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September - October 2011

Moldova Energy and Biomass Project **Newsletter** 

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### **PROJECT NEWS**



## The first villages to connect their public institutions to the straw-fired heating systems have been selected

The first 17 rural communities from the Republic of Moldova to connect their public institutions to the straw-fired heating systems were selected. All in all, 11 schools, 10 kindergartens and one community center will be heated during the winter time with locally produced energy. The rural public institutions will be connected to the biomass-based heating systems with the financial support of the Moldova Energy and Biomass Project, funded by the European Union and co-funded and implemented by the United Nations Development Programme in Moldova.

More than 13,400 persons, of which almost 5,000 children will increase their heating comfort due to the new thermal equipment for biomass-based energy production. The selected rural communities are located in Stefan Voda, Leova, Cantemir districts and Gagauz Yeri ATU – these being the first regions in which the Energy and Biomass Project launched its activities. During the implementation period, over 2011-2014, the Energy and Biomass Project will cover all districts of the Republic of Moldova – all in all, at least 130 rural public institutions will be connected to the heating systems based on agricultural waste, especially straw.

The biggest part of the costs incurred for the installation of the heating systems shall be covered by the project, while the community will contribute with at least 15% of the total cost.

With the new biomass-based heating systems, we will save up to 40%

Tiganca village from Cantemir district is one of the beneficiary communities of the Moldova Energy and Biomass Project. Thanks to the project, the school and the kindergarten from the village, which were heated until now with coal, will be connected to the biomass-based heating systems. "We had to pay until now 200,000 lei to heat the school and kindergarten during one cold season . With the new biomass-based heating systems, we will save up to 40%, and this money will be reinvested in the development of these institutions. Apart from making savings, we will also protect the environment. The straw will not be burnt anymore in the field, but will be transformed into ecological fuel", stated Petru Gandrabur, the mayor of Tiganca village, Cantemir district.

### Selection criteria of rural communities

The rural communities were selected based on criteria through a gradual, competitive, and transparent process. Public meetings will be organized in every district to raise awareness about the project and to encourage the rural communities to connect their public institutions to efficient strawbased heating systems. "The villages participating in the competition will be selected based on the following criteria: (1) secure source of straw balers' supply as well as available financial resources for fuel procurement, (2) existence of adequate public buildings to be connected to straw-based heating systems(3) existence of storage facilities to store the straw balers, and (4) community's commitment and motivation to access the alternative heating energy sources", Alexandru Ursul, Moldova Energy and Biomass Project Manager said.

The 17 rural communities which will connect their public institutions to the straw-fired heating systems: Ermoclia, Olăneşti, Palanca, Viișoara, Talmaz, Copceac, Popeasca, Crocmaz, Răscăieți (Ștefan Vodă district), Cazangic, Seliște, Sărata Nouă (Leova district), Antonești, Ţiganca, Lărguța (Cantemir district), Copceac, Carbalia (UTA Gagauz Yeri).

More info about selected communities:

http://undp.md/projects/Biomass/Selected%20rural%20communities 24.08.2011 ENG.pdf



### Villages from Ştefan Vodă which will get their public institutions connected to biomass-based heating systems have signed Memorandums of Understanding

9 villages from Stefan Voda Rayon which will get their public institutions connected to biomass-based heating systems have signed on 29 September Memorandums of Understanding with the United Nations Development Programme.

A number of 11 schools and kindergartens from these 9 villages (Ermoclia, Olanesti, Palanca, Viisoara, Talmaza, Copceac, Popeasca, Crocmaz, Rascaieti) will be heated during the winter time using the locally produced energy.

Stefan Voda Rayon is one of the first 4 regions in the Republic of Moldova in which the Moldova Energy and Biomass Project has launched its activity.

"Although Stefan Voda Rayon is fully supplied with gas, it is also one of the first rayons which accessed the alternative energy sources. I am proud that due to the Moldova Energy and Biomass Project, 9 villages from Stefan Voda will heat their kindergartens and schools with energy produced based on cereal waste", stated Nicolae Orlov, Deputy Chair of the Stefan Voda Rayon Council during the memorandums' signing event.

