



INDIVIDUAL CONSULTANT PROCUREMENT NOTICE

Date: **11th of October 2019**

Country: Republic of Moldova, Chisinau

Description of the assignment: International Consultant in distributed energy systems (energy cooperatives).

Period of assignment/services: 64 working days till June 2020

Contract type: Individual contract

Proposal should be submitted online by pressing the "Apply Online", **no later than 25th of October 2019.**

Requests for **clarification only** must be sent by standard electronic communication to the following e-mail: silvia.pana-carp@undp.org. UNDP 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 applicants.

1. BACKGROUND

The dramatic decrease of specific technologies such as wind and solar power in past 8 years and similar plummeting in costs for storage technologies, EU started to rethink its energy and climate change goals by focusing more on decentralized energy systems, small scale local production and consumption, digitalization of energy services, decarbonized energy mix and citizenship empowerment with the benefits of the transition to a cleaner energy future. The EU document that encapsulates all these changes and will determine the EU energy strategic directions by 2030 is called "EU Clean Energy Package" and is expected to enter in force by 2020. Win-win situations could be identified for Moldova to profit from these changes.

The Republic of Moldova is poorly endowed with conventional energy resources, and highly dependent on imported energy. The electricity sector of Moldova is fully dependent on external energy sources. Domestic supply sources consist of several combined heat and power (CHP) plants covering up to 20% of domestic consumption. The rest of demand is met by electricity procured either by imports from the Cuciurgani-Moldavskaya GRES gas-fired power plant, owned by the Russian company Inter-RAO and located in Transnistria or from Ukrainian suppliers such as DTEK. Similarly, Moldova is still largely dependent on gas supplies from the Russian Federation. In 2016,

out of 1.038 Bcm of contracted gas imports, over 99% were acquired from Russia's Gazprom. Another 2 Bcm were delivered by Gazprom to Transnistria and mainly used for electricity generation. Only around 25% of primary energy consumption is supplied through indigenous resources, 98% of which is biomass, mostly used for heating purposes in the rural areas.

Renewable energy could be one solution to tackle the energy challenges of Moldova. In this regard, Moldova committed to reach a binding target of 17% of energy from renewable sources in gross final energy consumption by 2020. By 2018 this target has been already achieved. The main source of energy that allowed Moldova to achieve its commitments relates to biomass. A significant contribution in this regard was brought by the project of UNDP "Energy and biomass" and financed by EU between the years of 2011 – 2018. This suggests that Moldova could start thinking, planning and committing to more ambitious goals by 2030.

For the period 2021 – 2030 the Energy Strategy of Moldova has three specific objectives:(i) to ensure an enhanced use of renewable sources; (ii) to improve energy efficiency; (iii) to introduce intelligent power networks. As the Strategy recognizes for the Republic of Moldova, the use of local renewable energy sources has first of all the goal to ensure the security of supplies. Other public social and economic benefits of the RES development, such as a lower impact on the environment, the creation of new industries and enterprises, positive structural consequences on regional economies and the creation of jobs, are good reasons to support RES in the country.

In 2018, Moldova started together with IRENA a Renewable Readiness Assessment of the Republic of Moldova. This exercise aims to identify the needed actions to overcome the barriers that impede the development of this sector in Moldova. Moldovan Government also is working actively to update the Energy Strategy 2030. This would be the momentum for Moldova to be bolder and pay more attention to distributed energy systems, business models focusing on energy communities at local level, having in this regard specific targets, policy and support mechanisms for this sub-sector.

In this respect the energy cooperatives could have a transformative impact on the whole Moldovan power sector. The main implications in case of an energy cooperative would be to create a source of local development, energy self-sufficiency, potentially smaller energy bills. The impact would be less energy imports, less debts and more local production, transparency and control over energy resources.

2. SCOPE OF WORK, RESPONSIBILITIES AND DESCRIPTION OF THE APPROACH AND METHODOLOGY

The overall scope of the assignment is to investigate the best practices of innovative business models focused on distributed energy systems in Czechia and West European countries and test the best ways to replicate them in Moldova.

The specific objective of the assignment is to investigate the energy policy, regulatory and energy market landscape in Moldova in order to pilot and harness the benefits of energy cooperatives in the country.

The international consultant could be supported by a national consultant that will assist him during field visits in Moldova, collection and analysis of information, interaction with national institutions and local communities, meetings with energy market participants and other donors active in the energy sector of Moldova. An estimated 3 to 4 visits during the assignment might be needed. During the assignment the following tasks will be conducted by the consultant.

