTR. The Table also provides details of the corrections/modifications in the activities done at the time of the inception of the project.

Table 25: Status of Activities for different Activities for Output 3.1 of the project

| Activities | Modifications at | Status at MTR |
|----------------------------------------------------------|--------------------------|-----------------------------------|
| | Project Inception | |
| 3.1.1 Forecasting of energy mix and determination of the | | This activity is still to be done |
| infrastructure requirements for each energy mix. This | | The RE forecasting is included in |
| will upgrade current forecasting methodology that does | | the revised NREP (2020-2040) |
| not consider the variability of RE plant outputs and | | currently being prepared by DOE |
| will include an inventory of proposed RE projects and | | with the support from the |

| Activities | Modifications at Project Incention | Status at MTR |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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: | 110jeer meepion | DREAMS project. The revised NREP will be an input to the Philippine Energy Plan (PEP) including the Transmission Development Plan (TDP). |
| 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). |
| 3.1.3 Evaluating the economics of RE plant operations and the projected impact of market settlements from REC on the RE project; | | This activity is still to be done. Please see recommendation 5 as well. |
| 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 | 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. |
| 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); | | This is an ongoing activity being done by NREB |
| 3.1.6 Developing market monitoring tools and compliance mechanisms that would discourage non-competitive behavior such as hoarding of RECs; | | This activity is still to be done. It is planned for the year 2020. |
| 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 |
| 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; | | 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 |
| 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. | | This activity has been partially completed. |

The progress towards results for Output 3.1 is rated as Moderately Unsatisfactory.

Output 3.2: Established "capitalized" RE markets complete with RE Registrar and operational support

The delivery of Output 3.2 involves implementation of the activities required to operationalize the REM including setup of the hardware and software for the REM and the RE Registrar, and training assigned PEMC personnel to operate and manage the RE Market, and to ensure the REM's transactions are compliant with the set rules and regulations for the granting of RECs. The activities to be carried out for Output 3.2 are contributing towards achievement of the targets for Indicators 3.1 and Indicator 3.2 Table 26 provides the details of the activities for Output 3.2 along with the status of their implementation. The Table also provides details of the corrections/modifications in the activities carried out at the time of the inception of the project.

| Activities | Modifications/ Corrections in | Status of Implementation |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|---------------------------------------------------------------------------------------------|
| | Activities at Project Inception | |
| 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. | | This is an ongoing activity |

Table 26: Status of Activities for different Activities for Output 3.2 of the project

The progress towards results for Output 3.2 is rated as Satisfactory.

Table 27 provides the Summary of the ratings for different Outputs for Outcome 3 of the project.

Table 27: Summary of the Ratings for different Outputs of Outcome 3

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

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 progress towards results for Outcome 3 of the project is rated as Satisfactory.

5.1.4 Progress towards results - Outcome 4a

The Outcome 4a of the project is to address the barriers related to the lack of successful RE projects in the country. The Outputs 4.1 to 4.4 will contribute to the achievement of Outcome 4a. Table 28 below provides an overview of the progress towards achievement of results for Outcome of the project against the set of indicators and the targets as listed in Table 9.

| Indicator | Baseline Level | Target | Level at PIR | Status at MTR | Rating at MTR |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------|-----------------|------------------|--------------------------------------------------------------------------|
| • Indicator 4.1: MW of RE projects that are being developed through the Project Preparatory Fund (PPF) | 0 | 15 | 0 | 0 | U (Pl. see the write up for justification of the Rating) |
| • 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 | 0 | 0 | S (Pl. see the write up for justification of the Rating) |
| • 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 | 0 | 0 | MS (Pl. see the write up for justification of the Rating) |

Table 28: Progress towards results: Outcome 4a

Indicator 4.1

Project Preparatory Fund (PPF) to facilitate development and implementation of the RE projects could not be established till the time of MTR. As per the project team there are issues with the creation and operationalising the PPF. The issues include the need to follow the procurement procedures while selecting the beneficiaries for the PPF. TORs for a consultancy for development of the PPF guidelines/mechanism were prepared, but the procurement of the consultancy could not be accomplished. **The progress towards results for Indicator 4.1 is rated as Unsatisfactory.**

Under outcome 4a, there is provision for US\$1 million to design financial instruments to facilitate funding of RE projects by the banks. Somehow this provision could not be implemented till the time of MTR. This is one of the reasons for lower utilization of the GEF funding by the project. It is recommended that the funds available may be utilized in an expeditious manner (please see recommendation 4). Some of the ways to utilise this money, which are in line with the overall project objectives and outcomes are as follows:

- Grant part capital subsidy for RE projects in non-viable/difficult areas established by private sector parties on competitive bidding basis invited by LGUs or Electric cooperatives,
- Provide part grants to LGUs (balance coming from LGUs) for establishing community managed small RE projects,
- Provide 'interest rate drawdown support' to the RE projects being established in difficult areas,
- Provide performance-based incentives (in terms of Peso/kWh) for RE based projects. The selection
 of projects to be supported maybe done while inviting the parties to establish RE based power
 projects.

This fund can be leveraged not only for achieving the target for Indicator 4.1 but also for achieving the targets for Indicators 4.2, 4.4 and 4.5.

Indicator 4.2

Activities for achieving the target for Indicator 4.2 has been clubbed with those for Outcome 2 of the project. For the purpose the project has initiated the 'Localized RE Planning (LREP)' program. Under the LREP the project is discussing preparation of bankable RE plans, with five LGUs in the province of Palawan and three LGUs in Iloilo. The progress towards results for Indicator 4.2 is rated as Satisfactory.

Indicator 4.3

There is not much progress towards achievement of results for Indicator 4.3. As per the PIR for the year 2019, the project plans to deliver the target for this indictor by providing local training to community based RE technicians and LGU engineers for micro-hydro power maintenance and management. The progress towards results for achieving the target for Indicator 4.3 is rated as Moderately Unsatisfactory.

The project design has provided a set of Outputs along with the matching set of activities for achieving Outcome 4a of the project. Different Outputs for Outcome 4a as per Project Documents are;

- Output 4.1: Financing mechanisms to enhance local RE investment
- Output 4.2: Bankable RE project plans through financial mechanisms
- Output 4.3: Rural electrification models incorporating innovative RE market services for off-grid areas
- Output 4.4: Training and certification programs for local technical experts

The following paragraphs and tables provide the details of the activities and the status of implementation of the activities at the time of MTR.

Output 4.1: Financing mechanisms to enhance local RE investment

The delivery of this output will entail assistance on facilitating the availability of financing mechanisms for LGUs and RE developers to successfully raise financing and develop RE projects. The assistance will promote the availability of existing project preparation funds to LGUs and smaller RE proponents who do not have access to such funds. Table 29 provides the details of the activities for Output 4.1 along with the status of implementation of the activities at the time of the MTR. The Table also provides details of the corrections/modifications in the activities carried out at the time of the inception of the project.

Table 29: Status of Activities for different Activities for Output 4.1 of the project

| Activities | Modifications at Project Inception | Status at MTR |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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); | | This activity was to be completed during the first year of project implementation. At the time of MTR mission, it was an ongoing activity. The study was completed, presented and approved by the Project Steering Committee on 18 February 2020. |

| Activities | Modifications at | Status at MTR |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 | Project Inception | This activity was to follow activity 4.1.1. However, at the time of MTR, 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). |
| expertise for RE equipment installation (through other activities such as Outputs 1.5 and 4.3); 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: | | 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. |
| 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 implementation phase will be sought before the fund is adopted; | | It is reported by the project team that, this activity is no longer applicable given the new UNDP guidelines. There will be no more pooling of funds among investors under one fund management. |
| 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. | | No action was reported at the time of MTR mission. It is reported by the project team that, no fund manager and no pooling of funds from investors. The fund will be managed by DOE under a sinking fund scheme ²⁸ to support RE projects. Counterpart contributions will be required from the RE project proponents and the RE project proponents may use the fund as leverage to |

²⁸ The "sinking fund scheme" is not a revolving fund and it is not recoverable.

| Activities | Modifications at Project Inception | Status at MTR |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | access additional funding for their RE projects. |
| 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 | | No action was reported at the time of MTR mission. It is reported by the project team that, this activity is no longer applicable since there will be no more fund manager (financial institution) to manage the fund. |
| 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. | | No activity till the time of MTR |

The progress towards results for Output 4.1 is rated as Moderately Unsatisfactory.

Output 4.2: Bankable RE project plans through financial mechanisms

The delivery of this output involves activities for assisting potential RE project proponents from small communities in remote missionary areas in the development of bankable plans for small scale RE projects at the local level. To deliver this output, the project design has provided for specific set of activities. Table 30 provides the details of the activities for Output 4.2 along with the status of their implementation. The Table also provides details of the corrections/modifications in the activities carried out at the time of the inception of the project.

| Activities | Modifications/ Corrections in | Status of Implementation |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Activities at Project Inception | |
| 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 | 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. |
| 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 their RE project; | | This activity is still to be done. Action is planned for the year 2020 |
| 4.2.3 On-the-job training of DOE personnel to assist and process service contracts for these RE projects. | | This is an ongoing activity |

Table 30: Status of Activities for different Activities for Output 4.2 of the project

The progress towards results for Output 4.2 is rated as Moderately Unsatisfactory.

Output 4.3: Rural electrification models incorporating innovative RE market services for off-grid areas

DOE has plans to strengthen policies to further encourage RE development in off-grid missionary areas. The delivery of this output involves implementation of a study of rural electrification models for areas that are underserved and cross subsidized in terms of electricity delivery and where RE development reduces electricity costs to these areas in the long term. With the estimated market size of these rural households targeted for electrification being in the range of 4.4 million households, the model would simulate an actual electrification project that "models" a particular innovative delivery mechanism showcasing renewables. To deliver this output, the specific set of activities which are required to be carried out are given in Table 31. The Table also provides details of the corrections/modifications in the activities carried out at the time of the inception of the project.

| Activities | Modifications at Project Inception | 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 electricity delivery and where the potential for RE can reduce electricity costs; | The study will look at the framework and methodology of the rural electrification study conducted for San Vicente Palawan under Support CCC Phase 1 | 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 the activities relating to RE by the LGUs and in the rural areas are being carried out under LREP. |
| 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; | | At the time of MTR, the activities and work under LREP by the project is at the planning stage under which the Local RE plans will be developed. Subsequent to this development of the specific PE project will be carried out. |
| 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; | | This activity is to be carried out by the 4 th year of the project implementation. The DREAMS project is yet to schedule this activity. |
| 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. | | This will be a follow up activity to 4.3.3 |

| Table 31: Status of Activities for different Activities for | Output 4.3 of the | project |
|-------------------------------------------------------------|-------------------|---------|
|-------------------------------------------------------------|-------------------|---------|

The progress towards results for Output 4.3 is rated as Satisfactory.

Output 4.4: Training and certification programs for local technical experts

The delivery of this output involves the development of RE training modules for the training and certification of technical experts. To deliver this output, the activities which are to be carried out are provided on Table 32. The Table 32 also provides the status of their implementation. The Table also provides details of the corrections/modifications in the activities to be carried out, at the time of the inception of the project.

| Activities | Modifications at Project Inception | 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. | This activity is scheduled for the year 2020 |
| 4.4.2 Conduct training of trainers' workshops during Years 1 and 2 (4 per year) towards certification of local technical experts; | | 2020 |
| 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. | This activity is scheduled for the year 2020 |
| 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. | | 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). |

Table 32: Status of Activities for different Activities for Output 4.4 of the project

The progress towards results for Output 4.4 is rated as Moderately Unsatisfactory.

Table 33 provides the Summary of the ratings for different Outputs for Outcome 4a of the project.

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

Table 33: Summary of the Ratings for different Outputs of Outcome 4a

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 Moderately Unsatisfactory.

5.1.5 Progress towards results - Outcome 4b

Outcome 4b 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. Table 34 below provides an overview of the progress towards achievement of results for Outcome of the project against the set of indicators and the targets as listed in Table 9.

| Indicator | Baseline Level | Target | Level at PIR | Status at MTR | Rating at MTR |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------|-----------------|------------------|--------------------------------------------------------------------------|
| • 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 | S (Pl. see the write up for justification of the Rating) |
| • Indicator 4.5: MW of installed capacity of RE projects resulting from accelerated expediting of RE service contracts by EOP. | 0 | 75 | 0 | 0 | S (Pl. see the write up for justification of the Rating) |

Table 34: Progress towards results: Outcome 4b

Indicator 4.4

The project is supporting implementation of the LREP in the provinces of Palawan and Iloilo. Within these two provinces 8 partner LGUs and the 2 Electric Cooperatives are working as partners for establishing the RE projects. Although, the activities for aching the target for Indicator 4.4 are delayed, it is possible for the project to achieve the targets by the EOP, particularly if the recommendation (please see recommendation 3) to extend the implementation timelines of the project by one year is accepted. Accordingly, the progress towards results for achieving the target for indicator 4.4 is rated as Satisfactory.

Indicator 4.5

The target of 75 MW for Indicator 4.5 is based on installed capacity of 4 RE projects, identified at the PPG stage which were to be supported by the project. At the time of project inception, it was recognised that none of the initially identified projects are going ahead and it was suggested that the project identify another set of RE projects of matching capacity which would be supported by the DREAMS project. Accordingly, new set of RE projects to be supported by the DREAMS project were recommended by REMB Divisions in the year 2018. Subsequently it was discovered that even this new set of RE projects are not looking for any support towards RE services contract, but were looking for financial support. As

an adaptive measure the project is working proactively to identify the RE projects which would be needing support towards implementation. DREAMS project has identified 13 RE projects, having an aggregate capacity of 115.72MW. These projects are delayed. These projects are being reviewed for any possible support they may require. The most common permitting problems stemmed from administrative boundary disputes, lack of Free and Prior Informed Consent of the host indigenous communities. Although, the activities for achieving the target for Indicator 4.5 are delayed, it is possible for the project to achieve the targets by the EOP, particularly if the recommendation (please see recommendation 3) to extend the implementation timelines of the project by one year is accepted. Accordingly, the progress towards results for achieving the target for Indicator 4.5 is rated as Satisfactory.

The project design has provided a set of Outputs along with the matching set of activities for achieving Outcome 4b of the project. Different Outputs for Outcome 4b as per Project Documents are;

Output 4.5: Site-specific RE resource databases Output 4.6: Expedited RE service contracts

The following paragraphs and tables provide the details of the activities and the status of implementation of the activities at the time of MTR.

