



UNITED NATIONS DEVELOPMENT PROGRAMME GLOBAL ENVIRONMENT FUND

FIJI DEPARTMENT OF ENERGY

UNDP GEF Project

Atlas Award ID: 00060769

Atlas Project ID: 00076656

PIMS No. 4358

“Fiji Renewable Energy Power Project (FREPP)”

GEF Focal Area: Climate Change

GEF-4 Strategic Program 3 on promoting market approaches for the supply of renewable electricity in utility scale grid-based power systems; and Strategic Program 4, on promoting sustainable energy production from biomass and modern uses of biomass.

Mid-Term Evaluation Final Report

Consultant: Alfredo Caprile

April, 2016

The analysis and recommendations of this report do not necessarily reflect the opinions of UNDP, its Executive Board or of the Members of the United Nations. This publication only reflects the opinion of the author.

Acknowledgment

This report has been prepared by Alfredo Caprile, President of Sustainable Development Advisors S.A. (www.sd-advisors.com.ar) in its capacity as Independent Consultant. The author would like to express his gratitude to all of the Project participants with whom he has met and interviewed during the Mid-Term evaluation mission in Suva, Fiji between the 22th and 31st of January 2016. The hospitality and gratitude that they have demonstrated in providing their opinions with regard to the outputs, outcomes and impacts that have been accomplished by the Project have been critical for the preparation of this report.

In particular, the author would like to thank Emma Mario, UNDP Programme Analyst for the Sustainable Development Pathways Cluster (Environment & Energy) and Merewalesi Laveti Environment Programme Associate from the UNDP office in Fiji, Miriama Baleimatuku, Project Manager for the Fiji Renewable Energy Power Project (FREPP) and Jeke Vakaloloma Pai, Biofuel Engineer, Fiji Department of Energy for their valuable contribution, as well as, to the rest of members of the Project team who have taken time to coordinate the interviews with the most relevant Project participants and have provided all of the requested information.

The author would also like to thank Thomas Jensen, Energy Programme Specialist, Bureau for Policy and Programme Support at UNDP Fiji, as well as, Susana Pulini, Director of the Department of Water and Sewerage and former FREPP Project Manager for their time in analysing the progress of the Project, its main achievements and the strategy that has been developed to complete the pending activities.

The Evaluator had the support of all the persons that have been interviewed to understand the context in which the Project has been developed, analyse the progress to date of the different activities that have been programmed and elaborate the conclusions and recommendations presented in this report.

Abbreviations and Acronyms

ADB	Asian Development Bank
AOP	Annual Operational Plan
APR-PIR	Annual Progress Report – Project Implementation Review
AWP	Annual Work Plan
CO ₂	Carbon Dioxide
CPAP	Country Program Action Plan
DOE	Fiji Department of Energy
EOP	End-of-Project
FEA	Fiji Electricity Authority
FJD	Fijian dollars
FREPP	Fiji Renewable Energy Power Project
FSC	Fiji Sugar Corporation
GEF	Global Environment Facility
GHGs	Greenhouse Gases
IEP	Integrated Energy Planning
IMF	International Monetary Fund
IP	Implementing Partner
IPP	Independent Power Producer
IRENA	International Renewable Energy Agency
kWh	Kilowatt-hour
M&E	Monitoring and Evaluation
MW	Megawatt
NEC	National Energy Council
NEMP	National Electrification Master Plan
NEP	National Energy Policy
NGO	Non-governmental organization
NIM	National Implementation Modality
PIC	Pacific Island Country
PMU	Project Management Unit
PPA	Power Purchasing Agreement
PSC	Project Steering Committee
QPR	Quarterly Project Report
RE	Renewable Energy
RET	Renewable Energy Technology
SEIAPI	Sustainable Energy Industry Association of the Pacific Islands
SFCCO	Strategic Framework for Change Coordinating Office
SHS	Solar Home System
SIDS	Small Island Developing States
TOR	Terms of Reference

UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
US\$	US dollar (1 US\$ = 2.11 FJD as of March 10, 2016)
USP	University of the South Pacific
WB	World Bank

Index

Acknowledgment	3
Abbreviations and Acronyms	4
Index.....	6
Executive Summary.....	1
Project Information.....	1
Project Description.....	2
Project progress summary	2
MTR Ratings and Achievement Summary Table	3
Summary of Conclusions.....	7
Summary of Recommendations.....	12
1. Introduction	16
Evaluation Objective s.....	17
Scope and Evaluation Methodology	17
Structure of the MTR.....	19
2 Project description and background context.....	21
2.1 Development context.....	21
2.2 Key barriers to development and commercialisation of RE.....	23
2.3 Project Description and Strategy	25
2.4 Project implementation arrangements.....	26
2.5 Project timing and milestones	27
2.6 Key Stakeholders.....	27
3 Findings	29
3.1 Project Strategy.....	29
3.1.1 Project Design	29
3.1.2 Logical Framework	30
3.2 Progress toward Results.....	31
3.2.1 Progress towards results analysis	31
3.2.2 Remaining barriers to achieve Project objectives.....	52
3.3 Project Implementation and Adaptive Management	52
3.3.1 Management arrangements	54

3.3.2	Work planning	55
3.3.3	Finance and co-finance	55
3.3.4	Project level monitoring and evaluation systems	57
3.3.5	Stakeholder engagement	58
3.3.6	Reporting	59
3.3.7	Communications.....	59
3.4.	Sustainability	60
4.	Conclusions	64
5.	Recommendations	70
	UNDP-GEF Midterm Review Terms of Reference	76

Tables

Table 1	Project Information	1
Table 2	MTR Ratings and Achievement Summary Table	3
Table 3	Summary of Recommendations	12
Table 4	FEA Power Generation Mix.....	21
Table 5	Project components and associated Outcomes	25
Table 6	Changes to original outputs.....	30
Table 7	New outputs included due to the delay in getting the NEP endorsed by Cabinet.....	53
Table 8	Break down of executed GEF funds as of December 31, 2015	55
Table 9	Biofuel mills installed or being installed as a result of FREPP.	57
.Table 10	Co-financing table.....	57
Table 11	Reporting Mechanisms	59
Table 12	Sustainability Risks	60
Table 13	Recommendations.....	70

Figures

Figure 1	Project Management Structure.....	26
----------	-----------------------------------	----

Annexes

Annex I	MTR Terms of Reference
Annex II	Glossary of Terms
Annex III	List of Documents Reviewed
Annex IV	MTR Evaluative Matrix
Annex V	MTR Mission Itinerary / List of persons interviewed
Annex VI	Model Questionnaire Used for Data Gathering
Annex VII	MTR Rating Scales
Annex VIII	Signed UNEG Code of Conduct form
Annex IX	Signed MTR final report clearance form

Executive Summary

Project Information

The following table summarizes the Project information

Table 1 Project Information

Project Title:		<i>Fiji Renewable Energy Power Project (FREPP)</i>		
GEF Project ID:	4358	Project Financing	<i>at CEO endorsement (US\$)</i>	<i>at Mid-Term Review (US\$)</i>
UNDP Project ID:	00076656	GEF financing (MSP):	975,000	975,000
Country:	Fiji	UNDP contribution:	N/A	N/A
Region:	Asia-Pacific	Government:	1,553,673	4,478,673
Focal Area:	Climate Change Mitigation	Other partners (Vara RE): Secretariat of the Pacific Community FSC Labasa cogen plant	15,000,000 0	Cancelled 11,250 17,000,000
FA Objectives, (OP/SP):	GEF-4 Strategic Program 3: Promoting market approaches for the supply of renewable electricity in utility scale grid-based power systems; and GEF-4 Strategic Program 4: Promoting sustainable energy production from biomass and modern uses of biomass.	Total co-financing ¹ :	16,553,673 1/	21,489,923
Executing Agency:	Department of Energy, Ministry of Infrastructure & Transport	Total Project Cost:	17,528,673	22,464,923
Other Partners involved:	Department of National Planning (Senior Beneficiary), Fiji Electricity Authority (FEA), Fiji Commerce Commission, Ministry of Public Enterprise, Ministry of Finance, etc.	ProDoc Signature (date project began) ² :		22/12/2011
		(Operational) Closing Date:	Proposed: 22/12/2014	Actual: 30/06/2016

¹ In 2013 with the approval of the 2013-2015 Public Sector Investment Programme for Biofuel Implementation, the Government increased its initial co-financing commitment of US\$ 1,553,673 to US\$ 4,478,673. In addition, FREPP was able to obtain a co-financing commitment from SPC of US\$11,250. After taking into consideration that the VRE co-financing commitment US\$ 15 million has been cancelled and the FSC Labasa cogen commitment of US\$ 17 million has been added, the total amount of co-financing commitments is now at US\$ 21,489,923 and the estimated total cost of the Project has changed to US\$ 22,464,923.

² Even though the PRODOC was signed on 22/12/2011 it took until August 15, 2012 to recruit the Project Team which is considered as the effective starting date of the Project

Project Description

The Fiji Renewable Energy Power Project (FREPP) focuses on the removal of barriers (policy, regulatory, market, finance, and technical) to the wide-scale use of RE resources for grid-connected power generation in Fiji.

It is in line with the GEF-4 Strategic Program 3 on promoting market approaches for the supply of renewable electricity in utility scale grid-based power systems; and Strategic Program 4, on promoting sustainable energy production from biomass and modern uses of biomass. The proposed project consists of 4 main components, each addressing specific categories of barriers, and these are:

- Energy Policy & Regulatory Frameworks;
- RE Resource Assessments and RE-based Project Assessments;
- RE-based Power Generation Demonstrations; and,
- RE Institutional Strengthening.

FREPP is expected to facilitate investments in RE-based power generation in Fiji, which will not only support the socio-economic development of the country but also make use of the country's RE resources and reduce GHG emissions.

Project progress summary

The design that has been adopted to create an environment which is conducive to private sector participation while supporting socio economic development, particularly in the outer islands, is adequate.

The delay in getting the NEP 2014 endorsed by Cabinet together with delays in the setup of the PMU and the resignation of the Project Manager in mid-2015 have impacted negatively in the achievement of the Mid-Term targets established in the PRODOC. Several activities which were dependent on having an approved NEP had to be replaced by others. In addition, there has been additional setbacks such as the need to terminate the agreement with VRE and look for an alternative demonstration project and DOEs refusal to approve the implement the PPP model for the Bukuya mini-hydro facility, in spite of the fact that FREPP had a signed LOA with the Bukuya Cooperative on the implementation of a tailored PPP approach which included a plan to add income generating activity investments for the benefits of the community.

In spite of these setbacks, FREPP has been able to achieve concrete and tangible results including:

- A draft of the National Biofuel Policy (new Output 1.1);
- The PPP model (mentioned above) for the operation and maintenance of off-grid RE based generation projects with high replication potential to be applied across Fiji (new Output 1.3);
- Scoping for the establishment of a Centralised Energy Database (Output 2.1);

- Assessment of wind and hydro resources (Output 2.2);
- Evaluation of Waste to Energy Power Generation (Output 2.2);
- Feasibility studies and installation and commissioning of biodiesel mills (Output 3.1);
- Preparation of a standardised Power Purchase Agreement (PPA) for IPPs (Output 3.2);
- Complete Investment Promotion package including the organisation and conduct of an Investor Forum with over 100 attendees;
- Complete assessment and development of RE incentive schemes (Output 3.4); and
- Status report of DOE’s Solar Home Systems (under Output 4.1).

MTR Ratings and Achievement Summary Table

The following presents the summary of the MTR Ratings and Achievements

Table 2 MTR Ratings and Achievement Summary Table

Measure	MTR rating	Achievement description
Project strategy	N/A	The Project focuses on the removal of barriers to the wide-scale use of RE resources for grid-connected power generation in Fiji. In general terms, both the characterization of the current situation, the expected results and the definition of the barriers which need to be removed conceptually are well described. At the same time, the Project is aligned with the country development priorities and during its design and implementation the perspective of different stakeholders have been taken into consideration.
Progress towards results	Objective: Removal of major barriers to the widespread and cost-effective use of grid-based RE supply via commercially viable RE technologies MS	Due to the delay in getting Cabinet to endorse the NEP 2014 it is unlikely that FREPP will be able to meet the Project Objective in full by (End of Project) EOP.
	Outcome 1:	Approximately 50% of preparatory work was achieved through the

Measure	MTR rating	Achievement description
	<p>Facilitation of investments on energy projects, particularly on RE and biomass based power generation</p> <p style="text-align: center;">MS</p>	<p>development of Fiji's Bio-fuel Policy (new Output 1.1). In addition, approximately 50% of preparatory work was achieved for the development of De-Risking or Tariff Guarantee Fund (new Output 1.3), which was meant to be applied to the Bukuya mini-hydro IPP-demonstration project.</p>
	<p>Outcome 2:</p> <p>Technical feasibility of harnessing RE resources are ascertained and made widely known</p> <p style="text-align: center;">MS</p>	<p>Approximately 50% of preparatory work for the establishment of a Centralised Energy Database system is achieved through the scoping of the Operational Centralized Energy Database System (Output 2.1). The waste-to-energy resource assessment is fully achieved and published (Output 2.2) while the wind and hydro renewable energy resource assessments are 50% achieved. The TOR to review existing feasibility studies and conduct comprehensive feasibility studies for priority RE projects have been prepared and is awaiting DOE approval to be published. The assigned budget seems to be too low.</p>
	<p>Outcome 3:</p> <p>Markets for specific renewable energy technologies are supported</p> <p style="text-align: center;">S</p>	<p>Approximately 30% of bio-fuel mill demonstration projects (Output 3.1) are established and operational while 50% of preparatory work is achieved for the two IPP-based demonstration projects (Output 3.1) The reluctance of DOE of approving the use of a PPP model for the Bukuya hydro facility has forced FREPP to look for another demonstration project. The standard PPA has been drafted but FEA has not yet agreed to use the proposed standard PPA (Output 3.2). The</p>

Measure	MTR rating	Achievement description
		Investment Promotion Package (Output 3.3) and assessment of RE incentive schemes (Output 3.4) are fully achieved and published.
	<p>Outcome 4: Renewable Energy development integrated into National Plan towards 100% Electrification of Fiji</p> <p>MS</p>	The report on the design and establishment of a SHS tariff collection system (new Output 4.1) is completed and needs to be approved by DOE. The TOR for hiring a consultant to work on a National Electrification Plan have been prepared but will not be published until the NEP receives Cabinet endorsement.
Implementation and adaptive management	S	During its implementation the Project had to rely on adaptive management in order to cope with different problems and incidentals encountered with good results. Among others, due to the delay in the implementation of the NEP 2014 the Project Board decided to redefine a number of Outputs which were dependent on the approval of the NEP 2014 for its implementation. Also, the Project Board acted promptly in cancelling the agreement with VRE due to lack of progress with the implementation of their demonstration project and was able to sign an agreement with Fiji Sugar Corporation (FSC) to have the Labasa 10MW heat and power plant to take the place of the VRE biomass project.
Sustainability	MS	<p>In addition to ensuring that the NEP 2014 is promptly endorsed by Cabinet, the main actions that are needed to ensure the sustainability of FREPP after the project ends include:</p> <ul style="list-style-type: none"> • Need to provide additional funding to support creation of the proposed Multi Sector

Measure	MTR rating	Achievement description
		<p>Regulatory Agency or for other options that have been suggested / considered to remove the regulatory functions away from FEA such as to strengthen / expand the mandate of the current economic regulator (i.e., Fiji Commerce Commission FCC) and /or giving DOE technical regulatory functions and keep FCC performing economic regulation</p> <ul style="list-style-type: none"> • Additional efforts are required to increase the dissemination of FREPP progress and lessons learned on a continuous basis. The conduct of additional workshops for key stakeholders and /or an awareness raising campaign should be considered • Revision of the current minimum IPP tariff to reflect the true avoided cost of generating electricity by FEA.

Summary of Conclusions

The key conclusions of the MTR are summarized below:

- **Project Formulation / Design**
 - A strength of this Project has been the extensive input from stakeholders during the Project conceptualisation phase, as well as, during the implementation of the demonstration projects³.
 - The design that has been adopted by the Project to create an environment which is conducive to private sector participation while supporting socio-economic development, particularly in the outer islands, is adequate.
 - The Project concept is fully aligned with the country development priorities as it will provide the necessary frameworks for private sector engagement in RE and help Fiji achieve its proposed national target of RE penetration in the electricity sector⁴.
 - The demonstration projects can be replicated in other areas of the country while certain Project components like the standardised PPA template and the proposed incentive mechanisms to help promoting RETs have potential to be applicable in other Pacific Island Countries.
 - Indicators related to the new Outputs that have been introduced need to be defined accordingly.
- **Project achievement**
 - Not yet having the NEP endorsed by Cabinet has prevented the implementation of a number of planned activities and several of the Outputs had to be changed, accordingly.

³ FREPP's support to demonstration project included technical assistance to the 10MW heat and power plant at the Labasa mill of Fiji Sugar Company and 7 biofuel mills plus the development of a PPP model for the Bukuya mini hydro facility

⁴ Various past, current and proposed targets exists (some of which appears to be moving goal posts) including e.g.:

- FEA's own set targets include:
 - 100% through renewable resources by 2011 – e.g. check 2003 FEA annual report
 - 90% of the energy requirements through renewable energy sources by 2015 – e.g. check the 2010 FEA annual report
 - 90% by 2025 – check here: http://www.fdoe.gov.fj/images/FREPP/clean_energy_investment.pdf
- National targets set by Government include:
 - RE providing 90% of grid electricity supply and 55% for off-grid supply by 2011 - as per 2006 National Energy Policy
 - 81% by 2020 and 99% by 2030 as proposed in the draft 2014 NEP
 - 99% by 2030 as per Cabinet endorsed Green Growth Framework (August 2014)
 - '...to approach 100% by 2030...' as per Fiji INDC: http://www4.unfccc.int/submissions/INDC/Published%20Documents/Fiji/1/FIJI_iNDC_Final_051115.pdf.

- Consequently, the implementation of the planned activities under the PRODOC for the Mid-Term of the Project show important delays, mainly in activities of Components 1 and 4, where the amount of GEF funds that have been spent for activities implemented so far are 33% and 7% of the total amount budgeted for these Components, respectively. On the other hand, the amount of GEF funds spent for activities implemented under Project Management are already 124% of the total amount of GEF funds that have been budgeted.
- Under this context, it is unlikely that FREPP will be able to have the key elements which are critical to ensure the attainment of the Project objectives in place by the EOP (i.e., June 30, 2016).
- As a result a one year extension of the EOP is recommended to allow sufficient time for the finalisation of the pending activities and ensure that the achievements that have been accomplished to date are fully capitalized.⁵
- In spite of these setbacks, the Project has been able to achieve concrete and tangible results as listed above under the Project progress summary above.
- **Project implementation and adaptive management**
 - The Project has been run in a flexible and adaptive manner and the PMU has been employing the project planning matrix (log frame) as a management tool to monitor progress and identify bottlenecks. Although the log-frame was adjusted in quarterly monitoring reports, the adjustments were not captured in the APR/PIR reports.
 - When faced with impediments that were beyond its control the PMU acted on the recommendations provided by the Project Board and took effective actions including the reformulation of several outputs which were highly dependent on having the NEP endorsed by Cabinet for their implementation⁶.
 - UNDP (both the BRH, PC and the Fiji MCO) proactively supported the formulation of FREPP, and continues to do so throughout the implementation of FREPP.
- **Management arrangements**
 - The Project is being implemented under UNDP's National Implementation Modality with DOE as the implementing partner for the day to day execution of the Project.
 - The highest level of reporting consisted of the National Energy Council (NEC) which was designated as Project Assurance. This government body no longer

⁵ This will be the second extension of the EOP. However, it is important to note that the majority of the delays that have occurred in the implementation of the proposed activities have been due to causes which were beyond the direct control of the Project. In particular, the delay in the endorsement of the NEP 2014 has been the major reason why several of the proposed activities have not been yet implemented and by not having an additional extension of the EOP the benefits of several of the activities that are still to be completed will be lost (i.e., adoption of the proposed RE support mechanisms and the standardized PPA for IPPs, approval of the national biofuel policy and the national electrification plan, etc.)

⁶ As a result of the Project Board meeting of April 3, 2014 new outputs for Outcome 1 and 4 were defined which resulted in an adjustment of the original log frame

exists and therefore during its first meeting, the Project Board unanimously agreed to nominate the Strategic Framework for Change Coordinating Office (SFCCO), to take on the role of Project Assurance.

- After the resignation of the former Project Manager in April 2015, the then Assistant Project Manager had applied for the position of Project Manager and was appointed to the post. What remains vacant is the position of Assistant Project Manager. Now, that the current Project Manager is on maternity leave, there is no dedicated PMU staff. DOE has made arrangements to recruit the Assistant, and has also assigned the Deputy Director to handle day-to-day project coordination matters in the meantime.
- The Project Board has had two meeting so far (i.e., 2013 and 2014), were critical decisions have been fully addressed. However, the lack of continuity in having at least one Project Board meeting per year is bound to have had negative implications on the implementation of Project activities (i.e., no Project Board meeting was held in 2015). The first quarter of 2015 was quite hectic and efforts were focussed on completing the IPP Framework consultancy including also preparations for the first-ever national Renewable Energy Investment Forum. The turn-over of staff that was experienced in second quarter along with the delayed recruitment of successor PMU staff implied that no one was available and able to effectively coordinate day-to-day activities including the convening of a Project Board Meeting during the later part of 2015.

- **Finance and co-finance**

- During initial implementation major delays have occurred due to the complex arrangement⁷ that has been designed for FREPP to access the GEF funds but improvements have been noted over time.
- The delay on Project implementation noted above is directly reflected in the low level of utilisation of GEF funds which as of December 31, 2015 was of 55% for the entire Project and of just 33% and 7% for Components 2 and 4, respectively despite the fact that 4 years have passed since the start of project activities.
- The committed co-financing of US\$ 15 million related to the implementation of VARA RE project was not realised due to the cancellation of the project. However, an additional co-financing commitment was realised as a result of the incorporation of the Labasa heat and power project as an additional demonstration project.

⁷ As per the PRODOC, funds are transferred to the Reserve Bank of Fiji and from there to the Government's Ministry of Finance, which then gets disbursed to the Ministry of Infrastructure & Transport before it's accessed by FREPP at DOE. Major delays have been faced with this arrangement, particularly due to bottlenecks within the Ministry of Finance. Some improvement has been noted over time.

- **Monitoring and Evaluation**

- The PMU has reported Project progress on the PIRs and QPRs by outcome and output in accordance with the annual targets presented in the PRODOC and with an adequate level of detail

- **Stakeholder engagement**

- The Project has effectively mainstreamed stakeholder involvement during the conceptualisation phase and key stakeholders have been cooperative and supportive throughout the implementation phase taking part in specific consultations apart from their participation in the Detailed Design Workshop (June 2010), Inception Workshop (September 2012) and the Investment Forum (April 2015).

