



TERMS OF REFERENCE

Job title: Team of two National Experts to support the Biomass Sector

Development Program (BSDP) and Policy Development for 2017-2022

Duty station: Chisinau

Reference to the Moldova Energy and Biomass Project (MEBP)

Contract type: Individual Contracts (IC)

Contract Duration: November 2017 - March 2018

I. Background:

The first phase (2011-2014) of the Moldova Energy and Biomass Project (MEBP) with a budget of 14.56 million EUR project, funded by the European Union and UNDP and implemented by UNDP, contributed 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, which is biomass from agricultural wastes.

In 2015 the Project entered its second phase in the framework of the Eastern Partnership Integration and Cooperation (EaPIC) programme, based on its continued high relevance and the clearly identified need to further support the consolidation of the emerging biomass market in the country. The extension timeframe spans until the end of 2017 with additional EU-funding of 9.41million EUR.

Project's commitment to develop a competitive and sustainable sector continues through creating the demand side by subsidizing the development of solid biomass based heating systems around the country and supporting the development of competitive production and supply of biomass products and technologies.

One of the centerpieces of MEBP activities is to support developing the local legal and policy framework that would be prone to establishing a competitive basis for biomass market. Moldova is a net importer of energy products and a predominantly agricultural country where solid biomass potential could have an immediate application if proper policies and frames exist. Supporting local biomass production through legal, financial and institutional instruments is one of the priorities of Government of Moldova (GOM) has set in its 2030 National Energy Strategy.

The first efforts to create systematic supply and demand started in early 2011 when the project (phase 1) was launched. The Government, though the Ministry of Economy and Infrastructure (MEI) established Energy Efficiency Department to develop policies and Agency for Energy Efficiency (AEE) to implement those policies through coordination and attraction of donor assistance, managing that assistance, coordinating and synergizing various sectors, players and value chains oriented to produce competitive and reliable renewable products and systems. Various efforts have been undertaken during the last years in order to align Moldovan legislation with EU acquis communitaire, promote various renewable initiatives in the country; commit to ambitious renewable targets within National Energy Sector Development Strategy, National Action Plan for Renewable Energy Sources 2013-2020, etc.

Despite some significant progress over the last few years, biomass potential isn't fully explored and remains vulnerable to market variations and non-functioning systems like legal support, subsidies, competitive and affordable finances, associative representation and lobbying, access to technical assistance, know-how and technology, etc. There remains as well, a need for continued support in view of consolidating the market and helping it adapt to a changing market environment, incl. changing quality requirements. At the same time the market of biofuels and biomass burning and processing technologies is of strategic importance to the country and public spending programmes, e.g. via the Energy Efficiency Fund, are being put in place. Private sector support mechanisms, be they publicly or donor funded, have to be carefully designed in order to avoid any market distortion, comply with state aid legislation and principles, while providing the right incentives to private sector agents.

In an effort to cover this sectorial planning and management gap, Ministry of Economy and Infrastructure and MEBP looks to hire a team of consultants namely: **Team Leader Technical Expert on Biomass** and a **Legal Expert**- that will support the Ministry of Economy and Infrastructure in developing the Biomass Sector Development Program (BSDP) for 2017-2022. The BSDP will be the guiding document for all relevant decision makers in envisioning and supporting the development of the sector. The period covered by the BSDP is 2017 -2022. The principal national counterpart leading the BSDP will be the Ministry of Economy and Infrastructure.

II. Scope of Work, key activities and expected outputs

The overall purpose of this consultancy for the team of two experts is to Design a support mechanism for solid biomass market development, analyzing the existing Moldovan legislation and policies, international experiences, financial instruments, other methods and techniques to determine the gaps and opportunities that are necessary to boost solid biomass sector development. In close liaison with all relevant institutions, the team of experts will look to identify current gaps and to understand the perspectives of solid biomass market development.

The team of consultants will develop a study aiming at identifying all potential financial, fiscal, economic, legislative instruments for market stimulation and review their feasibility and suitability, and recommend options for the most promising package of interventions. The study will:

- Be based on a review of the existing assessments undertaken in this domain, e.g. a recent study on promoting eco-technology uptake;
- Design instruments in close collaboration with the partners foreseen to adopt and implement them subsequently, most importantly Ministry of Economy and Infrastructure, Ministry of Finance, Energy Efficiency Agency and Energy Efficiency Fund;
- Be based on lessons learned of successfully applied market development models in the sector in other European countries;
- Provide clear and practical guidelines for each of the instruments or set of instruments proposed, describe in detail the level of effort needed and steps in implementation such as, responsible institution, expected timeframe, necessary additional resources, expected impact, etc.