- (1) Conduct market, policy research and modelling containing the following activities:
 - i. Model and estimate the annual energy production of an energy cooperative covering the needs of a local community (with population ranging from 500 to 2000 inhabitants).
 - ii. Estimate the volume of energy needed so that a cooperative could cover entirely (100% self-sufficient) or partially (50% to 70%) the energy needs of its members.
 - iii. Estimate the energy production costs of a cooperative in Moldova using costs benefit analysis, Levelized Cost of Electricity or other analytical tools indicating the costs recovery of investing in a renewable energy cooperative. The scenario could also consider storage option and non-storage option of the electricity produced.
 - iv. Model scenarios where excess energy could be produced by a cooperative and injected into the national electric system of Moldova or sold on the market.
 - v. Analyze 3-4 different models of energy cooperatives that could combine various energy technologies (e.g. biomass, biogas, wind, solar) and different legal statuses (limited trade companies, partnerships of civil law, public organizations) to understand which of these models would better fit to the needs and realities of local communities in Moldova.
- (2) Illustrate 3-4 examples through case studies of energy cooperatives from countries where this model proved successful by providing details on energy market design, policy support, energy prices, support schemes, internal organization and overall building blocks that make energy cooperatives viable. Countries could be Czech Republic (in case any models of energy cooperatives exist in this country) or Denmark, Germany, the Netherlands, Austria, Sweden where this model proved a positive track record.
- (3) Propose the minimum set of policy, legal, regulatory measures as well as market support mechanisms so that energy cooperatives have a minimum starting point in Moldova.
- (4) Based on the preliminary analysis of energy policies, market landscape and electricity (energy) system of Moldova propose a project concept (ideally a project document) aiming to pilot a few models of energy cooperatives in Moldova

Note: The dates of the missions will be proposed by Consultant as part of his technical offer and consulted with the Project manager prior to contract signature.

All of the deliverables will be prepared in English. Working language will be English with Romanian and/or Russian interpretation.

The Consultant will work under direct supervision of the Programme Specialist/Cluster Lead – Climate change, Energy and Environment Cluster and in close collaboration with UNDP Country Office in Moldova. The office of the consultant will be housed in the Green City Lab office. The

consultant will report directly to the Programme Specialist/Cluster Lead on day-to day activities and submit reports as required in the agreed upon plan and time schedule.

For detailed information, please refer to the Terms of Reference.

3. REQUIREMENTS FOR EXPERIENCE AND QUALIFICATIONS

Academic qualifications:

- At least master's degree in power engineering, energy systems, energy economics, energy management or other related fields.

Experience:

- At least seven (7) years of professional experience in energy industry, consulting services, research, design of decentralised or distributed energy systems and/or other related fields;
- At least three (3) years of experience in the international state-of-the-art approaches and best practices in distributed energy systems, modelling, policy design.
- Previous working experience from the Czechia and /or EU in terms of a specific track record of cooperation with institutions and bodies responsible for public policies in the field of energy.
- Demonstrated experience and success in the engagement of and working with the private sector and local communities on tasks related to distributed energy systems.
- Good analytical and problem-solving skills and the related ability for adaptive management with prompt action on the conclusion and recommendations coming out from the assignment;
- Ability and demonstrated success to work in a team, to effectively organize it, and to motivate its members and other project counterparts to effectively work towards the project's objective and expected outcomes;
- Proven experience in cooperation with international organizations or other bodies responsible for formulating smart urban development, at least three (3) similar assignments; previous working experience with UNDP or other international agencies will be an asset;
- Experience with Eastern European countries will be an asset;
- Excellent communication, analytical, facilitation and presentation skills;
- Excellent computer literacy (Word, Excel, Internet, Power Point).

Language skills

- Proficiency (verbal and written) in English; working level of Romanian and/or Russian will be an asset.

4. DOCUMENTS TO BE INCLUDED WHEN SUBMITTING THE PROPOSALS

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

1. Proposal: Brief proposal explaining why you are the most suitable for this consultancy including confirmation on availability to take up assignment for the whole period.
2. CV, including information about past experience in similar assignments and contact details for at least 3 referees;

3. Financial proposal (in USD, specifying the total lump sum amount as well as the requested amount of the fee per day).
4. Offeror's Letter confirming Interest and Availability.

Important notice:

Incomplete applications not considered.

5. FINANCIAL PROPOSAL

Lump sum contracts

The financial proposal shall specify a total lump sum amount, and payment terms around specific and measurable (qualitative and quantitative) deliverables (i.e. whether payments fall in installments or upon completion of the entire contract). Payments are based upon output, i.e. upon delivery of the services specified in the TOR.