- **Sustainability**

The activities done and the results (outputs) achieved so far are moderately likely to be sustainable or lead to making the expected outcomes sustainable in the medium to long term and the following recommendations (or slight variations) should be considered to enhance sustainability:

- Regulatory functions should be removed away from FEA and an independent regulatory agency has to be established. Additional funding will be needed to support establishing the proposed Multi Sector Regulatory Agency or to strengthen the regulatory mandate of the current economic regulator (i.e., Fiji Commerce Commission) and /or giving DOE technical regulatory functions and keep FCC performing economic regulation;
- There is now an urgent need for Cabinet to endorse the NEP 2014 in order to reduce uncertainty and risk in the eyes of prospective energy sector investors and lenders associated with not having an IPP framework in place including sound procurement processes and PPA principles for large-scale capacity and feed-in tariffs and net-metering arrangements for grid-connected small-scale renewables;
- The latest tariff that has been approved by FCC for IPPs is still substantially below the cost of thermal energy of FEA and needs to be revised upward⁸; and
- The tariff structure in Fiji, as well as, other Pacific Island Countries is uniform throughout the country (i.e., price does not reflect location specific cost). This is an area that should be looked into (i.e., establishing differentiated area

⁸ On May 26, 2014 the FCC authorized a minimum IPP rate of 0.3308 FJD per kWh which is substantially below the thermal generation cost estimated at 0.46 FJD per kWh which does not take into consideration the Transmission, distribution and retail (TDR) factor of 0.1267 FJD per kWh. Even though there is nothing preventing FEA from offering a higher unit IPP rate, the tariffs offered by FEA have not been sufficient to attract private sector investors and power generation project selection criteria are also not clear. Historically, FEA has been offering IPP tariffs that have been below the minimum IPP rate set by the FCC and more importantly they did not reflect FEA's true avoided cost. In the opinion of the Evaluator to be effective in promoting the installation of IPPs the minimum tariff set by the FCC should be as close as possible to FEA's true avoided cost. Also at present there are no feed-in tariffs, net metering or other incentive programmes to promote small-scale decentralised grid-connected RE based generation.

specific/geographic tariffs) to further strengthen the sustainability of IPP investments in remote areas.

Summary of Recommendations

Table 3 presents the summary of recommendations of the MTR

Table 3 Summary of Recommendations

Rec #	Recommendation	Responsible Entity
A	Overall recommendation	
A1	Granting a one year extension should be considered in order to finalise the undertaking of the various activities that have been planned but could not be concluded mainly due to not having an endorsed NEP 2014 in place. Otherwise, the benefits of several of the activities that are still to be completed will be lost (i.e., adoption of the proposed RE support mechanisms and the standardized PPA for IPPs, approval of the national biofuel policy and the national electrification plan, etc.)	UNDP DOE Project Board
B	Outcome 1: Facilitation of investments on energy projects, particularly on RE and biomass based power generation	
B.1	<i>Key recommendation</i> The delay in getting the NEP 2014 endorsed by Government has caused substantial deferrals to the implementation of activities under Outcome 1. Urgent actions should be taken to ensure that Cabinet endorses the NEP2014 ASAP The Project Board in consultation with UNDP and DOE should decide on the best strategy for expediting the endorsement of the NEP 2014.	UNDP/DOE Project Board
B.2	The indicators for new Outputs 1.1 (Biofuel Policy for Fiji enacted by Cabinet) and 1.2 (Implementing Rules and Regulations for the Biofuel Policy) need to be defined Possible SMART indicators to be considered are: <ul style="list-style-type: none"> • A Cabinet-approved comprehensive Biofuel Policy for Fiji by EOP • Institutional reform of DOE to effectively administer the Fiji Biofuel Policy by EOP • Cabinet-approved Implementing Rules and Regulations for the Biofuel Policy by EOP • Average annual budget for the implementation of the Biofuel Policy in place by EOP 	UNDP/DOE
B.3	The DOE needs to identify another demonstration project were the PPP which was initially developed for the Bukuya mini-hydro can be tested. This is very important due to the replication potential that is expected assuming the implementation of the PPP proves successful.	DOE

B4	The preparation of a study on the Cost of Electricity which was planned as part of Output 1.2 could not be undertaken due to discrepancies with FEA which considered that there is no need to undertake such study since such information already exists. However, FEA considers such information to be confidential and has denied FREPP access to the information. Consequently, it is important that this issue is resolved promptly given the importance of having updated information on the cost of electricity generation among others to attract private sector investment Presumably such information is available at FEA (as they generate the electricity) as well as the Fiji Commerce Commission (as they set the tariffs), but currently this information is considered commercial in confidence. However relevant issues include methodology which is being used to calculate electricity costs, level of transparency, public access to such information, etc.	DOE FEA
B.5	The IPP tariff that has been approved by FCC does not reflect the true avoided cost of electricity generation and hence needs to be revised accordingly (see footnote 8 above for more detail) Also consideration should be given to establishing different tariffs for different locations since the FEA avoided cost is not uniform across Fiji, something that is particularly relevant for IPP to installed in remote locations.	UNDP /DOE FCC FEA
B.6	Regulatory functions should be removed away from FEA and an independent regulatory agency has to be established ⁹ .	DOE
C	Outcome 2: Technical feasibility of harnessing RE resources are ascertained and made widely known	
C.1	<i>Key recommendation</i> The tendering of the contract for the implementation of the Centralised Energy Database should be done as soon as possible	DOE ITC Services

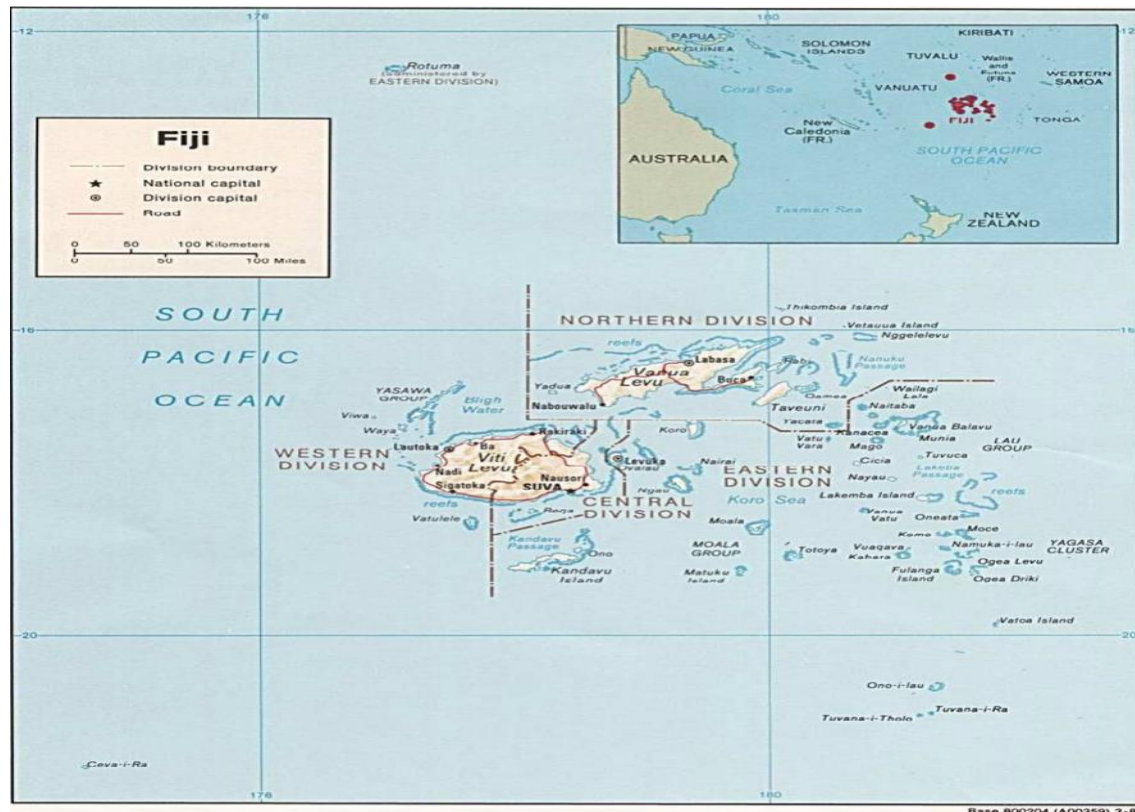
⁹ The establishment of a multi-sector regulatory agency have been flagged as one option, but that might not eventuate. Other options that have been suggested/considered include expanding the mandate and strengthening of the current economic regulator (i.e. Commerce Commission FCC) and/or giving DoE technical regulatory functions and keep FCC performing economic regulation.

C.2	Consideration should be given to increasing the budget that has been assigned to this activity (Output 2.3) in order to able to meet the proposed target of 6 completed and published feasibility studies on IPP investments by EOP with meaningful results. However, this may mean that other planned activities may have to be cancelled or reprogrammed depending on budget availability. Consequently, consideration should be given to the implications of deciding to increase the allocated budget for this activity in order to meet the proposed targets and decide accordingly.	UNDP/DOE
D	Outcome 3: Markets for specific renewable energy technologies are supported	
D.1	<i>Key recommendation:</i> Closely monitor and provide updates on RE investment opportunities and communicate the changes that have been approved by Government once the endorsement of the NEP 2014 is achieved.	DOE
E	Outcome 4: Renewable Energy developments integrated into National Energy Plan towards 100% Electrification of Fiji.	
E.1	<i>Key recommendation:</i> A prompt agreement should be reached with ADB on how to move forward with the preparation of National Electrification Plan or otherwise consideration should be given to reallocating the budget for this activity to other activities such as increasing the scope of assessing the feasibility of RE investments under Output 2.3 or organising an another investor workshop as recommended under Outcome 3 Among others the linkage to other relevant planned activities as part of the proposed 2014 NEP and associated draft Strategic Action Plan needs to be considered including e.g. : <ul style="list-style-type: none"> • Prepare and consult on a new rural electrification policy that incorporates the results of the review of off-grid electrification (including its concession to third parties), FEA's new electrification obligations, and the availability of an electrification fund • Prepare and consult on a comprehensive new national electrification master plan that shows how each un-electrified area of Fiji will be served in a least-cost manner, in a manner consistent with the rural electrification policy • Prepare and consult on a review of existing funding mechanisms for rural electrification and design a new electrification fund, including a methodology to determine subsidy levels to different providers, that 	UNDP/DOE ADB

	makes funding more transparent and easier to access by different stakeholders	
E.2	The indicators for new Output 4.1 (Promotion of RE grid-connected and off-grid electrification in rural areas) should be defined. A possible SMART indicator to be considered is: <ul style="list-style-type: none"> ○ Design and establishment of tariff collection system for Solar Home Systems in place by EOP. 	UNDP/DOE
F	Implementation and adaptive management	
F.1	<i>Key recommendation:</i> Now, that the current Project Manager is on maternity leave, there is no dedicated PMU staff. DOE has made arrangements to recruit the Assistant, and has also assigned the Deputy Director to handle day-to-day project coordination matters in the meantime. It is important that the recruitment of the Assistant takes place ASAP.	UNDP/DOE
	A replacement for the Bukuya hydro project has to be identified ASAP in order to test the PPP model that has been designed which will have to be adjusted for the specific conditions of the RE project to be identified.	UNDP DOE Project Board
G	Sustainability	
G.1	<i>Key recommendation:</i> Additional funding will be needed to support establishing the proposed Multi Sector Regulatory Agency or to strengthen the regulatory mandate of the current economic regulator i.e., Commerce Commission	DOE UNDP
G.2	Assuming no agreement is reached with ADB on how to move forward with the preparation of a National Electrification Plan, consideration should be given to allocate part of those funds to implementing other communication channels such as workshops, awareness raising campaigns and preparation of training modules to highlight the benefits of promoting the wide scale use of RETs and disseminate the main achievements of the Project to key stakeholders and the public in general. These activities will contribute to enhance the sustainability of the Project outputs, albeit indirectly.	UNDP/DOE

1. Introduction

In November 2015, the United Nations Development Program (UNDP) of Fiji contracted Alfredo Caprile¹⁰, as independent consultant, to perform the Mid Term Review (MTR) of the Project entitled: **“Fiji Renewable Energy Power Project (FREPP)”**. The Project started on December 22, 2011 and is currently in its fourth year of implementation. The end of Project (EOP) was originally set for December 22, 2014 and is now set for June 30, 2016.



FREPP focuses on the removal of barriers (policy, regulatory, market, finance, and technical) to the wide-scale use of RE resources for grid-connected power generation in Fiji.

The Project is in line with the GEF-4 Strategic Program 3 on promoting market approaches for the supply of renewable electricity in utility scale grid-based power systems; and Strategic Program 4, on promoting sustainable energy production from biomass and modern uses of biomass. The proposed project consists of 4 main components, each addressing specific categories of barriers, and these are:

- Energy Policy & Regulatory Frameworks;
- RE Resource Assessments and RE-based Project Assessments;
- RE-based Power Generation Demonstrations; and,
- RE Institutional Strengthening.

¹⁰ From here onwards refer to as the “Evaluator”.

The goal of FREPP is to reduce greenhouse gas (GHG) emissions from Fiji's power sector by replacing fossil fuels with renewable energy (RE) resources such as biomass. The objective of the Project is the removal of barriers to the widespread and cost-effective use of grid-based RE supply via commercially viable renewable energy technologies (RETs).

The Project will contribute to the improvement of the energy situation in Fiji from a continued utilization of fossil fuels to a sustainability of RE usage and support the socio-economic development of the country.

Evaluation Objectives

In accordance with the policies and procedures for Monitoring and Evaluation of UNDP and the Global Environmental Facility (GEF), MTRs are a mandatory requirement for all UNDP supported and GEF financed full and medium projects.

This report presents the findings of the MTR of the Project and has the following objectives:

- Analyse the relevance of the Project strategy,
- Evaluate the progress made in the achievement of the objectives and the results of the Project in accordance with what has been established in the Logical Framework,
- Examine the management arrangements
- Identify possible risks towards the sustainability of the Project, and
- Generate constructive recommendations to guarantee the success of the Project.

Scope and Evaluation Methodology

The MTR has been implemented in accordance with the Terms of Reference (see Annex I) and UNDP/GEF policies and procedures for monitoring and evaluation included in the "Guidance for Conducting Mid-Term Reviews of UNDP Supported GEF-Financed Projects¹¹". The evaluation is based on the five criteria defined in such guide which are:

- Relevance
- Effectiveness
- Efficiency
- Results
- Sustainability

Annex II presents the Glossary of Terms included in such Guide.

The following instruments have been used to gather project information and its progress and results:

¹¹http://web.undp.org/evaluation/documents/guidance/GEF/midterm/Guidance_Midterm%20Review%20SP_2014.pdf

- **Gathering of Project information and documentation**

Prior to the start of the mission to Fiji the following Project documentation was gathered and reviewed:

- Project Identification Form (PIF)
- UNDP Project Document (PRODOC)
- Project Inception Report
- Project Induction Training Report
- Project Implementation Reports (PIR's) (2013-2015)
- Annual Work Plan Reports (2012-2015)
- Quarterly progress reports (3rd quarter 2012, all of 2013 and 2014 and 1st, 2nd and 3rd quarters 2015)
- Finalized GEF focal area Tracking Tools at CEO endorsement and midterm tracking tool for climate change mitigation projects
- Minutes of Project Board Meetings (2013-2014)
- Financial and Administration guidelines used by Project Team

During the mission to Suva, additional documents were gathered including copies of substantial project deliverables. The list of all documents reviewed is presented in Annex III

- **MTR Evaluative Matrix** with a list of the evaluation criteria, questions, success indicators, data sources, and methods and instruments that have been used for data gathering (see Annex IV).
- **Mission to Fiji (22 -31 January 2016)**¹²

The mission to Fiji allowed for the conduct of a formal kick-off meeting of the MTR and consultations with members of the Project team and representatives of UNDP Fiji in charge of the Project. In addition, face to face meetings with the key Project stakeholders, beneficiaries and other interested parties were held. As part of the mission to Fiji, a field trip was undertaken to visit the Fiji Sugar Company (FSC) 10MW combined heat and power Plant in Labasa and the Copra Mill at Raiwaqa both in Vanua Levu Island, as well as, the Rabi Biofuel mill at Rabi Island. A mission wrap-up session with the presentation of initial findings took place at the offices of UNDP Fiji with the presence of:

- Emma Mario, Programme Analyst, Resilience & Sustainable Development Pathways Unit, UNDP Pacific Office
- Merewalesi Laveti Environment Programme Associate / Resilience & Sustainable Development Pathways Unit, UNDP Pacific Office Miriama Baleimatuku, FREPP Project Manager (FREPP) / Department of Energy
- Jeke Vakaloloma Pai, Biofuel Engineer / Department of Energy

¹² Prior to the start of the mission a virtual kick off meeting via Skype was organized with Emma Mario and Merewalesi Laveti from the UNDP office in Fiji and Miriama Baleimatuku, FREPP Project Manager to agree on the work plan and to adjust the program of interviews to be undertaken during the mission to Fiji.

Annexes V, VI and VII present the mission itinerary and list of all the people that has been interviewed during the mission, an example of the questionnaire used for data gathering, and the MTR rating scales, respectively.

- **Information analysis**

The documents gathered before and during the mission were analysed and compared together with the information that was obtained during the meetings with UNDP, the Project Team, key stakeholders, beneficiaries and other interested parties in order to verify its consistency and obtain the opinion of the interviewed parties with regard to the quality of the gathered information.

The progress of the Project in achieving its objective and each of the outputs were valued in accordance with the following scale:

- Highly Satisfactory (HS)
- Satisfactory (S)
- Moderately Satisfactory (MS)
- Moderately Unsatisfactory (MU)
- Unsatisfactory (U)
- Highly Unsatisfactory (HU)

The principal limitation of the evaluation is related to the short duration of the mission. Even so, based on his experience, the Evaluator considers that the level of detail contained in the gathered information and of the opinions of the interviewees have been sufficient to undertake the MTR in accordance with the guidelines established by UNDP and GEF.

Structure of the MTR

The MTR report is structured in accordance with UNDP and GEF requirements. The summary of the key sections is presented below:

- **Executive Summary** with a brief description of the MTR objectives and an overview of the key findings and recommendations
- **Section 1 – Introduction.** In this section the objectives and scope of the MTR are described together with the methodology which have been used to undertake the MTR.
- **Section 2. Context and Project Description** including the description of the background context and the key barriers which are faced for the market transformation. In turn, the Project scope and strategy, as well as, the mechanisms that have been used plus the Project time line and the key stakeholders are presented.
- **Section 3 – Findings.** In first place, the findings of the MTR are presented starting with an assessment of the Project strategy and followed by an analysis of the logic framework and an evaluation of the progress towards results. Next, aspects related to

Project implementation and adaptive management are discussed, as well as, its sustainability.

- **Section 4 .Conclusions.** In this section the key conclusions are presented.
- **Section 5. Recommendations** detailing the evaluator's principal recommendations.

2 Project description and background context

2.1 Development context

Fiji's energy situation is characterised by a high reliance on imported petroleum fuels, which account for around one third of total imports¹³. The main energy demand is driven by household consumption and transport fuels and by the needs of its major industries like agriculture, forestry, tourism and mining. The transport sector is the main user of imported fuel followed by the power sector.

Over the past years the government of Fiji has made significant progress in improving access to modern energy and increasing the share of RE in electricity generation. The power generation mix for 2014 was 44.96% hydro, 50.91% diesel and heavy fuel oil, 0.48% wind with the remaining 3.65% provided by Independent Power Producers (IPPs)¹⁴, namely Tropik Wood Industries Limited (TWIL) and Fiji Sugar Corporation (FSC). In comparison, 61% was generated from hydro in 2013, 37% from diesel and heavy fuel oil, 1% from wind with the remaining 2% from TWIL and FSC¹⁵. The decrease in the participation of hydro in the generation mix for 2014 was primarily due to the below average rainfall for nine (9) months in 2014 resulted in the lowest ever power production from Wailoa Power Station in twenty-one (21) years generating only 314.34 million units of electricity. Typically, some 400 million units of electricity generation is expected annually. The following table summarises the trend in the power generation mix over the last years

Table 4 FEA Power Generation Mix

Generation Type	2009	2010	2011	2012	2013	2014
Hydro	58%	48%	55%	64%	61%	45%
Thermal	39%	49%	41%	33%	37%	51%
IPPs	3%	3%	4%	3%	2%	4%

¹³ Total petroleum imports grew from around \$400 million in 2004 to a little over \$1.2 billion in 2013 which is approximately one third of Fiji's total import bill. However, it is important to recognise that on average around 60% of the total imports of fossil fuel is retained for use in Fiji while 40% is re-exported to other Pacific island countries. In 2006, out of \$1.02 billion (934,161 metric tonnes) spent on total petroleum fuel imports, \$731.1 million (628,616 metric tonnes) or 71.6% was retained in Fiji, while \$290.4 million (305,545 metric tonnes) or 28.4% was re-exported to other island countries. Source: 'Green Growth Framework for Fiji: Restoring the Balance in Development that is Sustainable for Our Future' August 2014.

¹⁴Technically speaking these companies are not IPPs since they are state owned companies that sell their excess power to FEA, rather than a single purpose private company which has been formed to generate electricity to be sold under a long term contract in which private investors bears significant risk and management responsibility. Even though the terms of the PPAs under the electricity generated by these two projects is sold to FEA are not publicly available, it is understood that the electricity is sold to FEA at the rate of FJD 0.15 per kWh, a rate at which no true IPP could achieve a bankable project in Fiji.

¹⁵ 2014 FEA Annual Report

In terms of access, approximately 82% of the rural population has access to electricity (2007) which is a high improvement when compared to earlier years – rural electrification was approximately 69% in 2003 – but significantly less than the 96% of the urban population with access to electricity (as of 2007)¹⁶. Since the census, a significant number of households have been electrified as part of the Rural Electrification Programme. However on the other hand it is unclear what the population growth has been. In addition the recent Tropical Cyclone Winston caused significant damage including approximately 24,000 houses have been damaged or destroyed (which is around one third of all households affected)

In spite of the improvements that have been accomplished during the last years, the electricity system still needs significant investment over the next decade (estimated to be in the order of FJD 1.5 billion) which cannot be financed by the public sector alone and hence Fiji needs to attract private sector investment in generation capacity. However, Fiji does not yet have an effective IPP framework in place to attract the urgently needed private sector investment into RE based power generation.

Since 1966, the Fiji Electricity Authority (FEA) has operated without effective technical regulatory oversight, including determining the conditions for potential private sector participants by itself. As a result, there is not yet a single “true IPP” project in Fiji mainly due to the lack of a clear regulatory framework for encouraging private sector participation, uncertainty in terms of the government plans to reform FEA¹⁷, as well as, resource information not being publicly available, among others.

The tariffs offered by FEA have not been sufficient to attract private sector investors and power generation project selection criteria are not clear. FEA has been offering an IPP tariff that is substantially below the minimum IPP tariff of 0.3456 FJD per kWh set by the FCC¹⁸. Also, at present there are no feed-in tariffs net metering provisions or incentive programmes to promote small-scale decentralised grid-connected RE based generation. Finally, in the rural electrification segment there is no comprehensive plan describing a least cost path to full affordable and reliable access to electricity and the process of quantifying RE resources is incomplete, so all resources and technologies could be addressed.

In November 2006, the Fiji government endorsed its first National Energy Policy (NEP) and associated strategic action plan which has guided the work of the Department of Energy (DOE) on the following objectives:

- Strengthen the capacity for energy planning through appropriate policy, regulatory and implementation frameworks and effective and efficient management;

¹⁶ Sustainable Energy for All (SE4ALL) Rapid Assessment and Gap Analysis, Final Report, 10th February 2014

¹⁷ The Government is planning to reform the FEA and in April 2015 published an invitation to register Expression of Interest for the partial divestment of FEA

¹⁸ This IPP tariff was set by the FCC determination of May 24, 2014

- Enhance energy security through greater participation and collaboration within industry;
- Increase access to affordable and reliable electricity services; and
- Research, promotion and utilisation of RE applications.

In March 2013, the Government began a review of the policy and associated strategic action plan, tapping into technical and financial assistance from GIZ and UNDP. The development of the proposed 2014 NEP has been coordinated with the preparation of a Sustainable Energy for All (SE4All) Rapid Assessment and Gap Analysis. The Rapid Assessment and Gap Analysis report was endorsed by Cabinet in the beginning of 2014 while the draft 2014 NEP is yet to be endorsed.

