

## DEPARTMENT OF ENVIRONMENT

### TERMS OF REFERENCE FOR THE PROPOSED SOLAR FARM ON LOT 46, NATUA (PART OF) SEAQAQA, MACUATA BY ENERGY FIJI LIMITED

#### **BACKGROUND**

This Terms of Reference (TOR) is prepared for the proposed Solar Farm on Lot 46, Natua (part of) Seaqaqa, Macuata by Energy Fiji Limited, to contribute to supply Clean Renewable Energy which aligns with the Government commitment to reduce carbon emission.

#### **PURPOSE OF THE TERMS OF REFERENCE**

- a) Assess the environmental baseline conditions at the site
- b) Assess the environmental impact of the proposed solar farm.
- c) Identify mitigate measures to minimise any environmental impacts.

#### **THE COMPONENTS OF THE ENVIRONMENT IMPACT ASSESSMENT (EIA) SHOULD INCLUDE:**

- a) Background and need for the project (site description and project description)
- b) Baseline information
- c) All Potential significant environmental impacts
- d) All mitigative measures
- e) An Environment Management Plan (EMP)
- f) Monitoring Plan and Reporting Requirements.

#### **RESPONSIBILITY**

The EIA report should be signed and dated by the developer. The signatory will assume full responsibility for the contents of the EIA report and implementation of recommendations if approved.

The EIA must be prepared by an accredited consultant (who has the specific area of expertise in relation to the proposed development and has a valid registration certificate issued by the Department of Environment) at the proponent's cost as required under section 28 of the Environment Management Act.

An EIA report that is not submitted within 12 months of the TOR being approved will be invalid and a new application for EIA processing of the proposal will need to be made, unless the proponent has obtained a written extension of time from the processing authority.

#### **1.0 EXECUTIVE SUMMARY**

The EIA report must provide a concise summary of the EIA findings, potential impacts and recommendations

#### **2.0 INTRODUCTION**

The EIA report must explain why, for whom and by whom the EIA has been prepared. Include sub-sections on the following:

- The manner in which the TORs were drawn up and approved.
- The objectives of the proposed development.
- Background information on a list of all consents required or consents sought.
- Briefly describe the major components of the proposed project, a brief history of the project and its current status.
- Boundaries of the study area.
- Identification of people/parties consulted in the preparation of the EIA.
- Tabulation of personnel involved in the preparation of the EIA, their expertise and their roles.



## DEPARTMENT OF ENVIRONMENT

### TERMS OF REFERENCE FOR THE PROPOSED SOLAR FARM ON LOT 46, NATUA (PART OF) SEAQAQA, MACUATA BY ENERGY FIJI LIMITED

#### 3.0 PROJECT DESCRIPTION

The Consultant must describe the proposed works to be undertaken. Also include information on:

- Key components of the development through the use of text, figures and design plans.
- Consents required for the proposed development.
- Land based modification/clearing, construction, earthworks (including excavation) and drilling together with the planned environmental protection and mitigative measures, land elevation activities and drainage plan.
- Stages of work and timeline for construction phase.
- State of the land and lease document.
- Description of the project including the following:
  - PV Solar panels and array configuration.
  - Battery Energy Storage System (BESS) specification.
  - Substation and grid interconnection facilities.
  - Inverter stations, transformers, cabling, control buildings.
- Establishment of Lots, machinery/equipment to be used and other details to provide context for later sections on impacts and mitigations.
- Labour and staffing.
- The proposed materials to be used (include brief description on quantities, sources and nature of materials for fill and the transport methods and route).
- Methods of storm water drainage including details of the expected volumes and velocity of discharge and the proposed point(s) of discharge.
- Details (species and the number) of inland vegetation proposed to be removed.
- Methods of sewerage treatment, waste disposal and water supply for the site.
- Infrastructure and utilities to be applied.

#### 4.0 DESCRIPTION OF EXISTING ENVIRONMENT

This section of the EIA report must provide a thorough account of the physical and biological characteristics of the site and document its social environment. Specifically, it should include:

##### 4.1 Physical Environment

- Climate data, solar irradiation, wind, temperature, noise levels, hydrology, soil type, and erosion risk.
- Road and traffic network information.
- Detailed water and electricity assessment for the proposed development.
- Existing land use, residential houses or facilities.
- Drainage plan against the storm water to minimize silt-soil being discharged into the surrounding watercourses.
- Detailed map(s) showing the project area including all construction and infrastructure sites, and projected areas of inundation.
- Identification and description of noise and vibration-sensitive locations in the project area.

##### 4.2 Biological Environment

- Locate ecologically sensitive habitats and significant habitat sites (as relevant) that may occur on or around the site and how they will be affected by the proposed development.
- Identification of species with potential to become nuisance vectors.
- Identification of species or ecosystems vulnerable to natural hazard or climate change impacts.





## DEPARTMENT OF ENVIRONMENT

### TERMS OF REFERENCE FOR THE PROPOSED SOLAR FARM ON LOT 46, NATUA (PART OF) SEAQAQA, MACUATA BY ENERGY FIJI LIMITED

- Bird and bat impact assessment is explicitly included, as solar farms may alter avian flight patterns.

#### 4.3 Socio-cultural Environment

- Description of the house/settlement and land use within the immediate environment of the project site and provide representative demographic profiles and population numbers (1km radius from the proposed site).
- Description of site uses that the project area has (if any) for local communities.
- Describe archaeological, cultural or historical sites (if any).
- Description of sensitive receptors within a 1 km radius of the project site.
- Identify the disturbance to the land surface due to the project activities.