"In the context of domestic price increase for gas, we should harness our own energy sources. Studies have proved that straw and cereal waste represent one of the most secure and easy to access alternative energy sources for the Republic of Moldova.

Annually, the Republic of Moldova produces, on average, 700 thousand tones of straw – the equivalent (from energy point of view) of about 250 million m3 of natural gas or 25% of the country's annual consumption", asserts Mihai Cuiban, the Senior Specialist of the Energy Efficiency Agency.

### Villages from Leova, Cantemir districts and UTA Gagauz Yeri have signed Memorandums of Understanding, too

On September 29-30, other 8 villages from Leova, Cantemir Rayons and Gagauzia ATU have signed Memorandums of Understanding with UNDP Moldova. It should be noted that these are the first regions in which the Moldova Energy and Biomass Project has launched its activity. By 2014, all the rayons of the Republic of Moldova will be covered – all in all, at least 130 rural public institutions will be connected to the heating systems based on agricultural waste, especially, straw.

The energy produced from own sources has a number of benefits. It decreases the dependency on imports, increases the energy security of the country, implies lower costs, and enables the development of new business and creation of new jobs. Besides, the renewable sources of energy reduce the greenhouse gas effects and environment pollution.

## Moldova Energy and Biomass Project Progress presented at the Project Board Meeting

The second meeting of the Energy and Biomass Project Board was held on September 16 in Chisinau. The project progress and the activities planned to be fulfilled by the end of 2011 were presented during the meeting.

Hence, during April 15 – September 10, the Energy and Biomass Project organized public meetings to introduce the project in 7 districts (Ştefan Vodă, Leova, Cantemir, Hânceşti, Teleneşti, Sângerei, Făleşti) and Gagauz-Yeri ATU.

The district and local public authorities, mayors, directors of schools, kindergartens, community centers, owners of agricultural lands, and economic units from the mentioned regions (all in all over 450 persons) were informed about the opportunities to harness the local sources for heating production and the conditions to be met so as to get connected to the straw-fired heating systems. As a result, 65 villages sent their intention letters, expressing their wish to get their public institutions connected to the biomass-based heating systems. After several selection stages, the proposals of 17 villages were accepted to be funded.

## The Project Selection Committee selected another round of 21 villages that will submit biomass heating projects

The Project Selection Committee organized a meeting on 17 October to evaluate the expressions of interests received from 35 villages from districts Telenesti, Hincesti, Sângerei and Falesti, which submitted their project proposals for connecting their public institutions to biomass heating systems. From this set of districts, 21 villages were approved by the Committee to pass to the final evaluation stage: district Hincesti (Carpineni, Crasnoarmeiscoe, Dancu, Drăgușenii Noi, Loganesti, Boghiceni), district Telenesti (Chiştelniţa, Sărătenii Vechi, Suhuluceni, Verejeni) district Singerei (Alexandreni, Bilicenii Noi, Bursuceni, Coşcodeni, Dumbravita, Pepeni), district Falesti (Bocani, Marandeni, Năvârneţ, Pietrosu, Pruteni). Selected villages will create a committee of representatives of LPA, the director of the public institution who is the beneficiary, local entrepreneur and others, who will develop a detailed project application, including its preliminary cost. The project application will be reviewed by the Projects Selection Committee and approved for investment.

The Projects Selection Committee of the Moldova Energy and Biomass Project includes representatives of the Ministry of Economy, Ministry of Regional Development and Constructions, Ministry of Agriculture and Food Industry, Energy Efficiency Agency, UNDP and the EU Delegation in Moldova.

## A survey presenting the solutions for household heating with biomass was launched

MEBP launched an in-depth survey of current systems in use and an analysis of biomass based energy efficient domestic heating systems, available equipment domestically and internationally and the potential for application in Moldova.