Upon carrying out the existing assessment, the team of experts will deliver a draft Biomass Sector Development Program (BSDP) that would support the national counterparts in drafting next 5 years of legislation and financial support programs.

Scope of Work and main activities for the Team Leader - Technical Expert on Biomass:

The Team Leader will analyze the sector by meeting various sector players and participants: farmers, briquette and pellet producers, farmers' associations, financial institutions and donors with energy development portfolios, local public administrations, industry clusters, central public institutions, etc. to understand and reflect the status of current development and sector trends in the study.

The study will analyze the entire **solid biomass value chain** and provide specific detailed recommendations towards overcoming legal, administrative, financial barriers at each separate stage of the chain. Based on the existing findings, the Team Leader will make recommendations and provide relevant examples that proved to be successful in developed countries and all of them linked to each other will lay the ground for a clear development path to be described in the BSDP.

The study will provide detailed information and provide recommendations on the following aspects:

- Raw material market a detailed analysis of all the existing studies, assessments, reports etc about the typology of the available raw materials, their suitability for briquetting or pelletizing; about existing biomass equipment, its burning characteristics, logistic details (loading, unloading, drying, storing, acceptable losses, mixing potential, costs associated with each stage), energy crops potential, etc.;
- Fuel production market a detailed analysis of the available equipment that is suitable to
 the existing raw material shall be presented along with a realistic estimation of the investment
 costs which is required for the production plant to be deployed;
- **Fuel marketing and sales** all relevant tools required for stimulating sales of biomass fuel must be analyzed. A detailed analysis of the best European practices shall be conducted and recommendations for the most feasible options for Moldova, provided;
- Fuel Demand and Supply a quantitative analysis of the parity between supply and demand should be done to determine the level of disparity. Also, it should be done in correlation with the existing/suitable equipment for producing the fuel as well as existing boilers. Basically, this part of the study should be answering the question how much suitable fuel we produce for the boilers installed?
- Human resources and capacity building the required human resources along the value chain will be analyzed to determine the status of available resources as well as the need for additional personnel to be trained;
- Legal/Fiscal aspects (incentives) all indirect modalities for stimulation of biomass market development will be listed. A status level shall be determined as well as recommendations for the incentivizing the biomass market shall be provided;

The study would target various instruments and interventions that reveal all the necessary aspects to ensure immediate and long-term needs of the solid biomass sector.

In addition to BSDP study, the Team Leader will prepare a List of Recommendations and a **separate Action Plan** for the next five years entailing **recommendations/actions** and estimated financial **support** (costs of the suggested actions) and responsible institutions, either the Ministry of Economy and Infrastructure and other governmental agencies in charge of renewables and energy efficiency on the steps necessary to undertake to fulfilling the needs of the biomass market and help achieving the national targets.

Team Leader will be required to perform the following tasks (supported, where needed by the legal expert):

- Review existing biomass and renewable legislation and policies to determine EU compliance;
- Review best international practices and determine their adaptability to the Moldovan environment and conditions
- Develop a comprehensive strategy of the solid biomass sector that would include all elements of the value chain, as follows:
 - ✓ An estimation of raw material and available resources, identification of raw materials suitability for energy purposes, programs and incentives for increasing the volume of