#### 5.0 POTENTIAL SIGNIFICANT ENVIRONMENTAL IMPACTS

The EIA report must assess all environmental impacts which are likely to be significant. The impacts are to be assessed as follows:

##### 5.1 Design and Engineering

- Compatibility of the proposed design and site layout plans.
- Site and drainage designs.
- Land excavation and clearing methods.

##### 5.2 Construction

- Site boundaries and site preparation works (site clearance).
- Drainage system, sedimentation control, point of discharge and its management.
- Disposal of spoil and waste management.
- Effects of proposed development on local topography e.g., via earthmoving, erosion, any excavation, reclamation and elevation of land.
- Road access and traffic management.
- Dust and air pollution.
- Use, storage and disposal of fuel/ oil, and chemicals.
- Sewage treatment and disposal facilities if any.
- Transport route for movement of machinery and vehicles.

##### 5.3 Operation and Maintenance

- Visual impact and traffic management.
- Dust control and air quality management.
- Effects of the project on ambient noise levels.
- Waste management and disposal.
- Wastewater treatment and disposal.
- Storage and spillage of material during transportation.
- Rehabilitation plan.
- Grievance Redress Mechanism.
- Energy response plan.
- Human Health Risk Assessment of the project.

##### 5.4 Vulnerability of the project to natural disasters

The vulnerability of the project to natural disasters and likely climate change impacts needs to be clearly assessed. List hazards and safety risks associated with flooding including safety risks to person, impacts on any newly created solar farm and infrastructure located within or outside the project area.



**DEPARTMENT OF ENVIRONMENT**

**TERMS OF REFERENCE FOR THE PROPOSED SOLAR FARM ON LOT 46, NATUA  
(PART OF) SEAQAQA, MACUATA BY ENERGY FIJI LIMITED**

**5.5 Rehabilitation Plan**

To clearly provide strategic and detailed plan on how the site(s) will be rehabilitated during and after the proposed development works. This must include information based on relevant guidelines, current best practice approaches and legislative requirements about the strategies and methods for progressive and final rehabilitation of the environment disturbed by the project and decommissioning works. Rehabilitation Plan must ensure that the amount of land disturbed minimizes the residual loss of land and water bodies with ecological or productive value.

Describe the rehabilitation completion criteria that would be used to measure progress and completion. Show the expected topography of the site after the rehabilitation plan.

**6.0 SOCIAL IMPACT ASSESSMENT**

The study area will encompass an area of 1km around of the proposed development site. The impact of the proposed project on nearby residents, properties and businesses should be considered and assessed. Consultations also need to take place with members of landowning units as well as communities nearby and must adequately address gender risks and impacts.

Central to the purpose of the social study is to identify issues or problems which the landowners, occupiers and/ or residents in or around the study area may have concerning the proposal. The proponent must hold a public consultation meeting at times and locations convenient to those who might want to participate. Notice of the public meeting must be given by the proponent at least 7 days before the meeting on every radio stations that broadcasts in the area of the site and in every newspaper that circulates in the area of the site.

Household survey must be undertaken within communities surrounding the project area. Minutes of the meeting and a copy of the household survey questionnaire must be kept and appended to the EIA report.

**7.0 COST BENEFIT ANALYSIS**

The EIA consultant must carry out a cost benefit analysis of the proposed activity to weigh the pros and cons in order to determine its feasibility.

**8.0 MITIGATION AND ABATEMENT MEASURES**

The EIA report must examine and recommend suitable mitigating and abatement measures for the adverse impacts identified. The effectiveness of the measures proposed should be stated and impacts of significance clearly identified. Measures recommended should be practical to local conditions and readily implemental. This should include a description of the measures envisaged to prevent, minimize and where possible offset any significant adverse effects on the environment of the project. The major issues and/or concerns raised should be addressed well in the mitigation measures.

**9.0 ENVIRONMENT MANAGEMENT PLANS**

The EIA Report must include an environmental management plan, it must -

- (a.) Describe in respect of the proposal the environmental protection measures that will be put in place by the proponent if approval is given for the proposal;
- (b.) Include an environmental monitoring and surveillance program of action;
- (c.) Provide for an environmental monitoring committee to be appointed by the proponent to verify that the environmental protection plan is being fulfilled and adverse impacts of the proposal documented.





**DEPARTMENT OF ENVIRONMENT**

**TERMS OF REFERENCE FOR THE PROPOSED SOLAR FARM ON LOT 46, NATUA**  
**(PART OF) SEAQAQA, MACUATA BY ENERGY FIJI LIMITED**

**10.0 CONTINGENCY**

The EIA report must provide procedures for emergency situations (if elsewhere cross reference). These can be a series of steps (including preparation) and should address the following situations:

- Cyclones
- Fuel spill
- Fire

**11.0 ENVIRONMENTAL BOND**

The Consultant must determine the amount of Environmental Bond as per regulations 32 of the Environment Management (EIA Process) Regulations 2007. The EIA report must include the bond calculated using the worst case scenario. The bond calculation formula must be attached.

**12.0 SUMMARY & CONCLUSION**

Appropriate conclusions should be drawn. It is useful to summarize the environmental impacts of the proposal and the steps that will be taken to mitigate adverse impacts.

**13.0 OTHER INFORMATION**

Any publication or papers both published and unpublished, that were used, as reference should be listed and appended to the report where appropriate. Appendices, raw data and any other relevant documents must be attached.



Senimili N. Baleicakau (Ms.)  
Director of Environment  
Department of Environment

Date: 14/08/25.

Cc: File Copy