



Local Technical Consultant on GHG Emissions Measurement, Reporting and Verification (MRV) for buildings

PROCUREMENT NOTICE

Date: 19 October 2018

Country: Republic of Azerbaijan

Project name: “Nationally Appropriate Mitigation Actions (NAMAs) for low-carbon end-use sectors in Azerbaijan”

Description of the assignment: Local Technical Consultant on GHG Emissions Measurement, Reporting and Verification (MRV) for buildings

Period of the assignment/services: Initially 12 months (November 2018 to November 2019)

Proposal should be submitted by online application no later than **31-October-2018 COB** to procurement.aze@undp.org

Any request for clarification must be sent in writing, or by standard electronic communication to the address or e-mail indicated above. UNDP in Azerbaijan will respond by standard electronic mail and will send written copies of the response, including an explanation of the query without identifying the source of inquiry, to all shortlisted consultants.

1. BACKGROUND

Project’s objective is to reduce the annual growth rate of GHG emissions from the energy end-use sectors. The project, which began in March 2015, targets 3 (three) energy end-use sectors, namely Buildings, Transport and Associated Gas Capture. The specific objective of project is to support State Oil Company of Azerbaijan Republic (SOCAR) in the implementation of its Climate Change Mitigation Strategy by promoting and upscaling green-house-gases (GHG) mitigation measures through a programmatic NAMA approach in the low carbon end-use sectors. SOCAR, being in the core business of oil & gas production, processing and distribution, is a major energy user and GHG emitter, and is the main stakeholder of project and implementing partner. The project also broadly aims to improve the country’s institutional & policy framework, address appropriate mechanisms and result in activities to realise significant GHG emission reduction achievements in the long term. The other key institutional stakeholders for this project are as listed below:

- Ministry of Ecology and Natural Resources (MENR);
- National Climate Change Centre (NCCC);
- Ministry of Energy of the Republic of Azerbaijan.

The “Energy Efficient Buildings” component of the project is improving the energy utilization efficiency in buildings by promoting the energy conserving design of new buildings and enhancing the efficiency in the operation of existing buildings. The realization of this objective is facilitated through the demonstration of building energy efficiency technologies, systems, and practices. The “Sustainable Transport” addresses fuel economy in SOCAR’s vehicles fleet by introducing alternative energy sources resulting in a lower energy intensity of the transportation sector. Technological and market opportunities for improving the current fuel mix that is 98% dependent on gasoline and diesel engines will help in reducing the energy intensity of transport sector. The aim of “Associated Gas Capture” component is to recover low-pressure associated gas from the oil wells in Siyazanneft Oil and Gas Production Unit and to collect, compress and transport it to a gas processing plant. The processed and clean gas will be provided to the gas grid and utilized by nearby villages and communities to supply family houses as well as

production facilities (e.g. chicken farms) with heating and cooking fuel. Significant physical progress has already been made on the buildings and transport components. The gas-capture component was recently launched and various options to be pursued are being studied in detail by SOCAR with the participation of an individual international expert.

2. SCOPE OF WORK, RESPONSIBILITIES AND DESCRIPTION OF THE PROPOSED WORK

With technical guidance of International MRV Consultant and under the supervision of Project Manager, the LTE-buildings shall be responsible for carrying out the MRV of *progress* (see above) on the NAMA “Green Building Program in SOCAR”. The tasks of the LTE-buildings include but is not limited to the following:

1. Carrying out an identification record of the buildings selected for the NAMA “SOCAR’s Green Building Program” which includes the following information:

- Specific location;
- Construction and commissioning year;
- Date of last repair / reconstruction, if any;
- Number of storeys;
- Floor-area, m²;
- Climatic zone¹;
- Source of heat supply (e.g. individual boiler, boiler-room or district heating), energy carrier (e.g. natural gas, mazut).

2. Collecting data for developing baseline of the NAMA “SOCAR’s Green Building Program” including:

- Quantity of electricity to be consumed in year, kWh/yr;
- Emission factor for electricity generation, kgCO₂/kWh;
- Heat consumption for heating (and hot water supply) of building, kWh/yr;
- Average technical transmission and distribution losses for providing electricity;
- Annual consumption of fossil fuel type k of baseline / NAMA building in year y;
- Average net calorific value of fossil fuel type k used, GJ/mass or volume unit;
- Emission factor of fossil fuel, kgCO₂/MJ or tCO₂/1000 m³ or ton;
- Fuel consumption of an individual boiler, mass or volume unit;
- Efficiency factor of boiler rooms supplying thermal energy to buildings, %;
- Efficiency of thermal power generation at CHPP;
- Floor-area of buildings.

3. Data collection for energy-efficient buildings built or reconstructed within the framework of NAMA for a cold (heating season) and a warm period of time including:

- Quantity of electricity to be consumed in year, kWh/yr;
- Emission factor for electricity generation, kgCO₂/kWh;
- Heat consumption for heating (and hot water supply) of building, kWh/yr;
- Average technical transmission and distribution losses for providing electricity;
- Annual consumption of fossil fuel type k of baseline / NAMA building in year y;
- Average net calorific value of fossil fuel type k used, GJ/mass or volume unit;
- Emission factor of fossil fuel, kgCO₂/MJ or tCO₂/1000 m³ or ton;
- Fuel consumption of an individual boiler, mass or volume unit;
- Efficiency factor of boiler rooms supplying thermal energy to buildings, %;

¹ Climatic zone is defined by gradation in terms of the number of degrees-days for heating and non-heating periods.

- Efficiency of thermal power generation at CHPP;
- Floor-area of buildings.