- raw material available, recommendations towards introduction of energy crops, models of sustainable economic development of private sector dealing with this business, logistical arrangements of the raw material transportation;
- ✓ Recommendations towards types of production technologies suitable to the identified raw material, models for sustainable economic development of the production units, recommendations towards the development of the local briquetting/pelletizing production industry;
- ✓ Types of boilers and burning technologies suitable for the locally produced fuel, development models for households using biomass boilers, development models for industry using biomass boilers, recommendations towards the development of the local boilers manufacturing industry;
- Assess the need for financing the sector by:
 - ✓ Identify existing subsidy mechanisms ready to support the local biomass market on both ends production and consumption
 - ✓ Based on the estimated amount of suitable raw material, determine the total amount of the required financing along the value chain.
 - ✓ Recommend financing specific mechanisms for each of the elements in the value chain of biomass market such as, supply, logistics and consumption.
- Estimate the timeframe of the required interventions, until they become unnecessary due to market sustainability;
- Assess the need for human resources in the sector by:
 - ✓ Identifying the type of specialists required for the sector to operate properly
 - ✓ Verify the result with the existing curricula of specialized education institutions and propose new training courses to fill in the gaps
 - ✓ Estimate the number of specialists required for the sector to become fully operational
 - ✓ Estimate the budget and time for the specialists to be created
 - ✓ Make clear recommendations towards developing a full-fledged training course for education institutions that have the potential to train specialists in the field
- Assess the need for technical assistance by:
 - ✓ Identify the major gaps in the value chain and recommend the best in class examples to solve them
 - ✓ Identify the education institutions capable to train specialists and propose a modification of the curriculum to accommodate the biomass production and consumption subjects;
 - ✓ Propose linkages between the countries with best experience in the field and major gaps in the local value chain to attract appropriate technical assistance
- Assess the need and possibility of fiscal incentives for the sector by:
 - ✓ Analyzing the status of tax regime for the fuel production business
 - ✓ Analyzing the status of fiscal incentives for the biomass use for the households and industry
 - ✓ Recommend, if appropriate, tools for indirect stimulation of the production and consumption of biomass fuel
- Assess the potential of energy supply services development
 - ✓ Analyze the existing experience of PPPs for energy supply based on biomass
 - ✓ Analyze the legal and institutional potential for introduction of energy supply contracts
 - ✓ Based on available international examples, make clear recommendations on development path of professional services in the sector
- Assess associative representation of the sector and identify legal instruments to promote cooperation and sector lobbying;
- Assess existing dialog platforms between the private sector and GOM and recommend how the interaction and communication could be improved;
- Determine a list of priority actions for national partners for further consolidation and development of biomass market for the period 2017-2022.

Scope of Work and main activities for the legal expert:

The overall purpose of the legal expert's support is the development of the draft **Governmental Decision** to approve the BSDP for 2017-2022.

Main activities will include:

- Support the Team Leader overall analysis by reviewing the legal and policy framework and providing concise reports and recommendations for the BSDP;
- Review of the international best practices in legal/policy enabling environments for biomass sector in the EU countries
- Develop the draft Governmental Decision that will approved the BSDP 2017-2022
- Counsel offered to the project and national counterparts, during this assignment, on the legal aspects in biomass sector

Expected outputs overall:

- A **comprehensive study** analyzing the current biomass market status and a roadmap to development of biomass market and a financial, fiscal, economic, legislative roadmap for biomass market stimulation in Moldova, including the biofuels sub-sector (in line with the new legislation on promoting the use of renewable energy);
- A **report with recommendations** for biomass market development stimulation and an **Action Plan** with priority list of actions for Moldova the target audience is MEI and other governmental agencies in charge of renewables and energy efficiency;
- **Biomass Sector Development Program for 2017-2022**, that would support the national counterparts in drafting next 5 years of legislation and financial support programs.
- A **draft Governmental Decision** on approving the National Biomass Sector Development Program for 2017-2022, elaborated according to, with the following structure:
 - a. <u>Introduction</u> (Background, European context, national context; Aims for the development of the action plan, the Methodology used for developing the action plan, etc.)
 - b. <u>Current situation</u> in the sector (general characteristics, energy situation, existing strategies and action plans/ legal framework in the field);
 - c. <u>Biomass market characteristics</u> (description of the supply and demand sides, theoretical and technical potential, new market trends/ initiatives, existing supply chains, existing gaps, etc.)
 - d. Biomass market SWOT analysis;
 - e. Description of the <u>Governmental vision</u> on the market development (targets, including regional ones, productions and use of biomass resources, vision on E-RES, H&C-RES, T-RES production and use, etc., biomass contribution to the local self-sufficiency concept implementation, by region, etc.)
 - f. Detailed <u>Action Plan</u> for the market development over the next five years (description of measures, draft timeframe, appointment of responsible bodies, etc.)
 - g. Impact assessment (energy, economic, financial and social impact assessment);
 - h. Progress monitoring and evaluation

III. Timeframes, Schedules and Deliverables

The following timeframes and deliverables are expected from the Team Leader (including deliverable no 4. For the Legal Expert:

Item no.	Deliverable	Estimated workload timeframe	Deadline
1.	Activity Plan for the assignment submitted and coordinated with the Ministry of Economy and Infrastructure and the MEPB (Biomass project)	Team Leader – 3 days Legal Expert – 1day	10 Nov 2017