The three objectives of the proposed draft 2014 NEP are to achieve:

- **Affordable energy for all:** Ensure that all Fijians have access to affordable and reliable modern energy services;
- **Sustainable energy supplies:** Establish environmentally sound and sustainable systems for energy production, procurement, transportation, distribution and end-use; and
- **Reduce import costs:** Encourage the efficient use of energy and the use of indigenous sources to reduce the financial burden of energy imports on Fiji.

Under the proposed draft 2014 NEP, it is proposed that legislation will be established to provide DOE with a clear mandate to carry out national level planning and policy development in the energy sector, as well as, other responsibilities including a regulatory role. FEA will remain responsible for planning of the national grid, including generation and network planning and planning of grid extensions whereas DOE would be responsible for national master plans including RE and rural electrification and the plans prepared by FEA and DOE should be in accordance with each other. The Fiji Commerce Commission (FCC) will continue to be responsible for regulation of fuel and electricity tariffs. Non-tariff regulatory functions in the electricity sector that are currently held under FEA, including licensing and approvals, would be transferred to DOE in line with the proposed separation of operational and regulatory activities of FEA. DOE would also take responsibility for developing an IPP framework, which would include procurement processes and PPA principles for large-scale capacity and feed-in tariffs and net-metering arrangements for grid-connected small-scale renewables.

However, the option of establishing a multi-sector regulatory agency initially covering electricity and telecommunication was announced last year by the Ministry of Public Enterprises and disinvestment of FEA has been taken forward also in 2015.

2.2 Key barriers to development and commercialisation of RE

The key barriers that have been identified in the PRODOC which are preventing the development and commercialisation of RE in Fiji include:

1. **Lack of a legal and regulatory framework for IPPs.** An effective IPP legal and regulatory framework is required to mobilize the urgently needed private capital into RE based power generation.
2. **Limited incentives to promote RET investments.** Limited incentives that have been put in place such as waiving of duties on certain RE imports and FEA rebates on top one hundred energy saver domestic consumers and tax holidays for investment in biofuel production and RE generation and cogeneration ¹⁹ are still insufficient. Additional incentives to promote RET investments are still required to promote RET investments such as “green” interest rates and access to long term financing.
3. **Unattractive tariffs for IPP investments.** Power purchase tariffs offered by FEA to date have not been sufficient to attract private investors or IPPs and power generation project selection criteria are not clear.
4. **Lack of incentives for small-scale decentralised grid-connected RE based generation.** There are no attractive feed-in tariffs, net metering provisions or incentive programmes to promote such generation by households and Small and Medium Enterprises (SMEs).
5. **Insufficient allocation of funds for establishing an independent regulatory agency.** Additional funding will be needed to support establishing the proposed Multi Sector Regulatory Agency or to strengthen the regulatory mandate of the current economic regulator i.e., Commerce Commission.
6. **No sustainable institutional framework to develop and operate rural electrification on commercial basis.** As included in the proposed draft 2014 NEP, a national electrification master plan showing how each un-electrified area with least cost solutions is needed together with the establishment of a dedicated electrification fund and associated framework determining the capital subsidies that would be required to facilitate equitable electricity access taking into consideration gender aspects and vulnerable groups with particular focus on how best to implement sustainable rural electrification.
7. **Lack of reliable and updated resource information.** Additional efforts are required to complement and strengthen existing information RE resources and making it available to potential private sector investors.
8. **High vulnerability to natural disasters,** particularly cyclones that can damage equipment and resources needed to generate electricity. Mandatory requirements for all project proposals to include risk analysis and mitigation strategies for approval are now in place but further monitoring and assessment of potential risks are still required²⁰.

¹⁹ <http://www.investmentfiji.org.fj/pages.cfm/for-investors/sector-industry-profiles/energy-sector.html>

²⁰ As stated in the PRODOC by 2010 mandatory requirements for all project proposals to include risk analysis and mitigation strategies for approval were in place. In addition, one of the guiding principles of the Green Growth Framework endorsed by Cabinet on July 29, 2014 calls for increasing the adoption of comprehensive risk management practices.

2.3 Project Description and Strategy

The objective of this Project is the removal of barriers to the widespread and cost-effective use of grid-based RE supply via commercially viable RETs, which will assist sustaining socio-economic development particularly in the outer islands in Fiji.

Certain components of this project, such as the Standard PPA for IPPs, have the potential for being used in other Pacific Island Countries.

In general terms, CO₂ emissions are considered negligible for Fiji, as well as, for other Pacific Island Countries (PICs). However, of concern are what the major emitters are doing (or not) to reduce their GHG. This Project will also contribute to the achievement of similar goals and objectives of the PICs that are working collectively under various sub-regional and regional programmes to promote investments in RETs to decrease their dependency on imported petroleum fuels. Hence, successful efforts in Fiji can serve as a model (for best practice) for other PICs or SIDS elsewhere to follow. FREPP intends to proactively share and build awareness of useful policies, regulations and legislation on applicable RETs, whose adoption can lead to significant reduction in GHG emissions and at the same time meet national energy objectives.

The stated Project strategy is based on a combination of upstream and downstream interventions which include:

- Establishing an enabling legal and regulatory framework for the involvement of the private sector through the enactment and enforcement of a new Energy Act together with the strengthening of the relevant agencies
- Evaluating Fiji's RE resource and RE investment potential plus designing and implementing two major demonstration projects and building partnerships with IPPs, investors and consumer groups on the promotion of the planned demonstrations to obtain their support in promoting RE-based power generation
- Enhancing the capacity of DOE and the energy sector in integrated planning including the preparation of a National Electrification Master Plan (NEMP) to cover the needs of un-electrified areas as well as address the increased demand from already electrified areas

The Project Document (PRODOC) mentions the following Outcomes:

Table 5 Project components and associated Outcomes

Component	Projected Outcome
1. Energy Policy & Regulatory Frameworks	Facilitation of investments on energy projects, particularly on RE-based power generation
2. RE Resource an RE-based Project Assessments	Technical feasibility of harnessing RE resources are ascertained and made widely know

3. RE-based Power Generation Demonstrations	Markets for specific RE technologies are supported
4. RE Institutional Strengthening	RE developments integrated into the National Electrification Master Plan (NEMP) towards 100% electrification

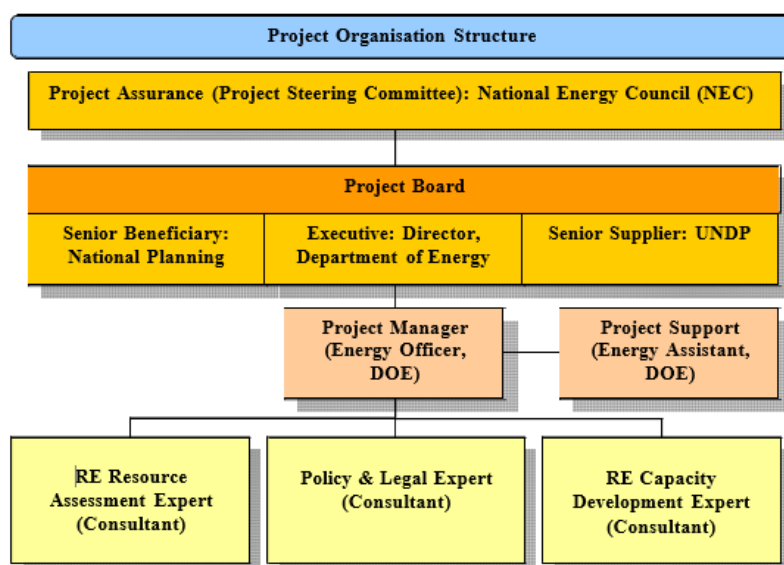
In terms of global environmental impacts the Project objective is to reduce GHG emissions from Fiji’s power sector by replacing the use of fossil fuels with RE resources such as biomass²¹.

2.4 Project implementation arrangements

The Project is being implemented under UNDP’s National Implementation Modality (NIM) with DOE as the Implementing Partner. According to the PRODOC (see next Figure), the Project was to be overseen by a Project Assurance (Project Steering Committee comprised of the National Energy Council (NEC)²² which as of this date has not been officially formed.

During the project development phase, the Government agreed to have the Project Management Unit (PMU) responsibilities supported by UNDP Country Office. This support includes procurement of goods and services, as well as, contractual management (of which close to US\$ 500,000 worth has been managed by UNDP) and technical and project management assistance. In this regard, UNDP has always consulted and involved DOE.

Figure 1 Project Management Structure



²¹ Cumulative GHG emission reduction from power generation in Fiji by EOP has been set at 935.8 ktons of CO₂

²² When the PRODOC was formulated there was a National Energy Advisory Council (NEAC) which is no longer in existence. Hence, during the May 14, 2013 Project Board meeting, the Board unanimously agreed to nominate the Strategic Framework for Change Coordinating Office (SFCCO), an independent body set up by the Government to monitor all government projects to take on the role of Project Assurance.

According to the PRODOC, the Project Board was to be comprised of the National Planning Ministry in its capacity of Senior Beneficiary, DOE as Executive and UNDP as Senior Supplier but according to Minutes of Project Board Meetings, the Project Board has been chaired by a representative of DOE. The other members of the Project Board consisted of representatives from UNDP, UNDP ARC, National Planning and other DOE staff

The Project Manager, who is responsible for the day-to-day coordination and management of activities, is supported by Assistant²³ whose role is to provide project administration, management and technical backing to the Project Manager. The required Experts (i.e. consultants) provide technical expertise in the various substantial components of the project.

The support of UNDP and these experts to the PMU has been able to strengthen the level of project management, obtaining results and mobilizing all project areas. A very important aspect to mention is that thanks to the Project organization and management, valuable knowledge is being transferred from the Project to the executing agency- DOE, contributing to its empowerment and sustainability.

2.5 Project timing and milestones

The Project was designed to be implemented within 3 years. The GEF Secretariat endorsed the Project on December 1, 2011 and the PRODOC was officially signed by the Government of Fiji and UNDP on December 28, 2011. However, due to delays faced by Government with respect to the recruitment of the Project team, it took until August 15, 2012 to establish the PMU which is considered as the effective starting date of the Project.

The Induction Training and Inception Workshops were undertaken on the 13th – 14th of September and 5th of October, 2012, respectively. The aim of the Induction Training was to support the PMU staff in understanding and taking ownership of the programming and operational requirements of the Project. During the Inception Workshop, all stakeholders and involved parties were informed of the Project's goals and objectives, as well as, the key roles and responsibilities of each of the actors. Prior to the Inception Workshop, two preparatory meetings were undertaken within DOE on September 25 and October 3, 2012 in order to update and validate FREPP's planned activities and outputs to suit DOE's needs.

According to the PRODOC, the end date of the Project was originally programmed for April 1, 2014 but has been extended to June 30, 2016.

2.6 Key Stakeholders

During Project formulation the following stakeholders were identified and consulted given their involvement and /or interest in energy sector development and planning:

- DOE
- Department of Environment

²³ Due to the resignation of the Project Manager in May 2015, the Energy Assistant was temporarily named Acting Project Manager and hence this position is currently vacant.

- FEA
- Ministry of Finance
- Ministry of Public Enterprises
- Fiji Commerce Commission
- Ministry of National Planning
- Resource owners
- IPP Investors
- Project developers
- Banks
- Development partners including University of South Pacific (USP), Secretariat of South Pacific (SPC) and UNDP
- RE equipment suppliers
- Media

In addition, the above listed stakeholders participated in the RE Investment Forum in Fiji which was held successfully on 9th April 2015 at the Holiday Inn hotel in Suva and attended by over 100 participants.

Leaving the RE Investment Forum aside, the stakeholders that had an active participation in the implementation of the project activities include:

- DOE
- Vara RE (which was only involved at the beginning until its agreement was terminated)
- FSC
- Bukuya Cooperative
- UNDP, UNDP / GEF EITT, UNDP Pacific Centre
- Ministry of National Planning.

3 Findings

This section presents the findings of the MTR. First, the Project strategy is examined followed by a critical analysis of the logical framework and an evaluation of the progress towards results. Finally, aspects related to Project execution and adaptive management and to the Project sustainability are examined.

3.1 Project Strategy

The Project strategy is based on a combination of interventions to facilitate the creation of an enabling environment for the involvement of the private sector in the power sector and reaching out to people at the grassroots level via the provision of clean, efficient, affordable and reliable RE.

3.1.1 Project Design

In general terms, the Evaluator considers that the design that has been adopted by the Project to create an environment which is conducive to private sector participation while supporting socio economic development particularly in the outer islands is adequate. Both the characterization of the current situation and expected results and identification of the different barriers which would need to be removed are conceptually well defined.

FREPP is in line with the GEF-4 Strategic Programme 3, on promoting market approaches for the supply of renewable electricity in utility scale grid-based power systems and Strategic Programme 4, on promoting sustainable energy production from biomass and modern uses of biomass. Also the Project is in accordance with UNDP's strategic area of support for Fiji in building national capacity for participants in global conventions, regulatory regimes and funding mechanisms for environmentally sustainable development

The Project concept is aligned with the country development priorities and in particular with those included in the NEP that was approved by Cabinet in 2006 as well as those that are included in the proposed draft 2014 NEP which Cabinet approval is still pending

Other initiatives that are aligned with the Project objectives are:

- Fiji's Renewable Readiness Assessment prepared by the International Renewable Energy Agency (IRENA) 2015
- Fiji's Roadmap for Democracy and Sustainable Socio-Economic Development (2010-2014)
- Green Growth Framework for Fiji (endorsed by Cabinet on July 29, 2014)
- Fiji's Second National Communication to the UNFCCC
- Peoples Charter for Change, Peace and Progress
- Sustainable Energy for All (SE4All): Rapid Assessment and Gap Analysis
- Fiji's Intended Nationally Determined Contribution

3.1.2 Logical Framework

The PRODOC including the Project results framework are based on the first project concept as presented in the PIF²⁴ which was approved in March 2009, whereas, the PRODOC was approved in October 2009.

The Detailed Design Workshop that was held in Fiji June7-11, 2010 led to the initial Logframe Matrix which considers the discussions held with private sector developers, government officials, UNDP, donors and the FEA. The Logframe Matrix is based on a comprehensive, joint problem analysis performed among the workshop participants and also takes into consideration the findings of the 2009 mission of the International Monetary Fund (IMF) published on May 20, 2010²⁵.

In general terms, the outputs and activities are well described and both the PRODOC design and the logical framework meet the SMART²⁶ criteria requiring that indicators ought to be:

- Specific,
- Measurable,
- Achievable,
- Relevant and
- Time-bound

Even though, the logical framework is still appropriate, the following modifications at the Output level were adopted during the Project Board meeting of April 3, 2014. These modifications were made primarily due to the negative impact that the Government delay in endorsing the proposed draft 2014 NEP was having in the conduct of the activities of the original Outputs which were dependant on the final content of the NEP.

Table 6 Changes to original outputs

Output No	Original	New
1.1	Fiji Energy Act	Biofuel Policy for Fiji to be enacted by Cabinet
1.2	Implementing Rules and Regulations (IRRs)	Implementing Rules and Regulations (IRRs) for the Biofuel Policy
1.3	Government agencies with enhanced regulatory and institutional capacity on energy development, in general, and RE	De-Risking or Tariff Guarantee Fund Developed and Piloted depending on whichever has the higher

²⁴ PIF Project Identification Form

²⁵.The Logframe Matrix that is available at:

<https://drive.google.com/file/d/0Bw-5ajzuswudEZWY24tSVJsWnM/view?usp=sharing>

²⁶ SMART: specific, measurable, achievable, relevant and time-bound

	development in particular	risk
4.1	Completed training programme on integrated energy planning (IEP) and administration of energy policy for government personnel	Promotion of RE grid-connected and off-grid electrification in rural areas

It is worth noting that the indicators for the new Outputs that have been incorporated into the logical framework have not been agreed yet and hence there is an urgent need for the Project Board to address this issue.

3.2 Progress toward Results

One of the key objectives of the MTR is to evaluate progress towards results based on the information included in the different Project documents and tracking tools and the results verified during the course of the MTR. This section provides an analysis of the progress towards results for the Project objective and each of the components including associated outcomes with their corresponding ratings in accordance with the rating scales that have been established for the MTR.

3.2.1 Progress towards results analysis

The Project has suffered important delays which negatively impacted in the achievement of the mid-term targets.

The PRODOC was officially signed by the Government of Fiji and UNDP on December 28, 2011 but the start of activities was delayed until August 2012 when the PMU was established. This led to the slow start-up and request for an extension. Another important setback was the resignation of the Project Manager in April 2015 together with the three month delay in not renewing the contract of the Project Manager Assistant and the ongoing delay in recruiting a successor Project Manager. This has caused substantial delays in project implementation in particular during the second half of 2015 where there were 7 weeks of inactivity due to the absence of the PMU staff. The prompt recruitment of a successor Project Manager and of a temporary replacement for the Project Manager Assistant is critical since the latter will be going on maternity leave in the coming weeks.

Other key setbacks that the Project has encountered during its implementation include:

- **Delay in getting the proposed draft 2014 NEP endorsed by Cabinet (Output 1.1).** Due to the delay in getting the proposed draft 2014 NEP endorsed by Cabinet there is still a lack of a high level comprehensive national level policy framework which among others would support investments in RE bases power generation by true IPPs. The only investments in RE based generation that have taken place until now are linked to government owned companies. In addition not having an endorsed 2014 NEP has

resulted in the need to change a number of Outputs which were dependant on the NEP.

- **Reluctance of FEA to release details of cost of electricity study (Output 1.2).** The preparation of a study on the Cost of Electricity which was planned as part of Output 1.2 could not be undertaken due to discrepancies with FEA which claimed to have done a similar study but insisted on its confidentiality. It is important that this issue is resolved promptly, given the importance of having updated information on the cost of electricity generation among others to attract private sector investment.
- **Disagreement on the application of the PPP model on the Bukuya hydro facility (Output 1.3)** Extensive work has been done in developing a PPP model to be implemented at the Bukuya hydro facility. In 2015, FREPP was able to sign a Letter of Agreement (LOA) with the Bukuya Cooperative on the implementation of a tailored made PPP approach which included a plan to add income generating activity investments for the benefit of the Bukuya community. At the end, DOE decided not to approve the LOA on the basis that it was felt that the Bukuya community was not yet ready to enter into a PPP due to the high rates that they would be facing, an argument that does not appear to be the case on the face of the LOA that had been signed with the Bukuya Cooperative. This is a case of the IP agreeing to carry out an activity and later disagree to proceed with the completion of the activity with what appears to be more of a political than a sound economic / technical reason. In the opinion of the Evaluator, FREPP should identify another demonstration project where an IPP model could be implemented, after being tailored for the specific needs of the new demonstration project.
- **Inefficiencies in the implementation of Output 2.1 – Establishment of an Operational Centralized Energy Database System.** Discrepancies on how to handle the preparation of the TOR for this activity between DOE and ITC Services has resulted in significant delays
- **Delays in the implementation of Output 2.3 – Assessed Feasibility of RE investments.** The TOR for the conduct of activities related to this Output were finalized in late 2015 but have not yet been approved by DOE. Also, the budgeted amount (i.e., US\$ 37,000) appears to be insufficient to meet the proposed indicators (i.e., 6 completed and published new feasibility studies of IPP by EOP, 4 planned new feasibility analysis to be carried out (after FREPP) by EOP, and 30% of interested investors in Fiji that expressed confidence in the technical and financial viabilities of RE-based power generation projects by EOP).
- **Cancellation of the Vara Renewable Energy (VRE) demonstration project (Output 3.1).** FREPP initially selected the proposed US\$ 15 million biomass power generation plant that VRE was planning to install in Fiji to become one of FREPP demonstration projects and agreed to contribute US\$ 115,000. Despite numerous deadlines and follow ups, VRE failed to provide sufficient information and consequently during the May 14, 2014 Project Board meeting the Board members unanimously agreed to

terminate VRE's engagement with FREPP and seek an alternative IPP demonstration project. Luckily, FREPP was able to sign a LOA with FSC to include the 10MW bagasse cogeneration facility at Labasa as a demonstration project. The installation of the Labasa cogeneration facility has been completed and the plant was commissioned in mid 2015²⁷.

- **Delay in commencing the preparation of the National Electrification Plan (Output 4.2).** The TOR for the implementation of this activity have been drafted but remain on hold since DOE claimed to have submitted a funding proposal to the Asian Development Bank (ADB) for a similar study. However, according to FREPP such proposal was submitted after the Government agreement with FREPP had taken place. At one point in time, it was suggested that ADB could fund the GIS component of the National Energy Master Plan. However, since ADB is awaiting NEP endorsement by the Cabinet before making a decision on this issue, FREPP has decided to go ahead with the preparatory phase. The issue as to which part of the National Energy Master Plan may be funded by ADB should be resolved urgently in order to be able to complete this activity before EOP

In spite of these setbacks, the Project has been able to achieve concrete and tangible results including:

- **Biofuel policy (new Output 1.1).** Two deliverables has been submitted to date for DOE approval which are: (i) *Development of National Biofuel Policy in Fiji: Context and Status* outlining current projects, an assessment of the current business and regulatory environment in Fiji for promoting biofuels and the existing capacities and opportunities for development of a national biofuel programme; and (ii) *National Biofuel Policy of Fiji 2015 (draft)* that provides a proposed framework for the development of biodiesel and bioethanol programmes, as guided by the socio-economic context in Fiji and in consideration of best practices and lessons learned from national projects and those of other countries in the world. These reports have been submitted for DOE approval and will then be subject to a stakeholder consultation prior to final submittal for Cabinet endorsement.
- **PPP model for the operation and maintenance of off-grid RE based generation projects (new Output 1.3).** A PPP model for the operation and maintenance of off-grid RE based generation projects was developed for the Bukuya hydro project which was selected as the second demonstration project. The objective was to provide an methodology /approach for developing a robust and suitable tariff structure that would guarantee the cost coverage for the operation and maintenance of the project, provide sufficient security to both parties of the PPP while ensuring investment into additional income generating activities for the local village and to serve as a basis for replication in other off-grid projects.

²⁷ <http://fijisun.com.fj/2015/06/18/cogeneration-on-track/>

- **Scoping for the establishment of a Centralised Energy Database (Output 2.1).** An analysis of the information processes relative to database development has been completed. The specific objectives of this exercise were to: (i) study, review and provide suggestions to the information Process Flow, (ii) plan, prioritize and map out research and data collecting methodologies and (iii) collate information, analyse and recommend for opportunities for improvement (OFIs). Also, the TOR for the establishment of the Centralised Energy Database has been prepared and procurement is underway.
- **Assessment of wind and hydro resources (Output 2.2).** A number of wind and hydro monitoring stations have been installed to assess wind and hydro resources together with a training on tower installations for wind monitoring stations and on the use of the WindPro and WAsP softwares²⁸ for predicting wind climates, wind resources and energy yields from wind turbines and wind farms. The installation of the wind monitoring stations required extensive negotiations with villagers and landowning units for securing the land for wind monitoring purposes and also with the Ministry of Lands and iTaukei Land Trust Board (TLTB) TLTB for the securing of freehold and native lands.
- **Assessment of Waste to Energy Power Generation (Output 2.2).** A detailed report on the Quantification and Assessment of the Amount and Types of Resources for Waste to Energy Power Generation in Fiji has been completed together with a set of Options and Recommendations for Effective Implementation of Waste to Energy Power Generation in Fiji²⁹. According to these reports, Fiji needs to set-up a well-designed feed-in-tariff policy that meets local objectives, social aspects and electricity sector characteristics of the country. It also recommended looking into setting up differentiating feed-in-tariffs for different waste to energy resources and project areas based on electricity production costs, in order to encourage development in a wider variety of areas bringing a number of benefits both in terms of the grid and to society. The major constraints that were identified include:
 - Low awareness and lack of appropriate information on waste to energy
 - Inadequate technical capacities to develop real projects
 - Low availability of financial services
 - Insufficient institutional capacity and unfavourable policy frameworks
 - Low capacities and requirements to deal with waste to energy associated risks both in the public and private sectors.
- **Feasibility studies, installation and commissioning of biodiesel mills (Output 3.1).** As part of its involvement in demonstration projects, FREPP has been supporting the Biofuel Development Unit at DOE with feasibility studies for 6 biofuels mills and commissioning and installation of seven (7) biofuel mills on the islands of Koro,

²⁸ FREPP purchased the software and funded the training programme for DOE

²⁹ All the reports are available at: <http://www.fdoe.gov.fj/index.php/energy-planning/frepp/2015-04-10-01-13-30>

Rotuma, Cicia, Vanuabalavu, Lakeba, Rabi and Gau. Also a Gender Impact Assessment for Koro biofuel project has been conducted and another is being completed for the Rabi island biofuel mill.

