

NEWSLETTER

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ENERGY AND BIOMASS

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Another 27 public institutions will install solid biomass based heat plants



The Energy and Biomass Projects Selection Committee has selected 27 new localities which will install solid biomass based heat plants in public institutions. Of these, 17 localities are situated in the South Development Region and include rural localities from Taraclia district and ATU Gagauz Yeri. From the North Development Region, the Committee selected four small towns that fit into the target group of the project, which are currently in the stage of developing technical descriptions and design documentation for the installation of biomass based heat plants. Another six localities from the South Development Region were selected during Meeting No.9 of the Projects Selection Committee of 26 February 2016. Solar panels for supplying hot water will be installed in 14 out of those 27 approved projects.

The procedure for selecting localities is comprised of three stages, each having an essential role to play. During the first stage, local community representatives submit a Letter of Intention, each project initiative being evaluated from the point of view of technical feasibility, institution's motivation to start using biomass fuel, capacity of the community to make a financial contribution to the project implementation, availability of potential biofuel suppliers in the region, availability of storage facilities for storing the biomass fuel, etc. During the next stage, the Committee evaluates the needs and capacity of the locality for implementing the biomass based heating project from the institutional, social, technical, environmental, economic, financial, legal, biomass fuel supply, and sustainability points

of view. Particular attention is paid to the institutional capacity of the beneficiary communities to mobilize local human and financial resources, as well as of the current partnerships between the local public authority and community stakeholders. During the next stage, an energy audit of the building is launched, and recommendations are provided regarding the boiler capacity and project budget, while the local authorities submit the endorsements and decisions required for the final approval of community projects.

The first 17 public institutions from the southern region of the country have already passed and received all the approvals, and the works are now at the completion stage, while the participants from the northern region are at the state of developing technical drawings and design documentation.

During Phase 2 of the Energy and Biomass Project, it is planned to install 80 heat plants in rural localities and small towns, particularly in the southern region of the country, as well as in the Transnistrian region. Of these, 21 localities are to install solar panels to insure the necessary quantity of hot water in public institutions, particularly in kindergartens.

During Phase I of the Energy and Biomass Project, there were installed 144 biomass based heat plants with a total capacity of 49 MW in public institutions, which constituted approximately 1% of the total final energy consumptions in the country or 9% of the final annual heat consumption.

The Organization of Public–Private Partnerships for installing biofuel production systems in Rabnita town was discussed within an information seminar



An information seminar regarding the Moldova Energy and Biomass Project was held in Rabnita, where discussions focused on insuring heat power produced from biomass through public–private partnerships (PPP). The Project is carried out by the United Nations Development Program, and financed by the European Union. Among the participants, the event was attended by: Andrei Chirsta, Head of State Administration, Ina Bulat, Deputy Head of State Administration, Igor Popov, Deputy Director of the Republican Institute for Scientific Research on Environmental Issues, Irina Şulga, Deputy head of the Directorate for Investment Activities and Business Administration under the Ministry of Economic Development, Town Council members, heads of municipal enterprises, and state administration specialists.

The Public–Private Partnership concept was presented by Oleg Branza, Business Development Specialist within the Moldova Energy and Biomass Project. Thus, the MEBP representatives elucidated the opportunities and perspectives for cooperation, as well as for the creation of public–private enterprise. The participants in the seminar listed the eligibility criteria and requirements set before the objects that can be included in the list of institutions for the installation of biofuel based heating systems. Oxana Alistratova, Community Mobilization Specialist spoke of the possibilities provided by the project to install biofuel based boilers. The engineer Tudor Dombroveanu who was also present at this meeting referred to technical

aspects related to installation of boilers, requirements for the premises and boiler rooms, as well as answered to all technical questions asked.

During the seminar held on 19 February, Irina Sulga, representative of the Directorate for Investment Activities and Business Administration explained to the participants in the even the specifics for the creation of public–private partnerships and answered to all the questions asked by the attendees.

There is a sufficient quantity of biological resources for the production of biofuel in Rabnita district, which is an excellent opportunity for establishing a local pellet and briquette production enterprise. As stated by Andrei Chirsta, Rabnita district is interested to get involved in the project, which has been broadly spread in many countries of the world.