It is expected that technology solutions will be assessed and ranked based on its performance (efficiency and emissions), fuel requirements (multifuel), features (cooking, baking, heating, central heating and hot water), integration into Moldovan houses (installation costs and requirements) local market conditions (supply, maintenance, warranty). The survey will provide valuable information regarding the feasible technologies that should be tested / applied. As a result, a number of 10 biomass based stoves/boilers will be procured, imported and installed by the project to test their efficiency and suitability to Moldovan conditions. After the performance evaluation and confirmation of their suitability, the project is aiming at piloting biomass based energy efficient solutions for household heating by creating an incentive scheme supporting the installation of at least 500 energy efficient domestic rural heating systems during the life cycle of the project.

### The briquettes and pellets production and consumption market will be known

Moldova Energy and Biomass Project launched the implementation of an analysis that will show local production capacity of briquettes and pellets and the consumption potential of briquettes and pellets on the market in Republic of Moldova. The ongoing study will also present the technologies applied on the market by existing producers and their plans in developing their businesses. Preliminary data of this study will be known in mid-November.





# Energy And Biomass Project participated in a public discussion with the students from the Energetics Faculty, during the UN Week

October 19, Chisinau –Students from the Energetics Faculty of the Technical University participated in a public discussion with the representatives of the Energy and Biomass Project organized during the UN Week.

Students were informed about the impact of the UN's work in the Republic of Moldova, the benefits for the ordinary people as a result of projects implemented and funded by UN, as well as about the history of the UN and its ongoing activities. Representatives of the Energy and Biomass Project told young people about their role and the need to actively participate in community life and decision-making process.

The future energeticians have also listened to a presentation by the Energy and Biomass Project, the largest project on the renewable energy market in the Republic of Moldova. They learned about the project's components, goal, objectives, and results to be achieved by 2014: at least 130 kindergartens, schools, health centers, and other rural public institutions and over 500 households to be heated with locally produced biomass-based energy, especially from wheat straw and other cereal waste.

"I really think that the renewable energy market should be developed in the Republic of Moldova. We have only to win from this situation: we will increase our energy security, produce fuel from local sources, save money for the consumed energy, and to crown it all, we will also protect the environment", said Constantin Leahu, student at the Energetics Faculty under the Technical University.

The students were interested in the selection criteria for communities to get connected to the alternative energy sources, the development of the local market of solid fuel production from biomass (briquettes, pellets), as well as in the possibility to collaborate within the Energy and Biomass Project.

### **SUCCESS STORIES**



### Biomass-based Energy: a long forgotten recipe

### The European Union and the UNDP help Moldovans to spend less on heating

Popeasca village from Stefan Voda rayon enters winter with big ambitions: the lyceum and the kindergarten from the locality will be heated by burning straw. Although a part of community inhabitants were rather skeptical in regards to giving up the gas, the mayor of the locality, Chiril Cojocaru, succeeded to convince all of them about the benefits of the renewable energy. "Why does the whole civilized world shift to such heating system, and we refuse to?" asks Chiril Cojocaru. "Are we richer than them?"...

### In line with the "civilized world"

Achieving energy savings was the main rationale of the mayor, when he decided to participate in the Energy and Biomass Project, funded by the European Union and co-funded and implemented by UNDP Moldova. Just like other representatives of local authorities in Moldova, Chiril Cojocaru tries his best every winter to struggle against the cold air in the institutions with small amounts of money allocated to the budget.

But even his ingenuity as a mayor with five mandates in a row does not help him avoid this predicament. The gas "eats" the most of the villagers' money.

"Those 5 months of winter cost us about 160 thousand lei. And even so, it sometimes happens for 2 months to remain uncovered, as we would run out of money", the mayor recalls from the last winters.

But now, Chiril Cojocaru is sure that the children will not freeze anymore in classrooms. Having documented himself solidly and after making all the calculations, he came to the conclusion that straw indeed will save money. The mayor went even further and made the calculations for the entire republic.

"If Moldova would use all the biomass it has, it would import 25% less gas than it does now!", says the mayor.

### Local Enthusiasm, Foreign Investments

The shift to the straw-based heating was performed in Popeasca village in several stages. First of all, the local council drafted an intention letter signed by the mayor and the director of the institution to be shifted to the new energy type.

