Fiji Rural Electrification Fund (FREF) Support Programme

Environmental and Social Management Plan

10 June 2024

QUALITY INFORMATION

Document: FREF ESMP

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Revision History

Revision	Revision Date	Details
0	10 June 2024	FREF ESMP for Review

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LIST OF ABBREVIATIONS

- AC – Alternating Current
- ASU - Arizona State University
- BoS - Bureau of Statistics
- CCD - Climate Change Division
- DoE - Department of Energy
- DoEnv - Department of Environment
- EFL - Energy Fiji Limited
- EIA - Environmental Impact Assessment
- ESRI - Environmental Systems Research Institute, Inc.
- FBS - Fiji Bureau of Statistics
- FCCC - Fijian Competition and Consumer Commission
- FLMMA - Fiji Locally Managed Marine Area
- FNU - Fiji National University
- FREF - Fiji Rural Electrification Fund
- GGGI - Global Green Growth Institute
- GoF - Government of Fiji
- IFRC - International Federation of the Red Cross and Red Crescent Societies
- IUCN - International Union for the Conservation of Nature
- KOICA - Korea International Cooperation Agency
- MLMR - Ministry of Lands and Mineral Resources
- MIMS - Ministry of Infrastructure and Meteorological Services
- MoE - Ministry of Economy
- MoF Ministry of Finance, Strategic Planning, National Development and Statistics
- MoIT - Ministry of Infrastructure and Transport
- MoLGUDHE - Ministry of Local Government, Urban Development, Housing & Environment
- MPWMST - Ministry of Public Works, Meteorological Services, and Transport
- NOAA - National Oceanic and Atmospheric Administration
- OSM - Open Street Maps
- PFAN - Private Financing Advisory Network
- PoF - Parliament of Fiji
- RFI - Request for Information

- SOPAC - South Pacific Applied Geosciences Commission
- SPC - Secretariat of the Pacific Community
- SPREP - Secretariat of the Pacific Regional Environment Programme
- UNDP - United Nations Development Program
- USTDA - United States Trade and Development Agency

1 INTRODUCTION

This Environmental and Social Management Framework (ESMF) has been prepared for the Global Environment Facility (GEF) project "*Fiji Rural Electrification Fund (FREF) Support Programme*". As this project is supported by UNDP, the project has been screened using UNDP's Social and Environmental Screening Procedure and deemed a Moderate risk project.

The project is a multi-site project and not all sites have been selected for the interventions, therefore, as a Moderate risk project, an Environmental and Social Management Framework (this document) has been prepared for the project.

1.1 BACKGROUND

This project aims to foster the development of mini off-grids for access to clean, affordable, reliable renewable energy and diversify Fiji's energy mix to reduce carbon dioxide emissions from the Fijian power sector, contribute to electricity access objectives and promote gender-balanced economic growth. Mini-off-grid solutions increase the reliability of electricity supply by adding to the existing grid supply, thereby improving Fiji's adaptability, and reducing its climate vulnerability.

FREF is envisaged to electrify approximately 300 rural communities (households, schools and hospitals) over the next 10 years using innovative renewable energy solutions. The provision of electricity is combined with modern auxiliary services such as smart meters, mobile payment etc. to - among other things - simplify payment processing and provision peaks. The ability to harness the provided green electricity allows rural Fijians to increase community income through multiple economic activities, reduce social inequality and promotes gender inclusivity. All which also contributes to building a more climate informed resilient livelihoods. This project will seek to electrify at least 10 rural communities over 18 months to support the expeditious implementation of FREF as well as demonstrate best practices to shore up investments in FREF and its rural electrification objectives.

1.2 PURPOSE OF THE ESMP

This ESMP is a management tool to assist in managing potential adverse social and environmental impacts associated with project activities, in line with the requirements of UNDP's Social and Environmental Standards (SES). It details the set of mitigation measures, monitoring, and institutional measures to be taken during implementation and operation of the project to eliminate adverse environmental and social risks and impacts, offset them, or reduce them to acceptable limits.

Its scope covers all components of the project, but in particular the implementation of site works associated with the installation and operation of the solar mini-grids.

The ESMP also references the additional safeguard measures that apply to the project during the implementation, including but not limited to:

- Gender Analysis and Action Plan
- Stakeholder Engagement Plan
- Grievance Redress Mechanism

This ESMP will be publicly disclosed in line with UNDP's Information Disclosure Policy and SES.

The ESMP will be updated from time to time by the implementing Project Management Unit (PMU) in consultation with the UNDP to incorporate changes that may occur during project implementation.

1.3 PROJECT LOCATIONS

This project is located in Fiji across a number of different islands (Figure 1, Figure 2, Figure 3). The USDTA studies assessed 75 sites, , to determine suitability and eligibility for inclusion in the program. The USDTA assessments also ranked the sites and grouped them into 3 groups: Group A, Group B and Group C.

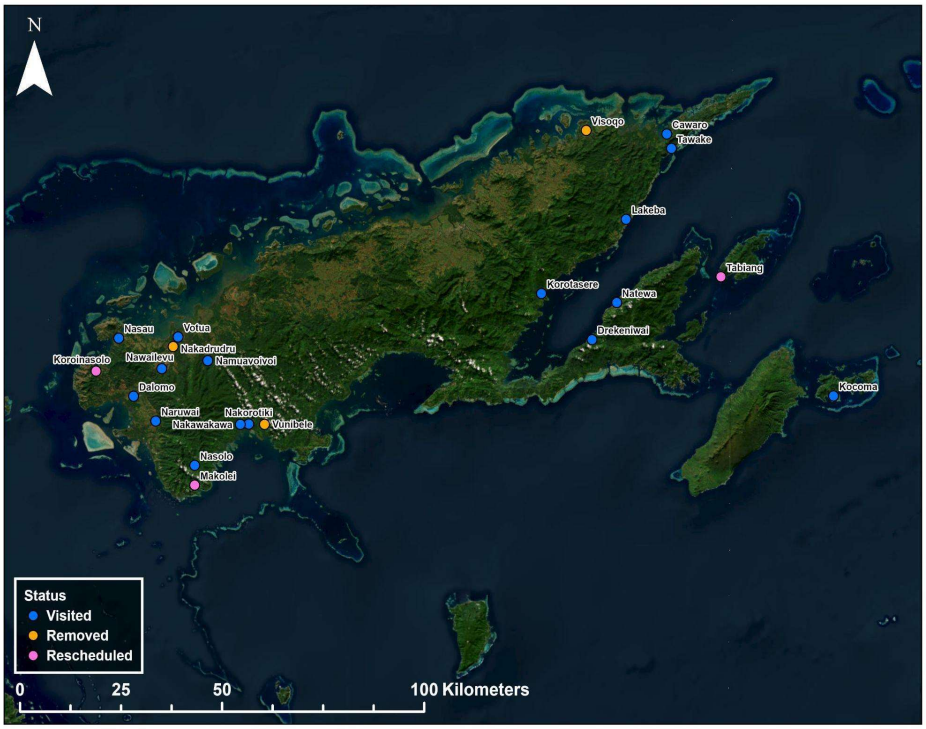

Figure 1 Sites in Group A – Vanua Levu (USDTA 2023a)

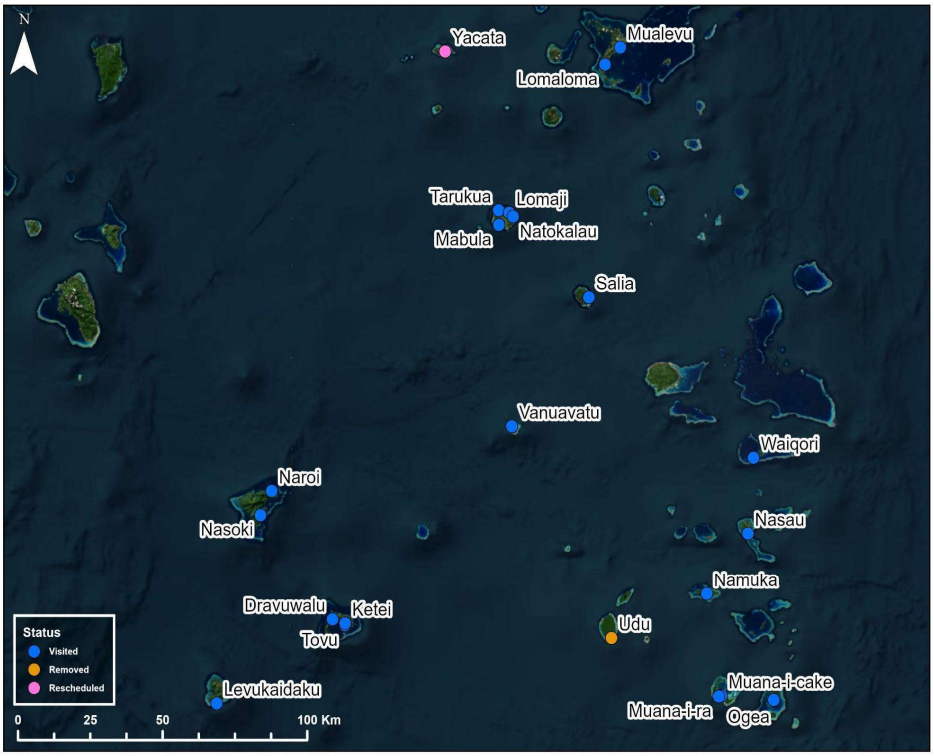

Figure 2 Sites in Group B – Lau region (USDTA 2023b)

Figure 3 Sites in Group C – Yasawa region (USDTA 2023c)

The first three sites to be implemented are:

- Salia village, Kioa Island,
- Waitabu village, Lekaba Island, Province of Lau
- Yandra village, Lekaba Island, Province of Lau

Details on each site are contained within Site Profiles. As profiles are developed for the remaining sites, the checklist and requirements of this ESMP will be applied to those sites.

1.4 Description of the Project

1.4.1 Project Outcomes

The project has been designed to achieve the following Outcomes:

- **Mitigation Outcome**: Fiji achieves its rural electrification and NDC target towards 100% renewable energy generation by 2030, this means a direct avoidance of an estimated 1,268M t CO^2 (tonnes of carbon-dioxide) emissions over lifetime.
- **Adaptation Outcome:** climate adaptation actions aim to reduce Fiji's climate vulnerability by increasing its adaptive capacity. The project's adaptation impact is the provision of reliable, gender sensitive, affordable

distributed power supply in rural areas as the basis for economic activity, which lead to income generation, reduction of poverty and inequality.

1.4.2 Project Outputs

The outcomes will be achieved through the following three interlinked Outputs:

- Output 1: Strengthened policy, regulations, and institutional capacity for rural renewable energy and electrification.
- Output 2: Improved private sector engagement in renewable energy generation and distribution
- Output 3: Affordable access to risk informed electricity and auxiliary services to unlock gender sensitive development opportunities.

1.4.3 Output Indicators and Activities of the Project

1.4.3.1 Output Indicator 1: Percentage completion of FREF business plan, financial models and incentive structures

Activity 1.1: Draft and facilitate approval for FREF business plans, financial models and incentive structures for Phases 2 and 3.

FREF is growing into a full-fledged commercial operation that will need to strategically manage its resources and develop and manage innovative contract modalities with private sector operators to deliver on its renewable electrification mandate. It is crucial to have the relevant set-up, staffing and credentials to be able to successfully manage such an operation, clear plans entailing the number of communities to be electrified over a 5-to-10-year horizon along with cost estimates, proposed asset ownership structures, maintenance schedules, supporting KPIs, resource mobilisation estimates, subsidization plans and any other relevant parameters to support FREF achieve its renewable electrification mandate.

This work will be led by UNDP with detailed technical support from PFAN.

- Activity 1.1.1 Hire consultant to develop FREF business plans, financial and ownership models, incentive structures and resource mobilisation plan.
- Activity 1.1.2 Conduct consultations with relevant stakeholders to collect and validate market information/data sets. This also entails an assessment of FREF operations and impact on Vio Island to inform design and implementation of Phases 2 and 3.
- Activity 1.1.3 Have FREF business plans, financial models, incentive structures and resource mobilisation plan approved by the FREF Board of Trustees and published as appropriate.
- Activity 1.1.4 Appoint a broker for the design phase.

Activity 1.2 Fundraising and Fund Management

This activity deals with fund management, fund raising and the periodic replenishment of the FREF Fund. Throughout the programme, attempts will continuously be made to acquire new funds, extend financing windows, and reach out to private investors, venture capitalists, development partners and more. Matters such as the quantity of funds to be raised, the subsidy levels of DESCO as well as Co-financing options for DESCOS are delt within this activity.

- Activity 1.2.1 Establish SOPs on fund management and investors relations
- Activity 1.2.2 Conduct annual replenishment drives with donors/investors/partners
- Activity 1.2.3 Annual reporting on the FREF fund management

1.4.3.2 Output Indicator 2: Percentage completion of Tariff algorithms, structures and regulations/guidelines for mini-grids

Activity 2.1: Draft and facilitate approval for tariff algorithms, tariff structures and regulations/guideline for mini grids.

Fiji's retail electricity tariffs are regulated by FCCC pursuant to section 39 of the FCCC Act 2010 and the Fijian Competition and Consumer Commission (Control of Prices for Retail Supply of Electricity and Ancillary Services) Order 2022, which

expires on 25 May 2025. FCCC is the Independent Regulator for the electricity sector and plays a vital role in designing and enforcing electricity tariff methodology under section 5 (1) and 6 of the Electricity Act 2017, outlining the structures, regulations and tariff determination guidelines. This will be critical in creating an enabling regulatory environment and effective management of FREF's operations.

Adhering to FCCC licensing procedures and compliance requirements will be vital for any private operators and/or Distributed Energy Services Companies (DESCOs) involved with FREF. To operate a generation plant and supply or sell electricity to off-grid customers, the generator owners will need to obtain an Electrical License for Installation and Generation and seek approval for sale or supply to off-grid consumers from FCCC. FCCC, with technical support from UNDP via this Programme, will support FREF in the management of tariff and technical regulations.

For on grid application, FCCC oversees regulating existing electricity operators such as EFL as well as newer entrants into the sector under a net metering system. However, there are no specific regulations for mini grids, in addition cost reflective tariff structures for mini grids are still to be developed. Supporting FCCC in the development of these will be a vital part of this output. This output will also act to inform and complement PFANs work in developing sound financial models for FREF but also provide overall guidance to operationalization of Phase 3 of FREF. This work will be led by UNDP with detailed technical support from PFAN.

- Activity 2.1.1 Develop Regulatory Framework for various renewable energy technologies (solar, hydro, wind and its hybrid model with diesel generation) to be administered by FREF.
- Activity 2.1.2 Develop working tariff models for different technologies under building block methodology.
- Activity 2.1.3 Prepare grid codes / technical requirements for off-grid sites in compliance with Electricity Act 2017 and Electricity Regulations 2019. Activity 2.1.4 Prepare Inspection forms and Guidelines for off-grid sites (in compliance with Electricity Act 2017 and Electricity Regulations 2019).
- Activity 2.1.5 Develop in- house capacity for FCCC to be able to carry out similar tasks/ activities in future and provide capacity building training for FCCC staffs on above deliverables.
- Activity 2.1.6 Develop Service Levels for DESCOs compliance. Define Service Quality (Capacity, Availability and Reliability)

1.4.3.3 Output Indicator 3: Number of sites for which technical assessments, socio-economic baselines, land tenure arrangements completed

Activity 3.1: Identify communities, schools, health centres, etc, conduct technical scoping, facilitate GIS mapping, seek community endorsement, and conduct initial technical assessments and designs

FREF has a target to electrify over 300 communities in 10 to 12 years. While immediate communities to be electrified have been scoped out for Phase 2 (Phase 2A = 3 communities, 2B = 2 communities, and 2C = 2 communities), FREF will be rolling out phase 2 throughout 2023 and there is room for additional 3 communities under Phase 2D throughout 2023 subject to funding being secured. Moreover, pipeline development for Phase 3 must also kick off from November-December 2022 and end in mid-March followed by necessary site assessments, stakeholder coordination, community engagement and tender development.

Of particular importance will be to secure the services of a Community Engagement partner that can converse with communities in their traditional language, help communities understand FREF's role and their role as customers of FREF, build awareness on renewable energy solutions, and conduct socio-economic baseline analysis of the communities, once they agree to become FREF customers, to inform the tender development process.