Output 4.5: Site-specific RE resource databases

For its delivery, this output is to conduct activities for the enhancement of RE resources assessments for site-specific hydro, wind, solar and biomass projects that are being actively considered for investment and implementation. The REMB MIS and RE knowledge platform is currently being designed where these data will be stored, process and communicated. Table 35 provides the details of the activities for Output 4.5 along with the status of implementation of the activities at the time of the MTR. The Table also provides details of the corrections/modifications in the activities carried out at the time of the inception of the project.

| Activities | Modifications at Project | Status at MTR |
|------------------------------------------------------|--------------------------------------|----------------------------|
| | Inception | |
| 4.5.1 Management and compilation of hydropower | There will not be any additional | No progress is reported. |
| resource assessments from stream gauging and | studies. Existing data base is | The knowledge platform |
| other reconnaissance-level information; | fragmented. Funds will be utilized | under the project is still |
| | to consolidate and compile the data. | to be created |
| | The compilation will be loaded in | |
| | the RE portal hosted by DOE | |
| 4.5.2 Collection and compilation of biomass resource | There will not be any additional | No progress is reported. |
| information into an inventory including waste | studies. Existing data base is | The knowledge platform |
| streams from agricultural processes and | fragmented. Funds will be utilized | under the project is still |
| municipal solid waste; | to consolidate and compile the data. | to be created |
| | The compilation will be loaded in | |
| | the RE portal hosted by DOE | |
| 4.5.3 Collection and compilation of geological and | There will not be any additional | No progress is reported. |
| reconnaissance-level information to develop an | studies. Existing data base is | The knowledge platform |
| inventory of potential low enthalpy geothermal | fragmented. Funds will be utilized | under the project is still |
| project sites; and | to consolidate and compile the data. | to be created |
| | The compilation will be loaded in | |
| | the RE portal hosted by DOE | |
| 4.5.4 Conducting locally-financed detailed wind | There will not be any additional | No progress is reported. |
| resource assessments through measurements | studies. Existing data base is | The knowledge platform |
| from wind masts and computer-generated wind | fragmented. Funds will be utilized | under the project is still |
| models. | to consolidate and compile the data. | to be created |
| | The compilation will be loaded in | |
| | the RE portal hosted by DOE | |

Table 35: Status of Activities for different Activities for Output 4.5 of the project

The progress towards results for Output 4.5 is rated as Unsatisfactory.

Output 4.6: Expedited RE service contracts

The delivery of this output involves provision of assistance to RE project proponents with DOE Service Contracts, along with their respective RE projects which were stalled in the approval process. At the PPG stage four such RE projects were identified (however, at the time of MTR none of these four identified projects were active). Table 36 provides the details of the activities for Output 4.6 along with the status of their implementation. The Table also provides details of the corrections/modifications in the activities carried out at the time of the inception of the project.

| Activities | Modifications/ | Status of Implementation |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Activities at Project | |
| | Inception | |
| 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; | | 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. |
| 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; 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; | | 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. |

Table 36: Status of Activities for different Activities for Output 4.6 of the project

| Activities | Modifications/ | Status of Implementation |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Activities at Project | |
| Once the approval is secured the project | Inception | |
| 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; | | 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. |
| 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; VAT for imported goods. Though a biogas plant is on hold until there is clarification on the VAT | | 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. |

| Activities | Modifications/ Corrections in Activities at Project Inception | Status of Implementation |
|-------------------------------------------------------------|------------------------------------------------------------------------|--------------------------|
| exemption status for imported goods related to RE projects. | | |

The DREAMS project, at the PPG stage, identified 4 RE projects which were to be supported by the project. At the time of project inception, it was recognised that none of the initially identified projects are going ahead and it was suggested that the project identify another set of RE projects of matching capacity which would be supported by the DREAMS project. As an adaptive measure the project is working proactively to identify the RE projects which would be needing support towards implementation. DREAMS project has identified 13 RE projects, having an aggregate capacity of 115.72MW. These projects are delayed. These projects are being reviewed for any possible support they may require. The most common permitting problems stemmed from administrative boundary disputes, lack of Free and Prior Informed consent of the host indigenous communities. Although, the activities for Outcome 4.6 are delayed, it would be possible for the DREAMS project to carry out these Activities by the EOP. Accordingly, **the progress towards results for Output 4.6 is rated as Satisfactory.**

Table 37 provides the Summary of the ratings for different Outputs for Outcome 4b of the project.

| Output | Rating at MTR for progress |
|-------------------------------------------------|--------------------------------|
| | towards achievement of results |
| Output 4.5: Site-specific RE resource databases | Unsatisfactory |
| 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 Outcome 4b of the project is rated as Satisfactory.

5.1.6 Progress towards results - Project Objectives

In the above paragraphs, progress towards achievement of results for different Outcomes and Outputs of the project were presented. In view of the progress made towards achievement of results for different Outcomes of the project, an assessment regarding progress made towards achievement of the objectives of the project is presented in this part of the report. The progress towards achievement of the project objectives has been done both in terms of the Indictors and Targets for 'Project Objectives' as provided in the log-frame and in terms of the progress towards achievement of the results for different Outcomes of the project as discussed in the above paragraphs.

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 objectives of the project are to be achieved through its four Outcomes. Table 38 below provides an overview of the progress towards achievement of the Targets for the four Indicators to monitor the achievement of the 'Project Objectives'.

| Table 38: Progress towards results: Project Object | tives |
|----------------------------------------------------|-------|
|----------------------------------------------------|-------|

| Indicator | Baseline Level | Target | Level at PIR 2019 | Status at MTR | Rating at MTR |
|-------------------------------------------------------------------------------------------------------|-------------------|--------|-------------------|------------------|-------------------------------------------------------------------|
| • Indicator A: Cumulative direct project CO2 emission reductions from RE development by end- | 0 | 205 | 0 | 0 | U (Pl. see the write up for justification of the Rating) |

| Indicator | Baseline Level | Target | Level at PIR 2019 | Status at MTR | Rating at MTR |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|---------------------------------------------------------------------------|
| of-project (EOP), ktonnes CO2 | | | | | |
| • 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. | 30.3 | MS (Pl. see the write up for justification of the Rating) |
| • 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 | 0 | S (Pl. see the write up for justification of the Rating) |
| • Indicator D ²⁹ : Total project direct GHG emissions reductions over the lifetime of the RE capacity created by the project (ktonnes CO2eq) | 0 | 2440 | 0 | 0 | S (Pl. see the write up for justification of the Rating) |

Indicator A

As was mentioned earlier (please see section 4.2), implementation of RE projects is a time-consuming process, due to which it is unlikely that any RE project supported by the DREAMS project would start generating electricity within the implementation timelines of the project. Thus, the Target value of Indicator A, is over ambitions and unlikely to be achieved. At the time of project design four RE projects with an aggregate capacity of 75 MW were identified. These RE projects were to be supported under the DREAMS project to obtain the clearances and approvals leading to direct project GHG emission reductions within the implementation. This was recognised at the time of project inception. As a part of the project inception it was suggested that the DREAMS project would keep the activity of supporting the approval process of the RE projects as an activity and during implementation of the DREAMS project would identify the RE projects of equivalent capacity and support the approval process for these projects.

The DREAMS project as an adaptive measure is identifying the RE projects which would need help and support in the approval process. The PIR for the year 2019, mentions that the DREAMS project in coordination with the Renewable Energy Management Bureau is in the process, to identify such RE project. The DREAMS project has reviewed the status of the 13 projects that have service contracts.

²⁹ Although, the 'Project Document' mentions lifetime direct GHG emission reductions due to the project as 2.44 million tons of CO2 equivalent, it has not been taken in the Log-Frame of the project. Indicator D has been recommended as a part of the MTR to monitor the achievement of the project results in an objective manner.

These 13 RE projects has an aggregate capacity of 115.72 MW. The DREAMS project will pick up some of these RE projects, depending upon the need to support them. These RE project would lead to direct GHG emission reductions. However, considering that none of these RE project would be operational during the implementation timelines of the DREAMS project, there won't be any direct GHG emission reductions by the end of the DREAMS project. As a result, any achievement against this indicator is unlikely. Accordingly, **the progress towards results for Indicator A has been rated as Unsatisfactory.**

Indicator B

As was mentioned earlier (please see section 4.2) the target value for Indicator B is a bit ambitious. Although, there is significant increase in the RE capacity in the country, the share of RE in the overall capacity mix is still to reach the targeted level. As was explained earlier the total RE capacity addition required during the implementation timelines of the project is 4866 MW. This is against the required total power generation capacity addition of 4275 MW (please see section 4.2, Table 8 of the report and recommendation 2). Thus, the entire electricity generation capacity addition required during the implementation period of the project would need to be essentially from renewable sources. This is not a practical thing to do, particularly considering that generally speaking RE is an intermittent source of power and needs to be supported by non-RE sources of supply to ensure continuous supply of electricity. This is further confirmed till the time of MTR of the project as the PIR for the year 2019 has pointed out. "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". In view of this, in spite of significant RE capacity addition during rest of the project implementation period, the achievement against Indicator B is likely to fall a bit short of the targeted value. Accordingly, the progress towards results for Indicator B is rated as Moderately Satisfactory.

Indicator C

The project is working with the LGUs in the provinces of Palawan and Iloilo to facilitate implementation of the RE projects, in the areas with low rates of electrification. Such areas could not be connected to the grid due to the reasons of them being isolated small islands or the areas with difficult terrain coupled with thin population. The project has carried out consultations with the electricity distribution companies in the two provinces. Discussions were also carried out with the municipalities in these two provinces. An MOU has been signed with the Palawan Province government to collaborate for establishing RE based systems in the areas which still do not have access to the grid. Inception planning is being carried out, with five out of the twenty-three municipalities in Palawan. The selected sites will serve as pilot areas towards the integration of RE plan in the development agenda and programs of the towns and eventually to show how RE will contribute to the objective to 100% electrification in off-grid communities.

Field visits and local consultations with different stakeholders in areas with low electrification rates were also conducted in Iloilo Province. The Electric Cooperative in Iloilo has requested assistance for developing investment proposals that will allow the cooperative to reach unserved and underserved communities in their franchise areas. As per the PIR for the year 2019, the partnerships with Palawan and Iloilo is expected to lead to reliable sources of RE to at least 20,741 households in Palawan and 19,446 households in Iloilo.

Although, the activities towards achievement of the target for Indicator C is presently underway, there is a bit of time lag. The is partially due to slow/delayed start of the project. For the RE capacities to be onboard to support achievement of the target, an extension in the implementation timelines of the project would be needed. It is recommended that the project be granted a no cost extension of one year (please see recommendation 3). **The progress towards results for Indicator C is rated as Satisfactory.**

Indicator D

Indicator D has been recommended as a part of the MTR to monitor the achievement of the project results in an objective manner. Although, the 'Project Document' mentions lifetime direct GHG emission reductions due to the project as 2.44 million tons of CO2 equivalent, it has not been taken in the Log-Frame of the project. As was mentioned in an earlier paragraph, at the time of project design, four RE project with an aggregate capacity of 75 MW were identified. These RE projects were to be supported under the DREAMS project to obtain the clearances and approvals. Implementation of these four RE project was to lead to direct project GHG emission reductions due to the DREAMS project. None of these four RE projects are going ahead with the implementation. This was recognised at the time of project inception. As a part of the project inception it was suggested that the DREAMS project would keep supporting the approval process of the RE projects as an activity and during implementation of the DREAMS project, would identify the RE projects of equivalent capacity and support the approval process for these projects. The DREAMS project as an adaptive measure is identifying the RE projects which would need help and support in the approval process. The DREAMS project has reviewed the status of the 13 projects that have service contracts. These 13 RE projects has and aggregate capacity of 115.72 MW. These RE project would lead to direct GHG emission reductions over the lifetime of these projects. The progress towards results for Indicator D is rated as Satisfactory.

In the earlier paragraphs ratings for progress towards results for different Outcomes of the project were provided. Table 39 provides the Summary of the ratings for the Outcomes of the project.

| | F J |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| Outcome | Rating at MTR 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 | Moderately 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 | Moderately Satisfactory |
| Outcome 4b: Increased number of operational RE projects using proven and emerging RE technologies that boosts successful replication | Satisfactory |

Table 39: Summary of the Ratings for different Outcomes of the project

The objective of the project is GHG emission reductions through the promotion and facilitation of the commercialization of renewable energy (RE) markets. It is likely that by the end of the project there will be significant addition in the RE capacity in the overall generation mix in the country. Also, it is expected that by the end of the project there will be creation of RE capacity due to the support provided by the project, which eventually would 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 Moderately Satisfactory.

5.2 Global environmental and other impacts

Mid-term review questions (see Annex B)

• Results in terms of contribution to sustainable development benefits, as well as global environmental benefits (direct and indirect emission reduction)

- Compare and analyse the GEF Tracking Tool at the Baseline with the one completed at the time of mid-term review
- What is the status and issues with employing RE power generation?
- What are the remaining barriers to achieving the project objective in the remainder of the project?
- 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?

5.2.1 GHG emission reduction estimates

The Global environmental impacts of the DREAMS project will largely be the reduction of GHG emissions associated with the combustion of fossil fuels for electricity generation. The project will also have local environmental benefits in terms of reduction in the emissions of harmful pollutants such as carbon monoxide, NOx, SOx and other harmful volatile organic compounds would also be reduced.

Due to continued reliance on fossil fuels for power generation, GHG emissions in Philippines, increased. It increased the country's grid emissions factor from 0.463 tonnes CO2eq/MWh in 1995 to 0.492 tonnes CO2eq/MWh in 2018. With more RE projects being approved and implemented under the DREAMS project, the power sector will experience a decline in GHG emissions.

Based on the expectations of an annual electricity generation of 338,002 MWh per year from 75 MW of installed capacity of hydropower, solar PV and biomass gasification, which were to be supported by the DREAMS project, the project document has contemplated direct GHG emissions reductions of approximately 2.44 million tonnes CO2eq over the lifetime of the RE projects, whose implementation will be supported by the project. The 'GEF tracking tool for climate change mitigation' at the time of CEO endorsement also mentions the projected direct GHG emission reductions due to the project as 2.44 million tonnes of CO2eq. The GEF tracking tool for climate change mitigation at the time of MTR has not provided any actual achievements at MTR regarding direct GHG emission reductions. This is because the RE capacities being supported/to be supported by the DREAMS project are yet to come on board.

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 resulting. The project document has projected indirect GHG emission reductions due to the project to be about 141,000 ktonnes CO2eq based on a causality factor of 20%.

As per the 'Project Document', out of the total projected direct GHG emission reductions of 2440 thousand tonnes of CO2eq, about 205 thousand tonnes was to be achieved within the implementation time of the DREAMS project. As was mentioned earlier (please see section 4.2) the targeted direct GHG emission reduction within the implementation period of the project is a bit over ambitions. This is considering that establishment of RE based electricity generation facilities, requires a number of sequential time-consuming activities. Some of the activities required for establishing a utility scale RE facilities are identification of the location, resource assessment, identification of land, acquisition of the land, plan design, feasibility study, arrangement and mobilisation of the funds required, procurement of capital equipment etc. Many of these activities can't be carried out in parallel.

Given the time required for implementation of a RE facility, much of envisaged RE capacity would get realised only towards the end of the DREAMS project implementation timelines. Such newly created RE capacity would lead to direct GHG emission reductions, but the direct GHG emission reductions will be achieved after the implementation timelines of the project. As the DREAMS project would be

supporting creation of the RE electricity generation facilities, it would lead to direct GHG emission reductions. However, most of such direct GHG emission reductions would happen beyond the implementation timelines of the DREAMS project.

