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#### **TERMS OF REFERENCES**

Job title:	National Consultants to monitor the usage of installed Biomass Heating
	systems in MEBP beneficiary communities
Duty station:	Chisinau, Moldova and home based
Reference to the project	Moldova Energy and Biomass Project, Phase II
Contract type:	Individual Contract (IC)
Period of assignment:	May 2016 - November 2017 (up to 160 consultancy days, per consultant)

## A. BACKGROUND AND CONTEXT OF THE ASSIGNMENT:

The Moldova Energy and Biomass Project aims to contribute to a more secure, competitive and sustainable energy production in the Republic of Moldova through targeted support to the most viable and readily available local source of renewable energy, namely biomass from agricultural wastes.

As of December 2014 the project entered into its second phase which is to last until end 2017. The second phase of the project had received additional funding of 9.46 million EUR allocated by the European Union in the framework of the Eastern Partnership Integration and Cooperation (EaPIC) programme, with the objective to leverage the successful activities and extend them to so far not covered or underrepresented regions, specifically Transnistria, Gagauzia and Taraclia, and to support further consolidation of the biomass market in the country based on the experience and lessons learned in the first phase.

The project will continue to support installation of biomass heating systems in communities aiming to install at least 80 additional biomass-based municipal heating systems with specific focus on Transnistria, ATU Gagauzia, Taraclia district including small towns following the *participatory community development approach*. Installation of combined solar/biomass technologies will also be piloted in public buildings in order to provide integrated energy saving and energy-efficiency solutions.

However, considering the novelty of the biomass based heating technologies to the Moldovan local public administration, specific emphasis will be put on monitoring the usage of biomass heating systems installed in the first phase of the project and provision of technical support and advice to the local beneficiaries in order to insure proper functioning of the heating installations.

For more information about the project, please visit: <u>www.biomasa.md</u>, <u>www.undp.md</u>.

### B. SCOPE OF WORK

The general objective of the consultancy is to support MEBP in its efforts to provide targeted technical assistance and to build capacities among Local Public Authorities and operators in the biomass-based boiler rooms via continuous monitoring of the public institutions connected to biomass-based heating systems, in order to enhance skills and knowledge regarding development, evaluation and implementation of sustainable community biomass heating projects and to provide on-site technical assistance and advice.

In order to achieve the stated objective, the project will employ two national consultants to transfer the knowledge, build capacities and provide targeted on-site assistance to local public authorities responsible for sound management of the biomass-based systems and boiler operators responsible for effective operation of the boiler plants. The consultants will collect relevant monitoring data and will timely and regularly communicate to MEBP about any deviances, critical situations, conclusions and considerations for future interventions. Additionally, the consultants will collaborate and share recommendations with other consultants engaged in the project (community mobilization consultant, public procurement specialist) for a greater overall impact.

The assistance will focus on the following outcomes for the following target groups:

- Municipal leaders, members of local councils, public servants from mayors' offices, managers of public buildings (directors of the schools, kindergartens, health care institutions etc.) from target communities have enhanced their knowledge and expertise in the area of sound management of biomass based installations for heating and solar systems for provision of hot water at community level including public procurement of solid-biomass, maintenance of the biomass systems including conservation for the summer period, etc.
- 2. The operators of the biomass-based municipal heating systems are equipped with skills, knowledge and understanding regarding biomass based heating systems, thus enabling them to ensure optimal functioning and maintenance of the boiler and solar systems installed in the public buildings from beneficiary communities. All the technical problems related to the functionality of the biomass systems are timely communicated to the MEBP Engineer and where possible locally solved by the technical consultant.

The consultants will assume full responsibility for the entire process related to developing the monitoring mechanism, identifying the knowledge and technical needs of each public institution, timely communication to MEBP specialists (Project Engineer, Community Mobilization and Capacity Building Specialist, follow up-activities to solve the identified problems and ensure the sustainability of the biomass systems (incl. logistics).

In particular, the consultants will carry out the following **activities:** 

- 1. Elaborate, in coordination with MEBP specialists the concept and methodology of the community monitoring mechanism:
  - 1.1. Develop and coordinate with the PMT the Annual Work Plan for the entire contract period, with timelines set for the amendment of training methodology, content and modules handouts;
  - 1.2. Familiarize with the project document provisions regarding training and capacity building efforts foreseen for the respective target groups (municipal leaders and operators of biomass-based heating systems) and already existing monitoring reports;
  - 1.3. Incorporate in the trainings' methodology all the previous lessons learned and best practices in managing biomass-burning boilers at the community level, effective intra-communal cooperation models from the MEBP activities. Together with PMT, take part in meetings with relevant stakeholders to discuss and share ideas regarding the proposed training programme and lessons learned from previous interventions;
  - 1.4. Develop Monitoring and Evaluation Forms and ensure proper filling in by participants and conduct evaluation after each visit /collect feedback;
  - 1.5. Prepare, in coordination with the MEBP specialists and other MEBP consultants, educational support materials, visual aids and handouts for the monitoring visits participants, including case-

studies, draft terms of reference for the procurement of solid biomass, draft contract models with servicing companies and other relevant materials;

- 2. Field monitoring visits to beneficiaries for on-site monitoring of the biomass heating system
- 2.1. Undertake on-site monitoring visits to beneficiary communities and collect relevant data concerning functionality of the biomass systems. The on-site visits schedule shall be agreed in advance with the PMT.
- 2.2. Undertake follow-up visits to the most problematic public institutions, to ensure that all recommendations provided to the managers and operators were implemented and all correction actions were applied.
- 2.3. Where necessary, during the visits, provide hands-on support and advice to beneficiaries on procurement of qualitative biofuel by providing template tendering packages for public acquisition, draft contract models and contract management guidance; technical assistance for sound operation of biomass heating and solar systems including removal of primary technical deficiencies, technical parameters adjustment, etc.
- 2.4. Inform the representatives of the public institutions about the visit and coordinate all the logistic aspects;
- 2.5. Respond promptly to queries from UNDP regarding the status of biomass sites, state of the biomass burning technologies, preparedness of the institutions to the heating season, etc., and participate in information briefings with the PMT whenever needed.
- 2.6. Provide the print-ready version of the educational support materials, visual aids and handouts for the monitoring visits participants, including case-studies, draft terms of reference for the procurement of solid biomass, draft contract models with servicing companies and other relevant materials.