Based on the learnings from Phases 1 and 2A and its experience in implementing renewable energy solutions in the Pacific, UNDP Pacific Office in Fiji has the capacity to develop standardised processes for FREF and the internal capacity to rapidly roll out FREF programmes. In doing so, UNDP will be tasked to oversee the following pre-construction activities and coordinate discussions with stakeholders to secure their support for FREF programmes.

- Activity 3.1.1 Conduct community long listing using predefined site selection criteria agreed to by the FREF Board of Trustees. 75 specific sites will be surveyed by Arizona State University (ASU) and GGGI while other sites will be surveyed by PFAN.

- Activity 3.1.2 Conduct site visits and technical scoping to identify viable renewable energy solutions for FREF to implement and eliminate sites that are technically unfeasible for Phases 2 and 3.
- Activity 3.1.3 Facilitate consultations with Climate Change and International Cooperation Division of the Office of the Prime Minister, Department of Energy and Energy Fiji Limited to ascertain planned or contradicting plans to electrify sites that are deemed viable for electrification by FREF.
- Activity 3.1.4 Conduct initial community consultations explaining FREF and secure community endorsement to become FREF customers through a Request Letter from the community to FREF, signed off by the community chief (for village) and witnessed by the Roko or signed off by each household (for settlements). These letters must also state the communities/settlements commitment to pay tariffs to FREF and willing to provide land to build FREF electricity infrastructure.
- Activity 3.1.5 Develop site maps in GIS and develop a detailed electrification plan for the selected sites. 75 Specific sites will be surveyed by GGGI while other sites will be surveyed by PFAN. Activity 3.1.6 Conduct geotechnical surveys in collaboration with relevant agencies of the Fijian Government.
- Activity 3.1.7 Hire a community engagement consultant and conduct pre-implementation/baseline surveys for each community and secure contracting arrangements for land tenure. This includes conducting a gender analysis that collects sex-disaggregated baseline data and gender equality gaps/disparities.

1.4.3.4 Output Indicator 4: Number of sites for which current and future auxiliary service needs identified

Activity 4.1: Conduct comprehensive demand and growth assessments for each site to ascertain auxiliary service needs.

FREF is an excellent development vehicle to localise SDGs into communities and enhance standards of living using an integrated approach to development. UNDP will utilise its existing programmes/programmes portfolio to pilot and scale solutions across FREF sites. Telecommunication services, solar ice plants, desalination plants, parametric insurance, digital payment systems, risk informing development, enabling access to markets for rural communities, coastal protection using nature-based solutions and other development initiatives are just some of many auxiliary services that UNDP will scale in communities electrified by FREF. These set of activities have been separated from Output 3 to emphasise the importance of future planning services provided by FREF as well as building community capacity to maximise productivity using those same services.

- Activity 4.1.1 Assessments/diagnostics entailing current and future development needs to be conducted as an extension to baselines assessments for electricity needs.
- Activity 4.1.2 Identify, incentivise, and build partnerships with private sector service providers to extend their services to FREF programmes sites, particularly for mobile connectivity.
- Activity 4.1.3 Develop Community Sustainable Development Plans through the community engagement partner to support the localisation of SDGs and articulate the development aspirations of communities.
- Activity 4.1.4 Conduct financial and technology literacy and business development training, for FREF communities to help create new and additional income generation activities.

1.4.3.5 Output Indicator 5: Number of tenders, advertisement and private sector deal structuring completed

Activity 5.1: Develop comprehensive tender documents that are aligned to international best practices/standards and encourages bids that are the best value for money.

Tender documents will need to be developed for Phases 2B, 2C, 2D and 3 following collection and analysis of data collected under Output 3. Output 5 will be led by UNDP with support from PFAN. In the lead up to tender development, private sector outreach will be crucial to identify a short list of potential bidders for FREF programmes. This will be achieved through PFAN's extensive private sector network in Asia Pacific and Africa based on its experience in energy access, mini-grid and distributed energy service programmes in these regions complemented by UNDP's intimate knowledge of the local contractor landscape in Fiji. An Expression of Interest (EoI) process will identify potential companies and solicit concept notes on specific business models and technical solutions which will feed into the design of the fund and the incentive structure to support the financial and ownership models of FREF programmes. This will be done in consultation with FREF. Pre-Qualified bidders will then be asked to bid for the right to manage and operate the DESCO(s).

- Activity 5.1.1 Conduct private sector outreach comprising of one-on-one meetings, roundtables and strategic roadshows, and facilitate an EOI process to identify top potential companies to bid for tenders.
- Activity 5.1.2 Conduct market gap assessment studies and surveys to inform tender design and structuring.
- Activity 5.1.3 Develop comprehensive tender documents in collaboration with the Global Green Growth Institute and facilitate approval from the FREF Board of Trustees.
- Activity 5.1.4 Develop comprehensive tender documents for auxiliary services that synchronise with the renewable energy tender. Bidders for tenders in Activity 5.1.3 and 5.1.4 will mandated to work together to achieve holistic system solutions.
- Activity 5.1.5 Advertise and market tender documents for Phases 2 and 3 using a site clustering and reverse auction approach.

1.4.3.6 Output Indicator 6: Number of private sector services provider partners engaged for FREF

Activity 6.1: Conduct robust, transparent and timely tender evaluation of bids received for Phases 2 and 3.

Building on Output 5, UNDP and PFAN will co-lead this work supported by UNDP and the FREF Advisory Committee. UNDP procurement procedures will be used to help expedite tender assessments, negotiations and awards as well as ensure highest degree of accountability and transparency. Selected bidder(s) will be required to pre order and store materials to avoid any material shortages i.e., future provisioning.

- Activity 6.1.1 Conduct tender evaluation in line with UNDP Procurement guidelines with close support from FREF Advisory Committee.
- Activity 6.1.2 Undertake comprehensive contract negotiations with the successful bidder(s), agree on KPIs, agree on performance milestones and facilitate regulatory checks.
- Activity 6.1.3 Support the facilitation of service level agreement between FREF/Department of Energy and the successful bidder(s).
- Activity 6.1.4 Support the facilitation of energy generation license between Fiji Competition and Consumer Commission and the successful bidder(s).
- Activity 6.1.5 Ensure that bidder(s) selected pre order materials, organise storage and have future provisioning of construction materials.

Activity 6.2 Appointment of Owner's Engineer

Selection of an engineering firm to develop and assess technical compliance to tender documents including but not limited to: Engineering standards compliance and Environmental Impact.

- Activity 6.2.1 Appoint an Owner's Engineer to oversee technical compliance to tender etc

1.4.3.7 Output Indicator 7: Number of people (disaggregated by gender) accessing renewable energy and Amount (megawatts) of renewable energy capacity installed

Activity 7.1: Oversee construction contracts and ensure that programme milestones and deliverables are achieved.

The UNDP/PFAN programme team to be established will be in charge of coordinating and managing construction contracts with technical assistance from broader PFAN networks and internal resources available in other UNDP offices around Asia and the Pacific. The team will aim to adhere to the

commissioning dates, monitor the quality of work being delivered by the contractors, and hold contractors accountable to the highest industry standard.

- Activity 7.1.1 Closely monitor construction progress and report to the FREF Secretariat on a fortnightly basis through performance monitoring meetings.
- Activity 7.1.2 Ensure engineering checks and certifications are received at relevant construction milestones.
- Activity 7.1.3 Facilitate site clearances by EFL and prepare for commissioning as needed.

- Activity 7.1.4 Conduct community capacity building sessions through the community engagement partners to help communities raise grievances, understand sustainable use practices for renewable energy, form community governance structures to oversee community responsibilities as FREF customers, and maintain community buy-in of the programme - i.e., relationship management.

Lead Agency: UNDP Supporting Agency: PFAN

Activity 7.2: Develop performance milestones for the DESCO/site operator to ensure high standards of operations are maintained.

- Activity 7.2.1 Establish performance milestones and minimum service requirements for the DESCOs.
- Activity 7.2.2 Conduct periodic and random checks of FREF sites.
- Activity 7.2.3 Facilitate necessary subsidy, equity or loans to DESCOs as needed.
- Activity 7.2.4 Pay contractors for the construction, operations and maintenance of FREF sites.

Lead Agency: UNDP

Supporting Agency: PFAN, FCCC and FREF Secretariat.

1.4.3.8 Output Indicator 8: Number of capacity building initiatives to revert FREF to Fiji Government

Activity 8.1: Conduct capacity development measures to assure sustainability of programme results after reverting operations to the Fijian Government

During the design and implementation phases, UNDP together with PFAN will work with FREF and related departments to build internal capacity so as to be able to manage, oversee and administer the necessary operations and activities related to the management and deployment of the funding and the award and oversight of the DESCOs and concessions.

For the modelling work PFAN can dedicate a resource to this work.

- Activity 8.1.1 Conduct workshops on cost of services, tariff design and FREF Guidelines.
- Activity 8.1.2 Provide trainings for FREF, DoE and FCCC officials on guidance for future tariff calculation exercises. The training would also include sessions on tariff determination principles, tools, and guideline processes in other countries which could be replicated in Fiji.
- Activity 8.1.3 Develop a 5-year succession plan for resource/regulatory capacity to support FCCC, DoE and FREF on off-grid mini-grid electrification.
- Activity 8.1.4 DESCO gap analysis and capacity building in fundraising, service management etc.

Lead Agency: UNDP Supporting Agency: PFAN

1.4.3.9 Monitoring, Evaluation, Learning and Communications

Activity MEL 1: Ensure a comprehensive monitoring and evaluation of programme implementation, sound communications with key stakeholders as well as establishing a learning process.

Output 9 is not to be considered as an Output in isolation, but rather a cross-cutting framework which and accompanies all the previous Outputs and activities of the Programme.

The overarching aims for the MEL system of this programme will be to:

- Ensure decision making on the design and technical implementation of FREF is regularly informed by a robust and up-to-date information.
- Provide internal and external accountability for donor spend and identify the programme's economy, efficiency, effectiveness and equity and assessment of cost effectiveness and value for money.
- Provide evidence of the programme impact – at the local level, country level and regional level monitoring programme achievements, results, and impact indicators which will be detailed in the programme log frame.

To achieve these objectives the following activities are proposed.

- Activity MEL 1.1 Elaborate a detailed MEL System, Log frame and monitoring plan. The ToC will be central to this. Gauge the baselines for the indicators at output and outcome level defined in the results framework.
- Activity MEL 1.2 Carry out periodic monitoring of the activities as well as monitoring of the output and outcome indicators defined in the results framework. Carry out quantitative and qualitative evaluation of the different workstreams and address any problems directly with the respective actor / counterpart. Present main results and key recommendations to donors and communicate externally.
- Activity MEL 1.3 Design a programme learning and knowledge platform - Results Management System (RMS) and related results dashboard and feed in key insights and learnings throughout the programme implementation. Present results to key stakeholders – make dashboard available.
- Activity MEL 1.4 Elaborate a detailed communications plan with the main objective to inform stakeholders about relevant achievements and upcoming milestones in the FREF implementation process. Start implementing the first steps of the communications plan.

1.5 SEQUENCING OF FREF (PHASES)

FREF is being implemented through three phases with Phase 1 already completed on Vio Island. Phase 2 is divided into four sub-phases which are Phases 2A, 2B, 2C and 2D. Apart from Phase 2A which is currently undergoing final tender evaluation as stated in '2.9' above, FREF is actively seeking funding for Phase 2B with New Zealand Government providing indicative funding commitment for this phase amounting to USD 1.5 million. The Asian Development Bank (ADB) has provided indicative commitment of USD 1.5 million to support implementation of Phase 2C through grant funding from the Government of Japan. Preliminary discussions are being held with Australian Government to fund Phase 2D through a combination of grant and concessional financing using the Australian Infrastructure Financing Facility for the Pacific.

Table 1 Implementation phases of FREF[1]

Phase	Details	Funding Flows
1 (2017-2019)	Pilot programme on Vio Island 47 households electrified FREF owned model, DESCO ops	Seed funding from Leonardo DiCaprio Foundation
2 (2023 – 2024)	10 communities Approximately 350 households electrified Phase 2A – 3 Sites in Viti Levu Phase 2B – 2 Sites in Maritime islands (Solar Hybrid x 2) – Kioa Island and Yadrana Island Phase 2C – 2 Sites in Maritime islands (1. Cicia – Solar Hybrid, 2. Buca – Hydro Phase 2D – 3 additional sites proposed for 2023	Grant funding from UK Government to cover Phase 2A at $792,725 ▪ Phase 2B- Funding from DFAT of $666,135 and approximately $1.5 million funding gap remaining ADB support through grant funding from the Government of Japan to cover Phase 2C = $3 million Funding being sought for Phase 2D. Sites TBC through USTDA/ASU/GGGI technical support
3 (2024 – 2036)	70-300 New Communities	Development Partners ▪ Blended financing with GCF/GEF/AIFFP/US/WB

[1] UNDP FREF Initiation Plan 2023

	▪ Approx. 16,500 Households Electrified assuming urban drift slows down in part, due to access to electricity ▪ Potential FREF/Private Sector owned models, DESCO ops ▪ Phase 3A – 15 sites TBC for 2024 ▪ Phase 3B - 22 sites TBC for 2025	▪ Equity financing with private sector ▪ FREF revolving fund ▪ Funding being sought for Phases 3A and 3B. Sites TBC through USTDA/ASU/GGGI technical support.

2 INSTITUTIONAL ARRANGEMENTS

2.1 GENERAL MANAGEMENT STRUCTURE

The project will be overseen by the Project Steering Committee that will be made up of the FREF Board of Trustees with technical representation by the FREF Advisory Committee – which include UNDP, UNIDO and other implementing partners are already part of the FREF Secretariat. For efficiency reasons, the project will use the governance structure articulated in the FREF Constitution that stipulates the duties and responsibilities of the FREF BOT, the Advisory Committee, and the FREF Secretariat which will also extend to the Project Steering Committee relative to the deliverables of the project (Figure 4).

The FREF Constitution also articulates the frequency of meetings and procedures to facilitate decision making for FREF which will also apply to the Programme Steering Committee.

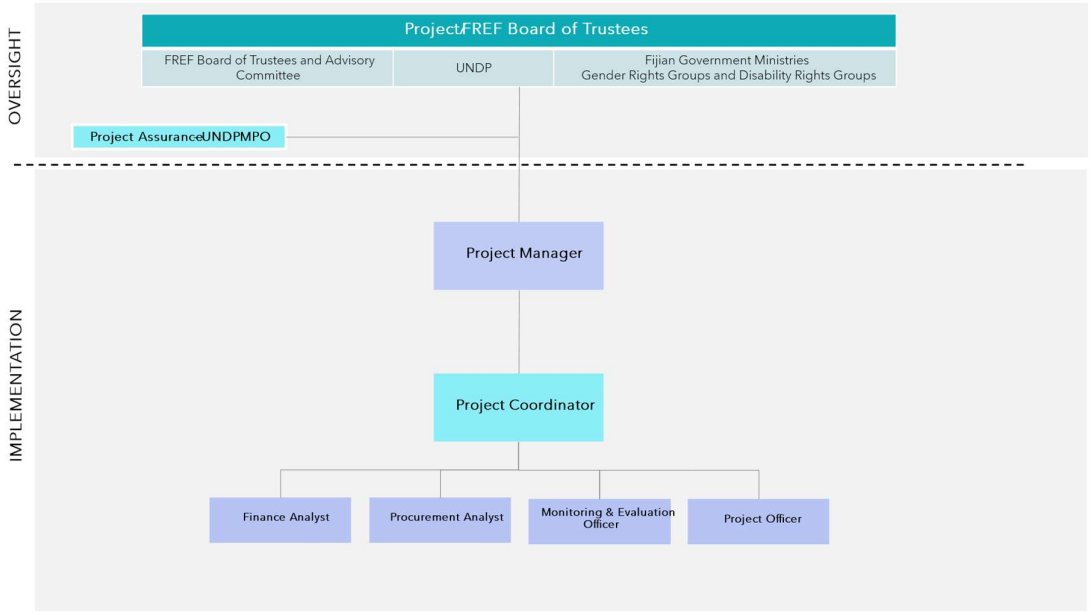

Figure 4 Project Governance and Management Structure

2.2 PROJECT DELIVERY ROLES

The roles and responsibilities of project staff and associated agencies in the implementation of this ESMP are as follows:

2.2.1 Project Board of Trustees

The Project Board has oversight and advisory authority, representing the highest body for coordination, strategic guidance, oversight and quality assurance. The body facilitates collaboration between UNDP, the Implementing Partner, the responsible parties, and other stakeholders for the implementation of the Project. The Project Board reviews and endorses annual work plans, provides strategic direction and oversight, reviews implementation progress, and reviews narrative and financial progress reports.