5.2.2 Other impacts

The most direct projected impact of the project in terms of global environmental impacts is the reduction in the emission of GHG. The project has a significant co-benefit of reduction in the pollutions and local environmental impacts.

Historically Philippines use to have significant share of RE in the overall electricity generation capacity in the country. However, of late due to establishment of more fossil-fuel based power plants the share of RE in the generation mix reduced. The DREAMS project will be instrumental in catalysing deployment of RE technologies for generation of electricity in Philippines, thereby leading to increase in the share of RE in the overall generation mix.

The Project, 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 has the provision to monitor renewable energy availability within sitio households; as a means of monitoring contributions of this Project to improving gender equality. The project as an adaptive measure is ensuring almost equal participation of women in all the training and capacity building initiatives. The project is country driven and takes into account the national realities, both in terms of institutional and policy framework in its design and implementation.

There are no adverse environmental or development impacts due to the DREAMS project. This was confirmed following the 'UNDP Social and Environmental Screening Procedure (SESP)' at the PPG stage and is documented in the 'Project Document'.

6. FINDINGS: PROJECT IMPLEMENTATION AND ADAPTIVE MANAGEMENT

This Chapter describes the appropriateness and functioning of project management and administration, work planning and monitoring and evaluation. The second section reviews relations with stakeholders, while the Chapter ends with an overview of planned and realised budget expenditures and co-financing.

6.1 Adaptive management and planning; monitoring & evaluation

Mid-term review questions (see Annex B)

- *Management:* Appropriateness of the institutional arrangement and whether there was adequate commitment to the project? Review overall effectiveness of project management as outlined in the Project Document. Have changes been made and are they effective? Are responsibilities and reporting lines clear? Is decision- making transparent and undertaken in a timely manner? Recommend areas for improvement; Review the quality of execution of the Executing Agency/Implementing Partner(s) and recommend areas for improvement; Review the quality of support provided by the GEF Partner Agency (UNDP) and recommend areas for improvement
- *Work planning*: Review any delays in project start-up and implementation, identify the causes and examine if they have been resolved; Are work-planning processes result-based? If not, suggest ways to reorientate work planning to focus on results? Examine the use of the project's results framework/log frame as a management tool and review any changes made to it since project start.
- *Reporting:* Assess how adaptive management changes have been reported by the project management and shared with the Project Board; Assess how well the Project Team and partners undertake and fulfil GEF reporting requirements (i.e. how have they addressed poorly-rated PIRs, if applicable?); Assess how lessons derived from the adaptive management process have been documented, shared with key partners and internalised by partners.
- *Communications:* Review internal project communication with stakeholders: Is communication regular and effective? Are there any key stakeholders left out of communication? Are there feedback mechanisms when communication is received? Does this communication with stakeholders contribute to their awareness of project outcomes and activities and investment in the sustainability of project results? Review external project communication: Are proper means of communication established or being established to express the project progress and intended impact to the public (is there a web presence, for example? Or did the project implement appropriate outreach and public awareness campaigns?).
- *M&E:* Review the monitoring tools currently being used: Do they provide the necessary information? Do they involve key partners? Are they aligned or mainstreamed with national systems? Do they use existing information? Are they efficient? Are they cost-effective? Are additional tools required? How could they be made more participatory and inclusive? Examine the *financial management* of the project monitoring and evaluation budget. Are sufficient resources being allocated to monitoring and evaluation? Are these resources being allocated effectively?

6.1.1 Management

The project design has provided for a structured management arrangement. UNDP is the GEF executing agency for the project. The project is being implemented under the NIM (Nationally Implemented Modality), with implementation being carried out the 'Implementation Partner' (REMB, under the Department of Energy). REMB has the overall responsibility to achieve the results of the project. REMB has designated a senior official as the National Project Director (NPD) for the Project. The Implementing Partner has 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 plays the role of policy and decision-making body for the project implementation. The NPD is 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 of the Philippines.

The Project Management Unit (PMU) comprising of a Project Manager (PM), Monitoring and Evaluation Officer (M&EO), a Finance Officer (FO), and an Administrative Officer (AO) looks after the day to day operations of the project. PB have the oversight of the Project Management Unit (PMU) and monitors the progress of the project, guide implementation and support the project in achieving its overall outputs, outcomes and objective.

UNDP provides overall management and guidance from its Country Office in Manila and the Regional Hub in Bangkok, and is also responsible for monitoring and evaluation of the project as per GEF and UNDP requirements. On its part UNDP provides the required support to the IP and the project team. The support is provided by way of inputs provided during the SC meetings and wherever required, offering the solutions to the problems faced by the project implementation team, e.g. it helps with the procurement process as and when require. UNDP also supports the process of preparation of the annual workplans (and the corresponding budget) and its approval by the steering committee. UNDP in its role as the GEF Executing Agency, is focused towards the achievement of the results of the project. The PIR for the project are being prepared regularly by the project team. UNDP provides its inputs to the PIRs on a regular and timely manner.

There was an initial delay in the start of the implementation of the project. The 'Project Document' was signed in June 2016 and after a delay of about a year PMU was established in July 2017. The delay in the establishment of the PMU was largely due to the time taken in the hiring of the 'Project Manager' and other staff for the PMU. The delay in implementation was not only due to the delay in hiring of the Project Manager, but also due to the changes in the officials in the Implementing Partner (DOE), due to the political changes in 2016, following elections. Once the PMU got established there was progress towards implementation of the project. However, the implementation of the project slowed a bit during Q2 of 2019 slowed down in the 2nd quarter of 2019, particularly on LGUs connected activities due to elections in the country.

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. Accordingly, at the time of the inception of the project corrections/ modifications were carried out in the activities for some of the Outputs. The 'Results Framework' of the project was validated at the time of the inception meeting.

Some of the activities supporting the implementation of RE projects are presently underway. These results of these activities in terms of established RE based electricity generation facilities are important from the viewpoint of the results and effectiveness of the project. These activities supporting creation of RE based power plants and resultant creation of RE based power generation facilities can be achieved only, if an extension of a year is granted to the project (please see recommendation 3). Completion of these activities and resultant RE based power generation facilities are crucial towards achieving of the results by the end of the project. Thus, it is important that a one year, no-cost extension to the implementation timelines is provided.

Significant part of the work is being done by government official at the province level and at the level of the Implementing Partners. Some of the activities for the project are being carried out by the consultants. REMB on its part as the implementing partner for the project is focused towards achievement of the results of the project. The workplan for the project and the corresponding budget are prepared by the PMU in consultation with the project director and other officials as REMB. The management inputs and processes in practise are adequate. The PIRs are prepared by the project team and the designated officials from REMB provide the required inputs to the PIR in a timely manner. The rating provided by REMB have been in line with the ratings provided by the project team.

The Project Steering Committee (PSC) and the Technical Committee which meets periodically are in place and play a critical role in project monitoring and evaluation by quality assurance, using

evaluations for performance improvement, accountability and learning, and ensuring that required resources are committed and providing overall direction to the project team.

Project implementation has responded to changing conditions and risks, and taken advantage of opportunities for partnerships and actions that support the overall project objective. The project had a slow start partially due to delayed hiring of the project manager and the other members of the project team and partially due to changes in the officials in the Implementing Partner (DOE), due to the political changes in 2016, following elections.

A key reporting requirement, the inception report, was prepared after the inception workshop of the project. The PIRs of the years 2018 and 2019 (draft) were prepared, as per the requirements. The project also prepares the Annual Performance Reports regularly. The work plans for the project are prepared and followed. Quarterly progress reports for the project are also prepared regularly. Accordingly, **the management of the project is rated Satisfactory**.

6.1.2 Work planning

Work planning is being done as per the provisions in the project design document. Work plan for the first year was finalised subsequent to the project inception meeting. The work plan for the year 2020 was in the draft form at the time of MTR. In accordance with the requirements, the work plans are prepared by the Project Manager, reviewed by the National Project Director and approved by the Steering Committee after deliberations. Some of the activities provided in the project design are yet be taken up in the workplans. It is suggested that while preparing the workplans and budget, a reference from the activities provided in the Project Design maybe drawn (please see recommendation 7). This will ensure that any activity specified in the Project Design does not get missed out. Work planning is rated as **Moderately Satisfactory**.

6.1.3 Reporting

A key reporting requirement, the inception report, which documents the agreed work plans and other arrangements, was prepared and shared with the stakeholders during the Inception Meeting. The inception report documents the working arrangements and the responsible institutions/ agencies. The Inception Report also documents the changes carried out in the activities for the project. PIRs for the project was prepared for the years 2018 and 2019. The project has also prepared the 'Annual Progress Reports' for the years 2018 and 2019. The quarterly progress reports are prepared and shared in accordance with UNDP / GEF requirements. The **reporting aspect of the project management has been rated as Satisfactory.**

6.1.4 Communications

At the time of MTR, the project did not have a website of its own. No mechanism was in place to disseminate the information about the work carried out under the project. The project is regularly disseminating the information about the project and the results through the news channels (both online and print media). Apart from this the project is making the effective use of the capacity building, training, and awareness creation activities for targeted stakeholders, under different components of the project as a means of communication.

At the time of MTR, activities were planned for creation of a knowledge platform for sharing the information about RE in the country. This would provide an additional channel for dissemination of information about the project and for communication with the larger stakeholders of the project.

Once the knowledge platform for RE is put in place, it will also act as a 'repository for information RE

resources and opportunities in the country. More outreach and awareness creation activities need to be planned by the project. The communications aspect of the project management has been rated as Moderately Satisfactory.

6.1.5 M&E systems

In line with the standard practice for GEF projects, provisions were made in the project design for midterm review and a terminal evaluation. The main M&E activities planned at the design stage meet GEF and UNDP requirements and standard practices.

Quarterly progress reports are prepared as per the M&E plan and were made available during the MTR. Financial monitoring and evaluation of the project is being 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.

The monitoring tools being used provide the required information. The monitoring tools being used are project specific and meets the requirements of the project design. The monitoring systems doesn't draw upon any of the national systems in Philippines. The tools being used are efficient and cost effective. However, the effectiveness of any monitoring tool depends on the accuracy of the information captured, which in the present case is captured manually in the monitoring tools. The monitoring tools being used is considered adequate. As at the stage of the design of the project, the impacts of the project on men and women were not considered significant, the project design has not provided any specific tools for monitoring of such impacts.

The steering committee is being chaired by the National Project Director, and includes the GEF Focal Point and members from other relevant government departments. The monitoring and evaluation budget provisions in the project are adequate. The **Monitoring and Evaluation aspects of project management are considered Satisfactory**.

6.2 Stakeholder engagement

Mid-term review questions (see Annex B)

- *Project management:* Has the project developed and leveraged the necessary and appropriate partnerships with direct and tangential stakeholders?
- *Participation and country driven processes:* Do local and national Government stakeholders support the objectives of the project? Do they continue to have an active role in project decision-making that supports efficient and effective project implementation?
- *Participation and public awareness:* To what extent has stakeholder involvement and public awareness contributed to the progress towards achievement of project objectives?

The main formal platform for engaging the stakeholders is the Steering Committee (SC). 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 the two provinces of Palawan and Iloilo.

Although, the PSC has representatives from different concerned ministries and departments, it doesn't have members from civil society, NGOs, research institutions, development agencies, trade & industry bodies or academia. PSC meetings are happening regularly. It is recommended that in order to increase the awareness amongst stakeholders, the project may come out with simple communication products (e.g. newspaper articles, communication and magazine of trade associations) informing the changing landscape for doing business in the power sector in general and in the RE space in particular (please see recommendation 8). Further, it is recommended that the project enhance the engagement of the private

sector and the prospective investors (e.g. RE equipment manufacturers, trade bodies, investors forum (please see recommendation 10). In the absence of formal communication channels, the participation of the larger stakeholders is not there. However, with the creation of a knowledge platform the outreach activities and the opportunities to engage wider stakeholders would get a boost. Stakeholder engagement at an aggregate level has been rated as **Moderately Satisfactory**.

6.3 Budget and co-financing

Mid-term review questions (see Annex B)

- Consider the financial management of the project, with specific reference to the cost-effectiveness of interventions.
- Review the changes to fund allocations as a result of budget revisions and assess the appropriateness and relevance of such revisions.
- Does the project have the appropriate financial controls, including reporting and planning, that allow management to make informed decisions regarding the budget and allow for timely flow of funds?
- Informed by the co-financing monitoring table to be filled out, provide commentary on co-financing: is co-financing being used strategically to help the objectives of the project? Is the Project Team meeting with all co-financing partners regularly in order to align financing priorities and annual work plans?

The project budget and sources of funds³⁰ for the project are summarised in Table 40 below:

| Source of Fund | Yr. 1 | Yr. 2 | Yr. 3 | Yr. 4 | Yr. 5 | Total |
|---------------------------------|------------|------------|-----------|-----------|-----------|------------|
| GEF | 845,044 | 2,343,979 | 755,469 | 729,512 | 525,996 | 5,200,000 |
| Co-financing: | 12,701,000 | 22,111,222 | 1,170,000 | 1,160,000 | 1,160,000 | 38,302,222 |
| UNDP | 40,000 | 40,000 | 40,000 | 40,000 | 40,000 | 200,000 |
| DOE/REMB | 460,000 | 460,000 | 460,000 | 460,000 | 460,000 | 2,300,000 |
| PEMC | 950,000 | 480,000 | 430,000 | 420,000 | 420,000 | 2,700,000 |
| Iloilo Provincial Government | 111,000 | 111,222 | 100,000 | 100,000 | 100,000 | 522,222 |
| Palawan Provincial Government | 140,000 | 140,000 | 140,000 | 140,000 | 140,000 | 700,000 |
| SunAsia (Mogpog 12 MW Solar) | 10,000,000 | 16,680,000 | 0 | 0 | 0 | 26,680,000 |
| Enfinity (Camotes 1.0 MW Solar) | 0 | 2,000,000 | 0 | 0 | 0 | 2,000,000 |
| EnTech (Armenia 2.0 MW Biomass) | 1,000,000 | 2,200,000 | 0 | 0 | 0 | 3,200,000 |
| Total: | 13,546,044 | 24,455,201 | 1,925,469 | 1,889,512 | 1,685,996 | 43,502,222 |

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As can be seen from the Table, there was a significant co-financing which was committed by different stakeholders. Apart from Government departments, co-financing was to come from the private sector by way of their investment in the RE projects which were to be supported by the DRAEMS project.

The private sector RE projects which were identified for support at the time of PPG, got scraped on a later date due to a variety of reasons. The DREAMS project is in the process of identifying and supporting another set of RE projects, which would require such a support. Once the investment in the newly identified RE set of projects get implemented, the co-financing part of the private sector would get realised. The in-kind co-financing contribution by the national counter parts at the time of MTR is as given in Table 41.