- **Baseline setting and M&E scheme for the Labasa Cogeneration project (Output 3.1).** As part of the LOA that was signed between DOE and FSC for the Labasa combined heat and power facility to be used as a FREPP demonstration activity of RE power generation, a baseline setting and an Monitoring and Evaluation (M&E) framework have been agreed to indicate the short and long term direct benefits and co-benefits gained from RE grid-connected power generation while also looking into the private sector viability for this demonstration project type in Fiji. Tangible benefits in terms of environmental improvement, energy security and socio economic impact will be also assessed. The 10 MW bagasse combined heat and power plant was commissioned in 2015 and FSC is expected to report to DOE the agreed upon M&E parameters on an annual basis (i.e., for 2015 and 2016 at a minimum) in order to demonstrate the plant performance as a demonstration project.
- **Preparation of a proposed standard PPA for IPPs (Output 3.2).** A proposed PPA template has been prepared to encourage interest and investment giving appropriate recognition to the existing PPA approach and particularly the interest of FEA³⁰ and at the same time providing an equitable balance between risks and rewards for IPPs and being in line with the needs, objectives and interests of the Fijian energy economy and its stakeholders.
- **Complete Investment Promotion package (Output 3.3).** As part of Output 3.3 FREPP has commissioned the formulation of a complete investment promotion package which includes: (i) Review and listing of bankable investment opportunities, (ii) Preparation of investment information packages, and (iii) Organisation and conduct of an Investor Forum, held on April 9, 2015 at the Holiday Inn in Suva and attended by over 100 participants. The Forum provided an opportunity to discuss and share the experiences and practices of establishing RE power projects in Fiji and provided a platform for investors, project developers and government agencies to exchange information and facilitate networking on the latest in the RE sector while furnishing investors with screened /prefeasibility RE power projects in Fiji with good investment potential³¹.
- **Complete assessment and development of RE incentive schemes (Output 3.4).** Another achievement of FREPP is the work that has been accomplished in analysing alternative RE energy support mechanisms which could contribute to the revitalisation of the RE market in Fiji by providing incentives for RE to be applied in (i) central grids,

³⁰Based on its experience with IPP projects and its mandated obligations pursuant to the Fijian Electricity Act, FEA has appropriately adopted a very robust and risk adverse approach to the PPA frameworks. The proposed PPA template is consistent with many of the key provisions in the existing FEA PPA. However, the finalized draft PPA is yet to be agreed by FEA.

³¹ The package, presentations from the Forum can be accessed:

<http://www.fdoe.gov.fj/index.php/energy-planning/frepp/2015-04-10-01-13-30>

(ii) distribution grids, (iii) mini-grids, and (iv) off-grid power systems. This work is completed and has been sent to DOE for its final approval³².

- **Promotion of RE grid-connected and off-grid electrification in rural areas (Output 4.1)**
A status report of DOE’s Solar Home Systems has been completed together with a proposal for the design and establishment of an effective and least-cost tariff collection system for Solar Home Systems projects based on the concept known as “Pay-As-You-Go” (PAYGO) which is now being successfully implemented in a number of countries thanks to the widespread availability of mobile telecommunication networks.

Table 6 presents the MTR rating scales used in assessing the progress towards results for each Component, project implementation and adaptive management and sustainability.

Table 6 MTR Rating Scales

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.
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”.

³² The reports are available here:

<http://www.fdoe.gov.fj/index.php/energy-planning/frepp/2015-04-10-01-13-30>

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
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	Implementation of none of the seven components is leading to efficient and effective project implementation and adaptive
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

Below in Table 7 the Progress towards results matrix is presented with the colour coding for the evaluation of indicators is presented.

Table 7 Progress towards results matrix

Indicator assessment code

Green= achieved	Yellow= On target to be achieved	Red= Not on target to be achieved
-----------------	----------------------------------	-----------------------------------

This project will contribute to achieving the following Country Programme Outcome as defined in CPAP or CPD: The mainstreaming of environmental sustainability and sustainable energy into regional and national policies, planning frameworks and programmes; and Pacific communities sustainably using their environment, natural resources and cultural heritage.

Country Programme Outcome Indicators: # of national development strategies, policies, plans of PICs incorporating environmental sustainability issues, % increase in national budget for environmental sustainability issues.

Primary applicable Key Environment and Sustainable Development Key Result Area: 1. Mainstreaming environment and energy OR 2. Catalysing environmental finance OR 3. Promote climate change adaptation OR 4. Expanding access to environmental and energy services for the poor.

Applicable GEF Strategic Objective and Program: For Strategic Program 3 (SP-3): Promoting Market Approaches for Renewable Energy and Strategic Program 4: Promoting Sustainable Energy Production from Biomass

Applicable GEF Expected Outcomes: For SP-3: growth in markets for renewable heat power in participating program countries; and for SP-4: the adoption of modern and sustainable practices in biomass production, conversion and use as energy

Applicable GEF Outcome Indicators:

For SP-3: tons of CO2e avoided, the adoption of on-grid renewable policies, and the quantity of electricity generated from renewable sources and for SP-4: tons of CO2e avoided, the adoption of modern biomass conversion technologies, improved efficiency of biomass energy use, kWh of electricity and heat generated from biomass sources, and energy services produced on the basis of biomass.

Strategy	Indicator	Baseline	Targets	Mid Term Level Assessment	Rating	Justification for Rating
Goal Reduction of greenhouse emissions from Fiji's power sector	Cumulative greenhouse gas emission reduction from power generation in Fiji by the end of project (EOP), ktons CO ₂	316.4 ³³	935.8	No true IPP RE power generation projects have been implemented so far due to the lack of an IPP enabling framework	n.a.	
Project Objective ³⁴ Removal of major barriers to the widespread and cost-effective use of grid-based renewable energy supply via commercially viable renewable energy technologies	Cumulative installed new private sector-owned RE-based power generation capacity by EOP, MW	0 ³⁵	4.7 ³⁶	0	MS	FREPP has suffered important delays in completing the planned activities and hence it is unlikely that FREPP will be able to meet the Project Objective in full by EOP.
	Share of RE in Fiji's power generation mix by EOP, %	52	89.0	49% for 2014 while it was at 63% in 2013 due to variations in hydro generation		
	Cumulative electricity production from RE-based power generation plants by EOP, GWh	494	1,505.1 ³⁷	n.a.		

³³ Minimum end-of-project CO₂ emission reduction from demonstrations only (3.2 MW VRE PP, and 25% of biofuel mills operational by EOP)

³⁴ Objective (Atlas output) monitored quarterly ERBM and annually in APR/PIR

³⁵ Considering that FSC and Tropik Woods are not entirely IPPs.

³⁶ Considering that FSC and Tropik Woods are not entirely IPPs. This is minimum, taking consideration only of the 3.2 MW VRE biomass-based power plant and 5 x 300 kW diesel engines using biodiesel produced by 5 biofuel mills

³⁷ This is minimum, taking consideration of baseline RE electricity + electricity generation only from VRE biomass-based PP and 5 biodiesel power generation units

	Indicator	Baseline	Targets	Mid Term Level Assessment	Rating	Justification for Rating
OUTCOME 1 Facilitation of investments on energy projects, particularly on RE and biomass based power generation	Cumulative investment on RE-based power generation by EOP, US\$ million	0	100	Approximately 50% of preparatory work was achieved through the development of Fiji's Bio-fuel Policy (new Output 1.1). In addition, approximately 50% of preparatory work was achieved for the development of De-Risking or Tariff Guarantee Fund (new Output 1.3), which was meant to be applied to the Bukuya mini-hydro IPP-demonstration project.	MS	The draft of the NEP 2014 constitutes a major step in the right direction. However, its endorsement by Cabinet is urgently needed to continuing paving the road for the wide-scale use of RE resources for grid-connected power generation in Fiji. However, it should be noted that via Cabinet endorsement of the Fiji Green Growth Framework last year some of the content from the proposed draft 2014 NEP de facto has been endorsed
Output 1.1: Fiji Energy Act <i>On the April 3rd, 2014 Project Board meeting this output was changed to "Biofuel Policy for Fiji to be enacted by Cabinet"</i>	No. of proposed articles on the Energy Bill that are endorsing RE-based power generation in Fiji A cabinet-approved comprehensive Energy Act promulgated Institutional reform of DOE to effectively administer the Fiji Energy legislation	0 0 0	Dec 2012 Dec 2011 Jun 2012	Completed activities: <ul style="list-style-type: none"> Initial agreement to undertake the preparation of the Energy Act ASAP and commence work in parallel with the review of the 2006 NEP to ensure that both documents complemented each other. A draft of the Energy Policy was produced by early 2014. Presentation of the proposed draft 2014 NEP during a workshop for stakeholders consultation during the 3rd quarter of 2013 Proposed Draft 2014 NEP was submitted to Cabinet for endorsement (4th quarter 2013) <ul style="list-style-type: none"> Note: the last two are not FREPP supported activities per se. The 2014 NEP was support by GIZ and UNDP, but not in context of FREPP 		At Project outset it was decided that this activity be undertaken ASAP and in parallel with the review of the National Energy Policy (NEP) to ensure that both documents complemented each other. However, due to the continuing delays in getting the NEP endorsed by Cabinet, in the Project Board meeting of April 3, 2014 it was decided to review this output and have in place a Biofuel Policy. This is a good example of the use of adaptive management by the Project Board in the face of the uncertainty derived from the continuous delays in the endorsement of the NEP by Cabinet, without which it make

	Indicator	Baseline	Targets	Mid Term Level Assessment	Rating	Justification for Rating
				<ul style="list-style-type: none"> Biofuel Policy draft has been prepared and needs to be endorsed by Cabinet 2nd draft of Biofuel Status Report has been presented by the consultant and reviewed by DOE <p>On-going activities:</p> <ul style="list-style-type: none"> Final draft of the National Biofuel Policy is under preparation 		no sense to work on the drafting of the proposed Energy Act. The Project Board needs to revise the indicators of this Output 1.1, accordingly.
Output 1.2: Implementing Rules and Regulations (IRRs) <i>On the April 3, 2014 Project Board meeting this was output changed to "Implementing Rules and Regulations (IRRs) for the Biofuel Policy"</i>	<p>No. of specific IRRs enforced by EOP</p> <p>No. of revised IRRs proposed to enhance Energy Act implementation by EOP</p>	<p>0</p> <p>0</p>	<p>Dec 2013</p> <p>Dec 2013</p>	<p>Activities completed</p> <ul style="list-style-type: none"> Draft of Feed in Tariff study Draft of Biofuel Status report has been presented and will serve as part of the basis to prepare the IRRs for the Biofuel Policy <p>Ongoing activities:</p> <ul style="list-style-type: none"> Upon Management's approval, the Biofuel Status report will be submitted to stakeholders. 		<p>Based on internal DOE discussions, it was decided that the Regulatory Framework to be implemented will be for the whole Energy Sector. In addition, it was agreed to include the setting-up of an Energy Regulatory Office and preparation of a Feed-in-Tariff study as additional activities under Output 1.2</p> <p>Drafting of TOR for Cost of Electricity study which could not be undertaken due to discrepancies with FEA which claimed to have undertaken a similar study but insisted in its confidentiality</p> <p>As it has been the case for Output 1.1, during the April 2014 Project Board it was decided that this output will</p>

	Indicator	Baseline	Targets	Mid Term Level Assessment	Rating	Justification for Rating
						focus on the formulation of the Implementing Rules and Regulations (IRRs) for the Biofuel Policy. The indicators of this Output should be revised accordingly. Currently awaiting final draft of the Biofuel Policy report to begin preparation of IRRs for the Biofuel Policy
Output 1.3: Government agencies with enhanced regulatory and institutional capacity on energy development, in general, and RE development in particular <i>On the April 3, 2014 Project Board meeting this output was changed to "De-Risking or Tariff Guarantee Fund Developed and Piloted depending on whichever has the higher risk".</i>	No. of RE regulations and legal frameworks administered by DOE senior staff for IPP projects and rural electrification by EOP %. of approved RE-based power generation projects that are fully-compliant with DOE-administered RE regulatory and legal frameworks by EOP	0 0	1 100	Completed activities: <ul style="list-style-type: none"> • Concept PPP model between the Bukuya Electricity Cooperative and a private company to Manage, Maintain and Operate (MMO) the hydro power station and electricity mini-grid • Stakeholder consultation with local community to identify potential income generating activities that would require electricity • Presentation to the Bukuya Cooperative of: <ul style="list-style-type: none"> ○ PPP concept and organization ○ Proposed income generating activity investments ○ Breakdown of the proposed tariff structure and cost • Preliminary agreement with the Bukuya Cooperative on: (i) the PPP model and tender procedures for the selection of the private company that would be in charge 		Extensive work has been accomplished in developing a concept PPP model to be implemented at the Bukuya hydro facility and which would serve as the basis for replication to other off-grid sites. However, this is not the only example of a PPP model. Independently of FREPP, a Village Micro Utility was initiated by Clay Engineering/Sunergise on Koro Island. Unfortunately the pilot/trial mini-grid system that was nearly installed/completed was destroyed by TC Winston. In addition, FREPP was able to reach a preliminary agreement with the Bukuya Cooperative on how to implement the PPP model which included a plan to add income generating activity investments.

	Indicator	Baseline	Targets	Mid Term Level Assessment	Rating	Justification for Rating
				<p>of operations and management without excluding FEA, (ii) indicative average daily household cost and (iii) adding new income generating activities</p> <p>Ongoing activities</p> <ul style="list-style-type: none"> Continue discussions with DOE to revert the decision on not to apply the PPP model to the operations and management of the Bukuya hydro facility after all the work that has been done. Alternatively, discuss with DOE to identify another demonstration project where the PPP model could be applied. 		<p>Unfortunately, DOE decided not to approve the proposed Letter of Agreement on the basis that it was felt that the Bukuya community is not yet ready to enter into a PPP due to the high tariff rates that they would be facing. Identifying the real basis for this decision is critical since in principle FREPP had reached a preliminary agreement with the Bukuya Cooperative. A new demonstration project in which the PPP model could be implemented should be identified shortly. The indicators for this output need to be updated to reflect the change of output.</p>
OUTCOME 2 Technical feasibility of harnessing RE resources are ascertained and made widely known	<p>No. of identified technically viable RE projects by EOP</p> <p>No. of investors that made use of available technical information on feasible RE-based energy system projects by EOP</p>	<p>0</p> <p>0</p>	<p>6</p> <p>20</p>	<p>Approximately 50% of preparatory work for the establishment of a Centralised Energy Database system is achieved through the scoping of the Operational Centralized Energy Database System (Output 2.1). The waste-to-energy resource assessment is fully achieved and published (Output 2.2) while the wind and hydro renewable energy resource assessments are 50% achieved. The TOR to review existing feasibility studies and conduct comprehensive feasibility studies for priority RE projects have been prepared and is awaiting DOE approval to be published. The assigned budget seems</p>	MS	<p>Lack of cooperation between ITC Services and DOE has resulted in substantial delays for the implementation of the Centralised Energy Database system which is important to facilitate RE investments by the private sector</p>

	Indicator	Baseline	Targets	Mid Term Level Assessment	Rating	Justification for Rating
				appears to be too low		
Output 2.1: Operational Centralized Energy Database System	No. of clients that request services from the central clearinghouse for their RE-based energy systems project EOP	0	300	Completed activities <ul style="list-style-type: none"> Scoping report for the establishment of a Centralised Energy Database undertaken by successful bidder GC Technologies Ongoing activities <ul style="list-style-type: none"> Tendering of work and recruitment of vendor for the design and installation of the Centralised Energy Database 		ITC Services and DOE were asked to draft the first set of TOR. However, the 4 bids that were received did not meet DOE expectations and UNDP was asked to handle the procurement process in two stages: (i) Scoping of the database and (ii) Design and installation of the Centralised Database resulting in important delays in the completion of the proposed activities under for Output 2.1 A co-funding of AUD\$ 15,000 was obtained from the Secretariat of the Pacific Community (SPC) for Technical Assistance and Co-funding for the preparation of the activities under this Output.
	No. of clients that make use of the central energy database system each year	0	150			
	% of clearinghouse and central energy database system clients each year that are satisfied with the services received	0	80			
	No. of implemented RE-based power generation projects that were facilitated by the central clearing-house system by EOP.	0	20			
Output 2.2: Completed and published RE resource assessments	No. of comprehensive RE resource assessments completed by EOP	0	12	Completed activities: <ul style="list-style-type: none"> Wind resource assessment and data downloading WindPro Training Training on wind monitoring tower installations Arrangements with villagers /land owners for securing land for wind monitoring purposes Wind surveys undertaken at various sites 		Based on internal DOE discussions the following resources were included as part of the Resource Assessment: <ul style="list-style-type: none"> Wind; Hydro to be co-funded by the Government of Fiji; Geothermal was excluded since FREPP
	Average % increase in currently known RE potentials that was established after the RE resource assessments	0	Dec 2013			
	No. of investors that made use of the RE resource assessment data/information in the design of	0	6			

	Indicator	Baseline	Targets	Mid Term Level Assessment	Rating	Justification for Rating
	their RE-based power generation projects by EOP			<ul style="list-style-type: none"> • Installation of wind monitoring stations • Hydro assessment and data downloading • Hydro surveys undertaken at several sites • Installation of a hydro monitoring stations • Detailed design of Nukuloa Hydro • Assessment on quantities and type of resources available for waste to energy power generation • Options and recommendations for effective implementation of waste to energy power generation <p>Ongoing activities</p> <ul style="list-style-type: none"> • Continuing with hydro and wind monitoring at several sites 		<p>resources are not sufficient to undertake the core drilling that was required to complement the results of a surface remote sensing assessment recently conducted by a team of Japanese experts;</p> <ul style="list-style-type: none"> • Biomass gasification using coconut shells. <p>The results of these resource evaluations and in particular wind and hydro monitoring are critical inputs for the preparation of feasibility studies.</p>
Output 2.3: Assessed feasibility of RE investments	<p>No. of completed and published new feasibility studies of IPP investments by EOP</p> <p>No. of planned new feasibility analyses to be carried out (after FREPP) by EOP</p> <p>% of interested investors in Fiji that expressed confidence in the technical and financial viabilities</p>	<p>0</p> <p>0</p> <p>0</p>	<p>6</p> <p>4</p> <p>30</p>	<p>Completed activities</p> <ul style="list-style-type: none"> • TOR to review existing feasibility studies and conduct comprehensive feasibility studies for priority RE projects have been prepared <p>Ongoing activities</p> <ul style="list-style-type: none"> • Awaiting final approval of TOR to be submitted for 		<p>Insufficient progress has been achieved so far on assessing the feasibility of RE investments. Consideration should be given to increasing the budget that has been assigned to this activity in order to be able to meet the proposed target of 6 completed and published feasibility studies of IPP investments by EOP with meaningful results. However,</p>

	Indicator	Baseline	Targets	Mid Term Level Assessment	Rating	Justification for Rating
	of RE-based power generation projects by EOP			advertising and contracting of consultant		this may mean that other planned activities may have to be cancelled or reprogrammed depending on budget availability and consideration should be given to the implications of deciding to increase the allocated budget for this activity in order to meet the proposed targets and decide accordingly.
OUTCOME 3 Markets for specific renewable energy technologies are supported	No. of additional rural households that have access to green electricity by EOP. No. of financial closures achieved for new RE- based power generation projects by EOP No. of RET system equipment/component suppliers & distributors in Fiji by EOP Overall volume of business in the RE market in Fiji by EOP, US\$ million	0 0 5 0	10,000 20 7 100	Approximately 30% of bio-fuel mill demonstration projects (Output 3.1) are established and operational while 50% of preparatory work is achieved for the two IPP-based demonstration projects (Output 3.1) The reluctance of DOE of approving the use of a PPP model for the Bukuya hydro facility has forced FREPP to look for another demonstration project. The proposed standard PPA is achieved (Output 3.2). However, the finalized draft PPA is yet to be agreed by FEA. As well, the Investment Promotion Package (Output 3.3) and assessment of RE incentive schemes (Output 3.4) are fully achieved and published.	S	The consultants that FREPP has hired to work on the activities which have been planned to help achieve this Outcome have done an excellent job in identifying bankable RE investments, preparing a proposed standardised PPA template and recommendations on RE energy schemes for Fiji. Their contribution in preparing an Investment Information Package and organising the Investor Forum have helped increase private sector interest in RE investment. However, DOE has not yet approved the PPA template and / or given feedback as to which of the proposed RE energy schemes would be put into force. In particular, the preparation and approval of legislation on IPPs and net metering tariff

	Indicator	Baseline	Targets	Mid Term Level Assessment	Rating	Justification for Rating
						approach are critical for achieving a wide-scale use of RE power generation both in terms of IPPs and RE distributed energy projects It should be noted that as part of preparing the proposed draft 2014 NEP an legislative gap analysis was undertaken which is available at: http://www.fdoe.gov.fj/images/NEP2013/final_legislative_gap_analysis_report.pdf
Output 3.1: Designed and implemented RE-based power generation demonstration	Overall installed capacity of RE-based power generation demo projects by EOP, MW No. of demo projects that are both operationally and financially viable by EOP No. of planned RE-based power generation projects that are replicating any of the demo projects by EOP Total installed capacity of replication RE-based power generation projects by EOP	0 0 0 1	4.7 10 16 At least 3	Completed activities: <ul style="list-style-type: none"> • Identification of land, agreement on terms of land lease, extension of VREL’s PPA with FEA and substantial hand holding with VREL management to get the project off ground. • Identification of other RE demonstration projects. • Signing of Letter Agreement with Fiji Sugar Corporation (FSC) to include the Labasa Mill 10MW as a FREPP demonstration project. • Technical support to the Labasa combined heat and power project including the preparation of a baseline setting and M&E framework for demonstrating and 		After a long hand holding with VREL management to get the project off ground FREPP was obligated to terminate the engagement with VREL as one of its demonstration projects. Fortunately, FREPP was able to sign a Letter of Agreement with FSC to include the Labasa mill cogeneration plant as a demonstration project Work on the biofuel mill has progressed well with 7 mills already in operation

	Indicator	Baseline	Targets	Mid Term Level Assessment	Rating	Justification for Rating
				<p>showcasing RE grid-connected power generation indicating short and long term direct and co-benefits gained and private sector viability of the project. FSC will report to DOE the M&E parameters on an annual basis.</p> <ul style="list-style-type: none"> • Signing of Letter Agreement for the Somosomo hydro facility. • Discussions with Bukuya hydro project to be included as a FREPP demonstration project. • Feasibility studies for biofuel mills completed for 6 sites • Commissioning and installation of seven (7) biofuel mills on the islands of Koro, Rotuma, Cicia, Vanuabalavu, Lakeba, Rabi and Gau. • Gender Impact Assessment for Koro biofuel project. <p>Ongoing activities:</p> <ul style="list-style-type: none"> • Capacity needs assessments and training for local engineering firms on RE based power generation systems. • Gender Impact Assessment for Rabi biofuel project 		

	Indicator	Baseline	Targets	Mid Term Level Assessment	Rating	Justification for Rating
				<ul style="list-style-type: none"> Commissioning and installation of 2 additional biofuel mills. Biofuel market assessment. 	Yellow	
Output 3.2: Prepared Standard Power Purchase Agreement (PPA) for IPPs	<p>Endorsed Standard Power Purchase Agreement (SPPA) templates that are used for IPP projects in Fiji</p> <p>No. of IPP RE-based power projects that made use of any of the approved SPPA templates by EOP</p>	0	1 ³⁸	<p>Completed activities:</p> <ul style="list-style-type: none"> Proposed Power Purchase Agreement Standardised Template has been prepared. <p>Ongoing activities</p> <ul style="list-style-type: none"> Final approval by DOE. 		PPA standardised template has been submitted for final DOE approval in April 2015. However, the finalized draft PPA is yet to be agreed by FEA.
Output 3.3: Completed Investment Promotion Package	<p>No. of prospective investors making enquiries with government agencies</p> <p>Cumulative number of investors that expressed and planned to invest & implement RE-based power generation projects by EOP</p>	0	15	<p>Completed activities</p> <ul style="list-style-type: none"> Review and listing of bankable investment opportunities. Preparation of investment information packages. Organisation and conduct of an Investor forum. 		The Investor forum took place on April 9, 2015 with the participation of 108 attendees, reflection of the high interest of investors and RE project developers as evidenced by the high number of questions that were raised and the high marks that have been received through the participation feedback forms that were distributed at the end of the forum.
Output 3.4: Completed assessment and developed RE incentives schemes	A comprehensive report on options and issues related to the establishment of a subsidy fund for private sector renewable energy	0 ³⁹	Jun 2012	<p>Completed activities:</p> <ul style="list-style-type: none"> Review of existing subsidy and incentives schemes in Fiji Implementation of RE incentive 		The international consultancy company that was hired to prepare recommendations for RE support mechanisms in Fiji

³⁸ There will be only 1 standard template since there is only 1 transmission and distribution utility.

