

#### TERMS OF REFERENCE

**Job title:** Local consultant to develop the technical specification for a software

and hardware components for forecasting the production of electricity using renewable energy sources (RESs), evaluation of tender documents and QA at the final stage of installation and

implementation

**Duty station:** Chisinau

**Reference to the:** "Addressing the impacts of the energy crisis in the Republic of

Moldova: Initiating solutions toward energy security and energy

poverty" Programe

Payment arrangements: Lump sum contract (payments linked to satisfactory performance and

delivery of outputs)

Contract type: Individual contract (IC)

**Contract Duration:** 20 working days during July - August 2022

## 1. PROJECT OBJECTIVES AND EXPECTED RESULTS

The overall objective of the Programme is to\_assist the Government of Moldova to tackle the current energy crisis and energy poverty in addressing prioritized systemic elements in the energy sector to cope with potential future energy crisis.

Specific objectives are to support the Government of Moldova to:

- 1. put in place the legal and regulatory framework in the energy sector with mainstreamed social and climate considerations in line with the EU requirements;
- strengthen the capacities of the energy-related actors and enhancing institutional coordination mechanisms to address and avert risks entailed in recent and potential future energy crisis;
- 3. increased awareness and communication among the population to adopt the best energy saving practices and measures and to encourage the use of renewables;
- 4. operationalize nation-wide energy programmes and demonstrate solutions to increase energy affordability in residential and public buildings, targeting specifically the most vulnerable and affected groups of population.

#### 2. BACKGROUND

Moldova is part of the EU's European Neighborhood Policy (ENP) and in the Eastern Partnership framework, which aims at strengthening individual and regional relationships between the EU and countries in its neighborhood. Moldova is also part of the Energy Community Treaty since 2010 and has signed the Association Agreement with EU in June 2014, including the DCFTA which entered into force in 2016. As a follow-up, Moldova is required to ensure transposition of the EU acquis Communautaire, which underpins the EU energy legislation on electricity, gas, oil, renewables, efficacity and environment. The country is planning to fully synchronize its electricity network with the ENTSO-E to connect to European electricity market.

The energy sector is one of the top priorities for the Government and it is addressed in Government's Plans and a number of policy documents, laws and regulations. The most important are the following: the draft National Development Strategy 2030, the National Energy Strategy 2030, Law on energy, Law on electricity, Law on promoting use of energy from renewable sources, Law on natural gas, Law on energy efficiency, Law on the energy performance of buildings, Law on the labelling of products with energy impact, Law on ecodesign requirements for energy-related products, etc., as well as a list of secondary legislation, meant necessary to ensure for the implementation of the primary legislation.

In accordance with the existing strategic planning documents, one of main priorities of the Government is to diversify the energy mix with more renewable energy, which is also fully in line with commitments under the EU Clean Energy for all Europeans package. Achieving this goal will require significant investment in the medium and long term, but also the country's ability to attract and absorb the funds. The development of renewables, such as wind and solar, will also depend on improving the balancing capabilities of the Moldovan power system and its integration with neighboring countries.

Starting with October 2021, Moldova faced significant crisis in the gas sector, which outlined the need to undertake more actions towards improving energy security of the Republic of Moldova, both in the natural gas and electricity sectors.

To enhance security of gas supply, Moldovan authorities are seeking various ways to diversify gas and electricity supply, to strengthen its energy security and enabling a transparent, fully open and well-functioning energy market.

The acute gas supply crisis in Moldova has also been subject of discussions within the Moldova-EU Association Council meeting on October 28, 2021. The EU and Moldova stressed the importance of resilience against any potential efforts by third parties to use energy as a geopolitical lever. The Association Council recalled the importance of continued energy market reform to strengthen competition and transparency in this sector. The EU has urged Moldova to ensure that the energy sector reform demonstrates full respect of the Energy Community acquis and is in line with the EU Third Energy Package. The EU side confirmed its support to the objective of Moldova to synchronize its electricity network with the Continental European

Network (CEN), an important step towards the integration into the EU energy system and market.

Under these circumstances, the Government of Moldova will be assisted to tackle the current energy crisis and energy poverty and addressing prioritized systemic elements in the energy sector to cope with potential future energy crisis. In partnership with EU, UNDP Moldova will therefore, support the Government of Moldova:

- To tackle the current energy crisis and energy poverty, and addressing prioritized systemic elements in the energy sector to cope with potential future energy crisis
- To support the Government of Moldova in building its capacities towards strengthening the national energy security, as well as in improving the legal and regulatory framework and operationalizing specific rapid large-scale interventions to tackle energy poverty and support most vulnerable and affected groups of population and businesses.

The Programme duration is envisaged between 2022- 2023 with support from Foreign Policy Instrument (herewith FPI) of EU. The Project Concept has been approved by FPI of the EU in February 2022, paving the way for development of the full project proposal.

In this context, UNDP Moldova is seeking to recruit a local consultant for the elaboration of the specifications for the procurement of the software for forecasting the production of electricity from renewable sources and hardware components.

