



TERMS OF REFERENCE

Job title:	Consultant to develop the ToR and the working mechanism for the online calculation tool to estimate associated investment opportunities in EE&RES and to compare the energy performances of houses
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” Programme
Payment arrangements:	Lump sum contract (payments linked to satisfactory performance and delivery of outputs)
Contract type:	Individual Contract (IC)
Contract Duration:	September 2022 – February 2023 (up to 30 working days)

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;
2. 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, energy efficiency and environment. The country has recently synchronized 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 eco-design 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 packages. 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 for integration into the EU energy system and market, an important step being the recent synchronization of its electricity network with the Continental European Network (CEN).

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. In this context, UNDP Moldova is seeking to recruit a Local Consultant to support identification of the potential beneficiaries of photovoltaic systems among the medical institutions.

The initiative aims to help the beneficiary medical institutions to reduce their bills on electricity by applying the net metering mechanism. The intervention will consist in installation of the photovoltaic systems of about 200 kW power each for three medical institutions. Installation of photovoltaic systems according to the net metering scheme will allow the beneficiary medical institutions to save significant amount of energy and ensure a higher level of security. The saved money will be possible to be used for improving the quality of provided health services.

In the same context, the project aims to provide support to other six public institutions in development of the feasibility studies for adoption of integrated renewable solutions. The studies will facilitate the efforts of the beneficiary institutions in identification of the potential investments for the identified solutions.

3. SCOPE OF THE WORK, DUTIES AND RESPONSIBILITIES

UNDP Moldova intends to hire a qualified and experienced national consultant to provide consulting and expertise services to ensure the development of an Energy Efficiency Calculator.

The main objective of this tool is to identify the best energy efficiency solutions for the home consumer.

The tool is welcome to be usable both for consumers in the residential sector (houses on land) and those who live in blocks of flats. Therefore, the working mechanism of the computer will be developed to help the consumer get an idea of the measures that can be applied by him in order to reduce the consumption of resources.

The development of the mechanism will take into account best practices and lessons learned from other initiatives to ensure that it complements, facilitates access to and provides adequate information on existing science, technology and innovation platforms, avoiding duplication and increasing synergies.

The tasks before the Consultant were divided into two sections:

Section A. Architecture, functional requirements and user group for the online platform:

- Given the overall objectives of the online platform, who should be the user group of the online platform?
- Given the overall goals of the online platform, what are its key functional requirements?
- Why would target users visit the platform and what added value do they get from using it?
- What existing problems or shortcomings does the platform solve or address for its users?
- Considering industry trends and best practices in information/knowledge/experience sharing via online platforms in general, what are typical platform usage scenarios by different user groups and how could/should the use cases evolve over time if the platform were to be implemented incrementally?
- How to attract maximum use and participation to the online platform?
- How should the performance of the online platform be evaluated? What are the criteria of being 'successful'?
- Any other important aspects or factors that are not included in the TOR which may enhance the outcome and potential of the online platform.

Section B. Development of the Terms of Reference for online calculation tool.

As company will be selected to develop an online toolkit for energy efficiency and performance assessment calculations for the automatic assessment of energy efficiency opportunities in different sectors at municipal/individual building level.

The tools will work like an energy calculator with a kind of questionnaire to fill in to have results such as identifying inefficient systems, indicating potential energy savings, financial savings and emission reductions achieved by opting for efficient options.

4. EXPECTED DELIVERABLES AND TENTATIVE TIMEFRAME

The assignment will require the completion of the following tasks:

No.	Deliverables	Tentative timeframe
1.	Determining the architecture, functional requirements, and user groups for the online platform. <i>Deliverables:</i> Initial report with evaluation results (<i>up to 5 working days</i>)	September 2022
2.	Elaboration of technical specifications for "Development of an online calculation tool for estimating associated investment opportunities in EE&RES and for comparing the energy performance of houses" <i>Deliverables:</i> Work Plan (<i>up to 10 working days</i>)	September 2022
3	Supporting the evaluation process of technical offers and providing comments/feedback to the Evaluation Commission in the assessment of technical offers. <i>Deliverable:</i> Evaluation report (<i>up to 5 working days</i>)	October 2022
4	Supporting quality monitoring and evaluation services offered by the selected company <i>Deliverable:</i> Final progress report and margin comments/feedback on technical aspects, quality monitoring and evaluation of the services offered. (<i>up to 10 working days</i>)	February 2023

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

5. MANAGEMENT ARRANGEMENTS

The National Consultant will work under direct supervision of the Team Leader–Component 3 of the Energy Security/FPI Programme. Overall supervision of the assignment will be the responsibility of the FPI Programme Manager. The Consultant has the responsibility of participating in all relevant working meetings with the project team at least twice per week. The estimated duration of a meeting is 2 hours.

This is a part-time consultancy. It is expected that the Consultant begins the assignment in September 2022 and completes it in February 2023.

Performance evaluation: The Consultant's performance will be evaluated against such criteria as timeliness, responsibility, initiative, communication, accuracy, and quality of the products delivered.

Language of the deliverables: All deliverables related to the assignment will be in English and/or Romanian, as communicated prior by the Team Leader/Programme Manager.

6. QUALIFICATION AND SKILLS REQUIRED

I. Academic background:

- Advanced degree (Master/equivalent or Ph.D.) in energy, engineering or other related fields is required.

II. Experience and knowledge:

- At least 5 years of proven professional experience in conducting data modelling/studies/assessments and/or quantitative and/or qualitative analysis of data;
- At least 4 years of working experience in the institutional consultancy or in energy related research institutions;
- Practicing the activity of energy auditor in the field of buildings will be considered an advantage.

III. Skills and competencies

- Proven experience in conducting thermal energetic calculations and/or technical-economic calculation of projects in the energy field;
- Proven experience in developing similar studies and methodologies;
- Preferred knowledge in high level index criteria and methodologies for Calculation Platforms
- Proven experience in the elaboration of scientific articles of international connotation;
- Strong knowledge of the Moldova's energy related official data;
- Fluency in written and spoken Romanian is required for this assignment. Good level of English and Russian will be an advantage.

Proven commitment to the core values of the United Nations, in particular, respecting differences of culture, gender, religion, ethnicity, nationality, language, age, HIV status, disability, and sexual orientation, or other status.

The United Nations in Moldova is committed to 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.

PAYMENT MODALITIES

The consultant will organize and facilitate the implementation of all activities as described above. His/her payment will be lump sum amount based, disbursed in several instalments, upon submission and approval of deliverables and certification by Programme Manager that the services have been satisfactorily performed.

7. APPLICATION PROCESS

Applicants shall submit the following documents:

- ☒ Offeror's Letter confirming Interest and Availability, including financial offer, according to Annex 2;
- ☒ CV, including information about experience in similar assignments with at least 3 references;
- ☒ 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.

Important notice:

The applicants who have the statute of Government Official / Public Servant prior to appointment will be asked to submit the following documentation:

- a no-objection letter in respect of the applicant received from the Government, and;
- the applicant is certified in writing by the Government to be on official leave without pay for the entire duration of the Individual Contract.

A retired government official is not considered in this case a government official, and as such, may be contracted.

IV. ANNEXES TO THE TOR

Annex 1 - Individual Consultant General Terms and Conditions

Annex 2 - Offeror's letter confirming interest and availability, including a financial proposal (template).