They had to prove three things in the letter: that the locality has a reliable source of biomass and space for storing it; that the school and the kindergarten may be connected to the new network; and that the villagers are motivated to access the alternative sources of energy.

The letter was revised by a special commission, and as it met all the set criteria, it was accepted. Subsequently, the village was required to present a draft budget in which the mayoralty committed to ensure a part of the envisaged investment. And finally, Popeasca village benefits from technical assistance for designing and installing the boiler plant.

Rodica Baltag, the local entrepreneur who will supply the biomass for the lyceum and kindergarten in Popeasca, knows from her own experience about the benefits of renewable energy. Her family has used renewable energy since long ago for household needs. "As all Moldovans, we also have some animals in the households, thus we never lack waste. We have a special tank where we throw all the bio-degradable waste – and this was the source for our over for years – before the gas appeared in the village."

Now Rodica Baltag will have to take care not only of her family, but also of those two public institutions from the village. She says she is proud to contribute in her own way to the Energy and Biomass Project. "We accepted to supply straw bales not only because of the financial perspective, but also due to ecological and social reasons", says Rodica Baltag. "We hope for children to stay warm in winter time."

Just like in the majority of villages from the republic, there is plenty of biomass in Popeasca. Only during this year, after harvesting the 200 hectares of cereals, about 100 tonnes of straw were left on the fields. This quantity is more than enough to heat the lyceum and the kindergarten during winter.

"Farmers always need money, thus the money obtained from biomass supply will be very welcome. We can invest it, for instance, in buying the spare parts for the agricultural techniques", says Rodica Baltag.

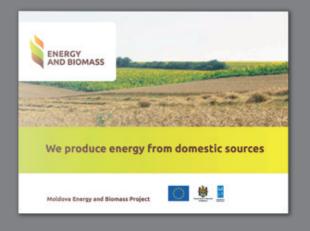
For the project to be implemented, the Popeasca mayoralty contributed 301 thousand lei, representing 15% of the total investment. The Energy and Biomass Project is already implemented in 17 villages from the republic, and another 21 villages are in the final assessment stage. It seems that Moldovans have reacted with enthusiasm to the idea of biomass-based heating.

"There are a lot of benefits" says Alexandru Ursul, the Manager of the Energy and Biomass Project. "Thus the village becomes less dependent on the ever-increasing price for natural gas. The community obtains the energy produced locally for a price that is three times lower. Besides, the money spent normally for fuel stays in the village and contributes to the development of new business, creation of new jobs, and community development as a whole".

Besides the financial benefits, the renewable energy protects nature. It does not pollute the environment and does not contribute to global warming.

Communication materials produced within Moldova Energy and Biomass Project

 Project Info-Sheet: "We produce energy from domestic sources" (RO, RU, ENG) <a href="http://undp.md/projects/Biomass/MEBP\_Info">http://undp.md/projects/Biomass/MEBP\_Info</a>
 %20Sheet ENG.pdf



 Poster promoting energy from biomass (RO,RU) <a href="http://undp.md/projects/Biomass/MEBP\_Poster\_RO.jpg">http://undp.md/projects/Biomass/MEBP\_Poster\_RO.jpg</a>



### **MEBP EVENTS CALENDAR**

#### **NOVEMBER**

- November 4 Project Selection
   Committee, evaluation of project
   proposals for investments in communities
   from Hancesti, Sangerei, Falesti, Telenesti
   districts.
- Signing of Memorandums of Understanding with selected communities for investment from Hancesti, Sangerei, Falesti, Telenesti districts.

#### **DECEMBER**

 December 2 - National Award Ceremony on Renewable Energy and Energy Efficiency. LeoGrand Hotel & Convention Center, 18.00

### **TENDERS LAUNCHED BY MEBP**

Production of video and audio materials for Communication Campaign (Launched on 20 October, Deadline – 11 November):

http://www.undp.md/tenders/details/451/

Procurement of Biomass Boilers for Household Heating (Launched on 21 October, Deadline – 28 November):

http://www.undp.md/tenders/details/450/

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