2.2.2 Project Management Unit

The Project Management Unit ensures effective implementation of activities on the ground, risk mitigation, and timely delivery of the results. The PMU's responsibilities include, but are not limited to:

- Assigning specific responsibilities for implementation of this ESMP, including monitoring, and community consultations on the draft management plans to a staff member(s) of the PMU
- Maintaining relevant records associated with management of environmental and social risks, including updated SESPs, impact assessments, a log of grievances together with documentation of management measures implemented
- Reporting to the Project Board and UNDP CO on the implementation of the ESMP
- Ensuring that all service providers are informed of their responsibilities for the day-to-day compliance with the ESMP.

2.2.3 UNDP

UNDP is the Lead Implementation Manager for FREF. This includes oversight of project execution to ensure that the project is being carried out in accordance with agreed standards and provisions. UNDP is also responsible for the Project Assurance role of the Project Board. UNDP's role includes the following:

- Provide oversight on all matters related to safeguards
- Inform all the stakeholders and right-holders involved in, or potentially impacted, positively or negatively, by the project, about the UNDP's Corporate Accountability Mechanism (described below)
- Ensure that the Compliance Review and the Stakeholder Response Mechanisms are operational during the lifetime of the project
- Ensure adherence to the SES for project activities implemented using funds channelled through UNDP's accounts, and undertake appropriate measures to address any shortcomings
- Verify and document that all UNDP SES requirements have been addressed
- Provide technical guidance on implementation of this ESMP and administrative assistance in recruiting and contracting expert safeguards services (as required) and monitor adherence of each site to the ESMP and UNDP policies and procedures.

2.2.4 Implementing Partners

The UNDP – FREF Support Project team are responsible for implementing this project in collaboration with the Department of Energy i.e. via the FREF Secretariat and the FCCC. Specific tasks include:

- Project planning, coordination, management, monitoring, evaluation, and reporting
- Reporting, fairly and accurately, on project progress against agreed work plans in accordance with the reporting schedule and required formats
- Maintaining documentation and evidence that describes the proper and prudent use of project resources in conformity to the signed Project Document and in accordance with applicable regulations and procedures (e.g. SES)
- Ensuring all requirements of UNDP's SES and national regulatory/policy frameworks and relevant international standards have been addressed (e.g. mitigation of identified adverse social and environmental impacts)
- Procurement of goods and services, including human resources required to ensure compliance with this ESMP.

2.2.5 Project Assurance

The 'project assurance' function of UNDP is to support the Project Board and Project Management Unit by carrying out objective and independent project oversight and monitoring functions. This role ensures appropriate project management milestones are managed and completed.

2.4 Administration of Environmental and Social Management Plan

As the lead implementing agency, UNDP will be responsible for responsible for the implementation with the ESMP via the delivery organisations.

The ESMP will be part of any tender documentation. UNDP will be responsible for the revision or updates of this document during the course of work. It is the responsibility of the person to whom the document is issued to ensure it is the most up to date version.

The UNDP are accountable for the provision of specialist advice on environmental and social issues to the delivery organisations (eg contractors and/or NGOs) and for environmental and social monitoring and reporting. UNDP or its delegate will assess the environmental and social performance of the delivery organisations (eg contractors) in charge of delivering each component throughout the project and ensure compliance with the ESMP. During operations the delivery organisations will be accountable for implementation of the ESMP. Personnel working on the projects have accountability for preventing or minimising environmental and social impacts.

The delivery organisation eg contractor will maintain and keep all administrative and environmental records, which would include a log of complaints together with records of any measures taken to mitigate the cause of the complaints.

The delivery organisation will be responsible for the day-to-day compliance with the ESMP.

2.4.1 Environmental procedures, site and activity-specific work plans/instructions

This ESMP provides a list of all the anticipated impacts that could occur throughout the project. Not all impacts will occur at every site. Therefore, as part of the site profiling and pre-work activities, the

If required, environmental procedures provide a written method describing how the management objectives for a particular environmental element are to be obtained. They contain the necessary detail to be site or activity-specific and are required to be followed for all construction works. Site and activity-specific work plans and instructions can be issued by UNDP if further action is considered necessary to meet the requirements of the ESMP and UNDPs SES. Alternatively, UNDP may request from the contractor written work method statements to demonstrate how ESMP requirements will be met.

2.4.2 Environmental incident reporting

Any incidents, including non-conformances to the procedures of the ESMP are to be recorded using an Incident Record and the details entered into a register. For any incident that causes or has the potential to cause material or serious environmental harm, the Project Manager shall be notified as soon as possible. The delivery organisation/contractor must cease work until remediation has been completed as per the approval of UNDP.

2.4.3 Weekly environmental inspection checklists

A weekly environmental checklist is to be completed and will include reference to any issues identified during the preceding week. The completed checklist is to be forwarded to UNDP for review and follow-up if any issues are identified.

2.4.4 Corrective Actions

Any non-conformances to the ESMP are to be noted in weekly environmental inspections and logged into the register. Depending on the severity of the non- conformance, the Project Manager may specify a corrective action on the weekly site inspection report. The progress of all corrective actions will be tracked using the register. Any non-conformances and the issue of corrective actions are to be advised to UNDP.

2.4.5 Review and Auditing

The ESMP and its procedures are to be reviewed at least every twelve months by UNDP staff. The objective of the review is to update the document to reflect knowledge gained during the course of project delivery/construction and to reflect new knowledge and changed community standards (values).

The ESMP will be reviewed and amendments made if:

- There are relevant changes to environmental conditions or generally accepted environmental practices; or
- New or previously unidentified environmental risks are identified; or
- Information from the project monitoring and surveillance methods indicate that current control measures require amendment to be effective; or
- There are changes to environmental legislation that are relevant to the project; or
- There is a request made by a relevant regulatory authority.

Any changes are to be developed and implemented in consultation with UNDP Staff. When an update is made, all site personnel are to be made aware of the revision as soon as possible eg through a toolbox meeting or written notification.

2.4.6 Training

Delivery organisations have the responsibility for ensuring systems are in place so that relevant employees, contractors and other workers are aware of the environmental and social requirements for construction, including the ESMP.

All project personnel will attend an induction that covers health, safety, environment, and cultural requirements.

All workers engaged in any activity with the potential to cause serious environmental harm (e.g. handling of hazardous materials) will receive task specific environmental training.

3 LEGAL AND INSTITUTIONAL FRAMEWORKS FOR ENVIRONMENTAL AND SOCIAL MATTERS

3.1 RELEVANT INTERNATIONAL TREATIES AND CONVENTIONS

Fiji is signatory to 187 multilateral treaties[2]. The following are relevant to environmental and social aspects of this project.

- Abolition of Forced Labour Convention 1957
- Agreement Establishing the South Pacific Regional Environmental Programme (SREP) 1993
- Equal Renumeration Convention 1951
- Minimum Age Convention 1973
- Indigenous and Tribal Peoples Convention 1989
- Convention concerning the Prohibition and Immediate Action for Eliminating the Worst Forms of Child Labour 1999
- Convention for the Protection of the Natural Resources and Environment of the South Pacific Region 1986
- Convention on Biological Diversity 1992
- Convention on Elimination of All Forms of Discrimination Against Women 1979
- Discrimination (Employment and Occupation) Convention 1958
- Freedom of Association and Protection of the Right to Organise Convention 1948
- International Convention on the Elimination on all Forms of Racial Discrimination 1966
- International Plant Protection Convention 1951
- Stockholm Convention on Persistent Organic Pollutants 2001
- The Montreal Protocol on Substances that Deplete the Ozone Layer 1987
- United Nations Convention against Corruption 2003
- United Nations Framework Convention on Climate Change 1992

3.2 NATIONAL LEGISLATION

3.2.1.1 Acts and Regulations

- Biosecurity Act 2008
- Birds and Game Protection Act 1923
- Climate Change Act 2021
- Constitution of the Republic of Fiji
- Domestic Violence Act 2009
- Electricity Act 2017
- Electricity Regulations 2019
- Employment Relations Act 2007
- Environmental Management (Waste Disposal and Recycling) Regulations 2007
- Endangered and Protected Species Act 2002
- Environmental Management Act 2005

[2] https://paclii.austlii.edu.au/pits/en/multilateral/fiji.shtml accessed 2 June 2024

- Environmental Management (EIA Process) Regulations 2007
- Fiji Independent Commission Against Corruption Act 2007
- Fisheries Act 1941
- Forests Act 1992
- Health and Safety at Work Act 1996
- Human Rights and Anti-Discrimination Commission Act 2009
- Industrial Associations Act 1941
- Information Act 2018
- iTaukei Affairs Act 1944
- iTakaukei Lands Act 1905
- Land Conservation and Improvement Act 1953
- Land Use Act 2010
- Litter Act 2008
- National Council for Older Persons Act 2012
- National Disaster Management Act 1998
- National Trust of Fiji Act 1970
- Ozone Depleting Substance Act 1998
- Pesticides Act 1971
- Preservation of Objects of Archaeological and Paleontological Interest Act 1940
- Prevention of Bribery Act 2007
- Registration of Sex Offenders Act 2021
- Rights of Persons with Disabilities Act 2018

3.2.1.2 Plans and Policies

- Fiji National Action Plan to Prevent Violence Against All Women and Girls 2023 - 2028
- Fiji National Climate Change Policy (2018-2030)
- National Climate Change Adaptation Strategy
- NDC Implementation Roadmap 2017-2030

3.3 Environmental Impact Assessments and Approvals in Fiji

In Fiji, the need for Environment Impact Assessments (EIA) for development projects is determined under the Environment Management Act (2005). The Approving Authorities responsible for receiving applications for the approval of any development activity must undertake screening to determine whether an EIA is required for development (refer to Part 4 (27) (1)-(4) Environmental Management Act).

The screening step sorts projects development proposals into three categories:

- **Category 1:** as set out in Schedule (2) Prt (1) of Environment Management Act, includes those proposals that require EIA and which must be sent to the Administrator at the Ministry of Environment for processing.
- **Category - 2:** *as set out in Schedule (2) Part (2) of Environment Management Act,* includes those proposals that require EIA and which must be processed by the approving authority.
- **Category – 3:** Development proposals a*s set out in Schedule (2) Part (3) of Environment Management Act 2005)* that may not require an Environmental Impact Assessment unless required otherwise by the EIA Administrator.

The process begins with the lodgement of an application with the approving authority that will make a determination on whether or not an EIA study is necessary. Should one be required the authority may process the application themselves (for a proposal set out in Part 2 Schedule 2 of the Environment Management Act (2005)) or forward it to the EIA Administrator for processing (for a proposal set out in Part 1 and 3 of Schedule 2 of the Environment Management Act (2005)).

The FREF activities do not fall under the Schedules of Summarise EIA requirements ie criteria that trigger need to undertake one. Although FREF activities do not fall within the scope of activities that require EIAs under the Act, **an application to the Approval Authority will need to be made for each site using the EIA Screening application form** (Appendix 1).

The EIA screening application form requires details of the proposed development, including a locality plan and any documentary evidence on the type of land tenureship, major physical features (if any), geographical location etc and any public consultations already conducted together with the screening fees.

The application is submitted to the Department of Environment, along with payment of the screening fee.

Other agencies that may be involved (as approval authorities) include:

- Local authority, i.e. for urban areas the appropriate city or town council constituted under the Local Government; for rural areas, Rural Local Authorities and the Central Board of Health.
- Lines of Ministries, the private sector, non-governmental organization and other interested person.

3.4 LAND TENURE /INDIGENOUS PEOPLES

Around 90 per cent of land in Fiji is owned by indigenous Fijians (iTaukei) through their mataqali (clan) and is termed native or iTaukei land. Of the remainder, about 8% is freehold and 2% is government owned. Native land is communally owned and cannot be bought or sold except to the state for public purpose.

The iTaukei Land Trust Board (TLTB) is a statutory body with responsibility to administer, develop and manage this land on behalf of its owners, and for their benefit, according to the Native Land Trust Board Act. The TLTB identifies the land required for use by iTaukei communities and makes the remainder available for leasing. The TLTB, not the actual owners, issues legally binding leases or land use agreements, as to whether the land can be used for agricultural, commercial, industrial or other purposes.

All people residing on native land are either landowners or tenants who have the permission of the landowning clan. Residents on native land have either formalised status through legal lease arrangements with the TLTB or have informal (vakavanua) agreements with the landowning mataqali.

The Agricultural Landlord and Tenant Act (ALTA) governs all agricultural leases of more than 1 ha and the relations between landlords and agricultural tenants. Minimum 30-year and maximum 99-year leases are allowed with no right of renewal. In practice, most leases are for 30 years. In the event of non-renewal, the tenant must vacate the land after a set grace period. The tenant can claim compensation for all development and improvements of the property with claims determined by the Agricultural Tribunal.

The ALTA was supplemented by the 2009 Land Use Decree No.36 (2010) in recognition that the requirement for tenants to vacate land once the fixed lease and grace period had expired causes both social and economic hardship. Government therefore amended the land laws to increase the flexibility of leases and to facilitate leasing of lands, which are currently idle or unutilized, under terms and conditions intended to be attractive to both the landowners and tenants. The Decree provides for longer tenure leases (up to 99 years) for agricultural and commercial development. Reserve land is not leased, but reserved by mataqali or government for future use.

3.4.1 Fiji Laws on Land Acquisition and Compensation

The Constitution of Fiji provides for protection of private property against arbitrary expropriation. The Constitution states that native land cannot be permanently alienated except for public purpose. It requires just compensation for all land or rights acquired by the government.

Land acquisition in Fiji is governed under the State Acquisition of Lands Act (SALA). Under the Act, all types of land can be acquired for public purposes. The law provides that in cases of land acquired for public purposes, legal titleholders have a right to compensation. The law also provides for the right of landowners to legal proceedings for solving disputes and grievances. The customary rights of indigenous peoples without formal title are also protected.

The SALA guarantees compensation to those with recognized legal rights or interests in land. Compensation is paid at market values effective from the date at which notice of the State's intention to acquire the land is given. Structures, however, are compensated only at book/depreciated values. Compensation includes for land, crops and trees, damage to portions of land not acquired (if any), changes in use and restrictions on use of any non-acquired portions, and any reasonable expenses associated with necessary changes of residence or places of business.

3.4.2 Indigenous Peoples

The Indigenous People in Fiji are known as the iTaukei and the Constitution of Fiji recognizes their ownership of iTaukei lands, their unique culture, customs, traditions, and language. The mainstream or 'dominant' group in Fiji is indeed the indigenous people.

In Fiji, *iTaukei* are neither socially excluded nor discriminated against and have equal (or in some cases, priority) access to development opportunities as well as greater political influence, since they are a majority. There is also a Ministry of iTaukei Affairs responsible for the 'good governance and well being of the iTaukei people' as stipulated in the iTaukei Affairs Act (Cap120). The Ministry has offices in 14 provinces and provides a high level of safeguards for indigenous people. It is responsible for implementing programmes for the welfare of iTaukei people; being custodian of iTaukei intellectual property registers; providing legal assistance and judiciary for all iTaukei disputes over land, customary fishing and hereditary titles; advocating for Fijian languages and cultures; facilitating training and skills development for iTaukei; and administering scholarship awards for iTaukei students.

WB (2016) found that households and communities from the largest ethnic groups—iTaukei and Indo-Fijian—tend to experience the same social problems, levels of poverty and opportunities. By comparison, Chinese and European communities tend to be wealthier, while Kai Solomoni and some mixed-race communities tend to be disadvantaged in many respects. Overall, however, social divisions are more pronounced between urban and rural areas and between educated and uneducated people than between different ethnic groups. Disadvantage in Fiji is often spatial and determined by the relative isolation of residents from government services, and their access to good land or economic opportunities, particularly paid work.

People of all ethnicities within the project areas will receive the full benefits of the FREF project. For the reasons given above, no special safeguards for IP are triggered by the project since it will not adversely affect their dignity, human rights, livelihood systems, culture, ancestral domains, and communal assets, territorial, natural or cultural resources.

No special action is needed to protect beneficiaries' interests in regard to their status as indigenous people. All customary land ownership has been mapped by the TLTB and there is a strong institutional basis for its equitable management.