³⁰ As per project Document

| Project Components | Agency/ Organization | Committed Amount ³¹ | Leveraged Co-Financing at MTR ³² | | | | |
|------------------------------------------|----------------------------------------|------------------------------------------------|-------------------------------------------------------------------------|----------------------|-----------------|------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| | | | Activities | Duration (Period) | Amount (USD) | Means of Verification | Remarks |
| RE Policy and Planning | Department of Energy | 425,000 | GEOP Operating Guidelines | | | | |
| | | | Public Consultations | 2017-2019 | 30,000 | Estimated amount | Completed |
| | | | • Market Study | 2020 | 40,000 | DOE-DAP MOA | Ongoing |
| | | | RE Market (REM) Rules | | | | |
| | | | Public Consultations | 2017-2019 | 50,000 | Estimated amount | Completed |
| Institutional Strengthening for RE | Department of Energy | 1,370,000 | Localized RE Planning Capacity Building (LREP Cap Build) | 2017-2022 | TBD | TBD | Ongoing Resource assessments |
| | Provincial Government of Palawan | 700,000 | LREP Cap Build | 2018-2022 | TBD | MOU AWP | MOU signed |
| | Provincial Government of Iloilo | 522,222 | LREP Cap Build | 2018-2022 | TBD | MOU AWP | For MOU signing |
| | Municipal LGUs | -0- | LREP Cap Build | 2019-2022 | TBD | AWP CDP/AIP | 9 MLGUs signified interest to participate on the LREP Cap |
| Capitalized RE Market Development | Philippine Electricity Market | 2,700,000 | RER/ PREMS Pre Development | 2017-2018 | | | |
| Development Corporation | | RER/ PREMS Post Development Operation | 2020-2022 | 500,000 | ERC filing | For PEMC and ERC approval | |
| RE Commercialization | Department of Energy | 425,000 | RE Project Development | 2017-2022 | TBD | TBD | The RE Projects will emanate from LREP |
| | Private RE Developers | 31,880,000 | Expedited RE Service Contract | 2017-2022 | TBD | TBD | Assessed 13 RE projects that may be supported by the project, but none qualified or did not pursue. |

 Table 41: Co-financing budget and Co-financing realized till MTR (Figures in USD)

Based on the final CDRs for 2017, 2018 and 2019, the cumulative expenditures as of 31 December 2019 charged under the GEF fund is USD 1,239,633.82 (23.84% utilization rate). This amount excludes the amount of USD 349,894.53 unpaid commitments as of 31 December 2019. Adding the unpaid committed amounts will bring the utilization rate to 30.57%.

³¹ Amount of Co-finance committed as per Project Document

³² DOE/LGUs/Government counterpart - the counterpart contributions provided are those that could be readily estimated by the project team at the time of MTR

Budget utilisation of the project at the time of MTR is falling significantly short of the approved ATLAS budget. It is expected that once the recommendation to utilise the funds available for project preparation (PPF) in an expeditions manner (please see recommendation 4) is implemented the 'delivery rate' of the project will improve significantly.

Based on the ratings above for the different aspects, Implementation and Adaptive Management has been rated as **Satisfactory**.

7. FINDINGS: SUSTAINABILITY

Mid-term review questions (see Annex B)

- Whether the risks identified in the Project Document, Annual Project Review/PIRs and the 'ATLAS Risk Management Module' are the most important and whether the risk ratings applied are appropriate and up to date? If not, explain why.
- *Financial*: What is the likelihood of financial and economic resources not being available once the GEF assistance ends (consider potential resources can be from multiple sources, such as the public and private sectors, income generating activities, and other funding that will be adequate financial resources for sustaining project's outcomes)?
- *Socioeconomic*: Are there any social or political risks that may jeopardise sustainability of project outcomes? What is the risk that the level of stakeholder ownership (including ownership by Governments and other key stakeholders) will be insufficient to allow for the project outcomes/benefits to be sustained? Do the various key stakeholders see that it is in their interest that the project benefits continue to flow? Is there sufficient public/stakeholder awareness in support of the long -term objectives of the project? Are lessons learned being documented by the Project Team on a continual basis and shared/ transferred to appropriate parties who could learn from the project and potentially replicate and/or scale it in the future?
- *Institutional*: Do the legal frameworks, policies, governance structures and processes pose risks that may jeopardize sustenance of project benefits?
- Environmental: Are there any environmental risks that may jeopardise sustenance of project outcomes?

7.1 **Project risks**

At the design stage, a thorough risk analysis was carried out and appropriate risk mitigation strategies were worked out. Annex 1 of the project document gives an overview of risks identified at the time of project design. At the PPG stage, project risks were also identified, which are summarised in Table 42.

| Risk | Level of Risk | Mitigating Actions |
|--------------------------------------|------------------|--------------------------------------------------------------|
| Inadequate human resources to | Moderate | One of the main Project activities is to address the lack of |
| implement higher volume of RE | | institutional capacity at all levels, notably at the local |
| project approvals leading to | | level where DOE outreach will be improved. |
| continued delays and long approval | | |
| periods | | |
| Inability to sell and absorb RE into | Low | Project assistance will be extended to facilitation of the |
| the existing power market | | start-up and implementation of RE Market mechanisms |
| | | which will provide assurances of RE sales and make sales |
| | | of RE competitive with conventional sources of energy. |
| The lower global price of oil | Low | Through Project assistance to improve outreach to smaller |
| reduces incentives of potential | | and more remote communities and increase their |
| proponents and communities from | | awareness of the long-term benefits of RE, these |
| pursuing RE development. | | communities will continue pursuit of indigenous sources |
| | | of power generation through renewables. |
| Climate change impacts the level | Moderate | The Project will assist in the planning and design |
| of RE generation | | processes to improve the resilience of RE projects through |
| | | extremes of climate change. |

| Table 13. Da | at a to Dialea and N | Titianting A stinger | (| in at a arrest and) |
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The project document has assessed the overall project risk as low. Till the time of the MTR none of the identified risks impacted the project. At an aggregate level, technical risks to sustainability of the project are considered **low**.

7.2 **Financial risks to sustainability**

The strategy of the project is to create investment RE by an enabling environment to attract investment. Under the DREAMS project, support to selected RE facilities is being provided to take care of the complicated approval processes. The DREAMS project also has provision to help the RE projects in the project preparation through the 'Project Preparation Fund'. The DREAMS project does not have any provision to support continuation of the operations of the RE facilities (e.g. feed-in-tariff support) or provisions of fiscal incentives (e.g. grants). Thus, the issue of non-availability of financial and economic resources beyond the implementation of he DREAMS project are not that much relevant. The **financial sustainability of the project is assessed to be likely**.

7.3 Socio-economic risk to sustainability

Thanks to the number of earlier initiatives in Philippines for promotion of RE based energy, there is a significant level of awareness in the general public about RE technologies for power generation.

The Project promotes the expansion of clean energy access and scale up efforts to increase the electrification rate in the Philippines. 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 deliver positive consequences like improved living standards; increased livelihoods opportunities; enhanced health etc.

A portion of the Project's technical assistance will be provided to remote far-flung communities with very limited access to electricity that are more dependent on costly fossil-fuel based power generation. The development of indigenous renewable energy will reduce electricity costs to these communities and increase access for 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. Project implementing agency, partners, 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.

At the time of project design 'UNDP Social and Environmental Screening Procedure (SESP)' was carried out. SESP pointed out that the 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, 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.

Due to the fast growth of RE installations in Philippines, the demand for skilled manpower to operate and maintain such installations would increase. In the short run, this can directly affect project implementation (e.g. delays in recruiting project staff or major escalation in remuneration rate of project staff or consultants, placing pressure on project budgets). This has been addressed in the project by having a component pertaining to training of individuals. At this mid-point in project implementation, we consider the **socioeconomic sustainability as likely**.

7.4 Institutional framework and governance risks to sustainability

At the time of project design the barriers towards higher uptake of RE in Philippines were identified included cumbersome regulatory approval process; weak coordination between DOE and local government units (LGU) on RE project approvals and lack of full implementation of de-risking mechanisms that are provided in the RE Act. The issues with the regulatory approval process included lack of clarity regarding roles and responsibilities of various institutions/agencies in the overall RE

development; lack of clarity over requirements of distribution utilities (DU) for approving interconnections with RE projects within their franchise area. One of the focus areas of the DREAMS project is to provide support to address these issues. DREAMS project also has provisions to strengthen the coordination between DOE and the LGUs and lower the challenges faced by RE developers in obtaining LGU endorsement of their RE projects. One of the other focus areas of the DREAMS project is complete implementation of the de-risking mechanisms that are provided in the RE Act. The derisking mechanisms which are being supported by the DREAMS project include, Renewable Portfolio Standards (RPS) and establishment of a RE Market for the trading of RE certificates, and distribution and transmission network regulations.

As the focus of the DREAMS project is to address the regulatory and institutional barriers towards higher uptake of RE, the project when successfully implemented would not face any issues towards sustainability of the results from the institutional and governance point of view.

Still, considering that the Government of Philippines is committed to promotion of renewable sources of energy and that this showcases the commitment of Philippines to addressing the global problem of climate change, it is expected that in case such issues do come up they will be taken care at the highest level in the Government and will be resolved.

From the view point of institutional framework and governance risks, the sustainability of the project results is **Moderately Likely.**

7.5 Environmental risks to sustainability

There are practically no negative environmental impacts of the project, other than some minor impacts due to change in the land-use pattern. There is a remote possibility of the need to chop down trees and other vegetation in some isolated cases to prepare the sites for RE project implementations. In case of biomass-based power projects there may be impacts in cases, the sources of biomass are not sustainable.

There is a minor risk of environment-related issues blocking RE power projects. From the view point of environmental risk, sustainability of the project is **Likely**.

8. CONCLUSIONS AND RECOMMENDATIONS

8.1 Conclusions

Mid-term review questions (see Annex B)

- Identify remaining barriers to achieving the project objective in the remainder of the project, and by reviewing the aspects of the project that have already been successful, identify ways in which the project can further expand these benefits
- MTR Ratings & Achievement Summary Table will be provided, summarising the ratings on a) results, b) implementation and adaptive management, c) sustainability with a short description of the rating's justification

8.1.1 Summary of main findings and of ratings

The following Table provides a summary of the ratings for;

- a) Progress towards Results
- b) Project Objectives
- c) Implementation and Adaptive Management
- d) Sustainability

Table 43: Mid-term review ratings and achievements summary

| Main criteria | Rating ³³ | Explanation |
|------------------|----------------------|-------------------------------------------------------------------------------------|
| Project Strategy | NA | In Philippines, from the year 2002 to 2010, GEF supported the project "Capacity |
| | | Building to Remove Barriers to Renewable Energy Development (CBRED)". |
| | | 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 provided 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 result 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. Despite these |
| | | efforts to catalyse RE development, the barriers still existed at the program and |
| | | project levels that constrained RE development in the country, notably at the local |
| | | level where the RE Act has not been effectively implemented. |
| | | The DREAMS Project was 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. These are issues that have emerged with the |
| | | Government of Philippine'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 |
| | | includes operationalization of 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 |

³³ HS: Highly Satisfactory, S: Satisfactory, MS: Moderately Satisfactory, MU: Moderately Unsatisfactory, U: Unsatisfactory, HU: Highly Unsatisfactory, L: Likely, ML: Moderately Likely, MU: Moderately Unlikely, U: Unlikely

| | | Standards (RPS), designed to accelerate development of RE resources in the country. |
|-------------------|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | The strategy of the project as discussed above was the result of consultations and background analysis during project design stage and relevance to Philippines's development context. |
| Progress towards | | |
| Project Objective | MS | 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. |
| | | One of the barriers which is to be removed is 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) that are 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 'Philippine RE Market System (PREMS)', the progress towards results for Outcome of the project is Satisfactory. |
| | | One of the other barriers which the DREAMS project is addressing is the lack of co-ordination and lack of clarity regarding the roles and responsibilities in the overall development of a RE project. Particularly, regarding the provisions in the RE Act. The DREAMS project was to support selected RE projects in the overall approval process leading to creation of RE capacity of about 75 MW, which was supposed to lead to the direct GHG emission reductions of 205 ktonnes CO2e within the implementation timelines of the DREAMS project. As the work on this from is lagging, the RE capacity would get created towards to end of the implementation timelines of the project, leading to direct GHG emission reductions. However, such direct GHG emission reductions would happen after the end of the DREAMS project. |
| | | The DREAMS project is targeting enhancing the capacity of the institutions at the local level to increase investment in the RE projects at local level (Outcome 2). Under the 'Local RE Planning Capacity Building Program (LREP Cap Build)' being implemented by the project, the activities to achieve this objective are being undertaken successfully. However, when it comes to creating longer term impacts by way of creation of knowledge platforms, the progress is still lagging behind. |
| | | The DREAMS project has provision to support development of the RE projects using the 'Project Preparation Fund (PPF)'. Creation of PPF is one of the provisions in the project design. Utilisation of the funds provided for PPF is still to be carried out in an effective manner. |
| - Outcome 1 | MS | This Outcome of the project pertains to enforcement of the supportive policy and regulatory environment that will leverage increased investment in RE development and application at the local level. This was to be achieved within the first year of the project implementation, so these policies and regulations can support achievement of the other outcomes of the project. Although, the objective of creation of conducive conditions for investment in RE is likely to be achieved, there would a time lag. |
| | | One of the other objectives within this Outcome was the promotion of manufacturing, fabrication and supply of locally produced components for RE applications. Till the time of MTR, the project could not make much progress towards achievement of this objective. |

| - Outcome 2 | MS | Under Outcome 2 of the project, it 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 project is doing this under its 'Local RE Planning Capacity Building Program (LREP Cap Build)'. The activities to achieve this objective are being undertaken successfully. In order to facilitate large-scale implementation of the RE projects, there is a provision of a knowledge sharing platform. The activities towards this are yet to implemented. At the time of MTR, the project was in the process of procuring the services to implement the hardware and software part of the knowledge platform. |
|----------------------------------------------|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| - Outcome 3 | S | Outcome 3 of the project addresses the barrier relating to the absence of a functional RE Market that represents tangible government measures to ensure compliance with the mandated utilization of RE generation and spur the growth of the RE industry. The outcome resulting from the outputs from this component will be a "capitalized" RE Market and an accompanying RE registrar that will contribute to an increased share of RE based power capacity, and an increased number of RE project developers at the local level. There is good progress towards implementation of 'Philippine RE Market System (PREMS)'. |
| Outcome 4a | MU | The Outcome 4a of the project is to address the barriers related to the lack of successful RE projects in the country. The project has provision to support development of the RE projects using the 'Project Preparation Fund (PPF)'. Creation of PPF is one of the provisions in the project design. Utilisation of the funds provided for PPF is still to be carried out in an effective manner. Under this Outcome the DREAMS project is also to support creation of bankable RE plans for the LGUs. Under its 'Localized RE Planning (LREP)' the project is discussing preparation of bankable RE plans, with five LGUs in the province of Palawan and three LGUs in Iloilo. One of the other objectives for the activities under Outcome 4a is to ensure availability of certified technicians for RE technologies at the local level. The project plans to deliver this by providing local training to community based RE technicians and LGU engineers for micro-hydro power maintenance and management. |
| Outcome 4b | S | This Outcome of the DREAMS project is to address the barriers of lack of co- ordination and lack of clarity regarding the roles and responsibilities in the overall development of a RE project. Particularly, regarding the provisions in the RE Act. Towards this the DREAMS project was to support selected RE projects in the overall approval process leading to creation of RE capacity of about 75 MW. Outcome 4b is expected to lead to increased number of RE projects using proven and emerging RE technologies thus boosting successful replication. Somehow, these selected RE projects did not go ahead with implementation. The DREAMS project is identifying another set of RE projects, which would need support in the process of clearances and would eventually provide the required support. |
| Implementation and adaptive management | S | As and when needed, the project team has responded to changing conditions and risks, to take advantage of opportunities for partnerships and actions that support the overall project objective. Overall, the management of the project is rated as Satisfactory. |