# 3. SCOPE OF THE WORK, DUTIES AND RESPOSIBILITIES

From June 1, 2022, the new rules of the electricity market came into force. In this sense, both traditional energy producers and those from renewable sources have the right to participate in the electricity market, based on predefined forecasts. The purpose of the activity is to develop a specification for the procurement of specialized software for forecasting electricity and hard drives for the Central Energy Supplier.

The activity includes the following duties and responsibilities:

- Undertake a comprehensive Desk review and market price analysis on existing software at the international level for electricity forecasting using Renewable energy sources (RESs).
- 2. Preparation of a report with recommendations on the most relevant forecast programs (licensed or open access), applicable to the Republic of Moldova;
- 3. In cooperation with the responsible department of the beneficiary, produce technical scope of work and draft the technical specifications and requirements/tender related documentation for purchasing the forecasting software and hardware components;
- 4. Provide support to the Project team in the technical evaluation process of tender applications, preparation of technical evaluation report to ensure best quality, compliance with technical requirements and value for money procurement;

5. In cooperation with the responsible department of the beneficiary, monitor and ensure quality of software installation, testing and commissioning in line with the UNDP requirements for procurement.

## **EXPECTED DELIVERABLES AND TENTATIVE TIMEFRAME**

The assignment will require the completion of the following tasks:

No.	Deliverables	Tentative timeframe
1	<b>Deliverable 1:</b> Report covering feasible options and recommendations on the most relevant forecast programs on the production of electricity using Renewable energy sources (RESs) (licensed or open access), applicable to the Republic of Moldova and respective cost estimates <i>i.e.</i> tasks 1-2 (up to 7 working day).	July 2022
2	<b>Deliverable 2:</b> Scope of work, including technical specifications and requirements prepared and cleared for tendering process, <i>i.e.</i> task 3 (up to 5 working days)	July - August 2022
3	<b>Deliverable 3:</b> Technical evaluation report of tendering documentation for procurement, i.e. task 4. (up to 3 working days)	August 2022
4	<b>Deliverable 4:</b> Final report developed after installation, testing and commissioning of the software, i.e., task 5 ( <i>up to 5 working days</i> )	August 2022

**Note:** Deliverables and the final timeline can be amended or specified for the purpose of the assignment.

## 5. INSTITUTIONAL ARRANGEMENTS

This is at individual contract. The timeframe for the work is July – August 2022.

The local consultant will be given access to relevant information and data necessary for execution of the tasks under this assignment. The consultant will work in close collaboration with the FPI Programme Manager and Team Leader for Component 2 - for substantive aspects of the assignment.

## **6. FINANCIAL ARRANGEMENTS**

The contract assignment will be for a fixed all-inclusive amount. Payments will be provided in two instalments. The first disbursement, upon the presentation of the deliverables 1, i.e. by end-July 2022. The second disbursement upon the presentation of the deliverables 2,3,4 i.e. by end-August 2022.

## 7. SKILLS AND EXPERIENCE REQUIRED

## I. Academic Qualifications:

• University degree (Bachelor's or Master's degree) in business administration, engineering, Information Technology or other related areas;

# II. Knowledge and Experience:

- At least 5 years of professional experience in the energy field;
- At least 3 years of experience in developing and implementing (either in the capacity of adviser, quality assurance or recipient) of similar products;
- Extensive knowledge of the country's energy profile;
- Excellent knowledge of the rules and regulations of the electricity market in the Republic of Moldova;
- Previous experience in developing technical specifications for procurement of IT or other equipment systems/software in the field;
- Previous relevant work experience with the UN or other international organizations is an asset.

# III. Competences:

- Strong analytical and report-writing skills demonstrated by previous assignments;
- Strong interpersonal and communication skills, ability to work with Government representatives, demonstrated by previous assignments;
- Ability to achieve results and deadlines in a timely manner, maintaining a high standard throughout;
- Computer proficiency, including knowledge of MS Office products (Word, Excel, Power Point) and electronic communication platforms such as Microsoft Teams, ZOOM, Google meet;
- Fluency in Romanian and Russian, proficiency in English language is required for this assignment.

The UNDP Moldova is committed to the workforce diversity. Women, persons with disabilities, Roma and other ethnic or religious minorities, persons living with HIV, as well as refugees and other non-citizens legally entitled to work in the Republic of Moldova, are particularly encouraged to apply.

# 8. PERFORMANCE EVALUATION

Contractors' performance will be evaluated against timeliness, responsibility, initiative, creativity, communication, accuracy, and overall quality of the delivered products.

# 9. DOCUMENTS TO BE INCLUDED WHEN SUBMITTING THE PROPOSALS

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

- 1. OFFEROR'S LETTER TO UNDP CONFIRMING INTEREST AND AVAILABILITY FOR THE INDIVIDUAL CONTRACTOR (IC) ASSIGNMENT;
- 2. Proposal, explaining why he/she is most suitable for the assignment, including past experience in similar assignments, providing a brief information on above qualifications, and brief methodology on how he/she will approach and conduct the work.
- 3. CV shall include Education/Qualification, Processional Certification, Employment Records /Experience.