3.5 UNDP Social and Environmental Standards

The project covered by this ESMF will comply with UNDP's updated Social and Environmental Standards (SES), which came into effect on 1 January 2021. UNDP Safeguards are measures to protect or to avoid risks (do no harm), while promoting benefits (do good). This ESMF, which forms part of the UNDP safeguards requirements, provides guidance to assess and manage the risks linked to potential harm induced by project activities, while providing guidance to ensure that these activities will promote benefits to the beneficiaries with respect to its objectives.

The UNDP SES underpin UNDP's commitment to mainstream social and environmental sustainability in its programmes and projects to support sustainable development and are an integral component of UNDP's quality assurance and risk-management approach to programming. Further details on the UNDP SES are available on the UNDP website. Through the SES, UNDP meets the requirements of the GCF's Environmental and Social Safeguards Policy.

The UNDP SES have been applied during the development of the project. The SES objectives are to:

- strengthen the social and environmental outcomes of programmes and projects
- avoid adverse impacts to people and the environment
- minimize, mitigate, and manage adverse impacts where avoidance is not possible

- strengthen UNDP and partner capacities for managing social and environmental risks
- ensure full and effective stakeholder engagement, including through a mechanism to respond to complaints from project-affected people.

UNDP uses its Social and Environmental Screening Procedure (SESP) to identify potential social and environmental risks and opportunities associated with all proposed projects. Each project is scrutinized as to its type, location, scale, sensitivity, and the magnitude of its potential social and environmental impacts. All project components are screened, including planning support, policy advice and capacity-building, as well as site-specific, physical interventions. Activities that will be completed under project co-financing are also included in the scope of the assessment.

The project has been screened against the UNDP SES using the UNDP Social and Environmental Screening Procedure (SESP) template. It is based on a precautionary approach, looking at the broad category of activity/intervention types and assessing potential risks based on the types of activities that are expected to be implemented at the sub-project level. The screening indicated that the project would trigger seven of the UNDP Social and Environmental Standards. The triggered standards and their requirements and relevant legal instruments are summarised in (Table 2).

Table 2 UNDP SES triggered and national legislation

	Triggered	UNDP SES Requirements relevant to project	Fiji Legislation, Regulations and Policies that are relevant to meeting UNDP SES requirements	Consistent / Action required
Programming Principles				
Overarching Principle: Leave No One Behind	Yes	• Follow the rights-based approach to development, including the application of a gender perspective. • Identify and include poor, vulnerable, excluded, and marginalised groups	Constitution of the Republic of Fiji	Consistent
Human Rights		• Further the realization of human rights as laid down in the Universal Declaration of Human Rights and other human rights instruments. • Uphold the principles of accountability and the rule of law, participation and inclusion, and equality and non-discrimination • Refrain from providing support for activities that may contribute to violations of a State's human rights obligations and the core international human rights treaties	Constitution of the Republic of Fiji National council for Older Persons Act 2012 – establishes a council for older persons for purpose of inclusivity, instilling dignity, respect for human rights and meeting basic needs through empowerment of older persons. Rights of Persons with Disabilities Act 2018 – provides for protection of rights in accordance with UN Convention on the Rights of Persons with Disabilities	Consistent
Gender Equality and Women's Empowerment	Yes	• Promotion of gender equality and the empowerment of women • Reduce gender inequalities in access to and control over resources and the benefits of development	Constitution of the Republic of Fiji Fiji National Action Plan to Prevent Violence Against All Women and Girls 2023 - 2028	Consistent

		• Ensure that both women and men are able to participate meaningfully and equitably • Ensure that projects do not discriminate against women and girls • Promote design and implementation of gender responsive projects • Prevention and elimination of sexual exploitation, abuse and harassment (SEAH)	Domestic Violence Act 2009 – provide protection from domestic violence and to promote the safety and wellbeing of victims of domestic violence. Human Rights and Anti-Discrimination Commission Act 2009 – includes discrimination on the basis of gender and processes for complaints. Registration of Sex Offenders Act 2021 – enables specified agencies to monitor sex offenders and assist in reducing the risk posed by sex offenders National Policy on Sexual Harassment in the Workplace (2007).	
Sustainability and Resilience	Yes	• Identify opportunities to advance sustainability and resiliency dimensions of development initiatives and to strengthen environmental management and protection • Use and promote precautionary approach	Constitution Town Planning Act 1946	Consistent

Accountability	Yes	• Compliance with national law and obligations under international law, whichever is the higher standard • Enable active local community engagement and participation in decision-making, particularly those at risk of being left behind • Transparency through provision of timely, accessible and functional information regarding supported activities, including on potential environmental and social risks and impacts and management measures • Ensure stakeholders can communicate their concerns and have access to rights-compatible complaints redress processes and mechanisms • Effective monitoring	Constitution of the Republic of Fiji – right to information, access to courts and tribunals Environmental Management Act 2005 – requires public hearings in relation to EIAs Environmental Management Act 2005 – project to be approved by an approving authority under Schedule 2 Part 2 1(d) "a proposal for a civic or community development" Fiji Independent Commission Against Corruption Act 2007 Prevention of Bribery Act 2007 Human Rights and Anti-Discrimination Commission Act 2009 – provisions for making complaints. Information Act 2018 – gives effect to Sections 25 and 150 of the Constitution, facilitates the right of access to information held by government and public agencies, processes for correction or deletion of false or misleading information that directly affect a person. Creates an Accountability and Transparency Commission. iTaukei Affairs Act 1944 Town Planning Act 1946 – requires disclosure of schemes and provides landowners and occupiers the right of objection	
Project Level Standards				
Standard 1. Biodiversity Conservation and Sustainable Natural Resource Management	Yes	• Precautionary approach to be applied • Risk identification and assessment: Identify and address direct and indirect impacts on natural resources, biodiversity, ecosystems and ecosystem services	Constitution of the Republic of Fiji – environmental rights Biosecurity Act 2008 – prevent entry, control establishment and spread of animal and plant pests and diseases. Birds and Game Protection Act 1923	Consistent

		• Risk reduction measures follow a mitigation hierarchy that favours avoidance of potential adverse impacts over minimization, mitigation where adverse residual impacts remain, and, as a last resort, application of offset and compensation measures. • no adverse impacts on critical habitats • under no circumstances will species known to be invasive be introduced into new environments • Forests: project activities: o are consistent with the conservation of natural forests and biological diversity, ensuring that they are not used for the conversion of natural forests; o incentivize the protection and conservation of natural forests and their ecosystem services, and enhance other social and environmental benefits; o enhance the sustainable management of forests, including the application of independent, credible certification for commercial, industrial-scale timber harvesting; o maintain or enhance biodiversity and ecosystem functionality in areas where forest restoration is undertaken; o ensure that plantations are environmentally appropriate, socially beneficial and economically viable, and utilize native species wherever feasible.	Endangered and Protected Species Act 2002 – regulates and controls trade, possession and transportation of CITES species. Environmental Management Act 2005 – applies principles of sustainable use and development of resources, includes risk based approach (EIA), Environmental Management (EIA Process) Regulations 2007 Forests Act 1992 – defines forest and nature reserves, can apply unalienated iTaukei land, preserves customary rights, prohibits fires within declared areas. Land Conservation and Improvement Act 1953	

		• Use integrated water resources management approach to water resources • Avoid, and where avoidance is not possible, minimize adverse impacts on soils, their biodiversity, organic content, productivity, structure, water-retention capacity. • Sustainable management of living natural resources • When purchasing natural resource commodities, where possible, use primary suppliers that can demonstrate that they are not contributing to significant conversion or degradation of natural or critical habitats		
Standard 2. Climate Change and Disaster Risks	Yes	• Climate change and disaster risk analysis, planning and implementation – assess for climate change and disaster risks and their impacts to project activities and outputs as well as the possibility that project activities could increase exposure to such risks • Minimize and avoid unwarranted increases in greenhouse gas emissions or other drivers of climate change from supported activities.	Climate Change Act 2021 - requires development of national climate change policy and decarbonisation strategy. Also, 1) aims to provide for the relocation of at-risk communities and safeguard their rights, 2) sets a net zero emissions target for 2050, 3) sets the legal framework to enable carbon sequestration, carbon stocks and emissions reduction projects (art. 45 to 60), 4) charges relevant agencies to conduct risk assessments and to decide on new buildings and infrastructure approvals based on resilience estimates, 5) makes provisions for the implementation of sustainable financing National Disaster Management Act 1998 – disaster planning and management. Ozone Depleting Substance Act 1998 – regulates ozone depleting substances and substances with high global warming potential Fiji National Climate Change Policy (2018-2030) National Climate Change Adaptation Strategy NDC Implementation Roadmap 2017-2030	Consistent

Standard 3. Community Health, Safety and Security	Yes	• Protect communities from hazards caused and/or exacerbated by project activities (including flooding, landslides, contamination or other natural or human-made hazards), disease, and the accidental collapse or failure of project structural elements. • Assess the risks to, and potential impacts on, the safety of affected communities during the design, construction, operation, and decommissioning of projects and establish preventive measures and plans to address them in a manner commensurate with the identified risks and impacts. • Avoid or minimize the potential for community exposure to health risks and diseases that could result from or be exacerbated by project activities. • Infrastructure design and safety to be in accordance with national legal requirements, good international practices, and any international obligations and standards. • For construction activities, ensure appropriate control of site access, use of appropriate personal protective equipment, safely designed work platforms, appropriate engineering and administrative controls, and safety barriers. Construction personnel will have appropriate qualifications and training. • Apply concept of universal access in the design and construction of facilities and services • Avoid, or where avoidance is not possible, minimize potential community exposure to hazardous materials	Electricity Act 2017 and *Electricity Regulations 2019 – requires licensing of contractors and installations, systems to be inspected* *Trade Standards and Quality Control Act 1992 – provides for safety standards* Environmental Management (EIA Process) Regulations 2007 – requires consideration of potential impacts and mitigation measures. National Disaster Management Act 1998 – disaster planning and management. Biosecurity Act 2008 – prevent entry, control establishment and spread of animal and plant pests and diseases.	Consistent

		and substances that may be utilized in or released by project activities • Be prepared for emergencies eg plans, training, equipment and resources. • Avoid, mitigate and manage the risks and potential adverse impacts on health and safety of communities arising from the influx of project-related workers • Avoid, or where avoidance is not possible, minimize such adverse impacts and implement appropriate mitigation measures that aim to maintain the value and functionality of ecosystem services of relevance to local communities.		
Standard 4. Cultural Heritage	No	• Avoid adverse impacts, comply with national laws and international obligations. If avoidance not possible, mitigate impacts. • Develop CH Management Plan to mitigate significant adverse impacts • Use independent experts to assess adverse impacts and stakeholder consultations • Protection of Cultural Heritage from damage, inappropriate alteration, disruption, removal or misuse • Consultation with stakeholders regarding Cultural Heritage • Chance Finds procedures - Refer to Chance Find Procedures in **Annex 4.**	Preservation of Objects of Archaeological and Palaeontological Interest Act 1940	

		• If utilize cultural heritage, (i) inform communities of rights, (ii) conduct good faith negotiations with documented outcome, (iii) provide for fair and equitable benefit sharing		
Standard 5. Displacement and Resettlement	No	• To anticipate and avoid, or, when avoidance is not possible, minimize adverse social and economic impacts from land or resource acquisition or restrictions on land or resource use • Where displacement is unavoidable, management plan required		
Standard 6. Indigenous Peoples	Yes	• Ensure respect for domestic and international law regarding rights of indigenous peoples. Do not participate in a project that violates the human rights of indigenous peoples • Identify indigenous peoples who may be affected by project activities utilizing range of criteria • Recognize collective rights of indigenous peoples to lands, territories and resources. • Recognize rights of indigenous peoples to legal personality. • Prohibit forcible removal of indigenous peoples from lands and territories and ensure no relocation without	Constitution of the Republic of Fiji iTaukei Affairs Act 1944 – iTaukei includes every member of an aboriginal race indigenous to Fiji and indigenous Melanesians, Micronesians or Polynesians living in Fiji who have elected to live in an iTaukei village. Amends all references in legislation to replace "Fijian" with iTaukei. Provides recognition of traditional governance structures. Requires iTaukei Board consideration of any proposed Bill that could affect rights and interests of iTaukei prior to introduction to Parliament. Provides for traditional courts (Tikina Court). iTakaukei Lands Act 1905 – provides for customary land tenure and use of iTakaukei lands Land Use Act 2010 – to utilise designated iTaukei land in a manner that is in the best interest of iTaukei landowners	Consistent
Standard 7. Labour and Working Conditions	Yes	• Terms and conditions of employment – written labour management procedures. Workers to be advised of conditions of their employment. • Non-discrimination and equal opportunity	Electricity Act 2017 – prohibition of employment of children Electricity Regulations 2019 – Licensing of contractors and installers, licensing and registration of installations	Child employment age

		• Workers organizations – freedom of association and recognition of the right to collective bargaining • No forced or child labour • Occupational health and safety - protect and promote the safety and health of workers	Employment Relations Act 2007 – creates minimum labour standards, prohibits direct and indirect discrimination in employment, provides rights and responsibilities in employment relations including collective bargaining, establishes mediation services, prohibits forced labour, equal pay (gender), unionism is optional, minimum age for employment of children is 15 years (specific hazardous occupations are prohibited for children under the age of 18, including electrical fitting), includes procedures for contracts – both written and oral – worker terms and conditions to be provided. Health and Safety at Work Act 1996 – covers OHS in the workplace Human Rights and Anti-Discrimination Commission Act 2009 – includes aspects associated with employment Industrial Associations Act 1941 – rights to form associations and freedom to associate.	
Standard 8. Pollution Prevention and Resource Efficiency	Yes	• Pollution prevention: avoid release of pollutants, where not avoidable, minimise and/or control intensity and mass flow of their release. • Ambient considerations: adverse impacts on existing ambient conditions requires consideration of finite assimilative capacity of the environment, existing and planned land use, existing ambient conditions, the project's proximity to ecologically sensitive or protected areas, the potential for cumulative impacts with uncertain and irreversible consequences, and strategies for avoiding and minimizing the release of pollutants. • Wastes: seek to avoid generation of waste, where not possible adopt waste management hierarchy (reduce, reuse, recycle)	Environmental Management Act 2005 – regulates discharge of waste and pollutants; provides for inspection, remedial action or closure of polluting facilities; Environmental Management (Waste Disposal and Recycling) Regulations 2007 Litter Act 2008 – prohibits and regulates the deposition of litter in the environment Ozone Depleting Substance Act 1998 Pesticides Act 1971 – regulate registration and sale of pesticides	

		• Hazardous materials: avoid or minimise and control release and exposure to hazardous materials. • Resource efficiency: design and implement project in manner that promotes efficient use and consumption of resources.		

4 ENVIRONMENTAL AND SOCIAL RISK SCREENING

4.1 SOCIAL AND ENVIRONMENTAL SCREENING PROCEDURE (SESP)

This ESMP has been developed as part of UNDP's due diligence process in the project cycle, following the screening of the FREF activities project with the 2021 UNDP SESP template.

As part of the environmental and social management of the project screening is being undertaken at two levels:

- Project level
- Site level

4.1.1 Project level screening

Project level screening has been undertaken (Appendix 2). The project level screening considered the project in its entirety and full suite of potential risks regardless of site ie all sites were considered to have the same risk profile, whereas many sites will have a lower risk profile.

The project level screening allowed the overall project risk to be categorised and all likely risks to be identified and mitigation measures developed (refer Section 6).

Table 3 Summary of main potential social and environmental risks according to the SESP

Risks	Significance	UNDP Safeguard Principles and Standards
Risk 1: Project will provide electricity on the basis of "user pays", there is a risk that some people living in poverty may not have equitable access due to tariffs.	Low	P5
Risk 2: The presence of construction workers could increase the risk for gender-based violence/SEAH.	Moderate	P12 S3.7
Risk 3: There is a risk that grievances could be raised due to the project	Low	P14
Risk 4: Installation of solar arrays at some sites could require clearing of existing vegetation and minor earthworks, thus modifying habitats and uses of the sites.	Moderate	S1.1, 1.3 and 3.1
Risk 5: The sites that will be used for the project could experience natural disasters eg earthquakes, landslips and cyclones.	Low	S2.1 and 2.2
Risk 6: Communities health, safety and security can be disturbed by excessive amounts of construction work and labour movement.	Moderate	S1, 3.2 and 3.7
Risk 7: The project will involve excavations for footings and minor earthworks at sites, which could result in the discovery of unknown cultural heritage items.	Low	S4.2
Risk 8: Community land ownership and tenure could be impacted if there is no clarity about the ownership structure of FREF assets.	Low	S6.1 and 6.2
Risk 9: The project involves construction and electricity, therefore there is the potential for occupational health and safety risks.	Moderate	S3.1 and 7.6
Risk 10: Generation of waste during construction and disposal of battery storage systems could cause environmental hazards.	Low	S8.1 and 8.2

4.1.2 Site level screening

The project will occur at multiple sites across Fiji. Each of these sites will undergo assessment by a technical team to confirm suitability. Part of this assessment will include repeating the screening exercise using the UNDP SESP[3] to confirm that no additional risks (that were not identified in the project-level screening) exist at the site and to provide site specific information.