	Indicator	Baseline	Targets	Mid Term Level Assessment	Rating	Justification for Rating
	investment published			<p>schemes in Fiji based on best practices from international experiences</p> <ul style="list-style-type: none"> Design of subsidy incentive scheme 		<p>presented its final report in February 2015 and could be accessed at:</p> <p>http://www.fj.undp.org/content/dam/fiji/docs/OtherDocs/Environment/Fj_Proposals_RE_Sup_report.pdf</p>
OUTCOME 4 Renewable Energy development integrated into National Plan towards 100% Electrification of Fiji	<p>Cabinet approved-Electrification Master Plan</p> <p>Average annual budget for the Electrification Master Plan by EOP, US\$</p> <p>% utilization of Fiji's RE resources (for power purposes) by EOP</p>	<p>0</p> <p>0</p> <p>52</p>	<p>Dec 2013</p> <p>10</p> <p>90</p>	<p>The report on the design and establishment of a SHS tariff collection system (new Output 4.1) is completed and needs to be approved by DOE. The TOR for hiring a consultant to work on a National Electrification Plan have been prepared but will not be published until the proposed draft 2014 NEP receives Cabinet endorsement.</p>	MS	<p>Due to the delay in getting Cabinet to approve the proposed draft 2014 NEP the activities under this Outcome show an important delay in spite of the decision of the Project Board to change some of the outputs. Also the delays in approving the TOR for the preparation of the National Electrification Plan by DOE has impacted negatively</p>
Output 4.1 Completed training programme on integrated energy planning (IEP) and administration of energy policy for government personnel <i>On the April 3, 2014 Project Board meeting this output was changed to "Promotion of RE grid-connected and off-grid electrification in rural</i>	<p>No. of GOF personnel trained on IEP and energy policy each year starting Year 2011</p> <p>% trained GOF personnel that are actively engaged in RE-based power generation policy making, planning and implementation operations by EOP</p> <p>No. of training institutions that are capable and qualified in IEP and energy policy training capacity building by EOP</p>	<p>2</p> <p>0</p> <p>2</p>	<p>6</p> <p>50</p> <p>2</p>	<p>Completed activities:</p> <ul style="list-style-type: none"> Inception report for the design and establishment of a Solar Home System (SHS) tariff collection system TOR for Integrated Energy Planning Training is finalized and awaiting endorsement of NEP by Cabinet to be advertised <p>Ongoing activities</p> <ul style="list-style-type: none"> Final report on the design and establishment of a SHS tariff collection system 		<p>Due to the delays getting Cabinet to approve the proposed draft 2014 NEP, the Project Board decided to change this Output. Training for Integrated Energy Planning is awaiting 2014 NEP endorsement by Cabinet for its implementation.</p>

³⁹ Prospective private RE investors do not commit funds, as investments are commercially not viable without support. Fiji's renewable energy industry remains small and weak. RE investment remains dependent on donor funding.

	Indicator	Baseline	Targets	Mid Term Level Assessment	Rating	Justification for Rating
<i>areas</i>						
Output 4.2 Completed and approved National Electrification Plan	Cabinet approved Electrification Mater plan Average annual budget for the Electrification Master Plan by EOP, US\$ million	0 0	Dec 2013 10	Completed activities: <ul style="list-style-type: none"> Drafting of the TOR completed but on hold as DOE has submitted a funding proposal to ADB for funding of the output 		DOE has objected to the undertaking of this activity since a similar activity has been included in a request for Technical Assistance made to the Asian Development Bank (ADB). FREPP Board insists in maintaining this activity under FREPP since it was formulated prior to the request that was sent to the ADB and hence suggested that DOE discuss an alternative activity with ADB. At one point in time it was suggested that ADB could fund the GIS component of the National Energy Master Plan However, since ADB is awaiting 2014 NEP endorsement by the Cabinet before making a decision on this issue, FREPP had initially decided to go ahead with the preparatory phase. However, during the 3 rd Board meeting that took place on March 23, 2016, it was decided to leave this Output for ADB due to the insistence to do so.

3.2.2 Remaining barriers to achieve Project objectives

In one way or another all of the barriers that were presented in *section 2.2 Key barriers to development and commercialisation of RE* are still present with the exception that thanks to the intervention of FREPP there has been substantial progress in strengthening existing information on RE resources and providing specific recommendations on the various types of RE incentive schemes including the preparation of a proposed standardised PPA template.

At this stage the most urgent action is for the Government to evaluate the various recommendations that have been presented by FREPP and speed up the endorsement of the proposed draft NEP 2014 by Cabinet which is blocking the implementation of several activities which fully depend on it.

3.3 Project Implementation and Adaptive Management

The Project is being implemented under UNDP's National Implementation Modality (NIM) with DOE as the Implementing Partner (IP) responsible for the day-to-day execution of the Project. During its implementation, DOE with the approval of the Project Board had to resort to adaptive management mechanisms to deal with different problems and contingencies such as:

- Based on the original Project Management structure, the highest level of reporting consisted of the National Energy Council (NEC) which was designated as Project Assurance. This government body no longer exists and therefore during its first meeting, the Project Board unanimously agreed to nominate the Strategic Framework for Change Coordinating Office (SFCCO), an independent body set up by the Government to monitor all government projects to take on the role of Project Assurance.
- During its first meeting, the Project Board also took other adaptive management decisions which included:
 - Removal of the geothermal resource assessment from FREPP activities due to the high costs associated with having a core drill of 500-1,000 meters depth and the low probability of ensuring successful finds,
 - Inclusion of biomass gasification (using coconut shells) as part of the RE assessment, and
 - Termination VRE's engagement with the Project and identification of an alternative IPP demonstration project by consulting FEA on their list of IPPs.
- Due to the delays in obtaining Cabinet endorsement of the proposed draft 2014 NEP, during the second Project Board meeting it was decided to substitute a number of Outputs which were dependent on the final approval of the proposed draft 2014 NEP as shown below.

Table 7 New outputs included due to the delay in getting the NEP endorsed by Cabinet

Output number	Old Output	New Output
1.1	Fiji Energy Act	Biofuel Policy for Fiji to be enacted by Cabinet
1.2	Implementing Rules and Regulations (IRRs)	Implementing Rules and Regulations (IRRs) for the Biofuel Policy
1.3	Government agencies with enhanced regulatory and institutional capacity on energy development, in general, RE development in particular	De-Risking or Tariff Guarantee Fund Developed and Piloted depending on whichever has the highest risk
4.1	Completed training programme on integrated energy planning (IEP) and administration of energy policy for government personnel	Promotion of RE grid-connected and off-grid electrification in rural areas

- During the second Project Board meeting it was also agreed to:
 - Define options for a PPP model for the operation and maintenance of the power generation and distribution grid assets for off-grid rural electrification projects and working with DOE to select the best options,
 - Develop and facilitate the process of establishing the PPP through a procurement method to include documentation preparation for the tender, establishing a bidder's evaluation scheme, drafting a PPP contract and assisting in PPP negotiations, and
 - Include other stakeholders who are not part of the Project Board to be part of the Steering Committee and designated the Project Manager together with Mr. Inia Saula, Principal Scientific Officer of DOE to be responsible for confirming the stakeholders that will be part of the Project Steering Committee and sending out invitations for a meeting to be undertaken as soon as possible. This task is still pending since this was the last time the Project Board met.⁴⁰

○ ⁴⁰ The Project Board is obligated to meet at least once a year. However, since the inception of FREPP there has only been Project Board meetings in 2013 and 2014. No Project Board meeting has been held in 2015. As stated previously, the first quarter of 2015 was quite hectic and efforts were focussed on completing the IPP Framework consultancy including also preparations for the first-ever national Renewable Energy Investment Forum. The turn-over of staff that was experienced in second quarter along with the delayed recruitment of successor PMU staff implied that no one was

Also, a Gender Assessment has been conducted for the Koro Island biofuel mill and a second one is in progress for the Rabi Island biofuel mill to evaluate the gender impacts that these type of projects would have for people living in remote islands. The results of these Gender Assessments will help clarify how these projects could best contribute to tangible improvements in the lives of the Fijian men and women involved.

3.3.1 Management arrangements

Due to the resignation of the Project Manager in April 2015, the Project now is in the hands of the Project Manager Assistant who is doing her best in managing the Project but which is clearly not sufficient given the high number of activities that need to be monitored, as well as, those which start is still pending. An urgent decision is needed to recruit a new Project Manager and a temporary replacement for the Project Manager Assistant who will be going on maternity leave in the coming weeks.

The Project Board has had two meetings so far (i.e., 2013 and 2014), where critical decisions have been made in view of the Project progress and issues encountered. In 2015, momentum picked up during the first and second quarters which kept everyone busy. In the 3rd and 4th quarters, there was staff turn-over within the PMU which delayed the implementation and convening of the 3rd Project Board meeting. The lack of continuity in having at least one Project Board meeting per year is bound to have had negative implications on the implementation of Project activities.

While the UNDP Pacific Centre staff proactively supported and guided the UNDP Country Office during the formulation phase, UNDP Fiji continues to provide proactive support to DOE / FREPP PMU with day-to-day coordination, as well as, implementation support on activities which were beyond normal oversight functions. As an example, UNDP Fiji has taken the lead with the procurement and management of all major consultancies worth a total of approximately US\$ 490,000. UNDP Fiji has also led the Gender Surveys in two demonstration sites (i.e., biofuel mills in Koro and Rabi islands). The effective supervision of UNDP is also reflected in the following actions:

- The issuance of a short-term contract to the Project Manager Assistant while awaiting recruitment of the replacement for the Project Manager, and
- Provision of comprehensive information on the tariff design for the Bukuya mini-hydro project that was developed by the consultant.

Also, many decisions on the Project implementation have been based on the recommendations of the UNDP GEF EITT team.

available and able to effectively coordinate day-to-day activities including the convening of a Project Board Meeting during the later part of 2015.

Finally, UNDP and the DOE were conducting quarterly meetings throughout the first year of project start-up to perform a detailed follow-up to the Project activities which have been documented properly.

3.3.2 Work planning

The Project has suffered delays mainly due to the long time that it took to establish the Project team in August 2012, the unexpected resignation of the Project Manager in April 2015 and the long time that it took to renew the contract of the Project Manager Assistant which led the Project to be dormant during 7 weeks in 2015. In turn, progress on the implementation of a number of planned activities has been impacted severely by the delay in the endorsement of the proposed draft 2014 NEP that was originally scheduled for 2014 and that has not yet happened.

Regardless of the delays experienced, the Project team has used the project planning matrix (log frame) as a management tool to monitor progress and identified bottlenecks for each of the planned activities as reflected in the QPRs and PIRs. Also, each of the Output changes that have been agreed due to the delay in the 2014 NEP endorsement by Cabinet have been documented in detail in the minutes of Project Board meetings

3.3.3 Finance and co-finance

As it has been outlined in the PRODOC, funds are first transferred to the Reserve Bank of Fiji and from there to the Ministry of Finance which then are disbursed to the Ministry of Infrastructure & Transport before being accessed by FREPP at DOE. Major delays have been faced with this arrangement, particularly due to bottlenecks within the Ministry of Finance, even though some improvements have been noted over time.

The total budget of GEF funds that have been assigned to the Project is US\$ 975,000. The following table shows the breakdown of the funds that have been executed as of December 31, 2015 for each of the Component.

Table 8 Break down of executed GEF funds as of December 31, 2015

Component		Total amount budgeted as PRODOC US\$	Amount of GEF budget spent as of 2015 US\$	Percentage of GEF budget spent %
#	Title			
1	Energy Policy & Regulatory Frameworks	150,000	90,297.51	60%
2	RE Resource and RE-based Project Assessments	150,000	49,366.32	33%
3	RE-based Power Generation Demonstrations	427,500	260,347.66	61%
4	RE Institutional Strengthening	150,000	11,049.71	7%

	Project Management ¹	97,500	120,573.64	124%
	Total	975,000	531,634.84	55%^c

1/ Amounts of unrealised gains / losses totalling US\$ 3,496.40 have been added to the cost of Project Management.

The utilisation of GEF funds for Component 2 and in particular Component are behind since the activities of both Components have suffered substantial delays. However, the amount of GEF funds utilised for Project Management are in excess of what has been budgeted. This cost overrun is not unique to FREPP since the same is observed for the majority of GEF projects in the Pacific region due to a variety of reasons. For FREPP the main reason is that an attractive offer had to be made in order to attract and retain highly qualified personnel.

With regard to co-financing the commitment of stakeholders willing to bring co-financing was initially set at US\$ 1,553,673 for the Government and US\$ 15 million for VRE.

As noted earlier in the report, the agreement with VRE was terminated. However, FREPP was able to obtain an additional co-funding contribution of AUD\$ 15,000 (i.e., approximately US\$ from the Secretariat of the Pacific Community (SPC) for the development of the Centralised Energy Data Base.

In addition, in 2013, DOE's initial commitment of US\$ 1,553,673 for the establishment of 21 biofuel mills has been increased to FJD 9,450,000 (i.e., US\$ 4,478,673) of which FJD 5 million (i.e. US\$ 2,369,668) has already been spent. The key objectives of the 2013-2015 Public Sector Investment Programme for Biofuel implementation include:

- Use currently underutilised but available copra resources to generate vegetable oil for bio-fuel blending;
- Provide alternative high value markets to copra farmers in remote and isolated communities;
- Create employment in the isolated communities;
- Reduce poverty levels by increasing income levels in these communities;
- Improve the quality and value of the coconut products being derived and sold by these isolated communities;
- Reduce the dependency of these isolated communities on imported fossil fuels, imported cooking oil; and
- Generate feed for farm animals from coconut by-products.

The programme includes the installation of 21 bio-fuel mills in seven provinces and the formation of a technical working group with Fiji Sugar Cooperation in carrying out a feasibility study on ethanol development and working out the upgraded and machinery required for the implementation of an ethanol refinery plant. The following table shows the list of biofuel mills that have been installed or are being installed as a result of FREPP.

Table 9 Biofuel mills installed or being installed as a result of FREPP.

No	Island	Company	Commission Date
1	Koro	Koro Biofuel Company Limited (KBCL)	10/03/10
2	Rotuma	Rotuma Biofuel Company Limited (RoBCL)	13/05/11
3	Cicia	Cicia Biofuel Limited (CBL)	08/09/11
4	Gau	Gau Biofuel Company Limited (GBCL)	16/03/13
5	Rabi	Rabi Biofuel Company Limited (RaBCL)	14/08/13
6	Lakeba	Lakeba Biofuel Company Limited (LBCL)	16/08/13
7	Vanua Balavu	Vanua Balavu Biofuel Company Limited (VBCL)	15/08/13
8	Moala	Moala Biofuel Company Limited (MoBCL)	Not confirmed yet
9	Matuku	Matuku Biofuel Company Limited (MaBCL)	Not confirmed yet

Table 12 shows a breakdown of the amounts committed by each of the co-financing entities and disbursements made in cash and in-kin as of December 31 2015

.Table 10 Co-financing table

Co-financing Entity	Type of co-financing	Co-financing amount at CEO endorsement (US\$)	Co-financing contributed at the time of the MTR (US\$)	Actual Percentage of Expected Amount (%)
Government	In cash	1,553,673 ¹	2,369,668	50
Vara RE	In cash	15,000,000	0	0
SPC /CPS	In cash	11,250	11,250	100
FSC Labasa cogen	In cash	n.a.	17,000,000	100
Total		16,553,673	19,380,918	86

1/ Total amount of Government co-financing is now US\$ 21,489,923 due the Government's decision to increase the amount of funds for the implementation of biofuel projects and the incremental co-financing resulting from the substitution of the Vara RE for the FSC Labasa cogen as part of the demonstration projects.

3.3.4 Project level monitoring and evaluation systems

The key Project monitoring and evaluation activities and systems that are being used for adaptive decision making based on changes in the Project environment are:

- Project Board meetings, and
- Periodic review reports and ad-hoc meeting with UNDP and other entities including
 - Project Implementation Reports (PIRs);

- Annual Work Plans (AWPs);
- Quarterly progress reports (QPRs) and monitoring meeting summaries; and Funding Authorization & Certificate of Expenditures (FACE) forms;

With regard to the PIRs, the Evaluator notes that Project progress has been reported by outcome and output in accordance with the PRODOC logic framework and with an adequate level of detail. The indicators of those outputs that have been changed need to be redefined accordingly.

The AWPs and the quarterly reports, as well as, the monitoring meeting summaries and FACE forms have been prepared with an adequate level of detail and with sufficient information to allow for the monitoring of the Project activities.

3.3.5 Stakeholder engagement

The conceptualisation phase of the Project involved representatives from: DOE, Department of Environment, Department of Forestry, FEA, Ministry of Public Enterprise and Trade & Commerce, Niu Industries, Elpicon Power Systems, Powerlite Generators, Iviti Renewable, Clay Engineering, Fiji National University, University of South Pacific, Secretariat of the Pacific Community, IUCN and UNDP. In addition, key stakeholders were consulted at the outset (i.e., at the detailed design workshop and associated project formulation discussions) and kept informed of developments throughout the formulation process.

Upon termination of the VRE agreement, the Project has been successful in setting up a partnership with FSC to include the 10 MW Labasa combined heat and power plant as an alternative demonstration project. Unfortunately, the arrangement with the Bukuya mini-hydro facility to test the implementation of a PPP model which was specifically designed for that project did not work out and the Project team is working on the identification of another project.

Key stakeholders have also been co-operative and supportive, having taken part in specific consultations apart from the Detailed Design Workshop, Inception Workshop and Investment Forum (e.g. the Waste to Energy Assessment, Development of the IPP investment framework and other interventions).

Particular credit should be given to FREPP and the international consultants that was recruited to organise the Investor Forum which was attended by more than 100 participants, evidencing of the high level of interest that presently exist in Fiji regarding private sector participation in RE investments. Also, to help improve the dissemination of Project progress on a timely basis detailed Project information has been made available DOE and UNDP websites⁴¹.

⁴¹<http://www.fdoe.gov.fj/index.php/energy-planning/frepp/2015-04-10-01-13-30>
http://www.fj.undp.org/content/fiji/en/home/operations/projects/environment_and_energy/Fiji_RE.html

The TOR for the preparation of a National Electrification Master Plan (Output 4.2) have been drafted but remain on hold since the 1st quarter of 2014 since DOE had submitted a funding proposal to ADB for funding a similar scope of services. At one point in time it was suggested that ADB could fund the GIS component of the National Energy Master Plan. However, since ADB is awaiting 2014 NEP endorsement by the Cabinet before making a decision on this issue, FREPP initially has decided to go ahead with the preparatory phase. During the 3rd Board meeting which was held on March 23, 2016, it was decided to leave this Output for ADB due to the insistence to do so.

3.3.6 Reporting

The following table summarizes the key reporting mechanisms that have been used by the Project Team to inform progress towards results and adaptive management changes to the PSC and key stakeholders

Table 11 Reporting Mechanisms

Document
Quarterly progress reports and monitoring meeting summaries
Funding Authorization & Certificate of Expenditures (FACE) forms
Annual work plans
Annual budgets and budget reviews
Project Implementation Reports (PIRs)
Annual Progress Reports
Project Board Minutes of meetings

3.3.7 Communications

Internal Project communications have been conducted regularly and effectively, having in turn generated appropriate feedback mechanisms in order to maintain a good level of communication between all parties involved. Both the UNDP and to a lesser extent the DOE website have posted most of FREPP reports in their websites.

As noted in the Report on Options and Recommendations for Effective Implementation of Waste to Energy Power Generation in Fiji⁴², *“the major constraints identified for implementation of waste to energy projects during the study were low awareness and lack of appropriate information on waste to energy; inadequate technical capacities to develop real projects; low availability of financial services; insufficient institutional capacities and requirements to deal with risks associated with waste to energy initiatives among key stakeholders remains generally low, both in public and in private sector”* Consequently, FREPP should consider implementing additional communication channels such as workshops,

⁴² See page 23 of the Report on Options and Recommendations for Effective Implementation of Waste to Energy Power Generation in Fiji, November 2014

awareness raising campaigns, and preparation of training modules to highlight the benefits of promoting the wide-scale use of RETs and disseminate the main achievements of the Project to key stakeholders and the public in general.

Based on the above Project Implementation and Adaptive Management is rated Moderately Satisfactory (MS)

3.4. Sustainability

The evaluation of Project sustainability consists in determining the extent to which the Project benefits will continue once the financing support of GEF is over and in evaluating those risks that may jeopardized the continuation of the Project outcomes.

The key Project documents (i.e., PRODOC, the Annual Project Review / PIR, and Risk Management Module ATLAS) have identified and assessed the main Project risks. The first column of the following table summarizes the main Project risks that were identified in those documents and which remain in force plus some others added by the Evaluator, while the second column presents the comments of the Evaluator for the four GEF categories of sustainability (financial, socio-economic, institutional framework and governance, and environmental).

