

Moldova Energy and Biomass Project

"Simpozionul moldo – german in domeniul aprovizionării cu apă, canalizării și eficienței energetice", Chisinau, 20 martie, 2012

Proiectul Energie și Biomasă în Moldova









Project Information

Timeframe: 2011- 2014

Funded by the European Union and UNDP European Union 14,000,000 EUR UNDP 560,000 EUR

Implemented by UNDP Moldova









Overall objective:

The overall goal is to contribute to a more secure, competitive and sustainable energy production through a targeted support to the most viable and readily available local source of renewable energy which is biomass from agricultural waste



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Expected project outputs:

- Improvement of municipal biomass heating and fuel supply markets established
- Foundations laid for establishment of efficient household heating, industrial cogeneration and biomass briquetting markets
- Capacity for growth of biomass markets at regional and local levels is built in Moldova
- The opportunities and benefits of biomass energy for Moldova are well known and visibility of project results promoted









Output 1

1.1 Installation of 130 biomass-fired boiler plants / average capacity of 0.3MW

Selection criteria of districts / communities / projects 2 stage process:

- -Pre-selection of Expressions of Interest / Application
- -Participatory needs and capacity assessment / project appraisal

Design-build approach, / 3 stage selection of approximately 7/10 contractors, / Request for proposals / tenders

- 1.2 Fuel cycle facilitated through leasing/hire-purchase mechanism for local fuel suppliers
- 1.3 Market environment enhanced to support quality, efficiency and effectiveness

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Progress:

2011: 8 districts - Ştefan Vodă, Leova, Cantemir, Hâncești, Telenești, Sângerei, Fălești, UTAG / 35 approved projects/ 2 completed, 33 ongoing;

2012: 13 districts

Glodeni, Donduşeni, Soroca, Râşcani, Floreşti, Orhei, Ungheni, Rezina, Şoldăneşti, Anenii Noi, Cimişlia, Basarabeasca, Cahul 22 projects approved; other 35-40 projects under identification

2013: 12 districts

Briceni, Ocnița, Edineți, Drochia, Călărași, Criuleni, Dubăsari, Ialoveni, Nisporeni, Strășeni, Căușeni, Taraclia









Community share:

- 1. Repair works, heat conservation measures within the public buildings
- 2. Repair / renovation of internal heating systems
- 3. Repair of biomass fuel store houses
- 4. Land improvements/territory arrangements closed to boiler plant and store house area
- 5. Site technical supervision
- 6. Other works by case

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UNDP support:

- 1. Technical design,
- 2. Construction of new biomass-fired boiler plant
- 3. Construction of outside heat distribution nets,
- 4. Connection of new boiler plant to power supply nets and water supply networks
- 5. Rehabilitation of heat point rooms and installation of new automation and heat control equipment
- 6. Connection to existing internal heating system, testing and putting into operation of the whole heating system
- 7. Land improvements and outside light around the boiler plant,
- 8. Environment and fire protection measures









Activity 1.2

Fuel cycle facilitated through leasing/hire-purchase mechanism for local fuel suppliers

- 1.Develop a sustainable mechanism for fuel supply to the installed boilers. A mechanism for leasing biomass processing equipment developed.
- 2.Identify reliable local partner organizations capable to deliver the required financial services
- 3. Monitor and evaluate activity implementation
- 4. Continuously support the local producers with relevant information concerning solid biomass fuel production cycle

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Activity 1.3

Market environment enhanced to support quality, efficiency and effectiveness

- 1.Support relevant initiatives concerning improvement of the legal framework for production/consumption of solid biomass fuels (i.e. develop the technical regulation for briquettes and pellets)
- 2.Keep track of problems and challenges faced by local stakeholders of biomass market and address policy, legislation and bylaw creation to facilitate the market development.









Output 2

Foundations laid for establishment of efficient household heating, industrial cogeneration and biomass briquetting markets

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Activity 2.1

Market solutions for high efficiency affordable rural biomass household heating identified and piloted

- Stimulate the market (rural households) to use efficient biomass based heating solutions. Until the end of the project around 500 biomass based boilers/stoves will be installed
- 2. Stimulate the local producers to start confectioning / assembling identified biomass based heating solutions.









Activity 2.2

Industrial cogeneration using biomass fuel demonstrated

- Develop and implement at least one Combined Heat and Power (CHP) unit using biomass as a by-product of an agri-industrial process
- 2. Demonstrate the opportunities of supplying power to the grid produced from agri-industrial by-products

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Activity 2.3 Market solutions for briquetting piloted

- Estimate the potential of biomass briquetting in Moldova (biomass potential, consumers preferences, private sector, LPAs)
- Initiate at least 4 sustainable briquetting businesses using different type of biomass in the form of Public Private Partnerships











Component 3

Training and Capacity building at local and regional level

- 1. Trainings for Local Public Administration beneficiaries of biomass based heating boilers
- 2. Trainings and workshops for boilers' operators
- 3. Training and capacity building activities for potential fuel suppliers (straw bales, briquettes/pellets)
- 4. Capacity building activities for "the young generation" related to renewable energy sources, their efficient use and development perspectives in Moldova.

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Component 4

The opportunities and benefits of biomass energy are well known and project results promoted

- A national awareness raising campaign on benefits of production and use of renewable energy
- MOLDOVA ECO-ENERGETICĂ,
- Media campaign on visibility of project results











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