The completion of the ESMP Site Checklist (Appendix 4) will also be undertaken as part of this work. The ESMP Site Checklist not only confirms that all required environmental and social aspects have been considered for each site, but also assists to draw attention to the required mitigation measures (outlined in the ESMP) relevant to the site eg whether there will be excavation or vegetation clearing.

Personnel undertaking screening should be familiar with the UNDP SES and the application of the SESP – details and guidance can be found on the UNDP website: https://info.undp.org/sites/bpps/SES_Toolkit/Pages/Homepage.aspx.

The following section provides a summary of the screening process.

4.1.3 Screening Process

SES screening for site-level activities shall be carried out by an appropriately qualified member of the project team using the SESP Template. The Template consists of two primary parts:

- Part A – Integrating Programming Principles to Strengthen Social and Environmental Sustainability
- Part B – Identifying and Managing Social and Environmental Risks

In Part A (Question 1.) is intended to help identify and document how key elements of the SES Programming Principles - (1) leave no one behind; (2) human rights; (3) gender equality and women's empowerment; (4) sustainability and resilience; and (5) accountability – have been addressed by the investment in order to enhance social and environmental sustainability.

Part B consists of five steps (Questions 2 to 6) to identify risks and how they will be managed:

- Question 2: What are the potential social and environmental risks? The first step in answering this question is to complete the Social and Environmental Risk Screening Checklist (Attachment 1 of the SESP Template), which provides a series of Yes/No questions related to potential risks under each of the SES Principles and Project-Level Standards. Project activities are screened for their inherent ('pre-mitigation') social and environmental risks regardless of planned mitigation and management measures. All "Yes" answers in the checklist indicate a potential risk.

  Concise descriptions of the potential risks identified in the Risk Checklist are entered under Question 2 of the SESP Template. The description should be as specific to the project (not just a restating of the Checklist wording) and as short as possible. The risk description should indicate the cause (triggering action/event) and the potential impact (environmental, social). Multiple related risks from the Checklist can be summarized together under a single risk description.

- Question 3: What is the level of 'significance' of the potential social and environmental risks identified in Question 2? To do this the screener will estimate both the potential impact (ie consequences if the risk were to occur) and likelihood (ie the chance of the risk occurring) for each identified risk. Ratings for both impact and likelihood are given on a scale of 1 (low) to 5 (high) – refer Table 4**Error! Reference source not found.** and Table 5.

Table 4 Rating the "Impact" of a Risk

Score	Rating	Social and environmental impacts
5	Extreme	Significant adverse impacts on human populations and/or environment. Adverse impacts of large-scale magnitude and/or spatial extent (e.g. large geographic area, large number of people, transboundary impacts, cumulative impacts) and duration (e.g. long-term, permanent and/or irreversible); areas adversely impacted include areas of high value and sensitivity (e.g. valuable ecosystems, critical habitats); adverse impacts to rights, lands, resources and territories of indigenous peoples; involve significant

[3] https://info.undp.org/sites/bpps/SES_Toolkit/SES%20Document%20Library/Uploaded%20October%202016/UNDP%20Social%20and%20Environmental%20Screening%20Procedure_JULY2022_ENGLISH.pdf

		levels of displacement or resettlement; generates significant quantities of greenhouse gas emissions; impacts may give rise to significant social conflict
4	Extensive	Adverse impacts on people and/or environment of considerable magnitude, spatial extent and duration, but more limited than Extreme (e.g. more predictable, mostly temporary, reversible). Impacts of projects that may affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples are to be considered at a minimum potentially Extensive
3	Intermediate	Impacts of medium magnitude, limited in scale (site-specific) and duration (temporary), can be avoided, managed and/or mitigated with relatively uncomplicated accepted measures
2	Minor	Very minor impacts in terms of severity and magnitude (e.g. small affected area, very low number of people affected) and duration (short), may be easily avoided, managed, mitigated
1	Negligible	Negligible or no adverse impacts on communities, individuals, and/or environment

Table 5 Rating the "Likelihood" of a Risk

Score	Rating
5	**Expected**
4	**Very likely**
3	**Moderately likely**
2	**Low likelihood**
1	**Not likely**

The combination of impact and likelihood is then used to determine the overall significance of each identified risk (low, Moderate, Substantial or High) using Table 6 as a reference.

Table 6 Determining the "Significance" of Risk

Impact	5	Moderate	Substantial	Substantial	High	High
	4	Low	Moderate	Substantial	Substantial	High
	3	Low	Moderate	Moderate	Moderate	Substantial
	2	Low	Low	Low	Moderate	Moderate
	1	Low	Low	Low	Low	Low
		1	2	3	4	5
		Likelihood				

- Question 4: What is the overall social and environmental risk categorization of the investment? Investment categorization is determined by the highest level of significance of identified risks across all risk areas (as rated in Question 3). The screening process results in one of the following five categories for the proposed investment:
    - Low Risk: Projects that include activities with minimal or no adverse social or environmental risks and impacts. Further assessment of potential adverse social and environmental risks and impacts is not required. However, the SES Programming Principles and stakeholder engagement requirements still apply to project activities.
    - Moderate Risk: Projects that include activities with potential adverse social and environmental risks and impacts that are limited in scale, are largely reversible and can be identified with a reasonable degree of certainty and readily addressed through application of recognized good international practice, mitigation measures and stakeholder engagement during project implementation.

- Substantial Risk: Projects that include activities with potential adverse social and environmental risks and impacts that are more varied or complex than those of Moderate Risk projects but remain limited in scale and are of lesser magnitude than those of High-Risk projects (e.g. reversible, predictable, smaller footprint, less risk of cumulative impacts). Substantial Risk projects may also include those with a varied range of risks rated as "Moderate" that require more extensive assessment and management measures.
- High Risk: Projects that include activities with potential significant adverse social and environmental risks and impacts that are irreversible, unprecedented and/or which raise significant concerns among potentially affected communities and individuals as expressed during the stakeholder engagement process. High Risk activities may involve significant adverse impacts on physical, biological, socioeconomic, or cultural resources, and may have the potential to aggravate existing situations of fragility or conflict, adversely affect human rights, lead to extensive environmental degradation and/or contribute to cumulative impacts. High Risk projects typically involve a range of issues regarding the SES Programming Principles and Project-level Standards. Note that High Risk investments will be excluded from the project.

- Question 5: Based on the identified risks and significance, what requirements of the SES are triggered? This question asks the screener to a) identify what types of assessment management measures/plans are to be developed and applied to the investment given the identified risks and investment categorization, and b) which SES Programming Principles and Project-Level Standards are triggered for the investment.
- Question 6: Describe the assessment and management measures for each risk rated Moderate, Substantial or High.

4.1.4 Prohibited Actions

The project implementation will ensure that no supported action:

- is detrimental to the conservation status of habitats and species, has measurable adverse impacts to critical habitats, or leads to a reduction in endangered species;
- is significantly harmful to the status or the ecological potential of surface water bodies and groundwater bodies;
- creates significant risks to communities and workers during construction and implementation;
- leads to significant damage, or removal of cultural heritage;
- Requires or involves:
  - Production or trade in any product or activity deemed illegal under host country laws or regulations or international conventions and agreements;
  - Purchase, application or storage of harmful pesticides or hazardous materials;
  - Production or activities involving forced labour / harmful child labour;
  - Production or trade in wood or other forestry products from unmanaged forests;
  - forced evictions;
- leads to any significant increase in the emissions of pollutants as compared with the situation before the activity started.

5 POTENTIAL SOCIAL AND ENVIRONMENTAL IMPACTS

5.1 ENVIRONMENTAL IMPACTS

Potential environmental impacts during life-cycle of a clean energy mini-grid are described in Table 7.

Table 7 Potential Environmental impacts in the life-cycle of a mini-grid

Impact	Relevant mini-grid component
Construction Phase	
Acoustic & air pollution from operating machinery	Excavation works for array foundations and any distribution poles or cable trenches as well as earth works for protection of power generation components
Soil erosion & sedimentation	
Water/ground pollution	Improperly used or disposed paint, chemicals, sealants relied upon during construction process. Improper closure of construction phase leading to unremoved construction materials (spare cables, connectors, etc.).
Solid waste generation	Packaging materials of PV panels, battery banks, combiner boxes, etc.
Oil/fuel spills	Transport of equipment to remote site and operating of construction machinery.
Loss of natural assets	Need for tree cutting to construct the distribution network/power generation assets.
Operation Phase	
Water/ground pollution from spill overs	Improperly transported and stored fuel for genset operation. Acid spillage (applicable for lead-acid battery banks relying on liquid sulphuric acid as electrolyte).
Acoustic pollution	Gensets strongly contribute to acoustic pollution. Power houses (where gensets are stored) should be built at sufficient distance from inhabitants' houses.
Air pollution	Old genset filters prevent proper cleaning of exhaust air. Gensets' air and fuel filters have to be replaced frequently as part of generator servicing. Schemes are determined by genset's manufacturers. Expulsion of toxic gas (thermal runaway) of improperly maintained or physically damaged lithium-ion batteries.
Fire/explosion	Vegetation/trees falling on distribution network cables. Applicable in case of large mini-grid systems with high current and voltage levels (inverters can be source of high magnetic fields). Consequence of improperly stored/handled fuel. Overheating of battery banks

Prevention of air/noise pollution and fires/explosions	Positive environmental impact associated with the reduction in genset use in favour of solar energy from PV arrays (applicable only where a solar mini-grid is deployed as a complement or replacement of an existing fuel generator). Positive impact associated with use of electricity instead of kerosene for household lighting purposes.
Loss of physical assets	Thunderstorms, floods and strong winds can lead to poles falling on community buildings (if not properly constructed) and short circuits.
Closure/Disposal Phase	
Water/ground pollution	Leachate generated on landfills of CdTe thin-film PV solar panels. Battery banks have to be properly disposed of due to their composition/use of chemicals and heavy metals (especially lead-acid and nickel-cadmium batteries) Refrigerants in air-conditioner units installed inside of powerhouses as part of battery coolant systems.
Landfill waste	Increased amounts of PV panel deployment worldwide. Priority for recycling.
Impact on landscape	Concrete foundations of powerhouse or PV panel arrays should be removed after Project life-time. Recycle materials where possible.

5.2 SOCIO-ECONOMIC IMPACTS

Potential social impacts during life-cycle of a clean energy mini-grid are described in Table 8.

Table 8 Potential social impacts during life-cycle of a mini-grid

Impact	Relevant mini-grid component
Construction Phase	
Temporary access restrictions to properties/community buildings	Installation of poles and cables
Positive economic impact	Potential employment of local labour during the construction phase
Operation Phase	
Risk of burns/fire	Fuel spill overs during refilling if proper systems are not used.
Visual impact	Poor siting of array or lack of consideration for potential reflection from the array can lead to unacceptable visual impacts.
Negative health impact	Associated with genset fuel and battery bank acid leakages (for Lead-acid batteries). Nickel-Cadmium & Lead-acid batteries are partially composed of heavy metals, exposure to which can lead to headaches, brain and kidney damage, abdominal discomfort affect

	children's growth, cause sleep problems and in severe cases lead to comas.
Possible social exclusion	In case community interest to connect to the mini-grid is larger than the mini-grid size allows.
Positive health impact	Provision of electricity allows to power medical equipment as well as preserve food for longer periods of time. Electrical bulbs are effective substitutes of kerosene lamps, which can be associated with multiple health issues (lung malfunction, infectious diseases and cancer).
Positive economic and social impact	Savings for households (provided affordable tariffs in relation to present expenditures on e.g. kerosene/diesel). Creation of business opportunities. Access to information (televisions, laptops, internet). Community gatherings are facilitated during night-hours as well. Potential employment of local personnel during the operation phase.
Increased security	Community/streets lighting during the night enforces security.
Women empowerment	Access to electricity is often associated with enabling women to become entrepreneurs.
Natural disaster (earthquake, tsunami, cyclone)	Damaged electrical connections could pose an electrocution risk. Damaged components create waste Increased dependance upon electricity means that inoperable system results increased social impact until repaired.
Closure/Disposal Phase	
Negative health impact	Improper disposal of batteries after their life-time can potentially lead to health risks as described above.

5.3 Assessment and Management Measures

5.3.1 Overarching Plans and Requirements

There are some safeguard measures that are to be applied to the whole project. These include:

- UNDP SES
- National and local laws
- Gender Action Plan (GAP)
- Stakeholder Engagement Plan (SEP)
- Grievance Redress Mechanism (GRM).
- ESMP (this document)

To support the full application of UNDP SES and addressing the associated identified risks, the relevant SES tasks will involve the following steps (Table 9) taken during project implementation by the PMU and the project partners.

Table 9 Actions to support application of UNDP SES

Actions	Timeframe
Project team awareness and training on compliance with UNDP SES and gender guidelines, the monitoring process, the grievance mechanism, and related issues	During the Project initiation phase
Re-assessment of impacts and risks for individual sites using SESP to confirm all risks previously identified	During site profiling and design
Updated reporting on compliance with UNDP SES guidelines and update of the monitoring system	Annually (in the PIR/APR) and as required per any site's SES management plan
Validation of the monitoring and evaluation approach, and reporting with clear and verifiable indicators and means of verification	In the project inception report and at project completion
Periodic progress reporting as prescribed in the project M&E plan	Concurrent with scheduled M&E activities
Project M&E activities as prescribed in the project M&E plan	Throughout the project implementation
Project Board assessment of compliance	Concurrent with Project Board meetings and additionally as required
Awareness and establishment of grievance mechanism (in addition to the initial training module at project inception--see first item).	At project inception

6 MITIGATION MEASURES

This section describes the mitigation measures for all potential risks/impacts identified by the project-level assessment. As noted, not all impacts will occur at all sites. Table 10 is to be used as a reference for selecting the mitigation measures that will be required at each site when using the ESMP Site Checklist (Appendix 4).

Environmental and social strategies have been devised to mitigate potential impacts during delivery of the project in the following areas:

- Biophysical Impacts
    - Ecology (FF)
    - Groundwater (GW)
    - Surface Water (SW)
    - Air Quality (AQ)
    - Noise and Vibration (NV)
    - Erosion, Drainage and Sediment Control (EC)
    - Waste Management (WM)
- Social-economic Impacts
    - Social Management (SM)
    - Archaeology and Cultural Heritage (CH)
    - Emergency Response (ER).