Table 12 Sustainability Risks

Sustainability Risk	Comment
<i>Financial risks</i>	
Lack of financial and economic instruments and mechanisms to support IPP investments in Fiji	Regulatory uncertainty, absence of an effective IPP framework in place and low IPP tariffs together with the lack of financial and economic instruments and mechanisms are the main reasons why there has been limited private sector investment in the power sector in Fiji. Until these issues are addressed the sustainability of IPP investment in Fiji will continue to be at risk.
Insufficient funding to ensure that an independent regulatory body is established	Additional funding is needed to establish the proposed Multi Sector Regulatory Agency or for other options that have been suggested / considered to remove the regulatory functions away from FEA such as to strengthen / expand the mandate of the current

Sustainability Risk	Comment
	economic regulator (i.e., FCC) and / or giving DOE technical regulatory functions and keep FCC performing economic regulation
<i>Socio economic risks</i>	
Insufficient public / stakeholder awareness in support of the Project objectives	Additional efforts should be made to increase the dissemination of Project progress and lessons learned on a continuous basis by consistently update the contents of FREPP both in the DOE and the UNDP websites. Consideration should be given to arranging additional workshop to discuss Project progress with key stakeholders
<i>Institutional framework and governance risks</i>	
Limited commitment of the Government to get Cabinet to endorse the proposed draft NEP 2014	The proposed draft NEP 2014 clearly sets out the Government vision for Fiji's energy future which is for a resource efficient, cost effective and environmentally sustainable energy sector. There is now an urgent need for Cabinet to endorse the NEP 2014 in order to reduce uncertainty and risk in the eyes of prospective energy sector investors and lenders.
Lack of a legal and regulatory framework for IPPs	After a hopefully soon enactment of the proposed draft 2014 NEP efforts should be focused on creating an enabling environment to attract private sector investment to the RE sector. Proposals made by FREPP with regard to benefits of introducing RE incentives schemes and a standardized PPA template have to be evaluated for prompt implementation.
Unattractive tariffs for RET investments	In the ruling of May 26, 2014 ⁴³ , the FCC increased the minimum IPP tariff by 17% from 0.2565 FJD/kWh to 0.3308 FJD/kWh effective May 27, 2014. However, this tariff is substantially below the cost of thermal generation that FEA assessed to be 0.61 FJD/kWh and hence needs to be revised accordingly. Also

⁴³ See <http://www.commcomm.gov.fj/wp-content/uploads/2014/05/IPP-Final-Authorization-second-phase.pdf>

Sustainability Risk	Comment
	consideration should be given to establishing different tariffs for different locations since the FEA avoided cost is not uniform across Fiji.
<i>Environmental Risks</i>	
Fiji's vulnerability to natural disasters, particularly cyclones that can damage equipment and resources used to produce electricity	DoE have established standards including equipment specifications for solar PV SHS part of the Rural Electrification Program. In addition specifications have been set on case-by-case (project-by-project). However, proper enforcement of the technical and equipment specifications that have been set is needed to ensure that all RETs investments are suitable for local climate conditions in addition to the dissemination of other voluntary guidelines that have been established to mitigate vulnerability to natural disasters of RETs investments ⁴⁴ . Also, as part of the soon completed WB Sustainable Energy Financing Project (SEFP) in Fiji, standards for applicable RETs were established ⁴⁵

Another element that would contribute to the sustainability of FREPP is to have a Renewable Energy Investors Association as private sector participation requires having a strong and unified voice in providing recommendations to improve the enabling environment for private

⁴⁴ Recently the Sustainable Energy Industry Association of the Pacific Islands (SEIAPI) prepared Pacific Island Country specific design and installation guidelines for on as well as off-grid solar PV. Some of these recommended/voluntary guidelines are available here:

Design of on grid solar PV: <http://seiapi.com/wp-content/uploads/2014/11/GRID-CONNECTED-PV-SYSTEM-DESIGN-GUIDELINES-.pdf>

Installation of on grid solar PV: <http://seiapi.com/wp-content/uploads/2014/11/GRID-CONNECTED-PV-SYSTEM-INSTALLATION-GUIDELINES.pdf>

Design of off grid solar PV: <http://seiapi.com/wp-content/uploads/2014/11/OFF-GRID-PV-SYSTEMS-DESIGN-GUIDELINES.pdf>

Installation of off grid solar PV: <http://seiapi.com/wp-content/uploads/2014/11/OFF-GRID-PV-SYSTEMS-SYSTEM-INSTALLATION-GUIDELINES.pdf>

⁴⁵ <http://www.fdoe.gov.fj/images/SEFP/productcatalogue0415.pdf> Some of the Fiji based companies providing products meeting these standards are available here:

<http://www.fdoe.gov.fj/index.php/power-sector/sustainable-energy-financing-project-sefp/faqs>

sector investment in the RE generation sector , an action that has already been suggested by prospective investors⁴⁶

Based on the above the overall sustainability of the Project is rated Moderately Likely (ML)

⁴⁶ As per the recommendations made in the Fiji Renewable Readiness Assessment prepared by International Renewable Energy Agency (IRENA).

4. Conclusions

The following conclusions have been drawn by the MTR:

- **Project Formulation / Design**
 - A strength of this Project has been the extensive input from stakeholders during the Project conceptualisation and detailed design phase, as well as, during the implementation of the demonstration projects⁴⁷
 - The design that has been adopted by the Project to create an environment which is conducive to private sector participation while supporting socio-economic development, particularly in the outer islands, is adequate
 - The Project concept is fully aligned with the country development priorities as it will provide the necessary⁴⁸ frameworks for private sector engagement in RE and help Fiji achieve its proposed national target of 90% RE in the electricity sector.
 - The demonstration projects can be replicated in other areas of the country while certain Project components like the proposed standardised PPA template and the proposed incentive mechanisms to help promoting RETs have potential to be utilized in other Pacific Island Countries
 - Indicators related to the new Outputs that have been introduced need to be defined accordingly.
- **Project achievements**
 - Not yet having the proposed draft 2014 NEP endorsed by Cabinet has prevented the implementation of a number of planned activities and several of the Outputs had to be changed, accordingly.
 - Consequently, the implementation of the planned activities under the PRODOC for the Mid-Term of the Project show a significant delay, mainly in activities of Components 1 and 4 where the amount of GEF funds that have been utilised

⁴⁷ FREPP's support to demonstration project included technical assistance to the 10MW heat and power plant at the Labasa mill of Fiji Sugar Company and 7 biofuel mills plus the development of a PPP model for the Bukuya mini hydro facility

⁴⁸ Various past, current and proposed targets exists (some of which appears to be moving goal posts) including e.g.:

- FEA's own set targets include:
 - 100% through renewable resources by 2011 – e.g. check 2003 FEA annual report
 - 90% of the energy requirements through renewable energy sources by 2015 – e.g. check the 2010 FEA annual report
 - 90% by 2025 – check here:
http://www.fdoe.gov.fj/images/FREPP/clean_energy_investment.pdf
- National targets set by Government include:
 - RE providing 90% of grid electricity supply and 55% for off-grid supply by 2011 as per 2006 National Energy Policy
 - 81% by 2020 and 99% by 2030 as proposed in the draft 2014 NEP
 - 99% by 2030 as per Cabinet endorsed Green Growth Framework (August 2014)
 - '...to approach 100% by 2030' as per Fiji INDC:
http://www4.unfccc.int/submissions/INDC/Published%20Documents/Fiji/1/FIJI_INDC_Final_05_1115.pdf .

so far are 33% and 7% of the total amount budgeted for these Components, respectively. On the other hand, the amount of GEF funds utilised under for Project Management are already 124% of the total amount of GEF funds that have been budgeted for this Component.

- Under this context, it is unlikely that FREPP will be able to have the following elements in place by the EOP (i.e., June 30, 216) which are critical to ensure the attainment of the Project objectives :
 - A transparent IPP framework for the competitive procurement of large-scale generators from IPPs with attractive tariffs.
 - A clearly defined framework for connecting small scale RETs to the grid with economically justified feed-in tariffs or other mechanisms that would generate the appropriate incentives and mitigate risks to private sector investors.
 - A credible regulatory authority either through the transferring of technical regulatory functions currently in the hands of FEA to an existing Government entity or creation of an independent regulator.
 - A National Electrification Master Plan showing how each un-electrified area of Fiji would be served with least cost solutions together with a sustainable institutional framework which would allow for the development and operation of rural electrification projects on a commercial basis by private sector investors.
- In spite of these setbacks, the Project has been able to achieve concrete and tangible results including:
 - An assessment of the current business and regulatory environment for promoting biofuels and the existing capacities and opportunities for the development of a national biofuel programme together with a draft National biofuel policy for Fiji.
 - The design of a PPP model for the operation and maintenance of off-grid RE based generation projects which included the establishment of a robust tariff structure to guarantee the sustainability of the project while ensuring investment into additional income generating activities for the local village and to serve as a basis for replication in other RE off-grid projects.
 - The scoping for the establishment of a Centralised Energy Database together with the preparation of the TOR for the implementation of the Centralised Energy Database.
 - Installation of a number of wind and hydro monitoring stations jointly with a training workshop on tower installations for wind monitoring and use of specialised software for predicting wind climates, wind resources and energy yields from wind turbines and wind farms.

- A comprehensive assessment of waste to energy power generation potential for Fiji.
 - Feasibility studies, installation and commissioning of nine biodiesel mills⁴⁹ in the islands of Koro, Rotuma, Cicia, Vanuabalavu, Labeka, Rabi, Moala, Matuku and Gau islands. Also, Gender Impact Assessment have been undertaken for the biofuel mills in Koro and Rabi islands.
 - Baseline setting and M&E scheme for the Labasa 10 MW combined heat and power project to indicate the short and long term direct benefits and co-benefits gained from RE grid-connected power generation while assessing the private sector viability for this demonstration project.
 - Preparation of a proposed standard PPA for IPPs giving appropriate recognition to the existing PPA approach⁵⁰ while providing an equitable balance between risks and rewards for IPPs and being in line with the development interest of Fiji.
 - An Investment Promotion Package including the preparation of an Investment Information package with a description of the current business environment and listing bankable investment opportunities in Fiji which was presented at an Investor Forum with more than 100 attendees.
 - A assessment and recommendations on RE incentive schemes with an analysis of alternative RE energy support mechanisms which could contribute to the revitalisation of the RE market in Fiji by providing incentives to private sector investors.
 - An assessment of DOE's SHS jointly with a proposal for the design and establishment of an effective and least-cost tariff collection system based on the concept of PAYGO.
- **Implementation and adaptive management**
 - The Project has been run in a flexible and adaptive manner.
 - The PMU has been employing the project planning matrix (log frame) as a management tool to monitor progress and identify bottlenecks for each of the planned activities as reflected in the QPRs and PIRs and properly documented. Also, each of the Output changes that have been agreed due to the delay in the 2014 NEP endorsement by Cabinet have been documented in detail in the minutes of Project Board meetings .

⁴⁹ The Vanuabalvu mills has been destroyed by Cyclone Winston, the Gau mill is temporary on halt and the Moala and Matuku mills are awaiting Cabinet to approve start-up capital. For the time being there are plans for future installations and the next approach would be to look into the feasibility of installing a biodiesel plant.

⁵⁰Based on its experience with IPP projects and its mandated obligations pursuant to the Fijan Electricity Act, FEA has appropriately adopted a very robust and risk adverse approach to the PPA frameworks. The proposed PPA template is consistent with many of the key provisions in the existing FEA PPA. However, the finalized draft PPA is yet to be agreed by FEA.

- When faced with impediments that were beyond its control the PMU acted on the recommendations provided by the Project Board and took effective actions including the reformulation of several outputs which were highly dependent on having the proposed draft 2014 NEP endorsed by Cabinet for their implementation.
 - Due to the resignation of the Project Manager in April 2015, the Project now is in the hands of the Project Manager Assistant. Hence, an urgent decision is needed to recruit a new Project Manager and a temporary replacement for the Project Manager Assistant, who is expected to go on maternity leave in the coming weeks.
 - UNDP (BRH, Pacific Center and Fiji Country Office) proactively supported and guided DOE during the formulation phase, and continue to do so with day-to-day coordination, as well as, implementation support on activities which were beyond standard advisory and oversight functions.
- **Management arrangements**
 - The Project is being implemented under UNDP's National Implementation Modality with DOE as the implementing partner for the day to day execution of the Project.
 - The highest level of reporting consisted of the National Energy Council (NEC) which was designated as Project Assurance. This government body no longer exists and therefore during its first meeting, the Project Board unanimously agreed to nominate the Strategic Framework for Change Coordinating Office (SFCCO), to take on the role of Project Assurance.
 - Due to the resignation of the Project Manager in April 2015, the Project now is in the hands of the Project Manager Assistant which is doing her best in managing the Project. An urgent decision is needed to recruit a new Project Manager and a temporary replacement for the Project Manager Assistant who will be going on maternity leave in the coming weeks.
 - The Project Board has had two meeting so far (i.e., 2013 and 2014), were critical decisions have been fully addressed The lack of continuity in having at least one Project Board meeting per year is bound to have had negative implications on the implementation of Project activities (i.e., no Project Board meeting has been held in 2015).
 - **Finance and co-finance**
 - During initial implementation major delays have occurred due to the complex arrangement that has been designed for FREPP to access the GEF funds⁵¹ but

⁵¹ As per the PRODOC, funds are transferred to the Reserve Bank of Fiji and from there to the Government's Ministry of Finance, which then gets disbursed to the Ministry of Infrastructure & Transport before it's accessed by FREPP at DOE. Major delays have been faced with this arrangement, particularly due to bottlenecks within the Ministry of Finance. Some improvement has been noted over time.

improvements have been noted over time. The delay on Project implementation noted above is directly reflected in the low level of utilisation of GEF funds which as of December 31, 2015 was of 55% for the entire Project and of just 33% and 7% for Components 2 and 4, respectively despite of the fact that almost 4 years have passed since the start of Project activities.

- The committed co-financing of US\$ 15 million related to the implementation of VARA RE project was not realised due to the cancellation of the project. However, an additional co-financing commitment was realised as a result of the incorporation of the Labasa heat and power project as an additional demonstration project.

- **Monitoring and Evaluation**
 - The PMU has diligently reported Project progress on the PIRs and QPRs by outcome and output in accordance with the project planning matrix (log frame) and with an adequate level of detail.

- **Stakeholder engagement**
 - The Project has effectively mainstreamed stakeholder involvement during the conceptualisation and detailed design phase and key stakeholders have been cooperative and supportive throughout the implementation phase taking part in specific consultations apart from their participation in the Inception Workshop and the Investment Forum. Upon termination of the VRE agreement, FREPP has been successful in setting up a partnership with FSC to include the 10 MW Labasa combined heat and power plant as an alternative demonstration project. Unfortunately, the arrangement with the Bukuya mini-hydro facility to test the implementation of a tailored made PPP model has been cancelled. The Project team is working on the identification of another project to test the PPP model.

- **Sustainability**
 - Additional funding would be needed to establish the proposed Multi Sector Regulatory Agency or for other options that have been suggested / considered to remove the regulatory functions away from FEA such as to strengthen / expand the mandate of the current economic regulator (i.e., FCC) and / or giving DOE technical regulatory functions and keep FCC performing economic decisions.
 - Even though it appears unlikely that the proposed 2014 NEP will be passed without revisions (after all the draft was submitted in November 2013), there is an urgent need for Cabinet to endorse the proposed draft NEP 2014 in order to reduce uncertainty and risk in the eyes of prospective energy sector investors and lenders.

- FREPP proposals and recommendations regarding the benefits of introducing RE incentive schemes and a standardised PPA template need to be evaluated for prompt implementation.
- The latest minimum tariff that has been approved by FCC for IPPs is still substantially below the cost of thermal energy that FEA assessed to be of FJD 0.61 / kWh and needs to be revised, accordingly. Also consideration should be given to establishing different tariffs for different locations since the FEA avoided cost is not uniform across Fiji.
- Proper enforcement of National standards and / or certification procedures are needed to ensure that RETs imported into Fiji are suitable for local climate conditions.
- Consideration should be given to establishing a Renewable Energy Investors Association to act as a single voice in providing recommendations to improve the enabling environment for private sector participation in the RE generation sector.

5. Recommendations

The following table presents the Recommendations of the MTR

Table 13 Recommendations

Rec #	Recommendation	Responsible Entity
A	Overall recommendation	
A1	A one year extension of the EOP is recommended to allow sufficient time for the finalisation of the pending activities and ensure that the achievements that have been accomplished to date are fully capitalized. Otherwise, the benefits of several of the activities that are still to be completed will be lost (i.e., adoption of the proposed RE support mechanisms and the standardized PPA for IPPs, approval of the national biofuel policy and the national electrification plan, etc.)	UNDP/ DOE Project Board
B	Outcome 1:	
B.1	<i>Key recommendation</i> The delay in getting the NEP 2014 endorsed by Government has caused substantial delays to the implementation of the planned activities under Outcome 1 and is considered to be critical in order to achieve the goals and objectives of the Project. Urgent actions should be taken to ensure that Cabinet endorses the NEP2014 ASAP. The Project Board in consultation with UNDP and DOE should decide on the best strategy for expediting the endorsement of the NEP 2014.	UNDP/DOE Project Board
B.2	The indicators for new Outputs 1.1 (Biofuel Policy for Fiji enacted by Cabinet) and 1.2 (Implementing Rules and Regulations for the Biofuel Policy) which were included due to the delays in the endorsement of the NEP 2104 by Cabinet need to be defined Possible SMART indicators to be considered are: <ul style="list-style-type: none"> • A Cabinet-approved comprehensive Biofuel Policy for Fiji by EOP • Institutional reform of DOE to effectively administer the Fiji Biofuel Policy by EOP • Cabinet-approved Implementing Rules and Regulations for the Biofuel Policy by EOP • Average annual budget for the implementation of the Biofuel Policy in place by EOP 	UNDP/DOE

B.3	The unexpected reluctance of DOE to grant final approval for the application of the PPP model that has been customised to be tested at the Bukuya mini hydro facility, came as a surprise since FREPP had originally signed a LOA with the Bukuya Cooperative and conducted extensive consultations with the community in order to agree on a plan to add income generating activity investments to provide strengthened the sustainability of the project and improve the living conditions of the people at Bukuya. The PMU needs to identify another demonstration project were the PPP can be tested. This is very important due to the replication potential that is expected assuming the implementation of the PPP proves successful.	UNDP/DOE
B.4	The preparation of a study on the Cost of Electricity which was planned as part of Output 1.2 could not be undertaken due to discrepancies with FEA which considered that there is no need to undertake such study since such information already exists. However, FEA considers such information to be confidential and has denied FREPP to have access to it. Consequently, it is important that this issue is resolved promptly given the importance of having updated information on the cost of electricity generation among others to attract private sector investment Presumably such information is available at FEA (as they generate the electricity) as well as the Fiji Commerce Commission (as they set the tariffs), but currently this information is considered commercial in confidence. However relevant issues include methodology which is being used to calculate electricity costs, level of transparency, public access to such information, etc.	UNDP/CDOE FEA
B.5	In the ruling of May 26, 2014, the FCC increased the minimum IPP tariff by 17% from 0.2565 FJD/kWh to 0.3308 FJD/kWh effective May 27, 2014. However, this tariff is substantially below the cost of thermal generation that FEA assessed to be 0.61 FJD/kWh and hence needs to be revised accordingly. Also consideration should be given to establishing different tariffs for different locations since the FEA avoided cost is not uniform across Fiji. ⁵²	UNDP/DOE FCC FEA

⁵² On May 26, 2014 the FCC authorized a minimum IPP rate of 0.3308 FJD per kWh which is substantially below the thermal generation cost estimated at 0.46 FJD per kWh which does not take into consideration the Transmission, distribution and retail (TDR) factor of 0.1267 FJD per kWh. Even though, there is nothing preventing FEA from offering a higher unit IPP rate, the tariffs offered by FEA have not been sufficient to attract private sector investors and power generation project selection criteria are also not clear Historically, FEA has been offering an IPP tariffs that have been below the minimum IPP rate set by the FCC and more importantly they did not reflect FEA's true avoided cost. In the opinion of the Evaluator to be effective in promoting the installation of IPPs the minimum tariff set by the FCC should be as close as possible to FEA true avoided cost Also at present there are no feed-in

B.6	In order to be able to attract private sector investment there is an urgent need to remove regulatory functions from FEA and establish an independent regulatory agency. And / or strengthen the regulatory mandate and capacity of DOE to undertake the new technical regulatory functions that would be allocated to DOE based on the proposed draft of the NEP 2014 ⁵³	UNDP/DOE
C	Outcome 2:	
C.1	<i>Key recommendation</i> Discrepancies between DOE and ITC Services on how to handle the implementation of the Centralised Energy Database have resulted in substantial delays for the completion of this activity. The tendering of the contract for the implementation of the Centralised Energy Database should be done ASAP.	UNDP/DOE ITC Services
C.2	Insufficient progress has been achieved on assessing the feasibility of RE investments. The TOR to review existing feasibility studies and conduct comprehensive feasibility assessments for priority RE projects are awaiting final approval. However, consideration should be given to increasing the budget that has been assigned to this activity (Output 2.3) in order to able to meet the proposed target of 6 completed and published feasibility studies on IPP investments by EOP with meaningful results. . However, this may mean that other planned activities may have to be cancelled or reprogrammed depending on budget availability. Consequently, consideration should be given to the implications of deciding to increase the allocated budget for this activity in order to meet the proposed targets and decide accordingly.	UNDP/DOE
D	Outcome 3:	
D.1	<i>Key recommendation:</i> Given the important level of attendance at the Investor Forum, with a high number of questions and debates it is strongly recommended to organise a follow up event to show progress made on the various actions undertaken by FREPP, provide an	UNDP/DOE

tariffs, net metering or other incentive programmes to promote small-scale decentralised grid-connected RE based generation.