In order to assist the requesting unit in the comparison of financial proposals, the financial proposal will include a breakdown of this lump sum amount (including all related costs e.g. fees, taxes, travel, phone calls etc.) and the number of anticipated working days. The consultant shall bare costs for all supplies needed for data collection and data processing including possession of his own personal computer.

Travel

All envisaged travel costs must be included in the financial proposal. This includes all travel to join duty station/repatriation travel. In general, UNDP should not accept travel costs exceeding those of an economy class ticket. Should the IC wish to travel on a higher class he/she should do so using their own resources.

In the case of unforeseeable travel, payment of travel costs including tickets, lodging and terminal expenses should be agreed upon, between the respective business unit and Individual Consultant, prior to travel and will be reimbursed.

6. EVALUATION

Initially, individual consultants will be short-listed based on the following minimum qualification criteria:

- At least master's degree in transport engineering, urban development and/or other related fields;
- At least seven (7) years of professional experience in in energy industry, consulting services, research, design of decentralised or distributed energy systems and/or other related fields.

The short-listed individual consultants will be further evaluated based on the following methodology:

Cumulative analysis

The award of the contract shall be made to the individual consultant whose offer has been evaluated and determined as:

- a) responsive/compliant/acceptable, and
- b) having received the highest score out of a pre-determined set of weighted technical and financial criteria specific to the solicitation.

* Technical Criteria weight – 60% (300 pts)

* Financial Criteria weight – 40% (200 pts)

Only candidates obtaining 210 points would be considered for the Financial Evaluation.

Criteria	Scoring	Maximum Points Obtainable
Technical		
At least master's degree in power engineering, energy systems, energy economics, energy management or other related fields;	Master's degree – 30 pts, PhD – 40 pts.	40
At least seven (7) years of professional experience in in energy industry, consulting services, research, design of decentralized or distributed energy systems and/or other related fields;	7 years – 30 pts each additional year 5 pts up to max – 40 pts	40
At least three (3) years of experience in the international state-of-the-art approaches and best practices in distributed energy systems, modelling, policy design;	less than 3 years – 0 pts; 3 years – 10 pts; 5 years – 20 pts each additional year 5 pts up to max – 30pts	30
Previous working experience from the Czechia and /or EU in terms of a specific track record of cooperation with institutions and bodies responsible for public policies in the field of energy.	No – 0 pts; Yes – 20 pts	20
Interview (demonstrated technical knowledge and experience; communication/ interpersonal skills; initiative; creativity/ resourcefulness)		
Demonstrated experience and success in the engagement of and working with the private sector and local communities on tasks related to distributed energy systems;	limited – <10 pts, satisfactory – <20pts, extensive – <30 pts	30
Good analytical and problem-solving skills and the related ability for adaptive management with prompt action on the conclusion and recommendations coming out from the assignment;	limited – <10 pts, satisfactory – <20 pts, extensive – <30 pts.	30
Ability and demonstrated success to work in a team, to effectively organize it, and to motivate its members and other project counterparts to effectively work towards the project's objective and expected outcomes;	limited – <10 pts, satisfactory – <20 pts, extensive – <30 pts.	30
Proven experience in cooperation with international organizations or other bodies responsible for formulating smart urban	< 3 assignments – 10 pts; >3 assignments – 30 pts	30

development, at least three (3) similar assignments; previous working experience with UNDP or other international agencies will be an asset;		
Experience with Eastern European countries will be an asset;	limited –<3 pts, satisfactory – <5 pts, extensive – <10 pts	10
Excellent communication, analytical, facilitation and presentation skills;	limited –<3 pts, satisfactory – <5 pts, extensive – <10 pts	10
Excellent computer literacy (Word, Excel, Internet, Power Point).	limited –<3 pts, satisfactory – <5 pts, extensive – <10 pts	10
Proficiency (verbal and written) in English; working level of Romanian and/or Russian will be an asset.	(English – max 10 pts., Russian – max 10 pts. or Romanian – max 10 pts.)	20
Maximum Total Technical Scoring		300
Financial Evaluation Scoring		
Evaluation of submitted financial offers will be done based on the following formula: $S = F_{min} / F * 200$ S – score received on financial evaluation; Fmin – the lowest financial offer out of all the submitted offers qualified over the technical evaluation round; F – financial offer under consideration.		200

Winning candidate

The winning candidate will be the candidate, who has accumulated the highest aggregated score (technical scoring + financial scoring).

The United Nations Development Programme 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.

Important notice

The applicant's who has 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.

ANNEXES:

ANNEX 1 – TERMS OF REFERENCES (TOR)

ANNEX 2 – INDIVIDUAL CONSULTANT GENERAL TERMS AND CONDITIONS