Business representatives expressed their interest in cooperating in the field of biomass production, as the opportunity to supply biomass for further production of biofuel is a more convenient alternative for them than burning the biomass in the fields and orchards.

The Moldova Energy and Biomass Project 2 is a three–year project carried out within the period 2015–2017. The Project has a total budget of 9.41 million Euro provided by the European Union and is implemented by the United National Development Program.

The Energy and Biomass Project is hiring several short-term local consultants

The Moldova Energy and Biomass Project is hiring **a national consultant for developing criteria applicable to public procurement of biofuel**. The expert will develop a Guideline for sustainable procurement of biofuel to be used by the communities that use solid biomass as fuel for heating public institutions. The objective of the Guideline is increasing the capacities of local public authorities and facilitating public procurement of solid biofuel.

The deadline for submitting the application file for participation is 13 March 2016. For more details, please access the [UNDP website](#).

The Consultant shall develop together with the MEBP specialists the concept and content of the Guidelines for Sustainable Procurement of Biofuel, and the set of recommended documents; shall organize and unfold three one-day information seminars for local public authorities and managers of institutions, during which the Guideline will be presented.

The Guideline will particularly focus on the following aspects:

1. Competitive offers, including the collaboration framework for organizing joint tenders for several institutions with the view to reach large economies of scale;

2. Contracting and contract management, including cancellation of the latter in case of non-observance of the quality, delivery and price conditions;
3. Quality control (control of the quality and condition of the supplied biofuel), quality certificates, etc.

Another vacancy within the Energy and Biomass Project is the one for the position of **Communication Consultant for organizing the Moldova Eco-Energetica Contest and Awarding Ceremony**. The Consultant will assist the Agency for Energy Efficiency through activities targeting the contest promotion among potential applicants and broad public.

Among such activities are:

- Developing an efficient mechanism for express information of potential applicants and persons requesting information;
- Organizing all the communication events which are part of the Moldova Eco-Energetica Contest;
- Organizing the Awarding Ceremony of Moldova Eco-Energetica Contest.

The deadline for applications is 13 March 2016; the Terms of Reference can be accessed on the [UNDP website](#).

The Project is also hiring **a National Consultant for reviewing the Guidelines for Teachers used during the class hours on "Renewable Energy Sources"**. This course is taught to grades 7 and 8 of the schools participating in the program for installing biomass based heat plants and has been extended for grade 9 as well.

Under the contract, the Consultant shall analyze the educational program and teaching materials, particularly the Guidelines for Teachers and the Students' Handbook, consult the stakeholders previously involved in the project – the Ministry of Education and teachers – and study the best regional and international practices in teaching optional courses on energy from renewable sources, particularly from biomass, and energy efficiency. The contract starting date is planned for 14 March; the respective Terms of Reference can be found on the [UNDP website](#).



ANGAJĂM
CONSULTANT

Over 40 localities that have installed biomass based boilers in schools want to extend the biomass based heating systems to other institutions as well



Public authorities from over 40 localities which already have experience in using biomass as fuel for heating their public institutions or have learned the positive experience of neighboring communities have expressed their intention to install biomass based boilers in other buildings from their localities. These have filed new applications to the Energy and Biomass Project with the request for investment co-financing.

A big part of applicants represent the beneficiary localities of Phase I of the Energy and Biomass Project, while the rest, are communities that have inspired themselves from the example of other villages or have become aware of the benefits of ecological and efficient heating, from local sources, for public institutions.

As stated by Tatiana Craciun, Project Community Mobility Officer, these applications will be examined when the Selection Committee of the Energy and Biomass Project will exhaust the requests from target localities of Project Phase II and suggest to the Administrative Council to extend the number of beneficiaries. Just to remind here that during Phase II, the Energy and Biomass Project has undertaken to install 80 biomass based heat plants in rural localities and small towns from the country, while in 21 public institutions the latter will be added solar panels for hot water production.