Table 10 Potential Impacts and Corresponding Mitigation Measures

Environmental / Social Attribute	Impact Description	Mitigation Measures	Action timing	Implementation Responsibility	Monitoring
Biophysical Impacts					
Ecology (FF) Performance Criteria ✓ no clearance of vegetation outside of the designated clearing boundaries ✓ no death to native fauna as a result of clearing activities ✓ no deleterious impacts on aquatic environments and terrestrial habitats ✓ no introduction of new weed species as a result of construction activities ✓ no increase in existing weed proliferation within or outside of any project footprint as a result of construction activities.	FF1. Habitat loss and disturbance of fauna due to clearing of vegetation	FF1.1: Limit vegetation clearing and minimise habitat disturbance through adequate protection and management of retained vegetation.	During construction	Contractor	Maintain records
		FF1.2: Minimise noise levels and lighting intrusion throughout construction and operation in the vicinity of any sensitive locations.	During construction	Contractor	Daily and maintain records
		FF1.3: Ensure that all site personnel are made aware of sensitive fauna/habitat areas and the requirements for the protection of these areas.	During construction	Contractor	Daily and maintain records
		FF1.4: Minimise disturbance to on-site fauna and recover and rescue any injured or orphaned fauna during construction and operation.	During construction	Contractor	Maintain records, Report
	FF2. Introduced flora and weed species	FF2.1: Implement an ESCP to reduce the spread of weeds through erosion and sediment entering any waterways and therefore spreading.	Pre and during construction	Contractor	Maintain records
		FF2.2: Revegetate disturbed areas using native and locally endemic species that have high habitat value.	During construction	Contractor	As required and maintain records
		FF2.3: Minimise disturbance to mature remnant vegetation, particularly canopy trees.	During construction	Contractor	Maintain records
		FF2.4: Seed is to be weed free.	Operation	Contractor	Maintain records
		FF2.5: Environmental weeds and noxious weeds within the project footprints shall be controlled.	During and post construction	Contractor	Weekly and maintain records
Groundwater (GW)	GW 1: Increase of gross pollutants, hydrocarbons,	GW1.1: Designated areas for storage of fuels, oils, chemicals or other hazardous liquids should have	Construction and operation phase	DoE/Contractor	Keep records

Performance Criteria ✓ No significant decrease in the quality and quantity of groundwater as a result of construction and operational activities in proximity to the projects; and ✓ Implementation of site-specific Erosion, Drainage and Sediment Control Plans (EDSCP) and other measures to protect groundwater.	metals, and other chemical pollutants into the groundwater.	compacted impermeable bases and be surrounded by a bund to contain any spillage.			
		GW1.2: Undertake refuelling at designated places away from water systems.	Construction, operation and decommissioning	All personnel	Report any spills
		GW1.3: Check all vehicles, equipment and material storage areas daily for possible fuel, oil and chemical leaks.	All phases	All personnel	Weekly
		GW1.4: Minimise the use of herbicides, pesticides and other chemicals and use only biodegradable herbicides that have minimal impact on water quality and fauna. Use only as per directions.	Construction and operation	All personnel	Maintain records
Surface Water (SW) Performance Criteria ✓ No significant decrease in water quality because of construction and operational activities ✓ No significant decrease in water quality because of dredging activities ✓ water quality shall conform to any approval conditions	SW1: Elevated suspended solids and other contaminants in surface water systems.	SW1.1: Develop and implement a site-specific Erosion, Drainage and Sediment Control Plan (EDSCP) to address drainage control, sediment and erosion controls and stockpiling of materials including soil during construction of all components of the projects.	Pre-Earthworks	Contractor	Initial set up and then as required with reporting to DoE and PMU
		SW1.2: EDSCP measures to be inspected regularly to ensure all devices are functioning effectively.	Construction	Contractor	Weekly and maintain records
		SW1.3: Designated areas for storage of fuels, oils, chemicals, or other hazardous liquids should have compacted impermeable bases and be surrounded by a bund to contain any spillage. Refuelling to be undertaken in areas away from water systems.	Construction and operation phase	All personnel	Weekly with reporting to DoE and PMU
		SW1.4: Avoid undertaking bulk earthworks during wet season	Construction	Contractor	Maintain records
		SW1.5: Construction materials will not be stockpiled in proximity to aquatic environment that may allow for release into the environment. Construction equipment will be	Construction and operation phase	Contractor	Maintain daily records

stipulated by DoE and/or other government departments, or in the absence of such conditions follow a 'no worsening' methodology ✓ effective implementation of site-specific EDSCPs.		removed from in proximity to the aquatic environment at the end of each working day or if heavy rainfall is predicted			
		SW1.6: Appropriate spill response plan in place.	Pre-construction / Construction	Contractor	Maintain record
		SW.1.7: Laydown areas established on pre-approved sites	Pre-construction	Contractor / PMU	Maintain record
	SW2: Operational water use - water will be used to wash PV Panels	SW2.1: Ensure water use does not adversely impact village supply			
		SW2.2: Only biodegradable cleaning chemicals to be used			
Air Quality (AQ) <u>Performance Criteria</u> ✓ Release of dust/particle matter must not cause an environmental nuisance ✓ air quality impacts associated with construction and operation activities minimized ✓ corrective action to respond to complaints and/or grievances is to occur within 48 hours.	AQ.1 Increase in dust levels at sensitive receptors, particularly as a result of construction activities.	AQ1.1: Implement effective dust management measures in all areas during construction.	Construction	Contractor	Maintain records
		AQ1.2: Restrict speeds on roads and access tracks.	Construction	Contractor	Ongoing
		AQ1.3: Manage dust/particulate matter generating activities to ensure that emissions do not cause an environmental nuisance at any sensitive locations.	Construction	Contractor	Daily
		AQ1.4: Construction activities should minimise risks associated with climatic events (check forecasts).	Construction	Contractor	Maintain records
		AQ1.5: Implement scheduling/staging of proposed works to ensure major vegetation disturbance and earthworks are minimised.	Construction	Contractor	Maintain records
		AQ1.6: Locate material stockpile areas as far as practicable from sensitive receptors. Cover if appropriate.	Construction	Contractor	Maintain records
		AQ1.7: Source sufficient water of a suitable quality for dust suppression activities complying with any water restrictions.	Construction	Contractor	Maintain records
		AQ1.8: Schedule revegetation activities to ensure optimum survival of vegetation species.	Construction	Contractor	Maintain records
		AQ1.9: Rubbish receptacles should be covered and located as far as practicable from sensitive locations.	Construction	Contractor	Maintain records
		AQ1.10: Workers should also have available dust protection masks	Construction	Contractor	Maintain records

	AQ2. Increase in vehicle / machinery emissions	AQ2.1: Ensure vehicles/machines are switched off when not in use.	Construction	Contractor	Maintain records
		AQ2.2: Ensure only vehicles required to undertake works are operated onsite.	Construction	Contractor	Maintain records
		AQ2.3: Ensure all construction vehicles, plant and machinery are maintained and operated in accordance with design standards and specifications.	Construction	Contractor	Maintain records
		AQ2.4: Develop and implement an induction program for all site personnel, which includes as a minimum an outline of the minimum requirements for environmental management relating to the site.	Construction	Contractor	Maintain records
		AQ2.5: Locate construction vehicle/plant/equipment storage areas as far as practicable from sensitive locations	Construction	Contractor	Maintain records
		AQ2.6: Direct exhaust emissions of mobile plant away from the ground.	Construction	Contractor	Maintain records
	AQ3. Burning of waste could reduce air quality	AQ3.1: Waste is not to be burnt on site	All phases	All personnel	Maintain records
Noise and Vibration (NV) <u>Performance Criteria</u> ✓ Noise from construction and operational activities must not cause an environmental nuisance at any noise sensitive place ✓ Always undertake measures to assist in minimising the noise	NV1: Increased noise levels	NV1.1: Select plant and equipment and specific design work practices to ensure that noise emissions are minimised during construction and operation including all pumping equipment.	All phases	Contractor	Maintain records
		NV1.2: Specific noise reduction devices such as silencers and mufflers shall be installed as appropriate to site plant and equipment.	Pre and during construction	Contractor	Maintain records
		NV1.3: Minimise the need for and limit the emissions as far as practicable if noise generating construction works are to be carried out outside of the hours: 7am-5.30pm.	Construction phase	All personnel	Daily and maintain records
		NV1.4: Consultation with nearby residents in advance of construction activities particularly if noise generating construction activities are to be carried out outside of 'daytime' hours: 7am-5.30pm.	Construction phase	All personnel	Daily and maintain records
		NV1.5: Provide temporary construction noise barriers in the form of solid hoardings where there may be an impact on specific residents.	Construction phase	Contractor	Daily and maintain records

associated with construction activities ✓ No damage to off-site property caused by vibration from construction and operation activities ✓ Corrective action to respond to complaints and/or grievances is to occur within 48 hours.		NV1.6: All incidents, complaints and non-compliances related to noise shall be reported in accordance with the site incident reporting procedures and summarised in the register.	Construction phase	Contractor/PMU	Maintain records
		NV1.7: The contractor should conduct employee and operator training to improve awareness of the need to minimise excessive noise in work practices through implementation of measures.	Pre and during construction	Contractor	Maintain records
	NV2: Nuisance or damaging vibration levels	NV2.1: Undertake dilapidation surveys of buildings near site or along route heavy transport may use	Pre and during construction	Contractor	Maintain records
		NV2.2: Consultation with nearby residents in advance of construction activities if vibration expected to be significant			
		NV2.3: Use low vibration equipment or construction techniques in preference to high impact or vibration options	Construction	Contractor	
Erosion, Drainage and Sediment Control (EC) <u>Performance Criteria</u> ✓ No build-up of sediment in the aquatic environments and/or surface and/or groundwater as a result of construction and operation activities ✓ No degradation of water quality on or off site of all projects ✓ All water exiting the project site and/or into groundwater systems is to have passed through best	EC1: Loss of soil material and sedimentation to the surface and/or groundwater systems from site due to earthwork activities	EC1.1: Ensure site geotechnical and soil conditions are understood prior to design and construction	Design and construction	PMU / Contractor	Maintain records
		EC1.2: Develop and implement an EDSCP for any surface works, embankments and excavation work, water crossings and stormwater pathways.	Construction phase	Contractor	Maintain records
		EC1.3: Ensure that erosion and sediment control devices are installed, inspected, and maintained as required.	Construction phase	Contractor	Maintain records
		EC1.4: Schedule / work staging to always minimise cleared areas and exposed soils.	Pre and during construction	Contractor	Maintain records
		EC1.5: Incorporate the design and location of temporary and permanent EDSC measures for all exposed areas and drainage lines. These shall be implemented prior to pre-construction activities and shall remain onsite during work.	Pre and during construction	Contractor	Maintain records
		EC1.6: Schedule/stage proposed works to ensure that major vegetation disturbance and earthworks are carried out during periods of lower rainfall and wind speeds.	Pre and during construction	Contractor	Maintain records
		EC1.7: Ensure any stockpile sites are appropriately bunded or fenced to prevent sediment runoff.	Pre and during construction	Contractor	Maintain records
		EC1.8: Locate stockpile areas away from drainage pathways, waterways, and sensitive locations. Consultation with Kaupule undertaken in finalizing location of stockpile and laydown sites.	Pre and during construction	Contractor	Maintain records

practice erosion, drainage and sediment controls ✓ Effective implementation of site-specific EDSCP		EC1.9: Design stormwater management measures to reduce flow velocities and avoid concentrating runoff.	Pre and during construction	Contractor	Maintain records
		EC1.10: Include check dams in drainage lines where necessary to reduce flow velocities and provide some filtration of sediment. Regularly inspect and maintain check dams.	Pre and during construction	Contractor	Maintain records
		EC1.11: Mulching shall be used as a form of erosion and sediment control and where used on any slopes (dependent on-site selection), include extra sediment fencing during high rainfall.	During construction	All personnel	Maintain records
		EC1.12: Bunding shall be used either within watercourses or around sensitive/dangerous goods as necessary.	During construction	All personnel	Maintain records
		EC1.13: Vegetated buffer strips around sites will be retained.	During construction	Contractor	Maintain records
		EC1.14: Silt fences or similar structures to be installed to protect from increased sediment loads.	During construction	Contractors	Maintain records
		EC1.15: Excess sediment in all erosion and sediment control structures (e.g. sediment basins, check dams) shall be removed when necessary to allow for adequate holding capacity.	During construction	Contractors	Maintain records
	EC2: Soil Contamination	EC2.1: If contamination is uncovered or suspected, undertake a Stage 1 preliminary site contamination investigation. The contractor should cease work if previously unidentified contamination is encountered and activate management procedures and obtain advice/permits/approval (as required).	Construction phase	All personnel	Daily and maintain records
		EC2.2: Adherence to best practice for the removal and disposal of contaminated soil/ material from site (if required), including contaminated soil within the project footprints.	Construction phase	Contractor	Daily and maintain records
		EC2.3: Drainage control measures to ensure runoff does not contact contaminated areas (including contaminated material within the project footprints) and is directed/diverted to stable areas for release.	Construction phase	Contractor	Daily and maintain records
		EC2.4: Avoid importing fill that may result in site contamination and lacks accompanying	Construction phase	Contractor	Daily and maintain records

		certification/documentation. Where fill is not available through on-site cut, it must be tested in accordance with geotechnical specifications.			
		EC2.5: Vehicle washdown and concrete protection areas will be at the laydown site and will be bunded with all wastewater collected and treated prior to discharge.	Construction	Contractor	Maintain records
		EC2.6: On-site storage of fuel and chemicals shall be kept to a minimum	Construction and Operation	Contractor and Operation	
Waste Management (WM) Performance Criteria ✓ Waste generation is minimised through the implementation of the waste hierarchy (avoidance, reduce, reuse, recycle) ✓ No litter will be observed within the project area or surrounds as a result of activities by site personnel ✓ No complaints received regarding waste generation and management ✓ Any waste from on-site portable sanitary facilities will disposed of by a waste licensed contractor	WM1: Production of wastes and excessive use of resources	WM1.1: Preference shall be given to materials that can be used to construct the project that would reduce the direct and indirect waste generated.	Pre and during construction	Contractor	Maintain records
		WM1.2: Daily waste practices shall be carried out unless these are delegated to the activities of external waste management bodies.	During construction	Contractor	Daily and maintain records
		WM1.3: The use of construction materials shall be optimised and where possible a recycling policy adopted.	During construction	Contractor	Weekly and maintain records
		WM1.4: Separate waste streams shall always be maintained i.e. general domestic waste, construction, and contaminated waste. Specific areas on site shall be designated for the temporary management of the various waste streams.	During construction	Contractor	Weekly and maintain records
		WM1.5: Minimise visual impact due to construction works and machinery use by ensuring proper housekeeping and management so that the construction site is left tidy at the end of each working day.	During construction	Contractor	Daily and maintain records
		WM1.6: Recyclable waste (including oil and some construction waste) shall be collected separately and disposed of correctly.	Construction	Contractor	Weekly and maintain records
		WM1.7: Waste sites shall be sufficiently covered to ensure that wildlife does not have access.	Construction	Contractor	Daily
		WM1.8: Disposal of waste shall be carried out in accordance with the Government of Fiji requirements.	Construction and Operation	Contractor / Operator	Maintain records
		WM1.9: Fuel and lubricant leakages from vehicles and plant shall be immediately rectified.	Construction	Contractor	Daily and maintain records
		WM1.10: Major maintenance and repairs shall be carried out off-site whenever practicable.	Construction	Contractor	Weekly and maintain records

✓ Waste oils will be collected and disposed or recycled off-site.		WM1.11: Where possible, fuel and chemical storage and handling shall be undertaken at central fuel and chemical storage facilities, such as petrol stations.	Construction	Contractor	Daily and maintain records
		WM1.12: On-site storage of fuel and chemicals shall be kept to a minimum.	Construction and Operation	Contractor / Operator	Maintain records and report any incidents
		WM1.13: All Project staff will be trained on these requirements and attendance will be recorded.	All phases	All personnel	Maintain records
	WM2: Damaged panels or batteries may result in contamination of local environment	WM2.1: Convey damaged batteries to a credible recycling company	Operation	Operator	Maintain records
		WM2.2: Convey damaged PV panels/batteries to a credible local recycling company	Operation	Operator	Maintain records
Socio-economic impacts					
Social Management (SM) <u>Performance Criteria</u> ✓ The community has been consulted and project elements have been designed with their informed consultation and participation throughout the project	SM1: Community Engagement	SM1.1: Implement Stakeholder Engagement Plan and operationalise GRM	All phases	PMU	Maintain records
		SM1.2: Equitable representation - ensure the representation is broad-based and in particular includes women and vulnerable people.	All phases	PMU	Maintain records
	SM2: Land ownership and Resource Use	SM 2.1: Conduct a stakeholder mapping and analysis of the landowners and non-landowning households in the adjacent community and other groups that the project may affect.	Design	PMU	Maintain records
		SM 2.2: Land targeted is traditional / community land. No works to proceed until land agreement is in place. Stakeholder engagement to be inclusive and utilise FPIC process in obtaining land use agreement.	Design	PMU	Maintain records
		SM 2.3: Ensure compliance with the SEP, in particular the need to address the requirements of UNDP Standard 6	All phases (FPIC pre-construction)	PMU	Maintain records (as per SEP)