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| | | Quarterly progress reports and the annual progress reports are prepared and shared in accordance with UNDP / GEF requirements. The monitoring reports do not cover the co-financing aspects. The reporting aspect of the project management has been rated as Satisfactory At the time of MTR, the project did not have a website of its own. No mechanism |
|----------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | was in place to disseminate the information about the work carried out under the project. The project is regularly disseminating the information about the project and the results through the news channels (both online and print media). Apart from this the project is making the effective use of the capacity building, training, and awareness creation activities for targeted stakeholders, under different components of the project as a means of communication. The communications aspect of the project management has been rated as Moderately Satisfactory. |
| | | The main formal platform for engaging the stakeholders is the Steering Committee (SC). 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 the two provinces of Palawan and Iloilo. Although, the PSC has representatives from different concerned ministries and departments, it doesn't have members from civil society, NGOs, research institutions, development agencies, trade & industry bodies or academia. In the absence of formal communication channels, the participation of the larger stakeholders is not there. Stakeholder engagement at an aggregate level has been rated as Moderately Satisfactory. |
| | | There is significant co-financing which was committed at the time of project design. Apart from Government departments, co-financing was to come from the private sector by way of their investment in the RE projects which were to be supported by the DREAMS project. The private sector RE projects which were identified for support at the time of PPG, got scraped on a later date due to a variety of reasons. The DREAMS project is in the process of identifying and supporting another set of RE projects, which would require such a support. Once the investment in the newly identified RE set of projects get implemented, the co-financing part of the private sector would get realised. |
| Sustainability | L | At an aggregate level, technical risks to sustainability of the project are considered low. The financial sustainability of the project is assessed to be likely. At this mid-point in project implementation, socioeconomic sustainability is considered as likely. From the view point of institutional framework and governance risks, the sustainability of the project is Moderately Likely. From the view point of environmental risk, sustainability of the project is Likely. |

8.1.2 Conclusions

The DREAMS project is a follow up project, to the GEF supported project "Capacity Building to Remove Barriers to Renewable Energy Development in the Philippines (CBRED)". CBRED lead to Renewable Energy Act (RE Act) of 2008 in Philippines. In the RE Act there are provisions for fiscal and non-fiscal incentives (such as the Renewable Portfolio Standard, Net Metering and Green Energy Option, among others) for promoting the investment in the RE sector. Despite the past efforts under the RE Act to catalyze RE development in the Philippines, barriers still exist, such barriers include;

a. 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. At the local level, there is also lack of capacity and understanding regarding the provisions in the RE Act
- b. 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
- c. There is a lack of demonstration of successful implementation of the RE projects under the new regime following the RE Act.

The idea of the DREAMS project was to address these barriers, 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 implementation of RE projects at the local level (addressing barrier a. above); creation of RE Markets and its implementation (addressing barrier b. above); facilitating implementation of the RE project using 'project preparation fund' created under the project (addressing barrier c. above). As per the project design, these three main work tracks under the DREAMS project were to be supported by a number of enabling activities e.g. development of policies and regulations, promotion of local production of RE equipment etc.

In accordance with the provisions in the 'Project Document' and in line with the three work tracks mentioned above the project team is working the three specific programs under the project, namely, 'Local RE Planning Capacity Building Program (LREP)'; 'Philippine RE Market System (PREMS)'; 'Project Preparation Fund (PPF). At the MTR, while the work on the LREP and PREMS is progressing well, the work on utilization of large funds under PPF is still to be initiated. Successful implementation of the recommendation at the MTR, to utilize the PPF to implement RE facilities will ensure attainment of the project objectives and the desired results by the end of the project.

8.2 Recommendations

Mid-term review questions (see Annex B)

- Corrective actions for the design, implementation, monitoring and review of the project
- Actions to follow- up or reinforce initial benefits from the project
- Proposals for future directions underlining main objectives

| Recommendation | Issues |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| In the results frame-work of the project, include direct GHG emission reductions as one of the Indicator | It is recommended that the projected direct reduction in the emission of GHG, due to the project be taken in the results framework of the project as an additional Indicator (Indicator D) with its corresponding Target. The figures of the projected direct GHG emissions due to the project are already provided in the project document, but it has not been taken to the results framework as an indicator and the target. As most of the direct GHG emission reduction would happen beyond the implementation timelines of the project, it would not be possible to monitor the achievement by measurement of the RE power generated. The monitoring of the achievement in this case may be done by estimating the 'Capacity Utilization Factor (CUF)' of the RE capacity created. |
| 2. In the results frame work for the project, review the target value of the indicator '% share of RE in the power generation mix of the Philippines'. | The target value for the Indicator '% share of RE in the power generation mix of the Philippines' is a bit over ambitious. As per the workings provided in the 'Project Document', in order to achieve the target, the total RE capacity addition required during the implementation timelines of the project would be 4866 MW. This is against the required total power generation capacity addition of 4275 MW during the same period. Thus, the entire electricity generation capacity addition required during the implementation period of the project would need to be essentially from renewable sources. This is |

| Recommendation | Issues | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| | not a practical thing to do, particularly considering that generally speaking RE is an intermittent source of power and needs to be supported by non-RE sources of supply to ensure continuous supply of electricity. | |
| | The project document itself has suggested (footnote 66 of project document) that this target should be reviewed during the project, to ensure it is commensurate with DOE's targets which are reviewed annually. It is recommended that the target value for this Indicator be reviewed and if needed revised. | |
| 3. Extent the project implementation timelines by one year | Actual implementation of the project started late (by about one year). Although, the implementation is happening as required, it would not be possible to complete some of the important activities within the remaining project implementation timelines, hampering the achievements of the project (e.g. Creation of the RE capacities). It is recommended that a no cost extension of one year be provided to the project. | |
| 4. Expedite the use of resources of the project for the creation of financial instruments | Under outcome 4a, there is a provision for US\$1 million to design financial instruments to facilitate funding of RE projects by the banks. Somehow, this provision could not be implemented till the time of MTR. | |
| | It is recommended that the available funds may be utilized in an expeditious manner. Some of the ways which are in line with the overall project objectives and outcomes in this regard are as follows: | |
| 5. Support creation of financial | a. Grant part capital subsidy for RE projects in non-viable/difficult areas established by private sector parties on competitive bidding basis invited by LGUs or Electric cooperatives b. Provide part grants to LGUs (balance coming from LGUs) for establishing community managed small RE projects c. Provide 'interest rate drawdown support' to the RE projects being established in difficult areas d. Provide performance-based incentives (in terms of P/kWh) for RE based projects. The selection of projects to be supported maybe done while inviting the parties to establish RE based power projects e. Available resources may also be used for some of the other appropriate measures to support overall objective of the project recommended under recommendations 6. | |
| 5. Support creation of financial models and also studies to determine the cost of generation of electricity out of different RE resources | Project document already has provision for these activities under Outcome 3 (Output 3.1, activity 3.1.3). The project team already has plans to carry out these activities. It is recommended that these activities may be carried out in expeditious manner to realize the benefits towards achieving the objective of the project. | |
| | One of the models which may be examined is the possibility of conversion of existing diesel-based standalone generators to RE- Diesel Hybrid. Financial feasibility study in this case would consider CAPEX as the cost of RE component, OPEX as 1% to 2.5% of CAPEX and Revenue is the Diesel Saved due to introduction of the RE component. Project may support development of standard simple Excel based financial model to support this. | |

| Recommendation | Issues |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6. Develop and enforce performance standards for RE equipment (Solar PV, Wind turbines etc.) and components like inverters, meters, control systems. Support this initiative with the establishment of accredited testing facilities. | Enforcement of performance of standards will ensure that only equipment of good quality gets imported in the country. This over a period of time will increase the confidence level of the investors in the RE technology. Project already have some provisions towards such activities under Outcome 1.5 (activities 1.5.2, 1.5.3, 1.5.4). It is recommended that implementation of these activities be expedited. For the additional suggestion to support creation of an accredited testing facility some of the funds under recommendation 3 may also be utilized. Accredited lab may be established within an appropriate government/institution owned facility. |
| 7. For work plan pick activities from the project document | Some of the activities provided in the project design has not been taken up in the workplans. MTR team is of the view that one of the reasons for this is that while preparing the workplans, the activities mentioned in the 'Project Document' are not referred. Thus, implementation of many activities which are required as per 'Project Document' don't get included in the work plan and hence doesn't get carried out. It is recommended that while preparing the workplans and budget, a reference from the activities provided in the Project Design maybe drawn. This will ensure that any activity specified in the Project Design does not get missed out due to oversight. |
| 8. Communication regarding the upcoming policy instrument for RE promotion | It is recommended that in order to increase the awareness amongst stakeholders, the project may come out with simple communication products (e.g. newspaper articles, communication in magazine of trade associations, online media) informing the changing landscape for doing business in the power sector in general and in the RE space in particular. |
| 9. Study regarding the potential demand for RE under the RE portfolio standards and the corresponding supply of RE for the compliance market to see the gap in demand and supply over a period of time | The study may include an exercise to determine the likely price band for Green Energy Certificates. Examine the possibility to come out with regulations regarding 'Floor Price' and a 'Cap Price' for Green Energy Certificates. |
| 10. Capacity building of private sector investors, RE equipment manufacturers and banks regarding the opportunities available under the RE portfolio standards and RE Certificates regime | Utilize the results of recommendation 5 and recommendation 9 to inform the prospective private sector investors regarding the opportunities available for the RE business under the new policy regime for the RE sector. |
| 11. In the guidelines by DOE for competitive bidding there should be directive to procure separate quantities for RE and for fossil- fuel based power | With the RPS in force, the electric co-operative/distribution utilities would need to attempt procuring a part of the electricity from RE sources. From time to time depending upon the expected demand for electricity, the electric co-operatives invite the competitive bids for procurement of power. It is recommended that while inviting the bids there should be separate quantity mentioned for RE sources and |

| Recommendation | Issues |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | the evaluation of bids for RE part of the quantity should be done separately. |
| 12. Introduce training modules on RE in the Industrial training institutes | Under outcome 4a, one of the targets is to ensure sufficient availability of certified technicians for RE. It is recommended that a RE specific training module be introduced in a some of the existing modules of TESDA and be available as a regularly course offered. |
| 13. Facilitate the capacity building assistance to the LGUs in harmonizing the energy components (with RE applications) of Local Development plans (Comprehensive Development Plans, Annual Investment Plans and Comprehensive Land Use Plans) | The local development plans of provinces (Iloilo and Palawan) and municipal level LGUs lacks details in the energy sector application of renewable energy. The local planning process feeds into the Regional Development Plan that incorporates the local energy plans. Technical Assistance inputs needs to be mobilized to assist the LGUs (provincial and municipal) through a participatory approach in developing their local energy plans. Review and streamline the process and develop guidelines on the local energy planning that will be incorporated the HLURB local planning guidelines. |
| 14. Capacity building of regulatory authorities | Study tour based on opportunities to participate in international workshops (separately for higher official and for managerial level officials) Consultancy for International Best Practices and case studies provided under dedicated sessions by the consultants |

ANNEX A. TERMS OF REFERENCE

International Consultant for Mid Term Review of the Development for Renewable Energy Applications for Market Mainstreaming and Sustainability Project

| Location: | Home-based |
|----------------------------------|-------------------------------------|
| Application Deadline: | 04-Nov-19 (Midnight New York, USA) |
| Time left: | 13d 13h 42m |
| Type of Contract: | Individual Contract |
| Post Level: | International Consultant |
| Languages Required: | English |
| Expected Duration of Assignment: | 38 days spread over five (5) months |

Background

Project Title

Development for Renewable Energy Applications for Market Mainstreaming and Sustainability

Context

UNDP Philippines has been working to improve the lives of the Filipino people since 1965, and is committed to help the country progress on the Sustainable Development Goals (SDGs) as well as national development priorities as set out in the Philippine Development Plan. Under the UNDP Strategic Plan for Environment and Sustainable Development's outcomes, UNDP aims for strengthened national capacities to mainstream environment and energy concerns into national development plans and implementation systems. It also aims to improve environmental sustainability of development processes.

The Development for Renewable Energy Applications for Market Mainstreaming and Sustainability Project's objective of the Project is to reduce GHG emissions through the promotion and facilitation of the commercialization of renewable energy (RE) markets through the removal of barriers to increase investments in RE-based power generation projects. This will be achieved through 4 components with the following outcomes: 1) Enforcement of a supportive policy and regulatory environment for leveraging investment in RE development and applications at the local level; 2) Strengthened institutional capacity that leads to increased RE investment at the local level; 3) Increased share of RE-based power capacity; and 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. 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.

Institutional Arrangement

The Climate Action Outcome Lead shall directly supervise the Mid Term Review Team. At different points during the contract, the Consultant is expected to liaise/interact/collaborate/meet with the Department of Energy.

Duration of Work

The total duration of the MTR will be 38 days spread over five (5) months. The tentative MTR timeframe is as follows:

• 1-15 December 2019: Preparation of the MTR Team (handover of project documents)

- 15 December 2019-10 January 2020 (3 days): Document review and preparing MTR Inception Report
- 10-15 January 2020: Finalization and Validation of MTR Inception Report- latest start of MTR mission
- 15-25 January 2020 (10 days): MTR mission: stakeholder meetings, interviews, field visits
- 27 January 2020: Mission wrap-up meeting & presentation of initial findings- earliest end of MTR mission
- 27 January to 15 February 2020 (10 days): Preparing draft report
- 15 February 2020: Incorporating audit trail on draft report/Finalization of MTR report
- 15 February-28 February 2020 (2 weeks): Preparation & Issue of Management Response
- 28 February 2020 (2 weeks): Expected date of full MTR completion

Duty Station

The consultant's duty station/location for the contract duration is mainly home based with mission to Manila of at least 10 days and field visits of at least 5 days in Palawan and Iloilo, if necessary.

Scope of Price Proposal and Schedule of Payments

Financial proposals must be "all inclusive" and expressed in a lump-sum for the total duration of the contract. The term "all inclusive" implies all cost (professional fees, all related expenses for travels mentioned in Clause G, living allowances etc.).