Renewables enhance Moldova's energy independence

In less than four years, Moldova, with support from UNDP and the European Union, almost doubled its share of renewable energy to 13 percent. By 2020, the country hopes to increase that production to 17 percent.

The Energy and Biomass Project is the first far-reaching initiative in the green energy sector launched in 2011. Its objective is to contribute to the safe and competitive production of sustainable energy, with a focus on biomass which happens to be the most affordable and practical way of greening the country.

"To produce energy from straw and other waste? It seemed like a fairytale. But together with the community, we have decided to heat our kindergarten that way", said Dorin Pinte*a, the Mayor of Pepeni village,* in the north of the country. The new heating system installed in the kindergarten proved to be efficient during the first two winter seasons.

Now all kindergartens in Pepeni, as well as the mayor's office, are connected to biomass heating systems. As a result, locals are now saying, heating bills have significantly decreased. About 620 families have already installed biomass boilers, with the programme reimbursing the totality of their initial \$1,300 investment.

In addition, the quality of the air has improved. Around 60,000 tons of CO₂ emissions are being eliminated annually.

Many of the surrounding villages have followed suit and are using local funds to connect public institutions to biomass based heating systems. Overall, 100 biofuel production businesses have been launched over the past five years in Moldova.



"We couldn't satisfy the demand any longer, but, at the same time, could not afford one-time investments of over 30,000 \$USD to procure a new production line. Installment payments without additional fees was a perfect solution for us. Now we've tripled our biofuel production, have created new jobs and have enlarged our business", said Ludmila Abramciuc, the manager of Ecobricheta, a company that manufactures the pellets.

Each producer, institution or household using biomass produced in Moldova contribute to the development of a sector which, in its turn, creates new jobs and reduces the energy vulnerability of the country.

The story is part of the UNDP regional communication campaign to promote successful projects implemented in the Eastern and Southern Europe.

[The original can be viewed here](#)

Facts and figures

- 90,000 persons, mostly children, benefit from improved heating comfort
- Almost 10 million USD of European funds have been invested in biomass based heating systems
- 870 families heat their houses with green energy

Did you know...

...that Europe produces more
renewable energy

192 Mtep

than coal

155 Mtep

natural gas

131 Mtep

or petroleum

72 Mtep



Ministry of Economy will promote the introduction of 0% VAT rate on the entire value chain of biomass fuel production

Octavian Calmâc,
Deputy Minister of Economy

- Last week, the Parliament has finally approved the Law on Renewable Energy Promotion in final reading. How do you estimate the impact of this law on the energy market in Moldova?
- The Government and private investors especially, have been looking forward to have this law in place, as they now have clarity about the state politics and can plan their investments, as they know which might be the criteria for entering the market being paid back their investments. This is a very important law that establishing the national objectives in terms of renewable energy, as well as the support mechanisms for market development. Thus, we have set as a target to achieve a share of 17% of energy from renewable sources in the final gross consumption of energy, and 10% in transports by 2020.

Most importantly, a support scheme has been approved, which will be applied in Moldova for renewable energy – tenders at ceiling prices, targeting the lowest price and newest technologies proposed by investors, with the suppliers' obligation to procure the entire quantity of energy produced by eligible renewable electric power producers for a period of 15 years.

This support mechanism, along with a limit of total photovoltaic and wind energy generation capacity set based on the experience gained by the Energy Community and more advanced countries in using RES. Thus, keeping in mind the market limitations with regard to insuring the security of deliveries and the consumer payment capacity, the Government decided to authorize a limited generation capacity from renewable energy sources in order to insure both the possibility for balancing the system within periods when, for objective reasons, the renewable energy production decreases, as well as for not causing tariff increases for final consumers. It was a difficult, but very important task to find a balance between the interests of investors and those of the consumers, and we hope we've managed to do so. During the week when the law was approved an announcement was published regarding the environmental impact assessment for a future wind power plant with a capacity of 60 MW, which is more than the capacity of CET1 in Chisinau. In other words, the investors have positively perceived the signals launched by us. So, I am sure the selected support mechanisms will support the market development and accomplishment of objectives set by Government.

- What other incentives does the new Law provide for the development of renewable energy market?

