Vanuatu Energy Access Project (VEAP)

Project Manager - National
Terms of Reference

A. Background

1. The Vanuatu Energy Access Project (the Project) will increase energy access and renewable energy generation in the two islands of Espiritu Santo and Malekula, being second and third largest population centers after Efate. The Project will assist Vanuatu install hydropower generation to replace diesel generation in Malekula and will extend the distribution grid in both Malekula and Espiritu Santo.

2. Vanuatu has a population of 234,000 (2009) which is geographically dispersed over more than 80 islands. 75.6% of the population is rural. Economic development is largely focused within urban areas. Access to electricity nationwide is low (33%), however drops even further in rural areas. Low access to reliable, affordable electricity has negative impact on the livelihoods of households, particularly rural households. Where electricity is available in the provinces, it is largely diesel generated. While cost of electricity is high, quality of supply is also high which is partially due to the electricity grids being operated by the private sector[1]. High cost and limited access to electricity is having a negative impact on economic development, particularly in the provinces. Over-reliance on imported fossil fuels (diesel) also has a negative macro-economic impact. In order to address these issues, the Government of Vanuatu (Government) has requested ADB to support development of least-cost renewable energy (hydropower) and grid extensions in targeted provincial centers.

3. Access to electricity is low. While the national electricity access rate is 33% of households, there is wide variation, from 82% access in urban areas to 17% access in rural areas. Of the 33% households who have access 64% are connected to the grid, while the remainder rely on solar systems or diesel generators. Household access to grid-connected electricity is 21.5% in Espiritu Santo and 8.2% in Malekula. The main reasons for the low access rates are (i) lack of government community service obligation funding for grid extensions; (ii) difficult geography and small, dispersed pockets of population, (iii) low capacity to pay in some areas, and (iv) the high cost of diesel power generation in the provincial centers due to difficult supply chains and small size of grids, which provides a disincentive to increase customers (where generation and supply costs exceed the tariff) particularly given the low lifeline tariff. Significant unmet demand means that people resort to self-generation but would connect to the grid if sufficient capacity were available. The limited reach of the distribution grid is slowing economic growth, particularly in the agriculture and tourism sectors. There is significant opportunity to increase the access rate through extensions of the existing distribution grid to peri-urban areas and establishing sustainable household solar system rollout models[2].

4. To address the above barriers, the Project will construct the Brenwe Hydropower Plant which would displace an estimated 90% of the diesel generation in Malekula. The Project will

[1] The Espiritu Santo grid is the second largest grid in Vanuatu with a peak demand of 1.7MW and installed capacity of 4.09 MW consisting of (i) 1.2 MW Sarakata Hydropower Plant; (ii) 2.85 MW diesel generators, and (iii) 40 kW grid-connected solar. The Malekula grid is the third largest grid in Vanuatu with 429 kW installed diesel generation and peak demand of 140kW.
[2] Current installed diesel-based generation capacity is adequate to supply the existing load.

increase the residential customer base in Espiritu Santo by 25% and in Malekula by 90%.

B. Implementation Arrangements

5. Ministry of Finance and Economic Management (MFEM) will be the executing agency for the project. The Department of Energy (DOE), within the Ministry of Climate Change, Adaptation, Meteorology & Geohazards, Energy, Environment and Natural Disaster Management (MOCC), will be the implementing agency with day-to-day implementation activities delegated to the Vanuatu Project Management Unit (VPMU). The Government will recruit consultants for implementing the Project for designs, peer review and construction supervision in accordance with ADB's *Guidelines on the Use of Consultants* (2013, as amended from time to time).

6. The Government has already engaged a Design and Supervision Consultant (DSC) for the Project who are responsible for preparation of design documents suitable for Engineering, Procurement and Construction (EPC) contracting, preparation of bidding documents, managing the bidding, bid evaluation process, contract award and construction supervision. The Government, to further improve and validate project designs, have requested undertaking a separate high-level peer review of the engineering designs and bidding documents produced by the DSC. This will include an appraisal of the site and development component selection, design methodology, approach and criteria, structural stability of the designed elements, EPC contractor specification, cost effectiveness and other project related documentation as prepared by the DSC. The Independent Peer Review (IPR) firm was recruited following ADB's Guidelines on the Use of Consultants (2013, as amended from time to time) using Single Source Selection method. This work has been completed.

7. In addition to this, the Government has engaged an International Project Advisor (IPA) who is assisting the VPMU in managing the DSC and the design stages of the VEAP. To further build capacity, the Government has sought assistance from the ADB to recruit a National for the role of VEAP Project Manager (PM) working with the PA during the design and implementation stages of the project.

8. The PM will be involved in the civil, electro and mechanical works of the project, transmission and distribution works, Control/Protection/SCADA works plus the planning studies required for the Grid extension works on Malekula and Santos. It is envisaged that the PM will be part of the construction team and will need to spend considerable time on the site during construction phase of the project. It is expected that the PM will work closely with the IPA and DSC team to maximize knowledge transfer during the period of the assignment. The consultant's tasks will include, but not necessarily be limited to:

a. provide project management and implementation support to the Government/VPMU on project financing agreements to facilitate compliance with country systems and covenants and assurances in the project financing agreements;
b. provide project management and implementation support to the VPMU, DOE, MOCC and other government agencies to facilitate compliance with country systems and development partner guidelines, procedures, and requirements, including procurement and project monitoring and reporting;
c. manage the DSC targeting on-time and on-budget delivery of services;
d. provide technical, project management and contractual inputs to the VPMU, DOE, MOCC and other government agencies on consultancy, works, goods, or

plant contracts managed by respective agencies following the conditions of contracts;

e. participate in all project technical meetings with the DSC and all project progress and construction progress meetings with the works, goods, and plant contractors and coordinate the timely delivery of progress reports from VPMU, consultants and contractors to the VPMU Steering Committee and development partners;
f. co-ordinate and inform the VPMU Steering Committee and all development partners on the progress and status of the VEAP project;
g. ensure all project contractors and consultants comply with the laws of Vanuatu and the policies of the development partners who finance projects including: (a) child protection; (b) safeguards; (c) anticorruption and good governance; and (d) other relevant development partner policies on cross cutting issues.
h. Ensure that all Environmental and Social Safeguard requirements are adhered to as per the Land Acquisition and Resettlement Plan (LARP), updating of the LARP and Safeguard Semi- Annual Reports are submitted in a timely manner
i. Ensure relevant Community consultation and awareness programs are executed and relevant reports compiled and submitted in a timely manner
j. Ensure that Land related matters are managed well for Project Site, Access roads and Transmission and Distribution network routes and attendance to relevant stakeholder meetings..

9. The period of the assignment shall be from June 2019 to December 2021.

C. Qualifications and Experience

10. The PM should have the following qualifications and industry work experience.

(i) A graduate from a recognized Tertiary Institution with a Bachelors of Engineering degree in either Civil, Electrical or Mechanical;
(ii) Must have worked for a minimum of five to seven years as an engineer;
(iii) Must have worked for a minimum of three years as an engineer in the Energy Sector;
(iv) Must have at least 3 years of experience managing and implementing infrastructure related projects in Vanuatu;
(v) Experience on procurement, FIDIC conditions of contract, management of consultants (firms and individuals), environmental safeguards, land acquisition and resettlement, climate change adaptation and disaster and risk management will be an added advantage;
(vi) Must be computer literate and proficient in Microsoft computer applications such as Word, Excel, Project, Access;
(vii) Must have a good command of the English language and able to speak Bislama. Speaking French will be an added advantage;
(viii) Must have a good character reference report with current employer and have field work experience, and
(ix) Must possess a clean drivers license.