⁵³ The establishment of a multi-sector regulatory agency have been flagged as one option, but that might not eventuate. Other options that have been suggested/considered including expanding the mandate and strengthening of the current economic regulator (i.e. Commerce Commission) and/or giving DoE technical regulatory functions and keep Commerce Commission performing economic regulation

	update on RE investment opportunities and communicate the changes that have been approved by Government as a result of the endorsement of the NEP 2014. This event should be planned for a date when concrete actions have taken.	
D.2		
E	Outcome 4:	
E.1	<p><i>Key recommendation:</i></p> <p>A prompt agreement should be reached with ADB on how to move forward with the preparation of National Electrification Plan. or otherwise consideration should be given to reallocating the budget for this activity to other activities such as increasing the scope of assessing the feasibility of RE investments under Output 2.3 or organising an another investor workshop as recommended under Outcome 3.</p> <p>Among others, the linkage to other relevant planned activities as part of the proposed 2014 NEP and associated draft Strategic Action Plan needs to be considered including e.g. :</p> <ul style="list-style-type: none"> • Prepare and consult on a new rural electrification policy that incorporates the results of the review of off-grid electrification (including its concession to third parties), FEA’s new electrification obligations, and the availability of an electrification fund Prepare and consult on a comprehensive new national electrification master plan that shows how each un-electrified area of Fiji will be served in a least-cost manner, in a manner consistent with the rural electrification policy Prepare and consult on a review of existing funding mechanisms for rural electrification and design a new electrification fund, including a methodology to determine subsidy levels to different providers, that makes funding more transparent and easier to access by different stakeholders 	<p>UNDP/DOE</p> <p>ADB</p>
E.2	<p>The indicators for new Output 4.1 (Promotion of RE grid-connected and off-grid electrification in rural areas) should be defined A possible SMART indicator to be considered are:</p> <ul style="list-style-type: none"> ○ Design and establishment of tariff collection system for Solar Home Systems in place by EOP ○ 	UNDP/DOE
F	Implementation and adaptive management	
F.1	<p><i>Key recommendation:</i></p> <p>An urgent action is needed to recruit a replacement for the Project Manager which resigned in May 2015 and has not yet</p>	UNDP/DOE

	been replaced. Also, a temporary replacement for Project Manager Assistant should be hired since the latter will be going on maternity leave in the coming weeks.	
E.2	A replacement for the Bukuya hydro project has to be identified ASAP in order to test the PPP model that has been designed which will have to be adjusted for the specific conditions of the RE project to be identified..	UNDP DOE Project Board
G	Sustainability	
G.1	<i>Key recommendation:</i> Additional funding will be needed to support establishing the proposed Multi Sector Regulatory Agency or to strengthen the regulatory mandate of the current economic regulator (i.e., FCC)	UNDP/DOE
G.2	Assuming no agreement is reached with ADB on how to move forward with the preparation of a National Electrification Plan consideration should be given to allocate part of those funds to implementing other communication channels such as workshops, awareness raising campaigns and preparation of training modules to highlight the benefits of promoting the wide scale use of RETs and disseminate the main achievements of the Project to key stakeholders and the public in general. These activities will contribute to enhance the sustainability of the Project outputs, albeit indirectly.	UNDP/DOE

Annex I
MTR Terms of Reference

UNDP-GEF Midterm Review Terms of Reference

1. INTRODUCTION

This is the Terms of Reference (ToR) for the UNDP-GEF Midterm Review (MTR) of the *medium*-sized project titled *Fiji Renewable Energy Power Project, FREPP* (PIMS# 4358) implemented through the *Fiji Department of Energy (DoE), Ministry of Infrastructure & Transport* which is to be undertaken on 15th June 2015. The project started on the 28th December 2011 and is in its *fourth* year of implementation. In line with the UNDP-GEF Guidance on MTRs, this MTR process was initiated before the submission of the third Project Implementation Report (PIR). This ToR sets out the expectations for this MTR. The MTR process must follow the guidance outlined in the document *Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects*.

31. PROJECT BACKGROUND INFORMATION

The project was designed to: focuses on the removal of barriers (policy, regulatory, market, finance, and technical) to the wide-scale use of RE resources for grid-connected power generation in Fiji. It is in line with the GEF-4 Strategic Program 3 on promoting market approaches for the supply of renewable electricity in utility scale grid-based power systems; and Strategic Program 4, on promoting sustainable energy production from biomass and modern uses of biomass. The proposed project consists of 4 main components, each addressing specific categories of barriers, and these are: (1) Energy Policy & Regulatory Frameworks; (2) RE Resource Assessments and RE-based Project Assessments; (3) RE-based Power Generation Demonstrations; and, (4) RE Institutional Strengthening. FREPP is expected to facilitate investments in RE-based power generation in Fiji, which will not only support the socio-economic development of the country, make use of the country's RE resources and reduced GHG emissions. The following corresponding outcomes would be realized through a set inter-related outputs:

- Outcome 1: Facilitation of investments on energy projects, particularly on RE and biomass based power generation;
- Outcome 2: Technical feasibility of harnessing RE resources are ascertained and made widely known;
- Outcome 3: Markets for specific renewable energy technologies are supported; and
- Outcome 4: RE developments integrated into National Energy Plan towards 100% Electrification of Fiji.

The project was initially designed for a three-year timeframe and expected to complete on 28th December 2014. However, due to reasons beyond the control of UNDP nor the project management unit (PMU), UNDP agreed to an 18-month extension in July 2014. The new project completion date is 28th June 2016. It must be noted that the establishment of the PMU was delayed eight months after project endorsement. Also, the review of the Fiji National Energy Policy which is the criteria for majority of project activities was delayed by twelve months after project endorsement. At the time of design, the total project budget was estimated at US\$17,528,673 comprising US\$975,000 from UNDP/GEF resources, US\$1,553,673 from government co-financing, and US\$15,000,000 as co-financing from the demonstration project (Vara Renewable Energy, VRE). Whilst resources from UNDP/GEF and government co-financing are being fulfilled, the same cannot be said of VRE and as such its engagement was terminated in second quarter 2013. The government and UNDP have identified an alternative demonstration project which is awaiting official endorsement.

The PMU is located within the DoE office and consists of the Coordinator and an Assistant. The PMU oversees the day-to-day functions of the project and reports directly to the Director of DoE, who is the Executive of the Project Board and makes management decisions in partnership with the Senior Beneficiary (a representative from the National Planning Office) and the Senior Supplier (UNDP).

31. OBJECTIVES OF THE MTR

The MTR will assess progress towards the achievement of the project objectives and outcomes as specified in the Project Document, and assess early signs of project success or failure with the goal of identifying the necessary changes to be made in order to set the project on-track to achieve its intended results. The MTR will also review the project's strategy, its risks to sustainability.

4. MTR APPROACH & METHODOLOGY

The MTR must provide evidence based information that is credible, reliable and useful. The MTR team will review all relevant sources of information including documents prepared during the preparation phase (i.e. PIF, UNDP Initiation Plan, UNDP Environmental & Social Safeguard Policy, the Project Document, project reports including Annual Project Review/PIRs, project budget revisions, lesson learned reports, national strategic and legal documents, and any other materials that the team considers useful for this evidence-based review). The MTR team will review the baseline GEF focal area Tracking Tool submitted to the GEF at CEO endorsement, and the midterm GEF focal area Tracking Tool that must be completed before the MTR field mission begins.

The MTR team is expected to follow a collaborative and participatory approach⁵⁴ ensuring close engagement with the Project Team, government counterparts (the GEF Operational Focal Point), the UNDP Country Office(s), UNDP-GEF Regional Technical Advisers, and other key stakeholders.

Engagement of stakeholders is vital to a successful MTR.⁵⁵ Stakeholder involvement should include interviews with stakeholders who have project responsibilities, including but not limited to executing agencies, senior officials and task team/ component leaders, key experts and consultants in the subject area, Project Board, project stakeholders, academia, local government and CSOs, etc. Additionally, the MTR team is expected to conduct field missions to Koro, Labasa, Ba including the following project sites *Koro Biofuel, Nacamaki Village; FSC 10MW Combined Heat and Power Plant, Labasa; and Bukuya Hydro Project.*

The final MTR report should describe the full MTR approach taken and the rationale for the approach making explicit the underlying assumptions, challenges, strengths and weaknesses about the methods and approach of the review.

31. DETAILED SCOPE OF THE MTR

The MTR team will assess the following four categories of project progress. See the *Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects* for extended descriptions.

31. 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. Were lessons from other relevant projects properly incorporated into the project design?

⁵⁴ For ideas on innovative and participatory Monitoring and Evaluation strategies and techniques, see [UNDP Discussion Paper: Innovations in Monitoring & Evaluating Results](#), 05 Nov 2013.

⁵⁵ For more stakeholder engagement in the M&E process, see the [UNDP Handbook on Planning, Monitoring and Evaluating for Development Results](#), Chapter 3, pg. 93.

- Review how the project addresses country priorities. Review country ownership. Was the project concept in line with the national sector development priorities and plans of the country (or of participating countries in the case of multi-country projects)?
- Review decision-making processes: 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?
- Review the extent to which relevant gender issues were raised in the project design. See Annex 9 of *Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects* for further guidelines.
- If there are major areas of concern, recommend areas for improvement.

Results Framework/Logframe:

- Undertake a critical analysis of the project’s logframe indicators and targets, assess how “SMART” (Specific, Measurable, Attainable, Relevant, Time-bound) the indicators are, and suggest specific amendments/revisions to the indicators as necessary. In case the indicators are suggested to be amended/revised, provide the relevant targets.
- Carry out an analysis of the project’s annual targets, assess whether the targets around the time of the MTR have been achieved or not. In case new indicators (new or amended/revised) suggest also the annual targets for these as necessary.
- Are the project’s objectives and outcomes or components clear, practical, and feasible within its time frame?
- 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.
- Ensure broader development and gender aspects of the project are being monitored effectively. Develop and recommend SMART ‘development’ indicators, including sex-disaggregated indicators and indicators that capture development benefits.

ii. Progress Towards Results

Progress Towards Outcomes Analysis:

- Review the logframe indicators against progress made towards the end-of-project targets using the Progress Towards Results Matrix and following 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 each outcome; make recommendations from the areas marked as “Not on target to be achieved” (red).

Table. Progress Towards Results Matrix (Achievement of outcomes against End-of-project Targets)

Project Strategy	Indicator ⁵⁶	Baseline Level ⁵⁷	Level in 1 st PIR (self-reported)	Midterm Target ⁵⁸	End-of-project Target	Midterm Level & Assessment ⁵⁹	Achievement Rating ⁶⁰	Justification for Rating
Objective:	Indicator (if applicable):							
Outcome 1:	Indicator 1:							
	Indicator 2:							
Outcome 2:	Indicator 3:							
	Indicator 4:							

⁵⁶ Populate with data from the Logframe and scorecards

⁵⁷ Populate with data from the Project Document

⁵⁸ If available

⁵⁹ Colour code this column only

⁶⁰ Use the 6 point Progress Towards Results Rating Scale: HS, S, MS, MU, U, HU

	Etc.							
Etc.								

Indicator Assessment Key

Green= Achieved	Yellow= On target to be achieved	Red= Not on target to be achieved
-----------------	----------------------------------	-----------------------------------

In addition to the progress towards outcomes analysis:

- 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 in the remainder of the project.
- By reviewing the aspects of the project that have already been successful, identify ways in which the project can further expand these benefits.

31. Project Implementation and Adaptive Management

Management Arrangements:

- 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 results-based? If not, suggest ways to re-orientate work planning to focus on results?
- Examine the use of the project’s results framework/ logframe as a management tool and review any changes made to it since project start.

Finance and co-finance:

- 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?

Project-level Monitoring and Evaluation Systems:

- 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?

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?

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 internalized by partners.

Communications:

- 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?)
- For reporting purposes, write one half-page paragraph that summarizes the project's progress towards results in terms of contribution to sustainable development benefits, as well as global environmental benefits.

31. Sustainability

- Validate 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.
- In addition, assess the following risks to sustainability:

Financial risks to sustainability:

- 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)?

Socio-economic risks to sustainability:

- Are there any social or political risks that may jeopardize 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 Framework and Governance risks to sustainability:

- Do the legal frameworks, policies, governance structures and processes pose risks that may jeopardize sustenance of project benefits? While assessing this parameter, also consider if the required systems/ mechanisms for accountability, transparency, and technical knowledge transfer are in place.

Environmental risks to sustainability:

- Are there any environmental risks that may jeopardize sustenance of project outcomes?

Conclusions & Recommendations

The MTR team will include a section of the report setting out the MTR’s evidence-based conclusions, in light of the findings.⁶¹

Recommendations should be succinct suggestions for critical intervention that are specific, measurable, achievable, and relevant. If the suggestion is a process, the steps to carry it should be presented. A recommendation table should be put in the report’s executive summary. See the *Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects* for guidance on a recommendation table.

Ratings

The MTR team will include its ratings of the project’s results and brief descriptions of the associated achievements in a *MTR Ratings & Achievement Summary Table* in the Executive Summary of the MTR report. See Annex E for ratings scales. No rating on Project Strategy and no overall project rating is required.

Table. MTR Ratings & Achievement Summary Table for the Fiji Renewable Energy Power Project

Measure	MTR Rating	Achievement Description
Project Strategy	N/A	
Progress Towards Results	Objective Achievement Rating: (rate 6 pt. scale)	
	Outcome 1 Achievement Rating: (rate 6 pt. scale)	
	Outcome 2 Achievement Rating: (rate 6 pt. scale)	
	Outcome 3 Achievement Rating: (rate 6 pt. scale)	

⁶¹ Alternatively, MTR conclusions may be integrated into the body of the report.

	Etc.	
Project Implementation & Adaptive Management	(rate 6 pt. scale)	
Sustainability	(rate 4 pt. scale)	

6. TIMEFRAME

The total duration of the MTR will be approximately *eight weeks* starting *20th August 2015*, and shall not exceed five months from when the consultants are hired. The tentative MTR timeframe is as follows:

TIMEFRAME	ACTIVITY
<i>6th August 2015</i>	Application closes
<i>13th August 2015</i>	Select MTR Team
<i>20th August 2015</i>	Prep the MTR Team (handover of Project Documents)
<i>24th -28th August 2015</i>	Document review and preparing MTR Inception Report
<i>31st August – 4th September 2015</i>	Finalization and Validation of MTR Inception Report- latest start of MTR mission
<i>7th-11th September 2015</i>	MTR mission: stakeholder meetings, interviews, field visits
<i>14th September 2015</i>	Mission wrap-up meeting & presentation of initial findings- earliest end of MTR mission
<i>15th – 18th September 2015</i>	Preparing draft report
<i>5th October 2015</i>	Incorporating audit trail from feedback on draft report/Finalization of MTR report
<i>12th October 2015</i>	Preparation & Issue of Management Response
<i>19th October 2015</i>	(optional) Concluding Stakeholder Workshop (not mandatory for MTR team)
<i>30th October 2015</i>	Expected date of full MTR completion

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

7. MIDTERM REVIEW DELIVERABLES

#	Deliverable	Description	Timing	Responsibilities
1	MTR Inception Report	MTR team clarifies objectives and methods of Midterm Review	No later than 2 weeks before the MTR mission	MTR team submits to the Commissioning Unit and project management
2	Presentation	Initial Findings	End of MTR mission	MTR Team presents to project management and the Commissioning Unit
3	Draft Final	Full report (using guidelines on content)	Within 3 weeks of	Sent to the Commissioning Unit,

	Report	outlined in Annex B) with annexes	the MTR mission	reviewed by RTA, Project Coordinating Unit, GEF OFF
4	Final Report*	Revised report with audit trail detailing how all received comments have (and have not) been addressed in the final MTR report	Within 1 week of receiving UNDP comments on draft	Sent to the Commissioning Unit

*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.

8. MTR ARRANGEMENTS

The principal responsibility for managing this MTR resides with the Commissioning Unit. The Commissioning Unit for this project's MTR is *the UNDP Fiji Multi-Country Office*.

The commissioning unit will contract the consultants and ensure the timely provision of per diems and travel arrangements within Fiji for the MTR team. The Project Team will be responsible for liaising with the MTR team to provide all relevant documents, set up stakeholder interviews, and arrange field visits.

9. TEAM COMPOSITION

A team of two independent consultants will conduct the MTR – one team leader (the international consultant with experience and exposure to projects and evaluations in other regions globally) and one team expert, usually from the country of the project (national consultant). The consultants cannot have participated in the project preparation, formulation, and/or implementation (including the writing of the Project Document) and should not have a conflict of interest with project's related activities.

The team leader and team expert shall be engaged jointly to undertake the mid-term review working concurrently according to a planned schedule. The Team Leader will have the overall responsibility of organizing and completing the review, submitting the final report as well as supervising the local consultant. The Team Leader is expected to propose a work plan, budget and timelines to achieve the expected outputs with the appropriate methodology.

The selection of consultants will be aimed at maximizing the overall “team” qualities in the following areas:

Team Leader: International Consultant

- Recent completed and satisfactory work on result-based management project evaluation (10%);
- Proven experience in developing and assessing the realization of SMART indicators (10%);
- Proven experience in the evaluation/validation and development of baseline scenarios (10%);
- Proven experience in working on GEF project design or GEF project evaluations (10%);
- Tracked record of work on development projects in Fiji, the Pacific region, and/or small-island developing states (16%);
- Work experience in renewable energy for at least 10 years (8%);

- Demonstrated understanding of issues related to gender and climate change mitigation; experience in gender sensitive evaluation and analysis (8%).
- Excellent communication skills (8%);
- Project evaluation/review experiences within United Nations system will be considered an asset (10%);
- A University degree in climate change mitigation in particular renewable energy, or other closely related field (10%).

Team Expert: Local Consultant

- Knowledgeable and experienced in facilitating participatory monitoring and evaluation processes (10%);
- Well established networks and relations with local, district, community and national stakeholders (10%);
- Academic and/or professional background in renewable energy projects or related fields with experience in renewable energy, with in-depth understanding of energy issues (in Fiji). A minimum of 5 years of working experience is required (15%);
- Familiarity with renewable energy approaches in Fiji and Pacific either through management and/or implementation or through consultancies in evaluation of related renewable energy projects. Understanding of local actions contributing to global benefits is crucial (15%);
- Previous experience as a consultant and/or team of consultants evaluating national, community based and regional projects. Proven experience to work in multidisciplinary and national teams, and deliver quality reports within the given time (16%);
- Ability to deliver quality products in technical evaluation of technical assistance projects (individual and/or as part of a team) (10%);
- Excellent English writing and communication skills; demonstrated ability to assess complex situations in order to succinctly and clearly distill critical issues and draw forward-looking conclusions (8%);
- Ability to converse, communicate in local language/dialects and understanding of customary protocols (8%); and
- Must be a citizen of Fiji (8%).

10. PAYMENT MODALITIES AND SPECIFICATIONS

10% of payment upon approval of the final MTR Inception Report.

30% upon submission of the draft MTR report.

60% upon finalization of the MTR report.

Or, as otherwise agreed between the UNDP Fiji Multi-Country Office and the MTR team.

11. APPLICATION PROCESS⁶²

Recommended Presentation of Proposal:

- a) **Letter of Confirmation of Interest and Availability** using the [template](#)⁶³ provided by UNDP;
- b) **CV** and a **Personal History Form** ([P11 form](#))⁶⁴;

⁶² Engagement of the consultants should be done in line with guidelines for hiring consultants in the POPP: <https://info.undp.org/global/popp/Pages/default.aspx>

⁶³ <https://intranet.undp.org/unit/bom/pso/Support%20documents%20on%20IC%20Guidelines/Template%20for%20Confirmation%20of%20Interest%20and%20Submission%20of%20Financial%20Proposal.docx>

⁶⁴ http://www.undp.org/content/dam/undp/library/corporate/Careers/P11_Personal_history_form.doc

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

All application materials should be submitted to the address (the Resident Representative, UNDP Fiji Multi-Country Office, Level 8, Kadavu House, Victoria Parade, Suva, Fiji) in a sealed envelope indicating the following reference “Consultant for FREPP Midterm Review” or by email at the following address ONLY: procurement.fj@undp.org, emma.mario@undp.org by **2:00pm on 6th August 2015 (Fiji time)**. Incomplete applications will be excluded from further consideration.

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

ToR ANNEX A: List of Documents to be reviewed by the MTR Team

1. PIF
2. UNDP Initiation Plan
3. UNDP Project Document
4. UNDP Environmental and Social Screening results
5. Project Inception Report
6. All Project Implementation Reports (PIR's)
7. Quarterly progress reports and work plans of the various implementation task teams
8. Audit reports
9. Finalized GEF focal area Tracking Tools at CEO endorsement and midterm tracking tool for climate change mitigation projects
10. Oversight mission reports
11. All monitoring reports prepared by the project
12. Financial and Administration guidelines used by Project Team

The following documents will also be available:

13. Project operational guidelines, manuals and systems
14. UNDP country/countries programme document(s)
15. Minutes of FREPP Board Meetings and other meetings (i.e. Project Appraisal Committee meetings)
16. Project site location maps

ToR ANNEX B: Guidelines on Contents for the Midterm Review Report⁶⁵

- i. Basic Report Information (*for opening page or title page*)
 - Title of UNDP supported GEF financed project
 - UNDP PIMS# and GEF project ID#
 - MTR time frame and date of MTR report
 - Region and countries included in the project
 - GEF Operational Focal Area/Strategic Program
 - Executing Agency/Implementing Partner and other project partners
 - MTR team members
 - Acknowledgements
- ii. Table of Contents
- iii. Acronyms and Abbreviations
1. Executive Summary (*3-5 pages*)
 - Project Information Table
 - Project Description (brief)
 - Project Progress Summary (between 200-500 words)
 - MTR Ratings & Achievement Summary Table
 - Concise summary of conclusions
 - Recommendation Summary Table
2. Introduction (*2-3 pages*)
 - Purpose of the MTR and objectives
 - Scope & Methodology: principles of design and execution of the MTR, MTR approach and data collection methods, limitations to the MTR
 - Structure of the MTR report
3. Project Description and Background Context (*3-5 pages*)
 - Development context: environmental, socio-economic, institutional, and policy factors relevant to the project objective and scope
 - Problems that the project sought to address: threats and barriers targeted
 - Project Description and Strategy: objective, outcomes and expected results, description of field sites (if any)
 - Project Implementation Arrangements: short description of the Project Board, key implementing partner arrangements, etc.
 - Project timing and milestones
 - Main stakeholders: summary list
4. Findings (*12-14 pages*)
 - 4.1 Project Strategy
 - Project Design
 - Results Framework/Logframe
 - 4.2 Progress Towards Results
 - Progress towards outcomes analysis
 - Remaining barriers to achieving the project objective
 - 4.3 Project Implementation and Adaptive Management
 - Management Arrangements
 - Work planning
 - Finance and co-finance
 - Project-level monitoring and evaluation systems
 - Stakeholder engagement
 - Reporting
 - Communications
 - 4.4 Sustainability
 - Financial risks to sustainability

⁶⁵ The Report length should not exceed 40 pages in total (not including annexes).

- Socio-economic to sustainability
 - Institutional framework and governance risks to sustainability
 - Environmental risks to sustainability
5. Conclusions and Recommendations (4-6 pages)
- 5.1 Conclusions
- Comprehensive and balanced statements (that are evidence-based and connected to the MTR's findings) which highlight the strengths, weaknesses and results of the project
- 5.2 Recommendations
- 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
6. Annexes
- MTR ToR (excluding ToR annexes)
 - MTR evaluative matrix (evaluation criteria with key questions, indicators, sources of data, and methodology)
 - Example Questionnaire or Interview Guide used for data collection
 - Ratings Scales
 - MTR mission itinerary
 - List of persons interviewed
 - List of documents reviewed
 - Co-financing table (if not previously included in the body of the report)
 - Signed UNEG Code of Conduct form
 - Signed MTR final report clearance form
 - *Annexed in a separate file:* Audit trail from received comments on draft MTR report
 - *Annexed in a separate file:* Relevant midterm tracking tools for climate change mitigation projects

ToR ANNEX C: Midterm Review Evaluative Matrix Template

Evaluative Questions	Indicators	Sources	Methodology
Project Strategy: To what extent is the project strategy relevant to country priorities, country ownership, and the best route towards expected results?			
(include evaluative question(s))	(i.e. relationships established, level of coherence between project design and implementation approach, specific activities conducted, quality of risk mitigation strategies, etc.)	(i.e. project documents, national policies or strategies, websites, project staff, project partners, data collected throughout the MTR mission, etc.)	(i.e. document analysis, data analysis, interviews with project staff, interviews with stakeholders, etc.)
Progress Towards Results: To what extent have the expected outcomes and objectives of the project been achieved thus far?			
Project Implementation and Adaptive Management: Has the project been implemented efficiently, cost-effectively, and been able to adapt to any changing conditions thus far? To what extent are project-level monitoring and evaluation systems, reporting, and project communications supporting the project's implementation?			
Sustainability: To what extent are there financial, institutional, socio-economic, and/or environmental risks to sustaining long-term project results?			

Evaluators/Consultants:

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

MTR Consultant Agreement Form

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

Name of Consultant: _____

Name of Consultancy Organization (where relevant): _____

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

Signed at _____ (*Place*) on _____ (*Date*)

Signature: _____

⁶⁶ www.undp.org/uneqcodeofconduct

ToR ANNEX E: MTR Ratings

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 (HU)	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.

