



ENERGY AND BIOMASS

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Happy Holidays!

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Moldova Energy and Biomass Project Newsletter

Moldova Energy and Biomass Project

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PROJECT NEWS



In 2012, 13 rayons will have the chance to heat their rural public institutions with biomass-based energy

In 2012, Energy and Biomass Project will launch its activities in 13 new rayons: Dondușeni, Florești, Glodeni, Râșcani, Soroca, Anenii Noi, Orhei, Rezina, Șoldănești, Ungheni, Basarabeasca, Cimișlia and Cahul. The villages from these rayons will be invited in 2012 to participate in the competition for selecting the public institutions which will get connected to biomass-based heating systems with the project's financial support. These rayons were approved during the meeting of the Energy and Biomass Project Board Meeting on December 15. The Project Board is set from representatives of the Ministry of Economy, Energy Efficiency Agency, Ministry of Environment, Ministry of Agriculture and Food Industry, Ministry of Regional Development and Constructions, Energy Efficiency and Renewables Alliance, Congress of Local Authorities from Moldova, European Union Delegation in the Republic of Moldova and UNDP Moldova.

Just to remind: by 2014, the Energy and Biomass Project will cover all the rayons of the Republic of Moldova, all in all, at least 130 rural public institutions will be connected to heating systems based on agricultural waste.

Moldova Energy and Biomass Project is a four-year project implemented during 2011-2014. The total budget of the project is 14.56 million Euro, granted by the European Union (14 million Euro) and UNDP Moldova (560.000 Euro).

In 2011, installation of biomass heating systems started in 35 villages from 8 rayons

In 2011, the Energy and Biomass Project carried out its activities in the following rayons: Ștefan Vodă, Leova, Cantemir, Hâncești, Telenești, Sângerei, Fălești and ATU Gagauz Yeri, all in all, 35 rural communities were selected to get their public institutions connected to modern biomass heating systems. Thanks to the new energy source, 42 buildings will be heated with biomass-based energy. Thus, over 18.000 persons, of whom 8542 children, will increase their heating comfort.

The energy produced from biomass has more benefits. It reduces dependency on imports, increases energy security, has lower costs, and allows start up of new businesses and creation of new jobs. Besides, the energy from renewable sources reduces emissions of green-house gas and environment pollution.

Villages from Telenești and Sângerei signed Memorandums of Understanding for getting connected to biomass-based heating systems

Eight villages from Telenești and Sângerei rayons, which will connect their public institutions to biomass-based heating systems, signed on November 16 Memorandums of Understanding with the United Nations Development Programme within the framework of the Energy and Biomass Project, funded by the European Union.

10 schools and kindergartens from these 8 villages (Telenești rayon: Chiștelnița, Sărătenii Vechi, Verejeni;

Sângerei rayon: Alexandreni, Bursuceni, Biliceni Noi, Dumbrăvița and Pepeni) will be heated during winter time with locally produced energy.

"I am very glad that Pepeni village passed all the selection stages and thanks to the support granted



by the European Union and UNDP Moldova, a modern heating system based on briquettes will be installed in the village kindergarten. I know the advantages of the biomass-based energy from my own experience, as two years ago I gave up gas-based energy in favor of briquettes, which I use to heat the house and save money", stated Dorin Pântea, mayor of Pepeni village, Sângerei rayon.

During November 17-18, other 10 villages from Hâncești and Fălești rayons signed Memorandums of Understanding with UNDP Moldova.

40 mayors and directors of schools and kindergartens visited Antonești village, Ștefan Vodă rayon, to see how biomass-based boilers function

Over 40 mayors and directors of schools and kindergartens from 17 villages, which will heat their public institutions with biomass-based energy visited Antonesti village from Stefan Voda rayon to see on the spot how a biomass-based heating system functions.