# The timeframe for the delivery of each activity/output per community shall be coordinated and agreed in advance with the Senior Community Mobilization Project Officer.

Time-framework	Number of working days
Elaborate, in coordination with MEBP specialists the concept and methodology of	3 days
the community monitoring mechanism	
Field monitoring visits to beneficiaries for on-site monitoring of the biomass heating	157 days
system	
Total	160 working days

Additionally, the consultants shall provide to the PMT feedback for improvement of the educational materials based on lessons learned from delivering the monitoring visits and from participants' evaluations forms and to mainstream gender equality throughout the training activities

# C. MANAGEMENT ARRANGEMENTS

The consultants will work under supervision and in close collaboration with Senior Community Mobilization Project Officer. He/she submits reports directly to Senior Community Mobilization Project Officer. The consultants are expected to undertake frequent field trips to beneficiary communities in Moldova over the entire period of contract. Transportation for all envisaged travels will be provided by UNDP.

The payment for services provided by the short term Community Monitoring Consultants will be released on a monthly basis based on the approved time-sheets confirming the actual volume of work performed and

based on outputs delivered and accepted by Senior Community Mobilization Project Officer and MEBP Project Manager during the given reporting period.

The consultants will be required to produce progress reports on monthly basis, and one Final Report upon the conclusion of the contract period.

**Monthly reports** will take the form of progress reports towards the contract targets as listed in the Annual Work Plan developed and agreed upon at the beginning of the assignment, and will include brief reports for each of the monitoring visit conducted in the respective districts. The monthly report need to include the following:

- A narrative part pertaining to the observations of the consultants team, and main findings with
  respect to the state of the biomass technologies, the action taken by the operators to ensure the
  sound operation of the biomass system, actions taken by the managers of the public institutions to
  ensure the timely procurement of solid biofuel, maintenance services, etc.;
- A statistical/quantitative part reflecting the regions and respectively small towns covered during the reporting period, total number of participants trained – by region respectively;
- A list of common questions, issues raised during training activities;
- Summary of Evaluation Forms from monitoring visits carried out in the period under review (by district, and overall);
- Follow-up activities in terms of further visits and corrective measure to be undertaken, etc.

**The timeline** for the submission of the monthly reports together with all annexes in original (list of participants, agenda of the visit, evaluation forms, action pictures taken during the visit) is 10 working days from the conclusion of the previous month. Monthly reports with corresponding attachments need to be submitted in electronic version to Community Mobilization Consultant, with copies to the Project Engineer.

The **Final Report**, including the educational materials developed within the assignment and all annexes in original (lists of participants grouped by target groups and regions, agendas of the monitoring visits, evaluation forms) will be submitted to the UNDP Project Manager, with copies to the Training and Capacity Building Officer within 10 working days after the conclusion of the last monitoring visit. The Final Report needs to be submitted in electronic version and on paper support. The report should comprise:

- A narrative section to reflect the main findings of the consultants, the extent to which contract objectives have been attained, a description of the methodology and approach, main findings with respect to the visits delivered during the period under review;
- Summary of the Evaluation Forms filled in by all participants, and the evaluation forms as such;
- A photographic portfolio of the assignment to include a selection of most appropriate action shots taken during the visits;
- Summary of lessons learned for future interventions;
- General Conclusion and Recommendations.

# **QUALIFICATION REQUIREMENTS**

# Consultant 1:

- University or higher Degree in Social Sciences, Public Administration, Economics, Engineering, or other related area.
- At least 5 years of experience in community development assistance including capacity building in the public sector or related work for a donor organization, governmental institutions, NGO or private sector / consulting;
- Previous working experience in community based development projects or energy/environmental projects is a strong asset;

- Technical understanding and practical experience in implementing decentralized energy supply or infrastructure projects;
- High level of responsibility and organization capacities, creative approach to solving issues;
- Excellent communication and reporting skills;
- Ability to meet deadlines and prioritize multiple tasks.
- Computer proficiency, including knowledge of MS Office products;
- An excellent command of written and spoken Romanian and Russian is required, knowledge of English is an asset;
- 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

# Consultant 2:

- University Degree or higher education in one or a combination of the following fields: Technical Sciences, Engineering, Mechanics, Electricity and/or Agriculture and Rural Development;
- At least 5 years of experience in engineering, installation, servicing or troubleshooting boiler plants or heating installations;
- Previous experience in developing training materials in the field of renewable energy, energy efficiency and/or agricultural sector is a strong advantage;
- Technical understanding and practical experience in implementing decentralized energy supply or infrastructure projects;
- Excellent understanding of boiler plants and heating systems configuration/set-up basics;
- High level of responsibility and organization capacities, creative approach to solving issues;
- Ability to meet deadlines and prioritize multiple tasks.
- An excellent command of written and spoken Romanian and Russian is required, knowledge of English is an asset;
- 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