- First Tranche 20% Upon submission and approval of the MTR Inception Report
- Second Tranche 10% Upon completion of the Presentation
- Third Tranche 30% Upon submission and approval of the Draft Final Report
- Fourth Tranche 40% Upon submission and approval of the Final Report

Duties and Responsibilities

The mid-term review shall be composed of a two-man team (one international and one national consultant). The MTR team will first conduct a document review of project documents (i.e. PIF, UNDP Initiation Plan, Project Document, ESSP, Project Inception Report, PIRs, Finalized GEF focal area Tracking Tools, Project Appraisal Committee meeting minutes, Financial and Administration guidelines used by Project Team, project operational guidelines, manuals and systems, etc.) provided by the Project Team and Commissioning Unit. Then they will participate in an MTR inception workshop to clarify their understanding of the objectives and methods of the MTR, producing the MTR inception report thereafter. The MTR mission will then consist of interviews and site visits to 5 pilot cities Manila, and possibly Iloilo and Palawan, where pilot sites are located.

The MTR team will assess the following four categories of project progress and produce a draft and final MTR report. See the *Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects* (Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-<u>Financed Projects</u>), for requirements on ratings. No overall rating is required.

Project Strategy

Project Design:

- Review the problem addressed by the project and the underlying assumptions. Review the effect of any incorrect assumptions or changes to the context to achieving the project results as outlined in the Project Document.
- Review the relevance of the project strategy and assess whether it provides the most effective route towards expected/intended results.
- Review how the project addresses country priorities
- Review decision-making processes

Results Framework/Log-frame:

- Undertake a critical analysis of the project's log-frame indicators and targets, assess how "SMART" the midterm and end-of-project targets are (Specific, Measurable, Attainable, Relevant, Time-bound), and suggest specific amendments/revisions to the targets and indicators as necessary.
- Examine if progress so far has led to, or could in the future catalyse beneficial development effects (i.e. income generation, gender equality and women's empowerment, improved governance etc...) that should be included in the project results framework and monitored on an annual basis.

Progress Towards Results

- Review the log-frame indicators against progress made towards the end-of-project targets; populate the Progress Towards Results Matrix, as described in the *Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects*; colour code progress in a "traffic light system" based on the level of progress achieved; assign a rating on progress for the project objective and each outcome; make recommendations from the areas marked as "not on target to be achieved" (red).
- Compare and analyse the GEF Tracking Tool at the Baseline with the one completed right before the Midterm Review.
- Identify remaining barriers to achieving the project objective.
- By reviewing the aspects of the project that have already been successful, identify ways in which the project can further expand these benefits.

Project Implementation and Adaptive Management

Using the *Guidance for Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects*; assess the following categories of project progress:

- Management Arrangements
- Work Planning
- Finance and co-finance
- Project-level monitoring and evaluation systems
- Stakeholder Engagement
- Reporting
- Communications

Sustainability

Assess overall risks to sustainability factors of the project in terms of the following four categories:

- Financial risks to sustainability
- Socio-economic risks to sustainability
- Institutional framework and governance risks to sustainability
- Environmental risks to sustainability

The MTR consultant/team will include a section in the MTR report setting out the MTR's evidencebased **conclusions**, in light of the findings.

Additionally, the MTR consultant/team is expected to make **recommendations** to the Project Team. Recommendations should be succinct suggestions for critical intervention that are specific, measurable, achievable, and relevant. A recommendation table should be put in the report's executive summary. The MTR consultant/team should make no more than 15 recommendations total.

The MTR consultant/team shall prepare and submit:

• MTR Inception Report: MTR team clarifies objectives and methods of the Midterm Review no later than 1 week before the MTR mission. To be sent to the Commissioning Unit and project management. Approximate due date: 10 January 2020

- **Presentation**: Initial Findings presented to project management and the Commissioning Unit at the end of the MTR mission. Approximate due date: 27 January 2020
- **Draft Final Report**: Full report with annexes within 1 week of the MTR mission. Approximate due date: 5 February 2020
- **Final Report***: Revised report with annexed audit trail detailing how all received comments have (and have not) been addressed in the final MTR report. To be sent to the Commissioning Unit within 1 week of receiving UNDP comments on draft. Approximate due date: 30 March 2020

*The final MTR report must be in English. If applicable, the Commissioning Unit may choose to arrange for a translation of the report into a language more widely shared by national stakeholders.

Competencies

Corporate competencies

- Demonstrates integrity by modelling the UN's values and ethical standards;
- Promotes the vision, mission, and strategic goals of UNDP;
- Displays cultural, gender, religion, race, nationality, and age sensitivity and adaptability;
- Treats all people fairly without favouritism.

Functional and technical competencies

- Ability to work in a diverse and multi-cultural environment;
- Self-motivated and ability to work under pressure and to meet strict and competing deadlines;
- Displays analytical judgment and demonstrated ability to handle confidential and politically sensitive issues in a responsible and mature manner;
- Demonstrates openness to change and ability to manage complexities;

Required Skills and Experience

Offers will be evaluated based on combined scoring method:

- Technical qualifications = 50%
- Proposed \hat{M} ethodology = 20%
- Financial Proposal = 30%

For the evaluation of the Technical Proposal, the selection of the successful consultant must be based in the following qualifications (with the appropriate obtainable points):

| Qualification | Obtainable |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| | Points |
| <i>Education:</i> A Master's degree in engineering, environmental management, industrial development, or other closely related field | 10 |
| <i>Experience:</i> 5 years of work experience with result-based management evaluation | |
| methodologies, applying SMART indicators and reconstructing or validating baseline scenarios | 15 |
| Competence in adaptive management, as applied to energy, decarbonization, | 10 |
| especially in relation to the renewable energy industry or commercialization expertise a strong asset, experience working in Asia will be an asset. | |
| At least 5 years' experience working with the GEF or GEF-evaluations, experience | 30 |
| within the UN system will be considered an asset. | |
| Demonstrated understanding of issues related to gender sensitive evaluation and analysis | 15 |
| Excellent communication skills and demonstrable analytical skills | 20 |
| TOTAL | 100 |

Applicants who will only receive 70 points from the assessment of the CV and Brief description of why the individual considers him/herself as the most suitable for the assignment will be qualified for the assessment of the Financial Proposal.

Recommended Presentation of Offer

Offerors **must upload in one (1) file** the documents below. You may download the editable version of the Offeror's Letter to UNDP Confirming Interest and Availability for the IC by clicking on this link: <u>http://gofile.me/6xdJm/bE9TCw8fU</u>

- 1. Duly accomplished **Offeror's Letter to UNDP Confirming Interest and Availability** for the IC that indicates the all-inclusive lumpsum contract price, supported by a breakdown of costs, as per template provided; If an Offeror 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 Offeror must indicate at this point, and ensure that all such costs are duly incorporated in the financial proposal submitted to UNDP;
- 2. **Financial Proposal** (Annex 2 of Offeror's Letter to UNDP Confirming Interest and Availability)
- 3. **Personal CV or P11**, indicating all past experience from similar projects, as well as the contact details (email and telephone number) of the Candidate and at least three (3) professional references;
- 4. **Comprehensive outline** of methodology.

In view of the volume of applications UNDP receives, only shortlisted offerors will be notified.

UNDP is committed to achieving workforce diversity in terms of gender, nationality and culture. Individuals from minority groups, indigenous groups and persons with disabilities are equally encouraged to apply. All applications will be treated with the strictest confidence. UNDP does not tolerate sexual exploitation and abuse, any kind of harassment, including sexual harassment, and discrimination. All selected candidates will, therefore, undergo rigorous reference and background checks.

ANNEX B. MID TERM REVIEW CRITERIA AND QUESTIONS

| Contents | Main review criteria and questions |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4. Findings: Project | |
| strategy | |
| 4.1 Project Design Problem being addressed Relevance and country drivenness 4.2 Results framework / Log-frame Log-frame; risks and assumptions; Indicators Stakeholder participation; linkager | What is the problem being addressed by the project and are the underlying assumptions are correct? Does the project strategy provide the most effective route towards expected/intended results? Were lessons from other relevant projects properly incorporated into the project design? How the project addresses priorities of Philippines. Was the project concept in line with the national sector development priorities and plans of Philippines? Were perspectives of those who would be affected by project decisions, those who could affect the outcomes, and those who could contribute information or other resources to the process, taken into account during project design. Are there are major areas of concern, recommend areas for improvement. Does the project decuately take into account the national realities, both in terms of institutional and policy framework in its design and implementation? Is the project country-driven? If the project progress is not good, what changes could have been made (if any) to the project design in order to improve the achievement of the project's expected results during rest of the project implementation period How 'SMART', (Specific, Measurable, Attainable, Relevant, Time-bound), the midterm and end-of-project targets are. Are the progress so far led to, or could in the future catalyse, beneficial development effects (i.e. income generation, gender equality and women's empowerment, improved governance etc.) that should be included in the project results framework and monitored on an annual basis? Are the broader development and gender aspects of the project are being monitored effectively? |
| with other initiatives; | |
| replication approach 5. Findings: Progress towards results 5.1 Attainment of outcomes and outputs • Progress towards outcomes analysis • Remaining barriers to achieve project | Review the log-frame indicators against progress made towards the end-of-project targets using the Progress Towards Results Matrix, with progress indicators for outcomes/outputs, indicating baseline and target levels, as well as current level and/or reported in PIR linked with ratings for each outcome |
| objectives 5.2 Global environmental and other impacts • GHG emission reduction estimates • Other impacts | Results in terms of contribution to sustainable development benefits, as well as global environmental benefits (direct and indirect emission reduction) Compare and analyse the GEF Tracking Tool at the Baseline with the one completed at the time of mid-term review What is the status and issues with employing RE for electricity generation? |

| Contents | Main review criteria and questions | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| | What are the remaining barriers to achieving the project objective in the remainder of the project? 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? | |
| 6. Findings: Project implementation 6.1 Adaptive management and planning; monitoring and evaluation Management Work planning Reporting Communications M&E systems | <i>Management:</i> appropriateness of the institutional arrangement and what are the ways in which the project can further expand these benefits? <i>Management:</i> appropriateness of the institutional arrangement and whether there was adequate commitment to the project? Review overall effectiveness of project management as outlined in the Project Document. Have changes been made and are they effective? Are responsibilities and reporting lines clear? Is decision-making transparent and undertaken in a timely manner? Recommend areas for improvement; Review the quality of execution of the Executing Agency/Implementing Partner(s) and recommend areas for improvement; Review the quality of support provided by the GEF Partner Agency (UNDP) and recommend areas for improvement <i>Work planning:</i> Review any delays in project start-up and implementation, identify the causes and examine if they have been resolved; Are work-planning processes results-based? If not, suggest ways to re-orientate work planning to focus on results? Examine the use of the project's results framework/log frame as a management tool and review any changes made to it since project start. <i>Reporting:</i> Assess how adaptive management changes have been reported by the Project Team and partners undertake and fulfil GEF reporting requirements (i.e. | |
| | Project Team and partners undertake and fulfil GEF reporting requirements (i.e. how have they addressed poorly-rated PIRs, if applicable?); Assess how lessons derived from the adaptive management process have been documented, shared with key partners and internalised by partners. <i>Communications:</i> Review internal project communication with stakeholders: Is communication regular and effective? Are there key stakeholders left out of communication? Are there feedback mechanisms when communication is received? Does this communication with stakeholders contribute to their awareness of project outcomes and activities and investment in the sustainability of project results? Review external project communication: Are proper means of communication established or being established to express the project progress and intended impact to the public (is there a web presence, for example? Or did the project implement appropriate outreach and public awareness campaigns?); <i>M&E:</i> Review the monitoring tools currently being used: Do they provide the necessary information? Do they involve key partners? Are they aligned or mainstreamed with national systems? Do they use existing information? Are they efficient? Are they cost-effective? Are additional tools required? How could they be made more participatory and inclusive? Examine the <i>financial management</i> of the project monitoring and evaluation budget. Are sufficient resources being allocated to monitoring and evaluation? Are these resources being allocated effectivel? | |
| 6.2 Stakeholder engagement | Project management: Has the project developed and leveraged the necessary and appropriate partnerships with direct and tangential stakeholders? Participation and country driven processes: Do local and national Government stakeholders support the objectives of the project? Do they continue to have an active role in project decision-making that supports efficient and effective project implementation? Participation and public awareness: To what extent has stakeholder involvement and public awareness contributed to the progress towards achievement of project objectives? | |

| Contents | Main review criteria and questions |
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| 6.3 Finance and co-financing | Consider the financial management of the project, with specific reference to the cost-effectiveness of interventions. Review the changes to fund allocations as a result of budget revisions and assess the appropriateness and relevance of such revisions. Does the project have the appropriate financial controls, including reporting and planning, that allow management to make informed decisions regarding the budget and allow for timely flow of funds? Informed by the co-financing monitoring table to be filled out, provide commentary on co-financing: is co-financing being used strategically to help the objectives of the project? Is the Project Team meeting with all co-financing partners regularly in order to align financing priorities and annual work plans? |
| 7. Findings: Sustainability | |
| 7.1 Project risks 7.2 Financial risks to sustainability 7.3 Socio-economic to sustainability 7.4 Institutional framework and governance risks to sustainability 7.5 Environmental risks to sustainability | Whether the risks identified in the Project Document, Annual Project Review/PIRs and the ATLAS Risk Management Module are the most important and whether the risk ratings applied are appropriate and up to date. If not, explain why. <i>Financial</i>: What is the likelihood of financial and economic resources not being available once the GEF assistance ends (consider potential resources can be from multiple sources, such as the public and private sectors, income generating activities, and other funding that will be adequate financial resources for sustaining project's outcomes)? <i>Socioeconomic</i>: Are there any social or political risks that may jeopardise sustainability of project outcomes? What is the risk that the level of stakeholder ownership (including ownership by Governments and other key stakeholders) will be insufficient to allow for the project outcomes/benefits to be sustained? Do the various key stakeholders see that it is in their interest that the project benefits continue to flow? Is there sufficient public/stakeholder awareness in support of the long-term objectives of the project? Are lessons learned being documented by the Project Team on a continual basis and shared/ transferred to appropriate parties who could learn from the project and potentially replicate and/or scale it in the future? <i>Institutional</i>: Do the legal frameworks, policies, governance structures and processes pose risks that may jeopardise sustenance of project outcomes? |
| 8. Conclusions and recommendations | |
| 8.1 Conclusions Summary of main findings and of ratings; statements on strengths and weaknesses Remaining barriers 8.2 Recommendations | Identify remaining barriers to achieving the project objective in the remainder of the project, and by reviewing the aspects of the project that have already been successful, identify ways in which the project can further expand these benefits MTR Ratings & Achievement Summary Table will be provided, summarising the ratings on a) results, b) implementation and adaptive management, 3) sustainability with a short description of the rating's justification Corrective actions for the design, implementation, monitoring and evaluation of |
| | the project Actions to follow up or reinforce initial benefits from the project Proposals for future directions underlining main objectives |

