

**ENERGY SECTOR SPECIALIST FOR  
ADB REG-TA 6522: ESTABLISHMENT OF THE PACIFIC INFRASTRUCTURE ADVISORY CENTER (PIAC)  
(SYDNEY-BASED AUSTRALIAN/NEW ZEALAND NATIONAL)**

## **Background**

ADB TA 6522 is a regional policy and advisory technical assistance that established the Pacific Infrastructure Advisory Center (PIAC) aimed to analyze, plan and implement technical assistance activities in support of the Pacific Region Infrastructure Facility (PRIF)<sup>1</sup>.

One of PIAC's core purposes is to "respond quickly to requests from PICs and regional institutions for advice and support on initiatives taken to improve the delivery and performance of economic infrastructure assets"<sup>2</sup>. It is also perceived to be a center for referral of country partner requests for TA and/or program funding to development partners for decision, and a help desk and information hub on economic infrastructure in the Pacific.

In the past 6 months, PIAC has received a number of enquiries from PICs and development partners for assistance in respect to providing policy and technical expertise in the sub-sector of energy/power, in particular, renewable energy; electricity sector tariff review; sector masterplanning; improving utilities' performance based on benchmarking indicators; and expanding access to modern energy through mechanisms such as public-private partnerships (PPP), community participation, and innovative funding means; among others. PIAC and Secretariat expertise are in the fields of finance and investment, water and sanitation, transportation economics, finance, investment, project management, public-private sector partnership and participation, and research which need to be complemented and reinforced by an energy sector specialist. This will allow PIAC to be more effective and better in delivering its mandate.

For the reasons cited above, including the delay in the establishment of the PRIF Management Unit, which will have a dedicated Power/Energy Specialist, PIAC is engaging the services of a short-term full-time **National (Australian/New Zealand) Energy Sector Specialist**. The Specialist will be sourced either from PIAC or PRIF development partners' databases and will be contracted through ADB procurement procedures. The Specialist will be engaged for a period of 6 months (1 Feb to 31 July 2012). The Specialist will be recruited in Sydney, Australia and form part of the PIAC Team based at ADB-PLCO Office in Sydney; however, the specialist will not be part of the PIAC Team to be transferred to the PRIF Management Unit.

## **Qualifications and Scope of Work**

### **Qualifications:**

- Electrical power engineer with at least 7 years relevant experience focused on power generation (diesel generation, small hydropower, solar electric and wind), power distribution, especially low and middle voltage distribution networks and mini-grids;

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<sup>1</sup> A partnership between ADB, Australia, New Zealand, the EU and EIB, and the World Bank Group to improve economic infrastructure services in the Pacific region.

<sup>2</sup> Extract from PIAC TA Paper, December 2008 and PIAC Strategic Framework, August 2009.

- Have hands on knowledge of specific technology topics within the electricity sector, such as sizing and implementation of distribution grids, interconnection issues between distributed renewable energy generation and diesel grids, power factor, system losses, stability of electrical network, applicable technical standards (i.e. IEC, NEMA, BS, etc.) and related operation and maintenance programs;
- Ability to provide a strategic advice on issues such as energy economic aspects, such as regulatory and environmental frameworks and governance, and least cost technology options;
- Previous work experience in developing countries and preferably in the Pacific Region.

## **Scope of Work/Terms of Reference**

### **A. Research**

1. Take the lead in following up on PIAC's Power Sector Benchmarking Exercise to include: (i) reviewing the Final Report of the 1<sup>st</sup> benchmarking exercise and identifying the good and poor performing utilities; (ii) review and finalize the framework for the implementation of the technical inputs for utilities performance improvement plans (PIPs); (iii) identify 2-3 utilities to pilot the PIPs and design the methodology for PIP implementation; and (iv) prepare the Terms of Reference for the 2012 (second) benchmarking exercise.
2. Collate and publicize existing available renewable energy resource data from around the Pacific; assessing where the gaps are; identify beneficial work to fill the gaps; and prepare related concept notes/working papers for presentation by PIAC to IWG.
3. Support PIAC's current research program in the power sector and lead the conceptualization, communication, and implementation of future research programs, such as:
  - Formulating guidelines/model template for developing Power Purchase Agreements for PIC governments and power utilities in the Pacific region based on renewable energy generation;
  - Preparing model frameworks and guidelines to help determine appropriate pricing methodologies for Power Purchase Agreements in the context of renewable energy generation;
  - Formulating criteria/guidelines/templates to govern the technical interconnection and safety requirements of distributed generators into utilities' networks as designed for renewable energy generation;
  - Technical and economic modeling of Pacific utilities' networks to help utilities understand and determine the technical and financial implications of increasing levels of intermittent renewable penetration.
4. Other work based on TA requests and/or directives from development partners.

### **B. TA Requests**

5. Support PIAC's response to energy sector TA requests in project identification, concept design, pre-feasibility studies, least cost technologies, , energy planning, and implementation and testing reviews.
6. Assist in coordinating and supporting development partners' energy sector policies and dialogues with relevant stakeholders in the region in relation to sector requests in the areas of: access to modern energy services and technologies, energy efficiency, organization and policy, and related climate change.
7. Assist in carrying out PIAC's coordination and facilitation role in infrastructure investments in the energy sector and provide technical information and recommendations to supplement current knowledge of development partners.
8. Provide sector expertise and advice to PIC Governments, regional organizations and to PIAC in the preparation and peer review of proposals, consultant's reports on government prepared studies, and operational/technical issues. Undertake fieldwork to be able to provide solid on-the-ground advice.

## **Submission of Applications**

Interested applicants are requested to email their application letter and CV before **18 January 2012** to:

The Pacific Infrastructure Advisory Center (PIAC)  
c/o ADB Pacific Liaison and Coordination Officer  
Level 18, One Margaret Street, Sydney  
Attention: Nina Mines, Operations Officer  
Email: [piac@theprif.org](mailto:piac@theprif.org) or [nmines.consultant@adb.org](mailto:nmines.consultant@adb.org)