4. GHG emission calculation including:

- Baseline emissions;
- NAMA emissions;
- Emission reduction.

5. Preparation of monitoring report for the NAMA.

6. Preparation of data and documents required for verification.

In addition to above tasks, the LTE-buildings shall provide inputs for the completion of annual, mid-term and final evaluation reports, and general information collection according to UNDP/GEF monitoring and evaluation requirements. He/she shall also participate in training workshops. Finally, he/she shall provide full support to the International MRV Consultant viz. collecting and providing required data.

3. DELIVERABLES

- By 31st December 2018: Carrying out an identification record of the buildings selected for the NAMA “SOCAR’s Green Building Program” (20%)
- By 1st March 2019: Collecting data for developing baseline and calculating GHG emissions (20%)
- By 1st May 2019: Collecting data for the NAMA buildings for cold period and calculate GHG emissions (20%)
- By 1st July 2019: Collecting data for the NAMA buildings for warm period and calculate GHG emissions (20%)
- By 1st October 2019: Preparing monitoring report and evidence base for verification (20%)

4. REQUIREMENTS FOR EXPERIENCE AND QUALIFICATIONS

Requirements
<p>Required Skills and Experience</p> <p><u>Qualifications:</u></p> <ul style="list-style-type: none"> • Post Graduate Degree in engineering, environmental management or any other qualification in relevant field. • Background in the field of energy management relating to one or more of the NAMAs covered by the project. <p><u>Experience:</u></p> <ul style="list-style-type: none"> • Minimum of 7 years’ direct experience in the management and development of medium to large scale energy efficiency projects including project cost estimating. • Minimum 2 years’ experience of design or construction aspects related to energy such as energy engineering, energy management, and sustainable design. • Minimum 2 years’ experience in the design and evaluation of building energy systems and controls or in oil/gas fields operations is highly preferred. • Minimum 2 years’ experience in making assessments and testing/commissioning of energy systems for medium-size industrial and commercial facilities. • Strong experience of preparing project reports and other program or technical documentation. <p><u>Competencies:</u></p> <ul style="list-style-type: none"> • Demonstrates integrity and fairness by modeling UN values and ethical standards; • Displays cultural, gender, religion, race, nationality and age sensitivity and adaptability; • Excellent communication skills; Excellent analytical skills; Strong oral and writing skills; • Extensive knowledge of computer applications; • Focuses on result for the client and responds positively to feedback; • Consistently approaches work with energy and a positive, constructive attitude;

- Ability to work independently as well as part of a team; Ability to operate under strict time limits.
- Language: Fluency in English and/or local languages is a must.

5. DOCUMENTS TO BE INCLUDED WHEN SUBMITTING THE PROPOSALS.

Interested local consultants must submit the following documents/information to demonstrate eligibility of their qualifications:

- Offeror's letter/filled-in template to UNDP confirming interest and Breakdown of Costs Supporting the Final All-Inclusive Price as per Template
- CV or Signed P11 Form
- Description of Approach to Work (Methodology)

If any of the above-mentioned documents is missing UNDP holds the right to reject the respective proposal altogether.

6. FINANCIAL PROPOSAL

Contract Payment:

The payments will be made in **five tranches** (20% each) as following in accordance with the deliverables in the attached ToR. In the financial proposals candidates should show the total amount expected for this work.

1st tranche – For the implementation of the 1st deliverables.

2nd tranche - For the implementation of the 2nd deliverables.

3rd tranche - For the implementation of the 3rd deliverables.

4th tranche - For the implementation of the 4th deliverables.

5th tranche - For the implementation of the 5th deliverables.

7. EVALUATION

The Evaluation Method will be technical responsive lowest priced method, which means that out of the offers gaining 70 points the lowest priced will be chosen.

Technical responsiveness will be evaluated by criteria shown in this PN with the maximum amount of points given for each technical requirement as below: Total points for the evaluation is 100 points.

The candidates will be evaluated using the following criteria:

- Post Graduate Degree in engineering, environmental management or any other qualification in relevant field (20)
- Background in the field of energy management relating to one or more of the NAMAs covered by the project (20)
- Minimum of 7 years' direct experience in the management and development of medium to large scale energy efficiency projects including project cost estimating (20)
- Minimum 2 years' experience of design or construction aspects related to energy such as energy engineering, energy management, and sustainable design (10)
- Minimum 2 years' experience in the design and evaluation of building energy systems and controls or in oil/gas fields operations (10)
- Minimum 2 years' experience in making assessments and testing/commissioning of energy systems for medium-size industrial and commercial facilities (10)
- Brief Description of Approach to Assignment (10)

If the substantive presentation of a technical proposal achieves the minimum of **70 points**, he/she is considered qualified and successful in the recruitment process.

8. MONITORING

Monitoring and progress control will be conducted by the Project Manager in consultation with the UNDP Project Coordinator.

Format and deadlines will be done in accordance with the phases and deliverables shown in the respective section in the ToR.

9. TIMEFRAME OF THE ASSIGNMENT

The consultant will be engaged under the Individual Contract, immediately after the completion of the selection process. The initial contract will be for a period of twelve months on a full-time basis, and is expected to start on 31 October 2018. Any further contract extensions will be subject to the overall performance as evaluated jointly by the Project Manager and International MRV Expert.

10. TRAVEL

Local Consultant may need to travel to project sites if required.

11. ATTACHMENTS

- 1) Project Document.
- 2) Terms of Reference
- 3) Procurement Notice
- 4) UNDP General Conditions of Contracts for the services of individual contractors
- 5) Template for Confirmation of Interest and Submission of Financial Proposal