ANNEX C. DOCUMENTS REVIEWED

1. Project Document Package

| | SESP |
|----------------------------------|------------------------------------|
| | Letter to DOE |
| | Project Document |
| | Signed DOA |
| | LPAC Minutes signed |
| | Project Inception Report |
| | Micro assessment Report |
| | Project Document CEO Endorsed |
| 2. Minutes of PSC Meetings | |
| C | PSC Meeting 1 MOM - 21Dec2017 |
| | PSC Meeting 2 MOM - 23Feb2018 |
| | PSC Meeting 3 MOM - 28Nov2018 |
| | PSC Meeting 4 MOM - 19Jun19 |
| | PSC Meeting 5 |
| 3. Project Implementation Review | |
| | 2018-GEF-PIR |
| | 2019-GEF-PIR |
| 4. Annual Progress Report | |
| | 2018 APR |
| | 2019 APR |
| 5. Annual Work Plan | |
| | 2018 AWP |
| | 2019 AWP |
| 6. Quarterly Progress Report | |
| | 2018_1Q |
| | 2018_2Q |
| | 2018_3Q |
| | 2019_1Q |
| | 2019_2Q |
| | 2019_3Q |
| 7. Project Component 1 | |
| | RE Policies Supported |
| | NREP Assessment Dec 13 2019 |
| | GEOP Operating Guidelines |
| | GEOP Supply Contract |
| | RE Decade Report |
| 8. Project Component 2 | |
| | LREP Development Process |
| | LREP Palawan Component |
| | LREP Iloilo Component |
| | Social Preparation - Palawan |
| | Palawan Partners_ Meetings |
| | Social Preparation - Iloilo |
| | Iloilo Partners_ Meetings |
| | Assessment - Palawan and Iloilo |
| | LKEP Training Module 1 Report |
| | San Vicente Micro Hydro Assessment |

| | San Vicente Micro hydro Results |
|-------------------------|------------------------------------------------------------------|
| | San Vicente Micro hydro coordinates |
| | Assessment - Oriental Mindoro |
| | Mindoro Case Summary Report |
| 9. Project Component 3 | |
| | About the PREMS |
| | PREMS Launching |
| | Project Management Plan (PREMS Dev_t. Phase) |
| | Quality Management Plan (PREMS Dev_t. Phase) |
| | PEMC PREMS UAT1 and Hardware Report |
| | PEMC PREMS UAT1 and Hardware Annex A1 |
| | PEMC PREMS UAT1 and Hardware Annex A2 |
| | PEMC PREMS UAT1 and Hardware Annex A3 |
| | PEMC PREMS UAT1 and Hardware Annex B |
| | I.T. Expert PRES UAT 1 and HW Report |
| | PEMC Letter to REMB |
| | DOE Report on PREMS-UAT2 |
| | PEMC PREMS DR Site Report |
| | RE Market Technical Consultation Report |
| 10. Project Component 4 | |
| | PPF Study - Inception Plan |
| | Expedited RE Service Contracts |
| 11. CDR | |
| | CDR 2017 |
| | CDR 2018 |
| | CDR 2019 |
| 12. Other Documents | |
| | Co-financing Counterpart Contribution |
| | GEF Climate Change Tracking Tool |
| | Green Finance Meeting |
| | LREP Module 1 Workshop - REPORT for NPD |
| | LREP Module 1 Workshop - Documentation 30Oct |
| | LREP Module 1 Workshop - TNA for _new |
| | MIS TOR Signed |
| | Review of the Philippine power reserve requirements and fuel mix |
| | Table of Contents of the Compendium of RE Laws |
| | TOR IC Support Service Facility for RE Projects |
| | TOR IC Support Service Facility for RE Projects |
| | TOR Sr Technical Advisor |

ANNEX D. LIST OF PERSONS INTERVIEWED

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| Mr. Perdinand Larona Sr. Project Advisor for Renewable Energy Detusche Gesselschaft Fur Hitternationale (GIZ) Mr. Vicente Loria Transmission Planning Manager National Grid Corporation of the Philippines Ms. Ma. Angela Mamuyac Chief, Local Planning and Development Division Dept., of Interior and Local Government Mr. Clares Loren Jalocon Corp. Planning and Corp. Planning and President, Renewables Philippine Electricity Market Corporation of the Philippines (REAP) & One Renewables Association of the Philippines (REAP) & One Renewable Energy Enterprises Mr. Jeffrie Sahagun E-Governance Officer Palawan Provincial Government Mr. Lito Tito Vice Mayor Municipality of Aborlan, Palawan Mr. Salvador Cotamco Mun. Planning and Development Coordinator Municipality of San Vicente, Palawan Mr. Jayson Gregorio Electrical Engineer Municipality of San Vicente, Palawan Mr. Ryan Dagsa Maminta Provincial Board Member Palawan Local Government Unit Mr. Rero Rebueno Sr. Project Manager Pilipinas Shell Foundation Mr. Benny Aquino Voran Project Manager Pilipinas Shell Foundation Mr. Attero Rebueno Sr. Project Manager Pilipinas Shell Foundation Mr. Atage Abregas Corporate Planning Manager National Power Corporation | Ms. Maris Cerezo | Assistant Director, REMB | Department of Energy |
| Renewable Energy Internationale (GL2) Mr. Vicente Loria Transmission Planning National Grid Corporation of the Manager Ms. Ma. Angela Mamuyac Chief, Local Planning and Development Division Dept., of Interior and Local Government Mr. Clares Loren Jalocon Corp. Planning and Corp. Planning and President, Renewables Philippine Electricity Market Communications Head Corporation Mr. Erel Nerida President, Renewables Renewables Association of the Philippines (REAP) One Renewables Chergy Enterprises Mr. Jeffrie Sahagun E-Governance Officer Palawan Provincial Government Mr. Lito Tito Vice Mayor Municipality of Aborlan, Palawan Mr. Salvador Cotamco Mun. Planning and Development Coordinator Municipality of San Vicente, Palawan Mr. Jayson Gregorio Electrical Engineer Municipality of San Vicente, Palawan Mr. Ryan Dagsa Maminta Provincial Board Member Palawan Local Government Unit Mr. Astero Rebueno Sr. Project Manager Pilipinas Shell Foundation Mr. Antero Rebueno Sr. Project Manager Pilipinas Shell Foundation Mr. Rafael Abregas Corporate Planning Manager National Renewable Energy Board Mr. At | Mr. Ferdinand Larona | Sr. Project Advisor for | Deutsche Gesselschaft Fur |
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| Ms. Ma. Angela Mamuyac Chief, Local Planning and Development Division Dept., of Interior and Local Government Mr. Clares Loren Jalocon Corp. Planning and Communications Head Dept., of Interior and Local Government Mr. Erel Nerida President, Renewables Association of the Philippines (REAP) Renewables Association of the Philippines (REAP) & One Renewable Energy Enterprises Mr. Jeffrie Sahagun E-Governance Officer Palawan Provincial Government Mr. Lito Tito Vice Mayor Municipality of Aborlan, Palawan Mr. Salvador Cotamco Mun. Flanning and Development Coordinator Municipality of Aborlan, Palawan Mr. Ian Echavez Mun. Environment and Natural Resources Officer Municipality of San Vicente, Palawan Mr. Ryan Dagsa Maminta Provincial Board Member Palawan Local Government Unit Mr. Ferdinand Pontillas Corporate Planner Palawan Electric Cooperative Mr. Antero Rebueno Sr. Project Manager Pilipinas Shell Foundation Mr. Rafael Abregas Corporate Planning Manager National Power Corporation Ms. Joinan Dizon Corporate Staff Transmission Corporation Ms. Antero Rebueno Corporate Staff Transmission Corporation Ms. Monalisa Dimalanta Chaipperson National Renew | Mr. vicente Loria | I ransmission Planning | National Grid Corporation of the |
| Mar. Angela Mainuyae Chief, Locar Praining and Development Division Dept, of Infertor and Locar Government President, Renewables Mr. Clares Loren Jalocon Corp. Planning and Communications Head President, Renewables Mr. Erel Nerida President, Renewables Renewables Association of the Philippines (REAP) & One Renewable Energy Enterprises Mr. Jeffrie Sahagun E-Governance Officer Palawan Provincial Government Mr. Lito Tito Vice Mayor Municipality of Aborlan, Palawan Mr. Salvador Cotamco Mun. Planning and Development Coordinator Municipality of Aborlan, Palawan Mr. Jayson Gregorio Electrical Engineer Municipal Engineering Office, San Vicente, Palawan Mr. Ryan Dagsa Maminta Provincial Board Member Palawan Local Government Unit Mr. Ferdinand Pontillas Corporate Planner Palawan Electric Cooperative Mr. Antero Rebueno Sr. Project Manager Pilipinas Shell Foundation Mr. Rafael Abregas Corporate Planning Manager National Power Corporation Ms. Dinna Dizon Concession Contract Management Group Transmission Corporation Ms. Alma Segui Project Evaluation Officer IV Department of Environment and Natural Resources, FASP Service Ms. Elma Eleria Project Evaluation Officer | Ma Ma Angola Mamuuaa | Chief Legal Diagning and | Philippines |
| Mr. Clares Loren Jalocon Corp. Planning and Corp. Planning and President, Renewables Philippine Electricity Market Corporation Mr. Erel Nerida President, Renewables Association of the Philippines (REAP) Renewables Association of the Philippines (REAP) & One Renewable Energy Enterprises Mr. Jeffrie Sahagun E-Governance Officer Palawan Provincial Government Mr. Lito Tito Vice Mayor Municipality of Aborlan, Palawan Mr. Salvador Cotamco Mun. Planning and Development Coordinator Municipality of San Vicente, Palawan Mr. Ian Echavez Mun. Environment and Natural Resources Officer Municipal Engineering Office, San Vicente, Palawan Mr. Ryan Dagsa Maminta Provincial Board Member Palawan Local Government Unit Mr. Ryan Dagsa Maminta Corporate Planner Palawan Local Government Unit Mr. Ryan Dagsa Maminta Provincial Board Member Palawan Local Government Unit Mr. Ryan Dagsa Maminta Corporate Planner Palawan Local Government Unit Mr. Renny Aquino Voran Project Manager Pilipinas Shell Foundation Mr. Rafael Abregas Corporate Planning Manager National Power Corporation Ms. Dinna Dizon Corporate Staff Transmission Corporation Ms. Alina Segui Project Evaluation Officer IV< | Ms. Ma. Angela Manuyac | Development Division | Dept., of Interior and Local Government |
| InterformCompositionCompositionCompositionMr. Erel NeridaPresident, Renewables Association of the Philippines (REAP)Renewables Association of the Philippines (REAP) & One Renewable Energy EnterprisesMr. Jeffrie SahagunE-Governance OfficerPalawan Provincial GovernmentMr. Lito TitoVice MayorMunicipality of Aborlan, PalawanMr. Salvador CotamcoMun. Planning and Development CoordinatorMunicipality of Aborlan, PalawanMr. Ian EchavezMun. Environment and Natural Resources OfficerMunicipality of San Vicente, PalawanMr. Jayson GregorioElectrical EngineerMunicipal Engineering Office, San Vicente, PalawanMr. Ryan Dagsa MamintaProvincial Board MemberPalawan Local Government UnitMr. Antero RebuenoSr. Project ManagerPilipinas Shell FoundationMr. Antero RebuenoSr. Project ManagerPilipinas Shell FoundationMr. Alipio AgatonCorporate Planning ManagerNational Power CorporationMr. Alipio AgatonCorporate StaffTransmission CorporationMr. Alipio AgatonCorporate StaffTransmission CorporationMs. Dinna DizonConcession Contract Management GroupTransmission CorporationMs. Elma EleriaProject Evaluation Officer IV Project Evaluation Officer IVDepartment of Environment and Natural Resources, FASP ServiceMs. Elma EleriaProject Evaluation Officer IV Project Evaluation Officer IVDepartment of Environment and Natural Resources, Foreign Assisted and Special Project Service (FASPS) | Mr. Clares Loren Jalocon | Corp Planning and | Philippine Electricity Market |
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| Mr. Lito TitoVice MayorMunicipality of Aborlan, PalawanMr. Salvador CotamcoMun. Planning and Development CoordinatorMunicipality of Aborlan, PalawanMr. Ian EchavezMun. Environment and Natural Resources OfficerMunicipality of San Vicente, PalawanMr. Jayson GregorioElectrical EngineerMunicipal Engineering Office, San Vicente, PalawanMr. Ryan Dagsa MamintaProvincial Board MemberPalawan Local Government UnitMr. Ferdinand PontillasCorporate PlannerPalawan Electric CooperativeMr. Castre TimbrezaManagerSolar Photovoltaic CenterMr. Antero RebuenoSr. Project ManagerPilipinas Shell FoundationMr. Rafael AbregasCorporate Planning ManagerNational Power CorporationMs. Dinna DizonConcession Contract Management GroupTransmission CorporationMs. Alipio AgatonCorporate StaffTransmission CorporationMs. Alma SeguiProject Development Officer IIIDepartment of Environment and Natural Resources, FASP ServiceMs. Elma EleriaProject Evaluation Officer IV Biomass Renewable Energy AllianceMr. Alberto Dalusung IIIRepresentativeMr. Alberto Dalusung IIIRepresentative | Mr. Jeffrie Sahagun | E-Governance Officer | Palawan Provincial Government |
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| Development CoordinatorMr. Ian EchavezMun. Environment and Natural Resources OfficerMr. Jayson GregorioElectrical EngineerMr. Ryan Dagsa MamintaProvincial Board MemberPalawan Local Government UnitMr. Ferdinand PontillasCorporate PlannerMr. Castre TimbrezaManagerMr. Antero RebuenoSr. Project ManagerPilipinas Shell FoundationMr. Rafael AbregasCorporate Planning ManagerMs. Dinna DizonCorcession Contract Management GroupMr. Alipio AgatonCorporate StaffMs. Alma SeguiProject Development Officer IIIMs. Elma EleriaProject Evaluation Officer IV Project Evaluation Officer IVMs. Elma EleriaProject Evaluation Officer IV Department of Environment and Natural Resources, FASP ServiceMs. Alma SeguiProject Evaluation Officer IV Department of Environment and Natural Resources, Foreign Assisted and Special Project Service (FASPS)Mr. Alberto Dalusung IIIRepresentative | Mr. Salvador Cotamco | Mun. Planning and | Municipality of Aborlan, Palawan |
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| Mr. Castre TimbrezaManagerSolar Photovoltaic CenterMr. Antero RebuenoSr. Project ManagerPilipinas Shell FoundationMr. Benny Aquino VoranProject ManagerPilipinas Shell FoundationMr. Rafael AbregasCorporate Planning ManagerNational Power CorporationMs. Dinna DizonConcession Contract Management GroupTransmission CorporationMr. Alipio AgatonCorporate StaffTransmission CorporationMs. Monalisa DimalantaChairpersonNational Renewable Energy BoardMs. Alma SeguiProject Development Officer IIIDepartment of Environment and Natural Resources, FASP ServiceMs. Elma EleriaProject Evaluation Officer IV Project Evaluation Officer IVDepartment of Environment and Natural Resources, Foreign Assisted and Special Projects Service (FASPS)Mr. Alberto Dalusung IIIRepresentativeBiomass Renewable Energy Allipnee | Mr. Ferdinand Pontillas | Corporate Planner | Palawan Electric Cooperative |
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| Mr. Alipio Agaton Corporate Staff Transmission Corporation Ms. Monalisa Dimalanta Chairperson National Renewable Energy Board Ms. Alma Segui Project Development Officer III Department of Environment and Natural Resources, FASP Service Ms. Elma Eleria Project Evaluation Officer IV Department of Environment and Natural Resources, Foreign Assisted and Special Projects Service (FASPS) Mr. Alberto Dalusung III Representative Biomass Renewable Energy Alliance | | Management Group | |
| Ms. Monalisa Dimalanta Chairperson National Renewable Energy Board Ms. Alma Segui Project Development Officer Department of Environment and Natural Resources, FASP Service Ms. Elma Eleria Project Evaluation Officer IV Department of Environment and Natural Resources, Foreign Assisted and Special Projects Service (FASPS) Mr. Alberto Dalusung III Representative Biomass Renewable Energy Alliance | Mr. Alipio Agaton | Corporate Staff | Transmission Corporation |
| Mis. Alma Segui Project Development Officer Department of Environment and Natural Resources, FASP Service Mis. Elma Eleria Project Evaluation Officer IV Department of Environment and Natural Resources, Foreign Assisted and Special Projects Service (FASPS) Mr. Alberto Dalusung III Representative Biomass Renewable Energy Alliance | Ms. Monalisa Dimalanta | Chairperson | National Renewable Energy Board |
| III Resources, FASP Service Ms. Elma Eleria Project Evaluation Officer IV Department of Environment and Natural Resources, Foreign Assisted and Special Projects Service (FASPS) Mr. Alberto Dalusung III Representative Biomass Renewable Energy Alliance | NIS. Alma Segui | Project Development Officer | Department of Environment and Natural |
| Mis. Elina Eleria Project Evaluation Officer IV Department of Environment and Natural Resources, Foreign Assisted and Special Projects Service (FASPS) Mr. Alberto Dalusung III Representative Biomass Repewable Energy Alliance | Ma Elma Elaria | III Drainat Evaluation Office BI | Resources, FASP Service |
| Mr. Alberto Dalusung III Representative Biomass Renewable Energy Alliance | IVIS. Elma Eleria | Project Evaluation Officer IV | Department of Environment and Natural Descurres Environment and Section |
| Mr. Alberto Dalusung III Representative Riomass Renewable Energy Alliance | | | Projects Service (EASDS) |
| | Mr. Alberto Dalusung III | Representative | Biomass Renewable Energy Alliance |