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

ToR ANNEX F: MTR Report Clearance Form

(to be completed by the Commissioning Unit and UNDP-GEF RTA and included in the final document)

Midterm Review Report Reviewed and Cleared By:

Commissioning Unit

Name: _____

Signature: _____ Date: _____

UNDP-GEF Regional Technical Advisor

Name: _____

Signature: _____ Date: _____

Annex II
Glossary of Terms

Glossary of Terms

Term	Definition
Activities	Actions taken through which the project inputs are mobilized to produce specific outputs
Adaptive Management	The project's ability to adapt to changes to the project design (project objective, outcomes, or outputs) during implementation resulting from: (a) original objectives that were not sufficiently articulated; (b) exogenous conditions that changed, due to which a change in objectives was needed; (c) the project's restructuring because the original objectives were overambitious; or (d) the project's restructuring because of a lack of progress.
Conclusions	Point out the factors of success and failure of the evaluated intervention, with special attention paid to the intended and unintended results and impacts, and more generally to any other strength or weakness. A conclusion draws on data collection and analyses undertaken, through a transparent chain of arguments.
Co-financing	Includes Grants, Loans/Concessional (compared to market rate), Credits, Equity investments, in-kind support, other contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector and beneficiaries. Refer to Council documents on co-financing for definitions, such as GEF/C.20/6 and GEF/C.46/09.
Cost Effectiveness	Assesses the achievement of the environmental and developmental objectives as well as the project's outputs in relation to the inputs, costs, and implementing time. It also examines the project's compliance with the application of the incremental cost concept.
Country Ownership	Relevance of the project to national development and environmental agendas, recipient country commitment, and regional and international agreements where applicable
Environmental risks to sustainability	Environmental factors that threaten sustainability of project outcomes (i.e. biodiversity-related project gains or water quality-related project gains that may be at risk due to frequent severe storms)
Evaluation	Project evaluations assess the efficiency and effectiveness of a project in achieving its intended results. They also assess the relevance and sustainability of outputs as contributions to medium-term and longer-term outcomes. Projects can be evaluated during the time of implementation, at the end of implementation (Terminal Evaluation), or after a period of time after the project has ended (ex-post evaluation).
Executing Agency	An entity or agency that receives GEF Funding from a GEF Partner Agency in order to execute a GEF project, or parts of a GEF project, under the supervision of a GEF Partner Agency. May also be referred to as "project executing agency." See "Implementing Partner" for equivalent UNDP terminology.

Financial Planning	Includes actual project cost by activity, financial management (including disbursement issues), and co-financing
Financial risks to sustainability	Financial factors that threaten sustainability of project outcomes. Factors to be considered are whether financial and economic resources are likely to be available after GEF grant assistance ends, or if macroeconomic conditions in the country/region are likely to affect future funding.
GEF Agency	GEF Agencies are the 10 institutions that are entitled to receive GEF Trust Fund resources directly from the GEF Trustee for the design, implementation, and supervision of GEF Projects as of November 2010. They include the following organizations: AfDB, ADB, EBRD, FAO, IADB, IBRD, IFAD, UNDP, UNEP, and UNIDO.
GEF Partner Agencies	Those agencies eligible to request and receive GEF resources directly for the design, implementation, and supervision of GEF Projects. This category includes both GEF Agencies and GEF Project Agencies. It does not include agencies designated by countries that request resources from the GEF Secretariat for the execution of activities under GEF direct access modalities (implemented by the GEF Secretariat), including for Convention reports and National Portfolio Formulation Exercises.
GEF Project Agencies	Any of the institutions that the GEF has accredited to receive GEF resources to design, implement and supervise GEF-financed projects apart from the ten GEF Agencies.

Source: Guidance for Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects

Annex III

List of Documents Reviewed

List of Documents Reviewed

- Project Identification Form (PIF)
- UNDP Project Document (PRODOC)
- UNDP Environmental and Social Screening results
- Project Inception Report
- Project Induction Training Report
- Project Implementation Reports (PIR's) (2013-2015)
- Annual Work Plan Reports (2012-2015)
- Quarterly progress reports (3rd quarter 2012, all of 2013 and 2014 and 1st, 2nd and 3rd quarters 2015)
- Audit reports
- Finalized GEF focal area Tracking Tools at CEO endorsement and midterm tracking tool for climate change mitigation projects
- Minutes of Project Board Meetings (2013-2014)
- Financial and Administration guidelines used by Project Team

The following documents were also reviewed:

- Fiji National Energy Policy 2013-2020
 - Review of the Fiji National Energy Policy, Draft Energy Policy, Jul 2013
 - Review of the Fiji National Energy Policy , Strategic Action Plan, October 2013
 -
 - Final Draft 7th November 2013
- Sustainable Energy for All (SE4ALL) Rapid Assessment and Gap Analysis Final Report 10th February 2014
- Invitation To Register Expressions Of Interest For The Partial Divestment Of Fiji Electricity Authority divestment of Government ownership in Fiji Electricity Authority (FEA) published on the Fiji Sun on 20th April 2015
- Gender Assessment FREPP Project Koro Island
- Scoping for Information Systems Database
- Waste to Energy Resource Assessment in Fiji
 - Quantification and Assessment on the Amount and Types of Resources for WtE Power Generation in Fiji – July 2014
 - Recommendations from Technology Research on Waste-to-Energy in Fiji -September 2014
 - Options and Recommendations for Effective Implementation on WtE Power Generation in Fiji – November 2014
- National Biofuel Policy for Fiji 2015 – (Draft)
- Fiji's Intended Nationally Determined Contribution
- Bukuya Hydro Demonstration Project
 - Baseline setting and M&E framework at the Bukuya Micro-Hydro Power Station
 - The RE-based Power Generation Demonstration in Bukuya Research Report for Republic of Fiji 26th March 2015
 - Concept of PPP Model and Tariff Structure for Bukuya Micro Hydro Power Project – Power Point Presentation

Annex IV
MTR Evaluative Matrix

MTR Evaluative Matrix

Evaluative Questions	Indicators	Sources	Methodology
Project Strategy: To what extent is the project strategy relevant to country priorities, country ownership, and the best route towards expected results?			
<ul style="list-style-type: none"> Is the project strategy relevant to country priorities? 	<ul style="list-style-type: none"> Degree to which the project supports the identified country priorities Evidence that the project strategy has taken into account the national realities, both in terms of institutional capacity and national policies and strategies 	<ul style="list-style-type: none"> Project Documents National policies and strategies 	<ul style="list-style-type: none"> Document analysis Interviews with project staff and all relevant stakeholders
<ul style="list-style-type: none"> How does the project support the sustainable energy development objectives of country? 	<ul style="list-style-type: none"> Degree of coherence between the project and national energy and sustainable development priorities, policies and strategies 	<ul style="list-style-type: none"> Project Documents Data collected throughout the MTR mission National policies and strategies 	<ul style="list-style-type: none"> Document analysis Interviews with all relevant stakeholders
<ul style="list-style-type: none"> Is the project Country-driven? 	<ul style="list-style-type: none"> Level of stakeholder participation in project design Level of stakeholder ownership in Implementation Appreciation from national stakeholders with respect to adequacy of project design and implementation to national realities and existing capacities Level of Involvement of government officials and other partners in the project design process Extent to which the programme activities meet the needs of the private sector and local communities Coherence between needs expressed by national stakeholders and UNDP-GEF Criteria Degree to which the programme is integrated into UNDP's Country Programme Action Plan (CPAP) and UN Development Assistance Framework (UNDAF) 	<ul style="list-style-type: none"> Project documents National policies and strategies UNDP documents Key project Partners 	<ul style="list-style-type: none"> Document analysis Interviews with project staff Interviews with all relevant stakeholders
<ul style="list-style-type: none"> Is the project internally coherent in its design? 	<ul style="list-style-type: none"> Level of coherence between project expected results and project design internal logic Level of coherence between project Design and project implementation approach 	<ul style="list-style-type: none"> Program and Project documents Key project stakeholders 	<ul style="list-style-type: none"> Document analysis Key interviews
Progress Towards Results: To what extent have the expected outcomes and objectives of the project been achieved thus far?			
<ul style="list-style-type: none"> Has the project achieved the expected outcomes and objectives so far? 	<ul style="list-style-type: none"> Indicators in project document results framework and log frame 	<ul style="list-style-type: none"> Project documents Data collected throughout the MTR mission 	<ul style="list-style-type: none"> Document analysis Interviews

		<ul style="list-style-type: none"> Project team and relevant stakeholders Data reported in project reports 	
<ul style="list-style-type: none"> Which ratings has the project achieve in terms of implementation progress 	<ul style="list-style-type: none"> Indicators in project document results framework and log frame (planned vs. expected outputs, outcomes, impacts) 	<ul style="list-style-type: none"> Project documents Data collected throughout the MTR mission Project team and relevant stakeholders Data reported in project reports 	<ul style="list-style-type: none"> Document analysis Interviews with project staff Interviews with all relevant stakeholders
<ul style="list-style-type: none"> Is the project likely to meet its objectives and overall results by project end? What are the main barriers, if any, for the project to achieve its objectives? 	<ul style="list-style-type: none"> Indicators in project document results framework and log frame (planned vs. expected outputs, outcomes, impacts) Number and type of unexpected results 	<ul style="list-style-type: none"> Project documents Data collected throughout the MTR mission Project team and relevant stakeholders Data reported in project reports 	<ul style="list-style-type: none"> Document analysis Interviews with project staff Interviews with all relevant stakeholders
Project Implementation and Adaptive Management: Has the project been implemented efficiently, cost-effectively, and been able to adapt to any changing conditions thus far? To what extent are project-level monitoring and evaluation systems, reporting, and project communications supporting the project's implementation?			
<ul style="list-style-type: none"> Have project activities been implemented in a cost-effective basis relative to the outputs and results achieved and their leveraged effect on planned investments on targeted sectors? 	<ul style="list-style-type: none"> Level of execution of project budget Percentage of budget for management and operations vs. other activities Leveraging effect on investments per sector / region 	<ul style="list-style-type: none"> Project documents Data collected throughout the MTR mission Project team and relevant stakeholders Data reported in project reports 	<ul style="list-style-type: none"> Document analysis Interviews with project staff Interviews with all relevant stakeholders
<ul style="list-style-type: none"> How appropriate and effective are the project management structure and staffing profile in realizing a relevant, effective and efficient project? What changes, if any, are needed to the project organizational structure and staffing profile to carry out its mandate? 	<ul style="list-style-type: none"> Evidence of clear roles and responsibilities for operational and management structure Degree of fulfillment of goals according to results framework (over evaluation period) Stakeholder satisfaction with project staff Abilities / capabilities / knowledge of project staff Evidence of bottlenecks / barriers to decision making 	<ul style="list-style-type: none"> Project documents Data collected throughout the MTR mission Interviews with project team and key stakeholders Data reported in project reports 	<ul style="list-style-type: none"> Document analysis Interviews with project staff Interviews with all relevant stakeholders
<ul style="list-style-type: none"> Has the project been able to adapt to any changing conditions thus far? 	<ul style="list-style-type: none"> Evidence of interactive decision-making (evaluating results and adjusting actions on the basis of what has been learned) Instances of changes in assumptions and interventions to respond to new or different information obtained through monitoring and project experience. 	<ul style="list-style-type: none"> Project documents Data collected throughout the MTR mission Interviews with project team and key stakeholders Data reported in project reports 	<ul style="list-style-type: none"> Document analysis Interviews with project staff Interviews with all relevant stakeholders

	<ul style="list-style-type: none"> • Actions taken to improve the project based on the results of M&E results and lessons learned. 		
<ul style="list-style-type: none"> • How effectively has project management accountability been exercised and how well is the M&E built into programming and strategy to strengthen accountability? 	<ul style="list-style-type: none"> • Number and type of mechanisms or systems in place for holding project management accountable for their roles and responsibilities • Examples of incidents, if any, when accountability measures or systems revealed mismanagement • Percentage of budget spent on M&E systems • Evidence of use of M&E / reporting information to make management decisions, adaptive management and /or inform changes in project strategy or planning 	<ul style="list-style-type: none"> • Project documents • Data collected throughout the MTR mission • Interviews with project team and key stakeholders • Data reported in project reports 	<ul style="list-style-type: none"> • Document analysis • Interviews with project staff • Interviews with all relevant stakeholders
Sustainability: To what extent are there financial, institutional, socio-economic, and/or environmental risks to sustaining long-term project results?			
Has the program been conducive to securing the supply of renewable electricity in utility scale grid connected based power systems?	<ul style="list-style-type: none"> • Are RE investments being planned? • How many RE projects have been implemented, if any? • Is the energy policy & regulatory framework conducive to the implementation of RE projects in Fiji? • Has the project been successful in promoting market approaches for the supply of renewable electricity in utility scale grid-based power systems • Does the type and amount of RE resources in Fiji allow for the implementation of profitable RE generation projects? 	<ul style="list-style-type: none"> • Interviews • Project documents • Data collected throughout the MTR mission • Interviews with project team and key stakeholders • Data reported in project reports 	<ul style="list-style-type: none"> • Document analysis • Interviews with project staff • Interviews with all relevant stakeholders • Document analysis
Strategy	<ul style="list-style-type: none"> • Which actions has the project put in place to guarantee the sustainability of the results? • Which are the key challenges and risks that the project is facings to ensure the sustainability of the results? 	<ul style="list-style-type: none"> • Project documents • Interviews 	<ul style="list-style-type: none"> • Document analysis • Interviews with project staff • Interviews with all relevant stakeholders
Financial sustainability	<ul style="list-style-type: none"> • How did the project address its financial and economic sustainability in the medium to long run? 	<ul style="list-style-type: none"> • Document analysis • Interviews 	<ul style="list-style-type: none"> • Document analysis • Interviews with project staff • Interviews with all relevant stakeholders
Institutional sustainability	<ul style="list-style-type: none"> • Is the institutional framework capacity adequate to support the implementation of third party renewable electricity generation investments in Fiji? 	<ul style="list-style-type: none"> • Document analysis • Interviews 	<ul style="list-style-type: none"> • Document analysis • Interviews with project staff • Interviews with all relevant stakeholders

Annex V

MTR Mission Itinerary / List of Persons Interviewed

MTR mission itinerary / List of people interviewed (22- 31 January 2015)

- 22 January, Friday** Evaluator departs for MTR mission
- 23 January, Saturday** Travelling to Suva, Fiji
- 24 January, Sunday** Evaluator arrives in Suva, Fiji
- 25 January Monday** Kick-off meeting at UNDP office
- Emma Mario, Programme Analyst, Sustainable Development Pathways Cluster (Environment & Energy) / UNDP Fiji
 - Merewalesi Laveti Environment Programme Associate / UNDP Fiji
 - Miriama Baleimatuku, FREPP Project Manager (FREPP) / Department of Energy
- Introductory meeting with UNDP Fiji Environment staff
- Winifereti Nainoca, Environment Team Leader / UNDP Fiji
 - Josua Turaganivalu, Environment Financial Services Associate / UNDP Fiji
 - Loraini Sivo, Environment Programme Analyst / UNDP
 - FijiShoko Takemoto, Regional Technical Specialist Climate Change Adaptation & Water and Oceans / UNDP Fiji
- 26 January, Tuesday** Interview with Fiji Department of Energy Staff,
- Miriama Baleimatuku, FREPP Project Manager (FREPP) / Department of Energy
 - Mikaele Belena Senior Scientific Officer / Department of Energy
 - Jeke Vakaloloma Pai, Biofuel Engineer / Department of Energy
 - Susana Pulini, Director of Water and Sewage and former FREPP Project Manager / Department of Energy,
- Interview with Department of Environment, Ministry of Infrastructure & Transport
- Aminiasi Qareqare, Acting Director of Environment, Department of Environment, Ministry of Local Government, Housing, Environment, Infrastructure & Transport
- Briefing with FREPP Project Manager
- 27 January Wednesday** Interview with Ministry of Finance, Public Enterprises, Public Service & Communications
- David Kolutagane, Permanent Secretary for Public Enterprises
 - Sandip Kumar, Economic Planning Officer
- Consolidation of findings
- 28 January, Thursday** Interview with UNDP Bureau for Policy and Programme Support
- Thomas Jensen, Energy Programme Specialist / UNDP Bureau for Policy and Programme Support
- Debriefing of MTR mission at UNDP Fiji
- Emma Mario, Programme Analyst, Sustainable Development Pathways Cluster (Environment & Energy) / UNDP Fiji
 - Merewalesi Laveti Environment Programme Associate / UNDP Fiji
 - Miriama Baleimatuku, FREPP Project Manager (FREPP) / Department of Energy
 - Jeke Vakaloloma Pai, Biofuel Engineer / Department of Energy

29 January Friday

Travel to Labasa, Vanua Levu Island to visit FREPP demonstration projects

Visit to Labasa Mill / Fiji Sugar Corporation at Labasa

- Karia Christopher, General Manager, Labasa Mill
- Akuila Matai Rokoara, Power plant engineer
- Paramasian Elangio, Power Plant engineer

Visit to Copra Mill at Raiwaqa

- John Deo, Acting General Manager, Copra Millers of Fiji Ltd

Visit to Rabi Biofuel Mill plant at Rabi Island

- Michael McComber, Plant Manager,

30 January Saturday

Travel back to Suva

Consolidation of findings

31 January Sunday

Consolidation of Findings

Evaluator concludes mission and departs from Suva

Annex VI

Questionnaire model used for data gathering

Fiji Renewable Energy Power Project (FREPP)

Survey questionnaire

Please answer all questions to the best of your abilities:

o Project Formulation /Design

- Conceptualization /Design I: risks and assumptions
 - o Explain some of the *inherent assumptions* in the original design. Are they correct? Examples include:
 - Scope of project vs. funding and capacity
 - Scale up possibilities
 - Sustainability- funding mechanisms, etc.
 - Capacities
 - others
 - o Please provide an elaboration of the project conceptualization process to the best of your knowledge
 - o Is the Log frame still appropriate?
 - o Should baselines be added and indicator adjusted?
 - o Does the risk matrix make sense and is it appropriate? Should it be upgraded? Is it used as management tool? How are risks mitigated?
 - o How would you rate the design on a scale of 1-5? (with five being highest)
- Country ownership/Drivenness
 - o How do the government partners engage / interact with this project? Is the project a national priority? Why or Why not? What is the institutional home of this project? Is this the optimal home? What is the status of legislation supportive of the program expected outcomes? Are there enforcement mechanisms? Could the project be housed in another institution?
- Stakeholder participation in design:
 - o Who are the key project stakeholders/beneficiaries? Describe how stakeholders were involved in the design process.
 - o How would you rate the stakeholder participation on a scale of 1-5? (with 5 being the highest)
- Replication approach:
 - o Does this project have a design / approach that can be replicated regionally, nationally or globally? Give evidence. Why or Why not?
- UNDP/GEF role:
 - o Describe the UNDP Country office and GEF contribution in management and implementation.
- Linkages between project and other interventions within the sector
 - o Describe the linkages between this project and other similar projects in the sector.
- Other aspects:
 - o Provide your rating of project design on a scale of 1 – 5 (with five being the

highest rating possible)

○ **Implementation/management approach:**

- Does the Project management employ the logical framework as a management tool? Provide concrete examples.
- Provide concrete examples of Project management and stakeholders use of adaptive management, i.e. comprehensive and realistic work plans every year?.
- Please draw the current project management and implementation arrangements.
- Describe the general operational relationships between the various institutions involved and others and how these relationships have contributed to effective implementation and achievement of project outcomes.
- How would you rate the implementation approach on a scale of 1-5? (Five is the highest rating possible)

31. Monitoring and Evaluation:

- Did project staff or stakeholders undertake periodic oversight?
- How often does the Project Board and the Steering Committee meet?
- Can you please describe what evaluations and or studies you have conducted on aspects of project?
- Describe the systems and tools employed for M&E, i.e. log frame, baselines established.
- Project indicators: are there results and progress indicators? Describe data analysis process.
- List staff and designation of responsibilities with respect to M&E i.e. capacities and resources for M&E
- How would you rate the M&E on a scale of 1-5? (Five is the highest rating possible)

○ **Partnership strategies**

- Are partnerships appropriate and effective including the range and quality of partnerships and collaboration developed with government, civil society, donors, the private sector and whether these have contributed to improved delivery?.
- Which is the degree of stakeholder and partner involvement in the various processes related to the outputs and outcome?
- How could synergies be built with other projects within the sector?

○ **Stakeholder Participation and Implementation:**

- How is information generated and disseminated by the project?
- Please comment on the overall strengths and weaknesses of the approach adopted by the project regarding stakeholder participation and implementation.
- Please describe the process and result of the establishment of partnerships and collaborative relationships developed by the project with local, national and international entities. Describe the effect of these on project implementation.
- Describe the involvement of government institutions in project implementation, the extent of government support of the project.
- How would you rate the stakeholder participation and implementation on a scale of 1-

5? (Five is the highest rating possible).

31. Financial planning:

- List activities and provide project cost by activity, outputs and activities (provide information to enable to allow an analysis of delivery by percentage)
- Describe the financial management (including disbursement issues),
- Describe the co-financing arrangements/agreements. Are they suitable?
- Has a project audit been conducted? What are the major findings? Do you agree?

G. Describe in details the execution and implementation modalities:

- Does National execution work or not?
- Describe the effectiveness of UNDP counterpart and project coordinators unit in participation in selection, recruitment, assignment of experts and national counterpart staff and in the definition of tasks and responsibilities.
- Are there any problems with the implementation i.e. current flow of staff in and out of the project, others?
- Describe the hiring process for Project staff- who is responsible for this? Are the donor and government partners involved?
- Describe the financial officer's roles? Does this work? Is it strategic and operational support toward project outcomes and for implementation?
- Does the project receive external technical backstopping and support from the wider partner knowledge network – why or why not?
- Do you think the procurement process is streamlined and efficient? What can be done to improve it? How does it affect overall implementation and expected results?
- What are some suggested improvements in the human resources situation?

Annex VII
MTR Rating Scales

MTR Rating Scales

Progress Towards Results Rating Scale

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”
Satisfactory (S)	The objective/outcome is expected to achieve most of its end-of-project targets, with only minor shortcomings.
Moderately Satisfactory (MS)	The objective/outcome is expected to achieve most of its end-of-project targets but with significant shortcomings.
Moderately Unsatisfactory (MU)	The objective/outcome is expected to achieve its end-of-project targets with major shortcomings.
Unsatisfactory (U)	The objective/outcome is expected not to achieve most of its end-of-project targets.
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.

Project Implementation & Adaptive Management Rating Scale

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”.
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.
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.
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.
Unsatisfactory (U)	Implementation of most of the seven components is not leading to efficient and effective project implementation and adaptive management.
Highly Unsatisfactory (HU)	Implementation of none of the seven components is leading to efficient and effective project implementation and adaptive management.

Sustainability Rating Scale

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
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
Moderately Unlikely (MU)	Significant risk that key outcomes will not carry on after project closure, although some outputs and activities should carry on
Unlikely (U)	Severe risks that project outcomes as well as key outputs will not be sustained

Source: Guidance for Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects

Signed UNEG Code of Conduct form

UNEG Code of Conduct for Evaluators/Midterm Review Consultants⁵²

Evaluators / Consultants

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

MTR Consultant Agreement Form

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

Name of Consultant Alfredo Caprile

Name of Consultancy Organization n.a.

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

Signed at Buenos Aires on February 16, 2015

Signature



Annex IX

Signed MTR final report clearance form

MTR Report Clearance Form

Midterm Review Report Reviewed and Cleared By:

Commissioning Unit

Name:

Signature:

Date:

UNDP-GEF Regional Technical Advisor

Name:

Signature:

Date: