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May-June 2013

Moldova Energy and Biomass Project **Newsletter** 

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## **PROJECT NEWS**



People interested to get the Magazine, free of charge, are required to call the Energy and Biomass Project, at: tel: 022 839983

#### ECO-ENERGETICA MAGAZINE WILL BE LAUNCHED ON 10 SEPTEMBER 2013

The Magazine comprises Success Stories of Moldova Eco-Energetica Competition finalists, 2012 Edition, articles about the key actors in the area of renewables and energy efficiency, as well as news on the 2013 Competition.

The event will be attended by Moldova Eco-Energetica Competition finalists, 2012 Edition, Ministers, Ambassadors, representatives of state institutions related to the sector of renewables and energy efficiency, international organisations from this sector, partners, and Media.

This is the first edition of the Magazine. It is envisaged to issue the Magazine on a yearly basis after the Moldova Eco-Energetica prize ceremony.

The event is organised by the Ministry of Economy, Energy Efficiency Agency and Moldova Energy and Biomass Project.

### MOLDOVA ECO-ENERGETICA APPLICATIONS CAN BE SUBMITTED UP UNTIL 20 SEPTEMBER

Public institutions, private sector representatives, NGO, foundations, initiative groups, and associations, mass media and individuals can apply for MOLDOVA ECO-ENERGETICA Competition, edition 2013 – the biggest contest for awarding successful initiatives in renewables and energy efficiency sector.

The following categories will be awarded during Moldova Eco-Energetica Awards Ceremony 2013:

- Best Project in Solar Energy: Photovoltaic Thermal
- Best Project in Wind Energy
- Best Project in Bioenergy:
   Production of solid biofuels
   Production of liquid biofuels
   Assembling and/or installation of the equipment related to bioenergy production.
   Production of thermal energy
   Production of energy through CHP
- Best Project in Hydraulic Energy
- Best Project in Geothermal Energy
- Best Project of Energy Efficiency in:

Energy sector
Industrial sector
Construction sector
Transportation sector
Public Sector

- Best Communication Initiative
- Best Educational Initiative
- · Best Initiative of the Youth
- Special prize

All the information, including the application forms are available on Energy Efficiency Agency web page

www.aee.md, in section Moldova Eco-Energetica.

The deadline for applications is 20 September.

The winners will be awarded at Gala Ceremony MODLOVA ECO-ENERGETICA which will take place in December 2013 in Chisinau.

Moldova Eco Energetica is organised by the Ministry of Economy and Agency for Energy Efficiency upon the initiative of EU-UNDP "Moldova Energy and Biomass Project".



#### BUY AN EFFICIENT BIOMASS BOILER AND GET A 30% REIMBURSEMENT OF THE INVESTMENT COSTS FROM EUROPEAN FUNDS

The Subsidy Programme for procurement of biomass boilers by the rural households and small towns continues.

The Government, with the support of the EU-UNDP Energy and Biomass Project, launched in April the Programme which offers, under more favourable terms, biomass boilers to households.

600 families are able to buy briquette, pellet fired boilers, or combined boilers, with 30% of the costs to be reimbursed through European funds.

The boilers to be purchased under this initiative have to be manufactured and/or assembled locally. So far, 11 companies have been accredited by the Energy Efficiency Agency to supply boilers to households under this Programme. These companies' portfolio comprises a wide range of boilers manufactured in the Republic of Moldova or assembled locally from parts supplied by famous European producers from Germany, Poland, Czech Republic, Romania, Latvia, and Greece. The accreditation process of companies – suppliers of biomass boilers is a continuous one.

The Programme's total budget amounts to 640 000 Euro. The maximum value to be reimbursed out of the Programme funds is 1 000 Euro per installed boiler.

#### For more information, please contact Energy Efficiency Agency:

MD-2068, Chisinau, 1, Alecu Ruso str. 10 fl., Tel: +373 22 31-10-12; 49-94-44, Mob.: +373 6977 6977. www.aee.md or www.biomasa.aee.md

### NEW WORKSHOP ON THE QUALITY OF SOLID BIOFUELS

The producers of briquettes and pellets as well as the manufacturers of biofuel-fired boilers, experts from ministries, state institutions, and Academia will participate in the second National Workshop on the Quality of Solid Biofuels in the Republic of Moldova conducted on 5 September 2013. The event is organised by the Energy Efficiency Agency, in partnership with the EU-UNDP funded Moldova Energy and Biomass Project.

"We install modern biomass heating plants, we bring new technologies to schools, kindergartens and community centres from the Moldovan Villages. At least, 100 rural public institutions will be heated with biomass energy during this heating season. The quality of the employed biofuel is of great importance for ensuring smooth operation and maximal efficiency of biomass heating plants. Also it is required that the biofuel meets the relevant standards", Nicolae Zaharia, Business Development Expert of the EU-UNDP funded Moldova Energy and Biomass Project has stated.

So far, the Republic of Moldova has approved 37 non-binding European quality standards related to the solid biofuels. The standards have been developed by the Technical Committee 32, created within the National Standardisation Institute. The Ministry of Economy has set a Working Group in charge for the development of Technical Regulations to outline the minimal technical parameters for solid biofuels. These will be binding parameters for all Moldovan producers of solid biomass fuels, comprising the necessary quality requirements, rules for placing the products on the market, conformity assessment and surveillance.

The number of briquette and pellet producers has increased twice during the last two years, reaching 65.





#### 14 SCHOOLS AND KINDERGARTENS FROM TARACLIA, CALARASI, CAUSENI, IALOVENI, NISPORENI AND STRASENI DISTRICTS SWITCH TO BIOMASS ENERGY

Mayors from 14 Villages have signed on August Memorandums of Understanding with the EU-UNDP funded Moldova Energy and Biomass Project, a document that serves as basis for launching the connection of public institutions to biomass energy.

14 schools and kindergartens from Taraclia, Calarasi, Causeni, Ialoveni, Nisporeni and Straseni Districts will have an alternative energy system to the one currently in place. The works aimed at designing and installing the new heating systems will be commenced in autumn.

"Our kindergarten was renovated three years ago. However, due to the shortage of funds, we did not manage to have a heating system installed. Hence, we were forced to use power convectors for heating the premises in winter time. I am so glad we won the contest, and, thus, 70 children attending the kindergarten as well as the kindergarten staff will benefit from clean energy during the next cold season. Also, we will create three new jobs thanks to the biomass heating plant", Parascovia Antoniuc, Mayor of Carnatenii Noi Village, Causeni District has mentioned.

Moldova Energy and Biomass Project will cover at the expense of European funds, the costs for designing the heating plant, purchasing and installing modern briquette/pellet-fired boilers with a capacity relevant for the institution space to be heated, for installing the heating point, connecting to the power and water supply grids, building the external underground thermal routes/paths, ensuring fire protection measures etc.

In its turn, the Community will make its contribution of at least 15% of the overall volume of works. For example, in Bratuleni Village, Nisporeni District, the Community is going to renovate the indoor heating system and change the pipes, radiators, and will also refurbish the biofuel storage.

"Winters have been a real burden for our 240 school children. The old coal-fired heating system was operated at its minimum capacity. Due to this reason we managed to heat the classrooms only, while the corridors, bathrooms and kitchen remained without heat. Things have changed from now on. Along with the modern biofuel-fired heating plant, we managed to obtain funds from the Energy Efficiency Fund to change the windows and ensure thermal insulation of walls. I am looking forward to see the school new look", Nicolae Chercheja, Mayor of Bratuleni Vallage, has stated.

Here you can see the Map of rural communities that have their public institutions connected to biomass energy with the financial support provided by Moldova Energy and Biomass Project.

Moldova Energy and Biomass Project is a four-year project implemented during 2011-2014. The Project total budget amounts to 14.56 Million EUR, provided by the European Union (14 million EUR) and UNDP Moldova (560,000 EUR).



### ENTREPRENEURS FROM TARACLIA LEARN HOW TO PRODUCE BIOFUEL

Agricultural entrepreneurs from Taraclia District learned how to produce biofuel out of agricultural waste. Tens of holders and administrators of agricultural lands get together on 26 August in Taraclia Town to get acquainted with the experience of Moldovan briquette and pellet producers and to acquire valuable information on how to start a business. The training is organised by the EU-UNDP funded Energy and

\*The list of Villages, which have signed Memoranda of Collaboration, are as follows: Harbovat and Saseni (Calarasi District); Ciufulesti, Carnatenii Noi, and Tanatarii Noi (Causeni District); Rusestii Vechi (Ialoveni District); Bratuleni and Soltanesti (Nisporeni District); Micleuseni and Vorniceni (Straseni District); Cairaclia, Cealic, Ciumai, and Novoseolovca (Taraclia District).

Biomass Project upon the initiative of future biofuel producers from the Southern region of the country.

The participants have been informed about the steps to be undertaken with the purpose to launch a biomass briquette and pellet production business, including the legal and infrastructure aspects to be taken into account prior to launching such a business in the Republic of Moldova.

#### Here are the subjects covered at the training:

- Fire security and occupational safety requirements at enterprises producing biofuel;
- Staffing requirements for biomass production business (depending on the production capacity and type of equipment);
- Requirements set for the raw material storage spaces, production and warehousing spaces for the final product;
- Location of briquette and pellet production lines.
   Design components;
- Cost of biomass fuel production business: optimal ratio of the cost of each production stage to the overall cost of business;
- Organising the process of biomass gathering. Specialised equipment depending on the type of biomass. Optimising the biomass collection process;
- Transportation of biomass. Optimising the process of biomass transportation;
- Primary chopping of biomass for briquetting and pelleting – specialised equipment;
- Technological process for producing biomass briquettes and pellets;
- Final chopping/shredding of biomass, humidity levels for different compacting technologies;
- Admissible combinations of biomass for the production of briquettes and pellets;
- Ensuring the optimal operation of briquetting and pelleting equipment;
- Quality parameters set for the solid biomass fuel; assessing the quality of briquettes and pellets.
   Methods of quality assurance and enhancement;
- Packing the final product (packages for household and industrial users, main differences);
- Marketing the briquettes and pellets. Sales and marketing techniques. Distribution channels. Price levels for briquettes and pellets on the local market.

The participants to the seminar received the Guide for Biofuel Suppliers developed by the Energy and Biomass Project.

### PUBLIC PROCUREMENT TENDER FOR BRIQUETTING EQUIPMENT

The Public Procurement Tender for Briquetting Equipment was launched on 30 August 2013. The equipment in question will be purchased under an initiative aimed at encouraging the biomass fuel production sector, launched by the EU-UNDP funded Moldova Energy and Biomass Project and implemented by the Energy Efficiency Agency. The tender documents will be opened on 16 September 2013. The winning Bidders to supply equipment to the future Programme beneficiaries will be identified on the same date.

The Programme aims at encouraging the biomass fuel production market in the Republic of Moldova and is intended to facilitate the procurement under leasing conditions of a wide range of equipment to manufacture biomass briquettes by private sector entities. The equipment will be provided under advantageous conditions for a three-year period with 0% commission, 0% interest and 0% VAT.



# AT SUMMER CAMP ENERGEL CHILDREN LEARN HOW TO PRODUCE RENEWABLE ENERGY AND USE IT EFFICIENTLY

120 children from 13 Districts learned how to produce renewable energy and use it efficiently at Summer Camp ENERGEL organised this year in Ivancea Village, Orhei District. For ten days (1-10 July) the children will be involved in many interactive and practical activities. "We have got an agenda that is both loaded and captivating. We have built models/layouts of photovoltaic panels and wind turbines; we are going to collect the garbage from the neighbouring communities; we will organise a fashion show and present clothes made out of eco materials, and we will show a play about renewables, acting as producers and actors", Mihai Vdovicenco, a school students from Prodanesti Village, Floresti District, attending the Summer Camp, has told us.

"Children are the driving force of any change. They are open to everything that is new and advanced. The solutions proposed by the young people attending the Eco Summer Camp for the wise use of renewable energy convinced me once again that they truly are the driving force", Valeriu Lazăr, Deputy Prime Minister, Minister of Economy, stated during his visit to Summer Camp ENERGEL, conducted on 4 July.

Summer Camp ENERGEL is part of the Educational Initiative aimed at promoting the renewables and energy efficiency launched by Moldova Energy and Biomass Project, funded by the European Union and co-financed and implemented by the United Nations Development Programme in Moldova. The Educational Initiative covers the communities that have their public institutions connected to biomass heating systems with the support provided by Moldova Energy and Biomass Project. "I am so glad to see that this Project, along with advanced biomass technologies, brings also an enormous stock of knowledge on renewables and energy efficiency to children. So far, the children have decided what energy future they would like to have for their community and country; therefore, they propose specific solutions for energy safety and cleaner environment", Wicher Slagter, Deputy Head of the EU Delegation in Moldova mentioned.

During the 2011-2013 school years, pupils from 106 schools covered by the Educational Initiative were involved in interactive activities dedicated to renewables and energy efficiency. The children participated to debates held within their school, attended webinar lessons where they discussed on-line topics on eco-energy with hundreds of colleagues from other schools, visited households, public institutions that use renewable energy, etc. The most active school students, selected on a competitive basis, have been invited to attend Summer Camp ENERGEL.

"The children attending Summer Camp ENERGEL are valuable promoters of renewable energy. They have been acquainted with the benefits derived from using solar, wind, hydro or biomass energy and foster these benefits in their own family, community, and country. I am pretty sure that, along with their new friends they have met here, the children will acquire knowledge, skills and beliefs, which would help them successfully accomplish their Mission as Eco Energy Advocates", Nicola Harrington-Buhay, Resident Representative of UNDP Moldova, stated.

This is the second edition of Summer Camp EN-ERGEL; the first one took place in Stefan Voda District in 2012. The Educational Initiative on renewables and energy efficiency is conducted with the support provided by the Continuous Education Institute and by the Republican Centre for Children and Youth "Gutta-Club".



# THE ENERGY AND BIOMASS PROJECT INTERACTIVE MAP CAN BE ACCESSED AT WWW.BIOMASA.AEE.MD

The Project Interactive Map, available at <a href="https://www.biomasa.aee.md">www.biomasa.aee.md</a>, has been completed with new data, covering so far 118 communities from 26 Districts and ATU Gagauz Yeri. The header block for each community comprises information on: beneficiary public institution, heated space, heating plant capacity, boiler model and performance, country of origin of the equipment, type of fuel, Project and community investment, beneficiaries. Likewise, the map contains pictures of heating plants in place, of works carried out to install the biomass heating plants, as well as pictures of old heating plants.

### **OUR PARTNERS**



## - Mr. Miscu, please tell us about the Company portfolio.

We launched the company activity in 2001. At that particular time, the company employed 20 people who installed natural gas and coal-fired heating plants and provided maintenance services. We managed to widen the range of rendered services during several years, covering already gas pipeline construction works, water supply and sewerage building works, construction of water treatment plants, as well as design and maintenance of built facilities. Also, we were involved in building dwellings in Nemteni, Obileni and Cotul-Morii Villages from Hincesti District, which suffered from the 2010 floods. Thus, we erected 24 dwelling houses with three rooms and ten houses with four rooms. I am so glad that the school from Cotul Morii, built from scratch, will be heated with biomass energy during the coming winter.

### - What was your first experience in installing renewable energy-based technologies?

- We have been exploring the experience of European countries in the area of renewables for many years. We organised study visits in Romania for our employees to see in situ how people could get biomass, solar and wind energy. We acquired the first experience in Cantemir and Leova Districts were we designed and built modern biomass heating plants

#### ALEXEI MISCU, "IZODROM GAZ" DIRECTOR:

"I AM SO GLAD THAT THE SCHOOL FROM COTUL MORII, BUILT FROM SCRATCH, WILL BE HEATED WITH BIOMASS ENERGY DURING THE COMING WINTER"

"Izodrom Gaz" is the company that installed biomass heating plants during the first year of Project activity. The "Izodrom Gaz" Team provided 23 schools, kindergartens and community centres from Cantemir, Leova, Hincesti, Soroca and Cahul Districts with an ecological heating alternative.

for five schools and kindergartens in 2011. We used modern technologies, boilers with automated working regime, and heat meters. The gas plants do not have heat meters incorporated. Many public institution managers and local government representatives had no idea what Gigacalorie is all about prior to the installation of biomass heating plants. They used to pay for the heat depending on the consumed volume of natural gas without taking account for its calorific value/quality. Now they already know that they will pay for the heat output.

#### - What is the benefit of knowing that?

- The cost of one Gigacalorie of natural gas is 1200 MDL, while the cost of one Gigacalorie of biomass would not exceed 900 MDL. If the heat meter shows exceedances of this amount, the operators are able to manage the consumption, identify the eventual gaps (poor quality of the fuel, wrong maintenance of the heating plant, etc.) to minimize the heat losses.





- How many biomass heating plants have you installed up-to-date?
- So far our team managed to design and install modern biomass heating systems in 23 rural schools, kindergartens and community centres. We also plan to provide our entity premises with an alternative biomass heating system. We intend to promote the use of biomass energy by own example.
- And how do you heat your dwelling?
- Based on power. The apartment we bought is disconnected from the natural gas grid and comprises a power-based heating system. The costs "bite" us painfully. The dwelling house I am building now will be heated with biomass for sure.
- Thank you for the interview.

#### **EVENTS CALENDAR OF THE ENERGY AND BIOMASS PROJECT**

06 september	Supervisory visit of the projects from Ungheni district	v. Bumbata v. Busila v. Sculeni v. Zagarancea v. Valea Mare v. Floritoaia Veche
10 september	Launch of Moldova Eco-Energetica Magazine	15.00-16.30 Hotel Codru, Mozart Hall,
13 september	Moldova Energy and Biomass Project Board	Ministry of Economy
16 september	Bids opening for briquetting equipment purchased through leasing mechanism.	Energy Efficiency Agency

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