Antonesti village from Stefan Voda rayon has been heating its school, kindergarten, art center, and church for four years with locally produced straw-based energy. "Gas-based heating costs a lot. As there is no enough money, there were days when children would freeze when studying. The alternative solution to have heating based on energy produced from agricultural waste is a very good one. Since 2008, pupils and

teachers have been studying and working in warm environment during winter time. We pay twice less for the biomass-based heating than we used to pay for gas-based heating", declared Nadejda Morari, the director of the school from Antonesti.

The mayors and managers of public institutions saw how biomass-based boilers function, visited the heating station, the storage facility for straw bales, and the premises heated with biomass-based energy. They have also received answers to all their questions regarding the functioning and maintenance of the system, as well as useful pieces of advice on establishing viable relations with the local entrepreneurs.

"This is an extremely useful visit. It is for the first time when I saw how an institution is heated with straw-based energy. The experience of Antonesti village is relevant and important for us. It will help us use at maximum the energy potential of biomass, thus ensuring a cost-effective and environmental friendly heating solution for our buildings", told us Tatiana Gorgos, the mayor of Sarata-Noua village, Leova rayon.

The persons who visited Antonesti represent the first 17 villages which will heat their public institutions with biomass-based energy with the support of the Energy and Biomass Project, funded by the European Union. The localities are from the following rayons: Stefan Voda, Leova, Cantemir, and ATU Gagauz Yeri – these are the first regions where the Energy and Biomass Project started its activity. During the implementation period, 2011-2014, all the rayons of the Republic of Moldova will be covered, at least 130 rural public institutions will be connected to heating systems based on agricultural waste, especially straw. The biggest part of expenses incurred for installing the heating systems will be covered by the project, while the community will contribute with a minimum of 15% of the total cost.



Community leaders have new knowledge about biomass-based modern thermal technologies

172 community leaders from 8 target regions identified in 2011 acquired new knowledge regarding the new biomass-based heating systems and technologies, their key operational aspects, efficient networking with local suppliers of biomass-based fuel, thus they got empowered with a set of practical tools necessary for guaranteeing an adequate management of the biomass-based heating systems at community level. Training seminars were organized during October – December.

Municipality leaders, including mayors, local counselors, and public servants need knowledge and specific skills regarding biomass-based systems' management in their local authorities. The training seminars tackled topics on energy efficiency at community level, diversification of energy sources and production of energy from local sources of renewable energy, legal and institutional framework on energy efficiency and renewable energy in Moldova, energy production from biomass, estimating local potential of biomass and its efficient use; technological processes associated with production of biomass-based energy from bales, pallets and briquettes; development of sustainable public-private partnerships at community level, as means to foster biomass market and to attract investments in communities.

30 operators learned how to operate biomass-based boilers

Boiler operators should know how to operate and maintain a biomass-based boiler. That is why those 30 boiler operators from the first 8 regions attended trainings to learn from professionals about the types of biomass-based fuels; technological

flow used in production of pallets, briquettes, and bales of straw; characteristics of the biomass-based boilers; how to load biomass in boilers, to take out the ash, and clean the boilers. The operators found out about their role in the process of thermal energy production and assurance of adequate operation of the technical equipment; they learned how to monitor the process, how to plan energy resources, and how to use them rationally; they have been informed about the security instructions for equipment operation, anti-fire instructions, and other. Besides this introductory training program, the boiler operators will benefit from on-site training specific to the boiler, which will be offered by the design and construction contractors.

Straw is not waste, but source of fuel and additional income

The agricultural entrepreneurs, potential suppliers of biomass-based fuel, have extended their vision about straw, which is not perceived anymore as waste to be thrown, but as a product that can be transformed into commodity to be sold on the market.

30 farmers interested to become suppliers of fuel for the biomass-based boilers benefited from specialized training about the benefits of using straw as energy source, baling process, different types of straw bales and baling equipment available on the market; adequate storage of straw bales; energy potential of the straw; types of boilers for straw burning, etc. More information about the trainings for agricultural entrepreneurs read in the success story "Renewable Energy: a "clean" business" on page 4.