✓ All stakeholders are appropriately represented ✓ Avoid adverse impacts to local community during construction and operations and where not possible, minimise, restore, or compensate for these impacts ✓ Cultural heritage is not adversely impacted ✓ Community health and safety is protected and overall well-being benefits derived from the project ✓ Complaint and grievance mechanisms are put in place and proactively managed ✓ Long-term social benefits are achieved.		with respect to IPs and the potential need for FPIC associated with the use of land			
		SM 2.4: Ensure compliance with the Grievance Redress Mechanism process.	All phases	PMU	Maintain records (as per GRM)
	SM3: Public nuisance caused by construction/operation activities (eg noise, dust etc)	SM 3.1: Carry out community consultation prior to undertaking activities.	All phases	PMU / Contractor	Maintain records
		SM 3.2: Implement appropriate management measures eg noise reduction, dust reduction etc.	Construction	Contractor	Daily and maintain records
		SM 3.3: Ensure compliance with the Grievance Redress Mechanism process.	All phases	PMU	Maintain records
		SM3.4: Minimise impacts on traffic/access The equipment will need to be transported to the communities. Road infrastructure is often poor and some communities can only be reached by boat. • Develop equipment delivery plan • Develop Construction Traffic Management Plan	Pre-construction and construction		Maintain records
		SM3.5: Trenches / earthworks affect surface trafficability. All excavations should be filled and levelled such that the finished surface is flush with the surrounds and does not present a hazard to vehicles or pedestrians.	Construction	Contractor	Maintain records (eg photos)
		SM3.6: Site selection and design to consider visual impacts and seek to minimise	Design	PMU / Designer	Site Feasibility Report
	SM4: Gender, Social Inclusion & GBV – women and vulnerable groups are not well represented or subjected to violence	SM4.1: Implement Gender Action Plan.	All phases	All personnel	Maintain records
		SM4.2: Implement SEP and operationalise GRM SEAH processes.	All phases	PMU	Maintain records
		SM4.3: Code of conduct will be signed by all workers (including project management) to demonstrate commitment to prevention of gender-based Violence and the prevention of the spread of sexually transmitted diseases such as HIV/AIDs.	Construction and operation	Contractor / operator	Maintain records
	SM5: Workers and Project Accommodation	SM5.1: Contractor to develop a worker accommodation plan.	All phases	All personnel	Maintain records

	– working conditions are poor, influx of workers creates housing and food pressures to communities	SM5.2: Minimise number of workers from off-island. • It is recommended for the contractor to employ as much labour from communities and districts as possible • Establish communication with local community to ensure adequate nomination of work opportunities. • Minimise strain on local housing by employing local / keeping external workforce small.	All phases	PMU / Constructor / Operator	Maintain records
		SM5.3: All imported project staff will abide by Fiji immigration policy and provide all required documentation, including health checks.	All phases	All personnel	Maintain records
		SM5.4: Overseas workers will undergo cultural familiarisation induction upon arrival and sign a code of conduct applicable for the duration of their contract.	Construction	Contractor	Maintain records
		SM5.5: Contractor will supply all required food for workers to the community to enable community members to be appointed to cook and prepare food for a fee.	Construction	Contractor	Maintain records
		SM5.6: Contractor will provide first aid facilities and trained first aiders.	Construction	Contractor	Maintain records
		SM5.7: Transparent disclosure of the requirements for adequate work facilities and decent work, to allow employees to be apprised of their worker rights and benefits.	Construction	Contractor	Maintain records
	SM6: Occupational Health & Safety Risks There are safety hazards associated with the use of machinery and the installation of electrical equipment.	SM6.1: OHS plans to be developed and approved, detailing appropriate operating procedures and safety provisions based on the type of machinery and materials being used, and contractors will be required to operate in compliance with these plans.	Construction	Contractor / PMU	Maintain records
		SM6.2: Ensure adherence to adequate health and safety measures during operation and maintenance of the plant including placing safety warning signs at relevant places, providing operation staff with adequate certified safety training and suitable PPE	Construction	Contractor	Maintain records

		SM6.3: In case of accidents, the accident should be documented, and more safety precautions should be taken to prevent future accidents	Construction / PMU	Contractor	Maintain records
		SM6.4: Adequate signage, fencing, guardrails, and/or warning tape to be installed so that members of the public, particularly children, cannot wander into restricted Project areas. Safety warning signs will be strategically placed near construction works to inform the public of prohibited activities. These signs will include both printed words and international symbols and will meet the universal design environmental access requirements/standards for persons with disabilities.	Construction	Contractor	Maintain records
		SM6.5: Notices will be published in the media to alert the public of the proposed construction works at least two weeks prior to the start of activities.	Construction	Contractor	Maintain records
		SM6.6: Potentially hazardous areas within and adjacent to the site will be left in a safe condition (e.g., securing materials and equipment, fencing off or preventing entry into excavations or trenches).	Construction	Contractor	Maintain records
		SM6.7: Unauthorized persons who enter the site will be escorted off the site as soon as they are discovered.	Construction	Contractor	Maintain records
		SM6.8: Regular OHS training	Construction	Contractor	Maintain records
		SM6.9: Only trained and/or certified persons to use specialized equipment, handle dangerous chemicals, and/or work with live electricity.	Construction	Contractor	Maintain records
		SM6.10: Ensure appropriate supervision to prevent workers from causing harm to themselves or others on the site.	Construction	Contractor	Maintain records
	SM7: Facility maintenance - the facilities will be visited to ensure ongoing performance and functionality.	SM7.1 Notify the communities of maintenance visits and any potential disruptions.	Operation	Operator	Maintain records

Cultural Heritage (CH) Performance Criteria ✓ There will be no adverse impact on any important Archaeological and/or Cultural Heritage sites ✓ Chance finds are managed appropriately	CH1: Damage or disturbance to significant important Archaeological and/or Cultural Heritage during the earth disturbances and land clearing activities	CH1.1: Location of all known cultural heritage items to be identified prior to excavation. Delineate in field if proximate to site to make location clear to construction crew.	Pre and during construction	PMU / Contractor	Maintain records
		CH1.2: Implement Stakeholder Engagement Plan – public will usually have good knowledge of local heritage.	All phases	All personnel	Maintain records
		CH1.3: Should any Archaeological and/or Cultural Heritage artifacts be identified (Chance Finds) implement the following Chance Find Procedures: • Stop the construction activities around the chance find. • Delineate the discovered site or area. • Secure the site to prevent any damage or loss of removable objects. • Notify the supervisory Engineer who in turn will notify the responsible local authorities. • Responsible local authorities will oversee protecting and preserving the site before deciding on subsequent appropriate procedures. Construction work could resume only after permission is given from the responsible local authorities and the HPO concerning safeguard of the heritage. Refer to Chance Find Procedures in **Annex 4.**	Pre and during construction	Contractor	Maintain records and immediately notify authorities of any find
	CH2: Construction activities could interrupt community events or celebrations	CH2.1: Implement Stakeholder Engagement Plan	All phases	All personnel	Maintain records
		CH2.1: The contractor should identify key dates within the communities and plan with the community representative the best approach during period.	Pre-construction and construction	Contractor	Maintain records
Emergency Response Management (EM) Performance Criteria	EM1: Fire and Emergency management and prevention strategies implemented	EM1.1: Hazardous / flammable products will be stored according to industrial requirements and standards and safely secured so that access is limited to authorized personnel	Pre and during construction	Contractor	Daily and maintain records
		EM1.2: Fire extinguishers are to be available on site.	During construction	Contractor	maintain records
		EM1.3: No open fires are permitted within the project area.	During construction	All personnel	Daily and maintain records

✓ No incident of fire outbreak ✓ No major chemical or fuel spills ✓ No preventable industrial or work-related accidents		EM1.4: Communication equipment and emergency protocols to be established prior to commencement of construction activities.	Pre-construction	Contractor	Maintain records
		EM1.5: Train all staff in emergency preparedness and response (cover health and safety at the work site).	During construction	Contractor	Maintain records
		EM1.6: Check and replenish First Aid Kits.	Construction	Contractor	Monthly and maintain records
		EM1.7: Use of Personal Protection Equipment.	Construction	All personnel	Daily and maintain records
✓ Provide an immediate and effective response to incidents that represent a risk to public health, safety or the environment ✓ Minimise environmental harm due to unforeseen incidents.	EM2: Spill Response – there is the potential for chemical and/or fuel spills.	EM2.1: Spill response plan will be developed to ensure that all fuels and lubricants used during the construction phase in machinery, equipment, generators and on marine vessels are contained, collected, treated and disposed of.	Construction	Contractor	Maintain records
		EM2.2: Identify areas within the project site and nearby vicinity that are sensitive to spills and releases of hazardous materials and locations of any water intakes.	Pre-construction	DoE	Maintain records
		EM2.3: Include regular training schedules and simulated spill incident and response exercise for response personnel in spill alert and reporting procedures, the deployment of spill control equipment, and the emergency care/treatment of people or wildlife impacted by the spill.	Construction	Contractor	Maintain records
	EM3: Natural Disasters - Potential for natural disasters to impact infrastruture	EM3.1: Design is to consider the range of potential natural disasters that could impact area	Design	PMU	Design Report
		EM3.2: Operator to have an Emergency/Disaster Response Plan	Operation	Operator	Review annually
		EM3.3: Local community and local authorities to be made aware of the required actions (if any) associated with mini-grid in the event of a natural disaster.	Operation	Operator	Maintain records

7 STAKEHOLDER ENGAGEMENT AND INFORMATION DISCLOSURE

7.1 STAKEHOLDER CONSULTATION /ENGAGEMENT

There has been extensive stakeholder consultation during the project design. Consultation has included the following groups:

- FREF Board of Trustees
- Department of Energy
- Climate Change Division of the Office of the Prime Minister
- Donors (UK FCDO, Australian DFAT, JICA, ADB, NZ MFAT)
- Fiji Competition and Consumer Commission
- PFAN
- DESCOs
- CBOs/NGOs
- Local government and traditional leaders
- Island communities and beneficiaries (refer below)

Potentially affected stakeholders will be engaged during the implementation of this ESMP. The project has a Stakeholder Engagement Plan (SEP) and a Gender Action Plan (GAP). These plans will be followed to ensure that stakeholders are engaged in project implementation and particularly. The SEP and GAP will be updated during project implementation as needed.

As part of the stakeholder engagement process, UNDP's SES require that project stakeholders have access to relevant information. Specifically, the SES (SES, Policy Delivery Process, para. 21) stipulates that, among other disclosures specified by UNDP's policies and procedures, UNDP will ensure that the following information be made available:

- Stakeholder engagement plans and summary reports of stakeholder consultations;
- Social and environmental screening reports with project documentation;
- Draft social and environmental assessments, including any draft management plans;
- Final social and environmental assessments and associated management plans; and
- Any required social and environmental monitoring reports.

This ESMP, along with the SEP and the GAP, will be disclosed via the UNDP CO website in accordance with UNDP SES policy (refer Section 7.3 below). Additionally, a summary will be made available in the relevant local languages, and the content discussed in local languages with the communities. The Project Management Unit will be responsible for ensuring that the information is channeled all the way to the project stakeholders to allow them to understand, comment on, and finally approve the SES documents.

7.2 MONITORING AND REPORTING OF ENGAGEMENT ACTIVITIES

The PMU will monitor the impacts of stakeholder engagement activities. Stakeholder engagement will form a regular agenda item at PMU meetings. Issues and risks identified will be recorded in the project Risk Register for ongoing monitoring and/or actioning as appropriate.

A summary of all stakeholder engagement activities will be collated and made available to the public e.g., in Project Implementation Report. The summary will contain the following information as a minimum:

- Stakeholder engagement activities implemented
- Dates and venues of engagement activities

- Information shared with stakeholders
- Outputs including issues addressed.

Outcomes of sharing sessions, consultations or responses to issues raised will be reported back to communities as per the SEP e.g., via the project website, newsletters, radio program, visits, meetings, etc.

The Stakeholder Engagement Plans will be monitored, reviewed at least annually and updated as required.

7.3 DISCLOSURE

The UNDP SES requires that a public record of stakeholder engagement throughout the project cycle be maintained and disclosed. In cases where it may be necessary to safeguard the identities of stakeholders due to potential harm, statistical information should be recorded and disclosed (SES, Part C, para. 28).

As part of the stakeholder engagement process, UNDP's SES require that project stakeholders have access to relevant information. Specifically, the SES (SES, Part C, para. 28) stipulates that, among other disclosures specified by UNDP's policies and procedures, UNDP will ensure that the following information be made available:

- Information on a project's purpose, nature and scale, duration, and potential risks and impacts
- Stakeholder engagement plans and summary reports of stakeholder consultations
- Social and environmental screening reports with project documentation
- Draft social and environmental assessments, including any draft management plans
- Final social and environmental assessments and associated management plans
- Any required social and environmental monitoring reports.

For Moderate risk projects, like FREF, drafts of any prepared assessments and related management plans (eg SESP, ESIAs, ESMF/ESMPs, SEP) need to be disclosed and consulted on at least 30 days prior to project approval or initiation of relevant activities. When no separate assessment/management plan is needed, a summary of the analysis contained in the SESP together with the proposed management measures needs to be similarly shared with project-affected stakeholders. In addition, final assessments and management plans must also be disclosed.

To ensure the widest dissemination and disclosure of project information, including any details related to applicable environmental and social safeguards, local and accessible disclosure tools including audio-visual materials such as flyers, brochures, videos, and community radio broadcasts will be utilized in addition to other tools. Furthermore, particular attention will be paid to women, indigenous peoples, marginalized minority groups, illiterate or technologically illiterate people, and people with hearing or visual disabilities, people with limited or no access to internet and other groups with special needs. The dissemination of information among these groups will be carried out with the project counterparts and local actors such as municipalities, producers´ associations, indigenous federations, organizations representing marginalized minority groups, women's organizations, government, and other regional actors.

8 GRIEVANCE MECHANISMS

8.1 INTRODUCTION

During implementation, and particularly construction phases of any project, a person or group of people can be adversely affected, directly or indirectly due to the project activities. The grievances that may arise can be related to social issues such as eligibility criteria and entitlements, disruption of services, temporary or permanent loss of livelihoods and other social and cultural issues. Grievances may also be related to environmental issues such as excessive dust generation, damages to infrastructure due to construction related vibrations or transportation of raw material, noise, traffic congestions, decrease in quality or quantity of private/ public surface/ ground water resources during irrigation rehabilitation, damage to home gardens and agricultural lands, etc.

8.2 GRIEVANCE REDRESS MECHANISM

The SEP contains a Grievance Redress Mechanism (GRM) as an appendix. The GRM is for people seeking satisfactory resolution of their complaints on the environmental and social performance of the Project. The GRM places special attention on ensuring that grievances related to gender issues, such as harassment, will be catered for, and that the grievance process will be designed in such a way that it facilitates access for women.

The Grievance Redress Mechanism set out in the SEP has been designed to:

- be a legitimate process that allows for trust to be built between stakeholder groups and assures stakeholders that their concerns will be assessed in a fair and transparent manner;
- allow simple and streamlined access to the Complaints Register and Grievance Redress Mechanism for all stakeholders and provide adequate assistance for those that may have faced barriers in the past to be able to raise their concerns;
- provide clear and known procedures for each stage of the Grievance Redress Mechanism process, and provides clarity on the types of outcomes available to individuals and groups;
- ensure equitable treatment to all concerned and aggrieved individuals and groups through a consistent, formal approach that, is fair, informed and respectful to a concern, complaint and/or grievance;
- to provide a transparent approach, by keeping any aggrieved individual/group informed of the progress of their complaint and/or grievance, the information that was used when assessing their complaint and/or grievance and information about the mechanisms that will be used to address it; and
- enable continuous learning and improvements to the Grievance Redress Mechanism. Through continued assessment, the learnings may reduce potential complaints and grievances.

The project GRM is detailed in Annex 2 of the project Stakeholder Management Plan. A summary is provided below.

A two-tier Grievance Redress Mechanism structure has been developed to address all complaints and/or grievances in the project. The first trier redress mechanism involves the receipt of a complaint and/or grievance at the village level.

Once received, each grievance received will be assessed for eligibility based on UNDP SES Stakeholder Engagement Guidance. This includes an assessment of whether the issue needs further clarification from the complainant or should be referred to other redress mechanisms or offices. Four of the broad criteria used to assess eligibility are:

- Information about negative economic, social or environmental impact by the project on the complainant or has the potential to cause such an impact.
- Specific information about the impact or probable impact is provided and how the project has or may cause it.
- Indication that the complainant is or represents those impacted or those who are at risk of being impacted by the project on their request.

Information for the grievance redress mechanism staff to make a determination of the first three questions

Complaints that cannot be readily resolved by the project team will be escalated to a first-level Grievance Redress Committee (Island/Village level). The Grievances Redress Committee would be formed to oversee all the grievances EXCEPT for grievances related to:

- SEAH
- Compensation for acquired land
- Issues relating to engineering aspects
- Cases pending in court

The resolution at the first tier will normally be completed within 15-20 working days and the complaint and/or grievance will be notified of the proposed response through a disclosure form.