| Name | Designation/Position | Organization |
|---------------------------|-----------------------------|--------------------------------------|
| Mr. Mario Nillos | Provincial Planning and | Iloilo Provincial Planning and |
| | Development Coordinator | Development Office |
| Ms. Susette Mamon | Provincial Administrator | Iloilo Provincial LGU |
| Ms. Mae Abeja | Project Officer II | Iloilo Provincial LGU |
| Mr. Rolle Depakakibo | Project Development Officer | Provincial Planning and Development |
| | III | Office- Iloilo |
| Mr. Nilo Hinojales | Municipal Engineer | Ajuy Municipal LGU, Palawan |
| Mr. Jorge Cadiao Jr. | MPDP Staff | Ajuy Municipal LGU, Palawan |
| Ms. Christine Joy Henmano | ISD Manager | Iloilo Electric Cooperative 3 |
| Ms. Consorcia Penaranda | General Manager | Iloilo Electric Cooperative 3 |
| Ms. Elna Balto | Corplan Chief | Iloilo Electric Cooperative 3 |
| Mr. Melvin Purzullo | Coordinator | GF-Western Visayas |
| Mr. Jeriel Militar | Project Leader | Central Philippines University- AREC |

ANNEX E. DREAMS MTR MISSION ITINERARY

| Date/Time | A ctivity | Respondents |
|-------------------------|-----------------------------------------------|-------------------------------------------------------|
| Jan 19, 2020, Sunday | Arrival-Manila | Dinesh Aggarwal |
| June 20. Monday | | Dinesh Aggarwal/Felicisimo David Jr. |
| 08:00-08:45AM | Courtesy and meeting at UNDP Country | Ms. Marian Theresia Valera Co |
| | Office | Ms. Gwen Anne Palmos |
| | | |
| 09:00-11:00AM | Interview/Meeting NEDA-Officials/staff | Mr. Eric Planta, Assistant Secretary, |
| | handling Infrastructure/Energy & | Investment Programming Group |
| | Environment Sector | Ms. Marina Ferrer, Economic Development |
| | | Specialist |
| | | Mr Bernie Magtaas, Sr. Economic Development |
| 01.00.02.00 DM | Martin a suith the Investmentine Destroy | Specialist, Infrastructure Staff |
| 01:00-05:00PM | (DOE-REMR) and DREAMS PMIL | Atty Maris P Cerezo |
| | Briefing/Project undates and finalize MTR | Mr. Gaspar Recobar Ir SRS-TSMD |
| | schedule | Mr. Ricardo Torres-DRFAMS project manager |
| | senedule | PMU staff (Marc Caoili, Hyacynth Rivera, Anne |
| | | Brigitte Lim, Ranee Vitan) |
| 3:30-4:00 PM | Interview, DOE -REMB | Ms. Ruby de Guzman, Division Chief, Biomass |
| | | Energy Management Division |
| 4-5:00 | Interview, DOE-REMB | Mr. Andy Ulgado, Division Chief, Hydro/Ocean |
| 4-4:30 PM | Interview, DOE REMB | Mr. Gaspar G. Escobar Jr, SRS-TSMD |
| Jan 21, Tuesday | Interview/meeting with GIZ representative | Mr. Ferdinand Larona |
| 8:00-9:00 AM | | GIZ Senior RE Advisor |
| 09:30-11:00 AM | Interview National Grid Corporation of the | Mr.Vicente Loria, Transmission Planning |
| | Phil (NGCP) officers | Manager |
| | | Mr.Christian Erenio, Visayas Transmission |
| 1.00 2.20 DM | | Planning Manager |
| 1:00-2:30 PM | Government Development | Mr. Joiomar Palawing, L COO III |
| Ion 22 Wodnosday | Government Development | Mi. Jejoinai Balaw-Ing, LOOO III |
| 10.00 AM-11.30 AM | Interview with DRFAMS Project Steering | USec Felix William Fuentebella |
| 10.00710111.507101 | Committee Chairman | |
| | | |
| 11:00-12:00PM | Interview with NREB Chairperson | Atty. Monalisa C. Dimalanta |
| 02:00-03:00PM | Interview Philippine Electricity Market | Mr. Clares Loren Jalocon |
| | Corporation (PEMC) Corporate Planning | |
| | Manager & Lead of Component 3 | |
| | Interview with Renewable Energy | |
| 03:30-04:30PM | Association of the Philippines (REAP) | Mr. Erel Nerida, Chairman, REAP |
| In 22 Thursday | MTD to any tangent to Delement | Dinash Assessed/Estisticas Devid In |
| 3 an 25, $1 mursuay$ | MTK team travel to Palawan | Diffesti Aggarwai/Fencisimo David Jr. |
| 0.007111 | Interview with Provincial LGU execs and | |
| | Staff | |
| 1:00 -2:00 PM | Governor's Office/E-Governance Officer, | Atty Jeffrie Sahagun Representative to |
| | | DREAMS PSC, |
| | Interview Provincial Board Member, | Mr. Aries jade del Rosario, Project Officer II |
| 2:00-3:00 PM | Chairman of Committee on Energy | Ms. Zandee Sophia Valledor, Project Evaluation |
| | | Officer |
| | Interview with Palawan Electric Cooperative | Mr. Ryan Maminta |
| | (PALECO) | |
| | | Mr. Fordinand Dantillas, Chief of Disaria |
| | | NIL FERDINANG PONULIAS, UNIEL OF Planning Division |
| | | Mr. Louie Libarra |
| Jan 24. Fridav | | |
| 8:30 -11:30 AM | Meeting with Palawan MLGUs participants | Mr. Lito Tito, Aborlan Vice Mayor &- Head |
| | to the completed capacity building activities | Renewable Energy Expert Group - Aborlan |

| 2:00-3:00 PM 3:30-4:30 PM Jan 25, Saturday | San Vicente MLGU Interview with RE Entrepreneur, Solar Photovoltaic Center Interview, Pilipinas Shell Foundation MTR team return to Manila | Mr. Salvador Cotamco, Mun. Planning and Development Coordinator, Aborlan Mr. Mr. Ian Echaves, MENRO, San Vicente Jayson Gregorio, Municpal Engineer, San VIcente Mr. Castre Timbreza, Manager Mr. Antero Rebueno, Sr. Project Manager Mr. Benny Aquino Voran, Project Manager Dinesh and Jun |
|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7:00 AM | MTD Team propagation of Initial Mission Eindi | |
| Jan 20, Sunday | National Power Corporation (NPC) | Mr. Dafaal Abargas |
| 8.30-9.30 AM | National Fower Corporation (NFC) | Corporate Planning Manager |
| 10:00-11:00 | Transmission Corporation | Mr. Alipio Agaton, Corporate Staff |
| Jan 28. Tuesday | | |
| 7:00 AM | Travel to Iloilo City | Atty. Suzette Mamon, Provincial Administrator |
| 10:00 AM -2:00 PM | Provincial Government of IloiloProvincial Planning and Development OfficeILECO 3 | Mr. Mario Nilos, PPDO Head Mr. Rolly Depakibo, PPDO Ms. May Abeja, PPDO |
| 2:30-3:30 PM 4:00-5:00 PM | Municipality of Ajuy AREC Central Philippines University Green Forum -NGO Network in Western Visayas Interview with RE supplier and contractor, Solar Photovoltaic centre Interview with Pilipinas Shell Foundation | Ms.Consorcia Penaranda, General Manager Ms. Christine Joy Henmano, ISD Manager Ms. Elna Balto, Chief, Corporate Planning Mr. Lino Hinojales, Municipal Engineer Mr. Jorge Cadiao Jr., Mun. Planning and Devt Coordinator Mr. Jerry Militar , head AREC-CPU Mr. Melvin Purzullo, Coordinator Mr. Castre Timbreza, Manager Mr. Antero Rebueno, Sr. Project Manager Mr.Benny Aquino Voran, Project Manager |
| Jan 29, Wednesday | Travel back to Manila | |
| 7:00 AM | | |
| 10:00 AM | Meeting with DREAMS PM | Mr. Ricardo Torres |
| 1:30-2:30 PM | Masting with DOE AREC Focal Person | Fortunato S. Sibayan |
| 5.50-4:00 PWI | wiedung with INKED Unairperson | Auy. Moliansa Dimalanta |
| Jan 30, Thursday 9:30-10:30 AM 2:30-3:30 PM | Meeting with Project Manager/PMU Team Meeting with Representative of RE Association at NREB & Member of Biomass | Mr. Ricardo Torres Mr. Alberto Dalusong III |
| | Alliance | |
| | Drafting of Initial MTR findings | MTR Team |
| Jan 31, Friday 11:00 AM-12::00nn | Reporting of Initial MTR Mission Findings at UNDP CO | MTR Team |
| 1:00 – 3:00 PM | Reporting of Initial MTR Mission Finding at DOE REMD | MTR Team |
| Feb 1, Saturday | Travel back to home base | Dinesh Aggarwal |

ANNEX F. RATING SCALE /DEFINATION

| Ra | Ratings for Progress Towards Results: (one rating for each outcome and for the objective) | | |
|----|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 6 | Highly Satisfactory (HS) | The objective/outcome is expected to achieve or exceed all its end-of-project targets, without major shortcomings. The progress towards the objective/outcome can be presented as "good practice". | |
| 5 | Satisfactory (S) | The objective/outcome is expected to achieve most of its end-of-project targets, with only minor shortcomings. | |
| 4 | Moderately Satisfactory (MS) | The objective/outcome is expected to achieve most of its end-of-project targets but with significant shortcomings. | |
| 3 | Moderately Unsatisfactory (MU) | The objective/outcome is expected to achieve its end-of-project targets with major shortcomings. | |
| 2 | Unsatisfactory (U) | The objective/outcome is expected not to achieve most of its end-of-project targets. | |
| 1 | Highly Unsatisfactory (HU) | The objective/outcome has failed to achieve its midterm targets, and is not expected to achieve any of its end-of-project targets. | |

| Ra | Ratings for Project Implementation & Adaptive Management: (one overall rating) | | |
|----|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 6 | Highly Satisfactory (HS) | Implementation of all seven components – management arrangements, work planning, finance and co-finance, project-level monitoring and evaluation systems, stakeholder engagement, reporting, and communications – is leading to efficient and effective project implementation and adaptive management. The project can be presented as "good practice". | |
| 5 | Satisfactory (S) | Implementation of most of the seven components is leading to efficient and effective project implementation and adaptive management except for only few that are subject to remedial action. | |
| 4 | Moderately Satisfactory (MS) | Implementation of some of the seven components is leading to efficient and effective project implementation and adaptive management, with some components requiring remedial action. | |
| 3 | Moderately Unsatisfactory (MU) | Implementation of some of the seven components is not leading to efficient and effective project implementation and adaptive, with most components requiring remedial action. | |
| 2 | Unsatisfactory (U) | Implementation of most of the seven components is not leading to efficient and effective project implementation and adaptive management. | |
| 1 | Highly Unsatisfactory (HU) | Implementation of none of the seven components is leading to efficient and effective project implementation and adaptive management. | |

| Ratings for Sustainability: (one overall rating) | | |
|--------------------------------------------------|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4 | Likely (L) | Negligible risks to sustainability, with key outcomes on track to be achieved by the project's closure and expected to continue into the foreseeable future |
| 3 | Moderately Likely (ML) | Moderate risks, but expectations that at least some outcomes will be sustained due to the progress towards results on outcomes at the Midterm Review |
| 2 | Moderately Unlikely (MU) | Significant risk that key outcomes will not carry on after project closure, although some outputs and activities should carry on |
| 1 | Unlikely (U) | Severe risks that project outcomes as well as key outputs will not be sustained |

ANNEX G. CONSULTANT CODE OF CONDUCT FORM

Evaluators/reviewers:

- 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, minimise 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 limitations, findings and recommendations.
- 7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Evaluation/reviewer Consultant Agreement Form

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

Name of Consultant: Dinesh Aggarwal (on behalf of the MTR team)

ANNEX H. AUDIT TRAIL

| Author | # | Para No./ comment location | Comment/Feedback on the draft MTR report | MTR team response and actions taken |
|--------|---|----------------------------------|------------------------------------------|-------------------------------------|
| | | | | |
| | | | | |
| | | | | |

In accordance with the procedures, Audit Trail is being submitted as a separate file

ANNEX I. EVALUATION REPORT CLEARANCE FORM

| Evaluation Report Reviewed and Cleared by | | | |
|-------------------------------------------|-------------------|--|--|
| UNDP Country Office | | | |
| Name: Floradema Eleazar | | | |
| Signature: C. Fliayor | Date:16 July 2020 | | |
| UNDP GEF RTA | | | |
| Name: _Usha Rao | | | |
| K. Web Pro | | | |
| Signature: | Date:16 July 2020 | | |