2.	The biomass market study	Team Leader – 31 days Legal Expert – 2 days	30 Nov 2017
3.	The BSDP as a roadmap for the development of biomass market and a financial, fiscal, economic, legislative roadmap for biomass market stimulation in Moldova; preliminary recommendations	Team Leader – 30 days Legal Expert – 5 days	30 Dec 2017
3.	The report with recommendations for biomass market development stimulation and Action Plan for Moldova – (the target institutions are Ministry of Economy and Infrastructure and other governmental agencies in charge of renewables and energy efficiency)	Team Leader – 43 days Legal Expert – 5 days	15 Feb 2018
4.	The draft Governmental Decision on approving the National Biomass Sector Development Program for 2017-2022	Team Leader – 5 days Legal Expert – 15 days	30 March 2018

The volume of work has been estimated at 112 working days for the Team Leader and 28 working days for the Legal Expert for the entire assignment during which all the activities and outputs/results envisaged under the present assignment are expected to be delivered. The mentioned number of working days has been <u>estimated</u> as being sufficient/ feasible for the envisaged volume of work to be completed successfully and is proposed as a guideline for the duration of assignment, and it cannot be used as criteria for completion of work/assignment.

The provision of envisaged deliverables approved by the Project partners and concerned national stakeholders would be the only criteria for the experts' work being considered completed and eligible for payments.

IV. Organizational setting

The Consultants will work under the direct supervision of the UNDP Energy and Environment Cluster Lead and MEBP Project Manager and in close coordination with the Ministry of Economy and Infrastructure and Agency for Energy Efficiency (AEE). All the available materials and necessary information will be provided to the consultants and additional meetings with counterparts will be facilitated.

The consultants' performance shall be assessed based on timeliness and quality of services. The contractor shall be notified of any deviation from the agreed schedules and standards, pursuant to which it will be required to remediate its performance. In case no satisfactory remediation shall be obtained UNDP reserves the right to terminate the contract.

The payment for services provided by the Consultant under the MEBP will be made on a lump-sum basis upon the service delivery and acceptance by MEBP and National counterparts (EEA, MEI).

The outputs and the all the complementary documents shall be prepared in Romanian. However a Mid term and final progress report shall be provided by the Team Leader to the UNDP Cluster Lead and MEBP project manager in English.

V. Qualifications and skills required

Team Leader - Technical Expert on Biomass:

Academic Qualifications:

• Advanced university degree (master's or similar) in Finance, Economy, Business or Public Administration, Energy Engineering or other related-fields;

Experience:

• Minimum 10 years of national and/or international consulting experience and/or policy drafting and analysis in the field of environment, energy efficiency and/or renewables;

• Hands-on experience in energy/environment policy drafting and analysis, strategic planning and monitoring;

Competencies and skills:

- Demonstrated knowledge of the EU biomass/renewables market regulatory field;
- Familiar with various financial, fiscal, economic, legislative instruments for market stimulation
- Hands-on experience in solid biomass projects;
- In-depth knowledge of international best practice in renewables of biomass market development, policy and economic incentive mechanisms, with particular emphasis on the region: Balkan, Baltic or CIS;
- Proven understanding of Moldovan realities concerning the energy and biomass sector with its strengths, weaknesses and opportunities;
- Extensive research and analytical skills;
- Fluency in Romanian and Russian is required. Good command of written and spoken English would be an advantage;

Personal qualities:

- Responsibility, creativity, flexibility and punctuality;
- Ability to solve difficult and challenging projects;
- 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;

Legal expert:

Academic qualifications:

• Advanced university degree (master's or similar) in Law or related disciplines;

Experience:

- At least 10 years of legal practice in public and/or private areas;
- Minimum 2 years of experience in drafting normative documents;
- Previous experience writing comprehensive business plans, defending business cases pertinent to the environment or energy field is a strong advantage;

Competencies, skills and work experience

- Strong professional background in relation to law and public administration;
- Demonstrated competencies in the development of laws, normative acts
- Demonstrated track record in research or other writing on governance analysis, public and/or justice sectors
- In-depth knowledge of Moldovan sectorial legislation, etc;
- Proven understanding of Moldovan realities concerning the biomass market with its strengths, weaknesses and opportunities;
- Excellent analytical and communication and reporting skills;
- Excellent computer skills (MS Word, Excel, etc);
- An excellent command of written and spoken Romanian and Russian is required. Good command of written and spoken English would be an advantage

Personal qualities:

- Responsibility, creativity, flexibility and punctuality;
- Ability to solve difficult and challenging projects;
- 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;