Should the grievance be not resolved within this period to the satisfaction of the complainant, the grievance will be referred to the next (second) level of Grievance Redress Mechanism, which involves a Second-level Grievance Redress Mechanism committee composed of senior administrators eg CEOs, Directors and UNDP RR.

Managing complaints of SEAH requires different approaches than other types of complaints due to the sensitivity of the violence; the potential for survivors to experience stigma, rejection, or harm; and because of the reluctance of many survivors to come forward. Additional mechanisms are needed that create safe, enabling spaces for survivors to report SEAH that offer a safe, ethical, survivor-centred response. Thus, survivor safety, choice, confidentiality and consent must be systematically applied to all complaints of SEAH. For this reason, the GRM includes a specific pathway to receive and resolve complaints of SEAH related issues stakeholders may be adversely affected, directly or indirectly due to the project activities -refer section below.

For GBV/SEAH complaints, a victim-centred approach will be taken. The victim-centred approach puts the rights and dignity of victims, including their well-being and safety, at the forefront of all efforts to prevent and respond to sexual exploitation and abuse and sexual harassment, regardless of the affiliation of the alleged perpetrator.

In the event that a complaint relates to GBV/SEAH (either through the existing channels of the GRM process or via Fiji Women's' Crisis Centre), the Project Manager would notify a nominated staff focal point who are informed of all GBV services/referral focal points for their community and how to access them. The staff focal point will help reduce risk of exposure of GBV survivors and reduce undermining confidence. The SEAH focal point will assist SEAH survivors by referring them to the Fiji Women's' Crisis Centre for support immediately after receiving a complaint directly from the survivor. Information in the GRM will remain confidential and will not be managed by the mainstream GRM process – for SEAH complaints, the GRM will serve primarily to: a) refer complainants to the GBV service provider; and b) record resolution of the complaint.

8.3 UNDP'S ACCOUNTABILITY MECHANISM

For more information: https://www.undp.org/content/undp/en/home/accountability/audit/secu-srm/social-and-environmental-compliance-unit.html

In addition to the project-level GRM, UNDP's SECU and SRM remain available, and stakeholders will be informed of this option to file a complaint or submit a request.

UNDP recognizes that even with strong planning and stakeholder engagement, unanticipated issues can still arise. Therefore, its social and environmental compliance reviews and stakeholder response mechanisms are underpinned by an Accountability Mechanism with two key components:

A Social and Environmental Compliance Review Unit (SECU) to respond to claims that UNDP is not in compliance with applicable environmental and social policies; and

A Stakeholder Response Mechanism (SRM) that ensures individuals, peoples, and communities affected by projects have access to appropriate grievance resolution procedures for hearing and addressing project-related complaints and disputes.

SECU and SRM Requests can be submitted via:

- An online webform: https://secure.ethicspoint.eu/domain/media/en/gui/104895/index.html
- WhatsApp, Viber and Signal using 001 (917) 207 4285, or through our WeChat Account @SECUSRM
- Call (costs are incurred by caller) using 001 (917) 207 4285. Skype is an affordable way to place such a call.
- By post: Attn: SECU/SRM, OAI, UNDP
  1 U.N. Plaza, 4th Floor
  New York, NY USA 10017
- By email to: project.concerns@undp.org

Complaints should be as specific as possible, describing current or potential adverse impacts that have a plausible causal link to a UNDP-supported project/programme and, if possible, the UNDP social and environmental standards/commitments that are believed to have been violated.

While there are no strict format or language requirements, it is helpful if the complaint includes the following information:

- Name, address, telephone number, and other contact information.
- Whether the Complainant(s) wish to keep their identity confidential, and if so, why.
- Name, location, and nature of the UNDP project or programme (if known).
- How the Complainants believe they have been, or are likely to be, adversely affected by the UNDP-supported project or programme.
- If a third party, such as a civil society organization, is filing a complaint on behalf of an affected individual or community, the complaint should include evidence the third party is working on behalf of the individual or community.
- Although helpful, it is not necessary to cite specific UNDP standards or policies (such as the UNDP's Social and Environmental Standards).

Existing national and sector forums may also provide important opportunities for stakeholders to provide feedback on project implementation. Utilization of existing structures and processes to engage stakeholders is encouraged, as this may provide opportunities for issues to be raised before they develop into more significant grievances. However, such fora would not substitute for specific project grievance redress mechanisms (GRM) that will be required.

8.4 GEF Secretariat Conflict Resolution Function

GEF Policy also establishes the position of GEF Conflict Resolution Commissioner in the GEF Secretariat. The Commissioner plays a facilitation role and reports directly to the GEF CEO. Through the Commissioner, GEF Agencies report to GEF Council on grievance cases which Agencies have determined to be within the scope of their review, as well as on new developments in these cases.

A person concerned about a GEF-financed project or operation may submit a complaint to a local or country-level dispute resolution system, a GEF Partner Agency or the GEF Resolution Commissioner at:

- By post: Mr. Peter Lallas
  GEF Conflict Resolution Commissioner
  The World Bank Group, MSN N8-800
  1818 H Street, NW
  Washington, DC 20433-002

- By E-mail: plallas@thegef.org

Complaints submitted to the Commissioner should be in writing and can be in any language. The complaints should provide at least a general description of the nature of the concerns, the type of harm that may result, and (where relevant) the GEF-funded projects or program at issue.

9 MONITORING AND EVALUATION ARRANGEMENTS

9.1 PARAMETERS TO BE MEASURED

Reporting on progress and issues in the implementation of this ESMP will be documented in the project's implementation reports (PIRs) and annual project implementation reports (APRs). The PMU, with support from UNDP CO, will be responsible for compiling reports on the implementation of this ESMP, for reporting to the Project Board. Key issues will be presented to the Project Board during each meeting.

The project results, corresponding indicators, and mid-term and end-of-project targets in the project results framework will be monitored annually and evaluated periodically during project implementation. Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements. The UNDP Country Office is responsible for ensuring full compliance with all UNDP project monitoring, quality assurance, risk management, and evaluation requirements.

The ESMP monitoring and evaluation plan is outlined below in Table 11 . Stakeholder participation will be encouraged throughout monitoring and evaluation of the ESMP.

Table 11 ESMF Monitoring and Evaluation Plan

Monitoring Activity & Relevant Projects	Description	Frequency / Timeframe	Expected Action	Roles and Responsibilities
Track progress of ESMP implementation	Implementation of this ESMP with results reported to Project Board at each meeting	Quarterly	Required ESMP steps are completed in a timely manner.	Safeguards Officer / PMU
Development of site-plans using the Site Checklist)	Carried out in a participatory manner, localised analysis of potential social and environmental impacts, as well as identification / validation of mitigation measures	To be completed prior to construction activities commencing on site	Risks and potential impacts are assessed and management actions identified and incorporated into project implementation strategies.	Safeguards Officer
Compliance with Consent Authority approval conditions	Consent conditions from approval authorities will detail the environmental and social controls required for construction activities	Continuous		Construction Contractors Audits by Safeguards Officer
Implementation of mitigation measures and monitoring of potential impacts identified in site checklists/plans	Permanent and participatory implementation and monitoring of impacts and mitigation measures	Continuous	Monitoring of environmental and social risks, and corresponding management plans as relevant	Safeguards Officer PMU
Monitoring of complaints and grievances	Implementation of the GRM	Monthly as part of PMU meetings	Capturing and reporting complaints received and the actions taken. Report frequency and outcomes to Board. Disclose summary annually	PMU
Learning	Knowledge, good practices, and lessons learned regarding social and environmental risk management to be captured regularly, as well as actively sourced from other projects and partners and integrated back into the project.	At least annually	Relevant lessons are captured by the project teams and used to inform management decisions.	PMU
Annual project quality assurance	The project will be assessed against UNDP's quality standards to identify project strengths and weaknesses and to inform management decision making to improve the project	Annually	Areas of strength and weakness will be reviewed and used to inform decisions to improve project performance	UNDP CO
Review and make course corrections	Internal review of data and evidence from all monitoring actions to inform decision making	At least annually	Performance data, risks, lessons and quality will be discussed by the project steering committee and used to make course corrections	PMU

Monitoring Activity & Relevant Projects	Description	Frequency / Timeframe	Expected Action	Roles and Responsibilities
Annual project implementation reports	As part of progress report to be presented to the Project Board and key stakeholders, analysis, updating and recommendations for risk management will be included	Annually	Updates on progress of ESMP will be reported in the project's annual PIRs. A summary of the avoidance and mitigation of potential social and environmental impacts will be included in the program annual report, sharing best practices and lessons learned across the program.	PMU
Project review	The Project Board will consider updated analysis of risks and recommended risk mitigation measures at all meetings	At least annually	Any risks and/ or impacts that are not adequately addressed by national mechanisms or project team will be discussed in project steering committee. Recommendations will be made, discussed and agreed upon.	Project Board

10 APPENDICES

Templates for SESP available at:

https://info.undp.org/sites/bpps/SES_Toolkit/Pages/Guidance-and-Templates.aspx

Annex 1: ESMP Site Checklist

The ESMP Site checklist below is to be used for each site. It will assist in developing a site-specific plan for managing environmental and social impacts. Use the tables in Sections 5 and 6 of the Project ESMP to identify risk/impact areas and mitigation measures to manage them – each mitigation measure has a unique identifier, which can be used as a shorthand reference in this checklist.

	Issue and Comment	**Yes, No or Not Applicable (where yes, reference the relevant mitigation measures as per ESMP)**
	Have you described the proposed/existing development in full and included plans showing the location of the proposed/existing development and surrounding environment (land uses/features)?	
	Description of proposed activities	
	Ownership details of proposed land area	
	Bushland areas, other system areas and reserves	
	Wetlands and waterways	
	Priority surface and groundwater protection areas (eg. public drinking water sources and other declared areas)	
	Any existing site contamination or details of previous land uses which may have contaminated the soil or water resources	
	A layout of the proposed/existing development on a site plan with the current topography including contour lines and catchment boundaries, catchment areas, adjacent areas including creeks and buildings; the location of permanent stormwater inlets, pipes, outlets, and other permanent drainage facilities; current vegetation on site and vegetation to be removed from the site; and detailed alterations to existing land structures.	
	Have you addressed relevant issues from the following list and identified control measures to address environmental impacts - include mitigation reference codes as per ESMP (Table 10)?	
	Potential Biophysical Impacts	
	Ecology (FF)	
	Groundwater	
	Surface water	
	Air Quality	
	Noise/vibration	
	Erosion and sedimentation (EC).	
	Social Management	
	Community Engagement	
	Land ownership	
	Gender	
	Worker conditions and OHS	
	Cultural Heritage	
	Emergency Response	

Chance Find Procedure for the Fiji Rural Electrification Fund (FREF) Project

Version Developed; November 2024

1. Introduction

The Fiji Rural Electrification Fund (FREF) Project, being implemented by the United Nations Development Programme (UNDP), aims to provide solar mini-grids to rural communities and villages across Fiji. The construction of solar mini-grids may involve excavation or ground-disturbing activities that could uncover archaeological, paleontological, or cultural materials. These materials may include objects of historical, cultural, or religious significance, as well as fossils, remains, or artifacts that are protected under the Preservation of Objects of Archaeological and Palaeontological Interest Act [Cap 264] of Fiji.

In accordance with the national legal requirements and best practice environmental and social standards, this Chance Find Procedure (CFP) provides a systematic approach for the management of any archaeological, cultural, or paleontological finds encountered during the implementation of the FREF Project.

2. Objective

The objective of the Chance Find Procedure is to outline the steps that must be followed if any archaeological, cultural, or paleontological materials are discovered during the construction activities related to the solar mini-grids. The procedure ensures compliance with the Preservation of Objects of Archaeological and Palaeontological Interest Act [Cap 264], as well as safeguarding the cultural heritage and environmental integrity of Fiji.

3. Scope

This procedure applies to all contractors, subcontractors, and personnel working on the FREF Project. It covers the activities related to site preparation, excavation, and construction of solar mini-grids.

4. Definitions

- Chance Find: The unexpected discovery of archaeological, paleontological, or cultural artifacts or materials during excavation or construction activities.
- Archaeological Materials: Objects or structures of historical, cultural, or scientific significance, including artifacts, human remains, pottery, tools, or ceremonial items.
- Paleontological Materials: Fossils or other remains of extinct organisms, including plant and animal fossils, and other materials that are of scientific interest related to past life forms.
- Cultural Heritage: Material, immaterial, or natural elements of historical, cultural, or social significance to the community or country.

5. Roles and Responsibilities

- UNDP Project Manager: Ensure that the Chance Find Procedure is incorporated into the overall project design and that the contractor is aware of their responsibilities regarding potential chance finds.
- Contractor/Construction Team: Responsible for adhering to the Chance Find Procedure, ensuring that workers are trained, and reporting any findings promptly.
- Environmental and Social Safeguards Specialist: Provide guidance on the implementation of the Chance Find Procedure, offer technical support in case of a find, and liaise with the relevant authorities.
- Local Authorities (e.g., Department of Heritage and Arts): Serve as the official authority to assess, document, and protect any archaeological or cultural finds.
- Site Supervisor: Ensure workers are familiar with the Chance Find Procedure and maintain awareness at all times during ground-disturbing activities.

6. Chance Find Procedure

In the event of a potential archaeological or cultural find, the following steps should be followed immediately:

Step 1: Halt Work Immediately

- As soon as any construction worker suspects they have discovered an archaeological, cultural, or paleontological object (e.g., pottery, stone tools, bones, fossils, human remains, or ancient structures), they must stop all ground-disturbing work in the area and inform their immediate supervisor.

- The construction activities should not resume until the find has been properly assessed and cleared by the relevant authorities.

Step 2: Secure the Site

- The area around the find should be secured to prevent further disturbance. Mark the boundaries of the find area using visible markers such as flags, tape, or fencing.

- Restrict access to the site by anyone other than authorized personnel involved in the assessment and reporting of the find.

Step 3: Notify the Relevant Authorities

- The site supervisor must notify the UNDP Project Manager and the Environmental and Social Safeguards Specialist as soon as a chance find is suspected.

- The Environmental and Social Safeguards Specialist will immediately contact the Department of Heritage and Arts or other relevant national authorities as outlined under the Preservation of Objects of Archaeological and Palaeontological Interest Act [Cap 264] to assess the find. The department will provide guidance on whether the object requires preservation or further study.

Step 4: Document the Find

- The contractor, with assistance from the UNDP Project Manager and relevant authorities, will document the find. This will include:

o Descriptions of the object(s) found.

o The exact location (GPS coordinates).

o Photographs of the find and the surrounding area.

o Notes on the size, condition, and potential historical/cultural significance.

Step 5: Assessment and Protection

- The Department of Heritage and Arts, in coordination with the UNDP and other relevant authorities, will conduct an assessment to determine the significance of the find and whether it requires immediate protection, excavation, or further study.

- If the find is determined to be of cultural, archaeological, or paleontological importance, further action will be taken to ensure its preservation. This may involve an expert team to excavate and protect the materials, or the development of a mitigation plan to protect the site.

Step 6: Decide on Work Resumption

- Based on the assessment of the authorities, work may resume once it is determined that the area can be safely worked in, or after appropriate measures are taken to protect the cultural or archaeological material.

- If necessary, the design of the solar mini-grid construction or its location may be modified to avoid disturbing significant heritage materials.

Step 7: Reporting and Record Keeping

- A formal report will be prepared by the UNDP Project Manager, including the details of the find, actions taken, and any necessary modifications to the project.

- The report will be submitted to the relevant authorities and filed as part of the project's documentation for future reference and compliance.

7. Capacity Building and Awareness

To ensure effective implementation of this procedure, all personnel involved in the project, including contractors and subcontractors, will be trained (2 days course to be implemented by the Department of Heritage and Arts) on the chance find procedure. Training will include:

- Recognizing potential archaeological or cultural materials.
- Understanding the importance of reporting potential finds.
- Awareness of the national legal framework governing archaeological and cultural heritage preservation.

8. Conclusion

The preservation of Fiji's cultural, archaeological, and paleontological heritage is critical to the success and integrity of the Fiji Rural Electrification Fund Project. By adhering to this Chance Find Procedure, the project can mitigate risks, ensure legal compliance, and safeguard significant heritage materials for future generations.

This procedure should be reviewed regularly and updated in response to lessons learned or changes in regulations.