SUCCESS STORIES



RENEWABLE ENERGY: A "CLEAN" BUSINESS

Agricultural entrepreneurs from Moldova learn how to earn money from straw processing

While in the rest of the world discussions on renewable energy have appeared 20 years ago, Moldova started to make the first steps in this direction only recently. Continuous rises in price for natural gas, small salaries, and economic dependency on foreign providers – these were the main reasons to focus attention on the new type of energy.

Hence, if until recently only ecologists were talking about the advantages induced by recycling, biomass-based heating, and energy independency – today the majority of mayors from Moldova tackle these topics on the daily agenda. The Energy and Biomass Project, funded by the European Union and co-funded and implemented by UNDP Moldova, served as an impulse to help a lot of people to pass from talks to actions. It came not only with the idea of switching to biomass-based heating, but also with necessary technical assistance and expertise. Thus, information seminars were organized in all the rayons where project was active in 2011.

These are, first of all, the representatives of local public authorities, directors of public institutions, and entrepreneurs from rural localities. Participants attending these sessions have the possibility to find out everything about straw based heating and biomass business from project specialists.

Straw businesses are profitable

"We show them why straw business is profitable and how investments made for baling equipment or transport trailers are recovered", says Victoria Ignat, Training and Capacity Building Specialist from Energy and Biomass Project. "Besides, we help participants to draft a model-plan for the potential business, for them to determine the profitability of such business all by themselves".

Victoria Ignat also says that trainings aim to popularize straw-based heating and from other agricultural wastes. These things became real in Stefan Voda rayon, for instance. This rayon has already 13 institutions with social destination which are to shift to straw-based heating during the winter time. Every time such a seminar is organized, the training halls are full with people. Participants are interested in all the stages: from collecting straw in the field – up to transforming it in bio-fuel.

Cornel Bordeianu, Project Specialist, who prepares the presentations, says that the idea of straw business is more and more popular among Moldovans. During the seminar the participants find out about all the economic aspects related to straw baling. "We show them different types of equipment: foreign ones and those produced in the region. It depends on how prepared the entrepreneurs are to get involved in this process. I am sure that soon we will have an increasing market for straw bales".



Straw business, indeed, becomes popular and Moldovans seem to have understood that they can earn money from straw sale.

"I crop cereals and I would like to implement a straw baling line" says Iurie Galiuc, a seminar participant. Iurie came to find out more about the straw business, as he thinks it is rather profitable. "Until now I was leaving the straw on the field, now I see that something useful may be made out of it. But I need technique for this. That's why I came – I would like to inform myself. In general I consider that we should have done it 3-4 years ago, and now we would have had already large-scale production. While now we have to face the problem: either we consume gas at astronomic prices or we implement new technologies".

We will heat all kindergarten rooms with biomass based energy

Ludmila Zagoreț is the director of the kindergarten from Râscaieți village, from the rayon. She came

to find out the cost for a tonne of straw, so as to calculate if it is profitable to heat the institution with the new type of fuel. She says that winter is a very difficult season for the children from the kindergarten.

"We have 70 children, all of them of different age. All of them have to stay in one room, as we have only one oven heating the institution. Children eat and play in the same room. Biomass-based heating would solve all our problems. We would have the possibility to heat all the rooms, even the special events' hall!" says the director.

According to the specialists in the area, straw-based heating is three times cheaper than the coal or gas-based heating. Besides, it does not harm the environment and increases country's energy security. Biomass-based heating would not only rescue Moldova from cold, but would also save money.

ENERGY AND BIOMASS PROJECT EVENTS CALENDAR

January 10 – 13, 2012: Energy and Biomass Project launch in Donușeni, Râșcani, Glodeni, and Soroca rayons.

January 19, 2012: Festive inauguration of the biomass-based thermal system in the kindergarten from Ermoclia village, Stefan Voda, the first institution benefiting from heating based on alternative energy within the framework of the Energy and Biomass Project.

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