- Another very important element introduced by the new Law on Renewable Energy is the net metering principle. Thus, any household having photovoltaic panels and producing electric power in excess of their own needs will deliver it into the network, and a balance will be made at the end of month. Payments between the electric power producer/consumer and supplier will be made based on the balance as of the year end. The new Law has eliminated the restriction by which only those having photovoltaic panels over 10 kW capacity could deliver electric power into the network at a tariff set by ANRE. Now the law only establishes the maximum limit of installed capacity – 100 kW. I would like to highlight here that the net metering contracts shall be signed based on the principle „first come – first served" up to a volume of 1% of the total electric power supplied into the network.

Along with the Law on Promotion of Renewable Energy Sources, a new Law on Electric Power is in process of approval. This document provided for the procedure of establishing the tariffs for accessing the renewable electric power network. Thus, electric power producers will benefit from a non-discriminatory, regulated access to power networks, at published non-discriminatory, cost-based, transparent, and predictable tariffs calculated and approved in compliance with the Law on Electric Power.

- What types of energy does the Government count on in accomplishing the objectives set in renewable energy area?

- Obviously, biomass has the largest potential in Moldova, as it equals to almost 85% of the renewable energy consumed in different forms within the country. A related more in the beginning to wind and photovoltaic energy because these two are less developed in Moldova compared to biomass energy, although five years ago this sector seemed not to be an interesting one and rather a step backwards.

Biomass proved to be a „Cinderella", which has insured a big majority in the consumption of renewables over the past years. Within the period 2011–2016, the consumption of energy produced in the Republic of Moldova from renewable sources reached 13% of the total, of which the biggest share – 12% – belonged to biomass energy. Due to this, Moldova recorded a grand leap in reducing energy dependence on foreign suppliers of gas and coal. In 2011, the production of renewables constituted only 4%, with a quasi-total dependence on imports.

Those 144 heat plants installed in public institutions with the support of the Energy and Biomass Project, as well as the offer of biofuel on behalf of those 130 pellet and briquette production companies had a significant contribution to the increase in consumption of solid biomass based heat power. The latter have a production capacity of approximately 120 thousand tons annually, which equals to over 53 million cubic meters of gas or 80 thousand tons of coal.

- How will the Ministry of Economy support the further development of biofuel market?

- First of all, we count on the increased quality of the solid biomass fuel once the specialized laboratory is launched, and on the elimination of periodical criticism regarding the biofuel quality. The producers will be able to prove by documents the quality of products placed on the market, while the consumers will be able to check and eliminate any doubt raised. Along with the technical requirements previously approved by Government for biofuel quality, the existence of the laboratory will lead to a maturing market.

Secondly, we will stimulate the synergy between different types of renewable energy. In this sense, the Energy and Biomass Project has rightly felt the trend, undertaking to install solar panels in the public institutions moving to biomass based heating during Phase II. The use of renewables should be viewed in complex with energy efficiency measure that can reduce the energy consumption by up to 30%. Thus, the investment efficiency increases significantly, and the cost recovery period and budget expenditures decrease, respectively.

Thirdly, the Ministry of Economy will promote the introduction of a 0 VAT share along the entire biomass fuel production value chain. Currently, a standard 20% VAT share is applied in this sector, while the VAT share on natural gas is 8%, the local producers being thus discriminated and the market distorted. We think that the introduction of 0 VAT share on a market of circa 100 million lei will not reduce the budget revenues significantly, generating in exchange annual savings of up to 50 million lei in the budget and allowing to enhance a market with huge potential for Moldova.

In conclusion, the price of equipment for photovoltaic and wind energy has decreased pretty much over the past years, but remaining still less accessible than biomass compared to payment capacity and natural potential of the Republic of Moldova. Biomass is found in abundance in all agricultural farms and is affordable in price, although the use of biomass as fuel would certainly involve more labor force for the collection, processing, transportation and burning of the latter, which is not necessarily a bad thing, meaning new jobs. This new biofuel industry has created hundreds of new jobs over the past 5-6 years in Moldova.

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The opinions expressed in this publication do not necessarily reflect the views of the European Union and UNDP.

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