21ST OSCE ECONOMIC AND ENVIRONMENTAL FORUM

"Increasing stability and security: Improving the environmental

footprint of energy-related activities in the OSCE region"

SECOND PREPARATORY MEETING

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Moldova

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21st OSCE ECONOMIC AND ENVIRONMENTAL FORUM SECOND PREPARATORY MEETING

STATUS OF RENEWABLE ENERGY PRODUCTION IN THE REPUBLIC OF MOLDOVA



Kyiv, April 16th, 2013

LEGAL AND REGULATORY FRAMEWORKS FOR RES

- 1. Energy Strategy till 2030 Government Decision No. 102 as of February 5, 2013
- 2. Law on renewable energy No. 160 as of July 12, 2007
- National Program on Energy Efficiency 2011-2020 Government Decision No. 833 as of November 10, 2011
- 4. Provisions on guarantees of origin (GoO) of electricity generated from the renewable energy sources Resolution of ANRE # 330 as of April 3, 2009
- Methodology for the determination, approval and application of tariffs for electricity generated from RES and biofuel – Resolution of ANRE # 321 as of January 22, 2009
- Energy Efficiency Agency Government Decision No. 1173 as of December 21, 2010
- 7. Energy Efficiency Fund Government Decision No. 401 as of June 12, 2012.
- National Renewable Energy Action Plan (NREAP) is under the process of development and is planned to be approved in the mid of 2013.

ENERGY STRATEGY 2030 – RES DEVELOPMENT____

One of the Specific objectives of the Energy Strategy is related to the increase the use of renewable energy sources (RES).

The general priority for the RES development in Moldova will be:

- establishment of a national institutional framework, providing appropriate support to this development
- harmonized integration into the existing energy infrastructure and expected return of investments made in the additional generation of clean energy
- a reduced impact over the environment
- fulfilment of the Energy Community and EU requirements in the area.

Performance indicator: 400 MW out of the 1,050 MW produced by the new generation capacities, will be based on the power generation from renewable sources. Being supported by the obligation to buy at the final tender price, it will attract the interest of potential investors into the use of the wind energy.

RES-based generation technologies used in the Republic of Moldova will pass through the filter of economic efficiency and of the availability of resources.

ENERGY STRATEGY 2030 – RES OBJECTIVES

- To stimulate the use of energy produced from renewable sources, in relation to the total internal gross consumption: 20% in 2020, with an intermediate objective of 10% in 2015;
- To ensure a 10% share of biofuels in the total fuels by 2020, with an intermediate objective of 4%;
- To ensure a 10% annual share of power produced from renewable sources by 2020.

These objectives related to RES are also specified in the National Development Strategy "Moldova 2020" and NEEP 2011-2020!!!

LAW ON RENEWABLE ENERGY

- Mandatory purchase of energy and fuels produced from renewable energy sources by suppliers.
- Obligation of the national regulator to approve tariffs for a term of 15 years to stimulate investments. The tariffs shall be based on the approved methodologies, which will provide for return of investments, as the case might be, in construction, extension, modernization of installations, as well as in the lines for connection, transportation and distribution of energy and fuels.
- Creation of a revolving fund, entitled Energy Efficiency Fund, which is non-budgetary, i.e. financially independent. The fund will finance both renewable and EE projects. The same law stipulates the Government commitment to contribute 10% to this Fund.

The new Law on renewable energy is under the process of development, according to the provisions of EU Directive 2009/28/CE, and is planned to be approved by the Parliament in 2013.

NATIONAL ENERGY EFFICIENCY PROGRAM 2011-2020

The National Energy Efficiency Program (NEEP) sets the priority policies and actions which shall be implemented during 2011-2020 in order to meet the challenges emerged as a result of energy prices increase, dependency on imported energy resources and the impact of the energy sector on climate change.

Implementation of the NEEP shall be ensured through National Energy Efficiency Action Plan (approved by the Government Decision No. 107 as of February 7, 2013) and National Renewable Energy Action Plan (under the process of development), to be newly approved every three years.

NATIONAL RENEWABLE ENERGY ACTION PLAN

- The 1st National Renewable Energy Action Plan (NREAP) has been drafted according to the simplified template for NREAPs issued by the EnC Secretariat.
- Following the Decision regarding the transposition of the RES Directive 2009/28/EC, the EnC Country Partners must submit NREAPs according to the complete template by 30 June 2013.
- Thus, Moldova as Country Partner in EnC has to accomplish its commitment by the end of June 2013.

NREAP is a key document of the Republic of Moldova's policies promoting the use of renewable energy sources towards fulfilling the main strategic objectives of achieving security of energy supply, environmentally sustainable development and climate change abatement.

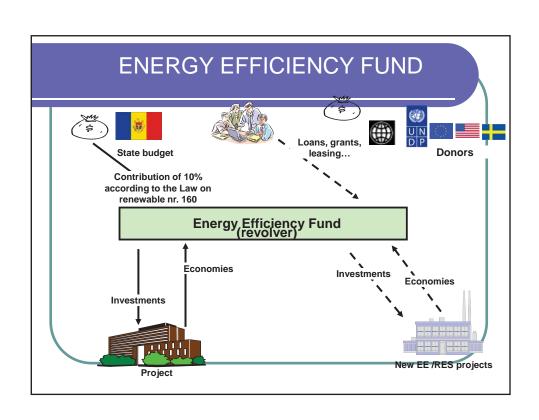
MISSION OF THE ENERGY EFFICIENCY AGENCY (EEA)

The Agency, as a central public authority and the focal point in the field of energy efficiency and RES, has the mission to:

- manage the activity in the energy efficiency and renewable energy sectors;
- ensure the implementation and reach the objectives set out in the national energy efficiency and renewable energy programs and coordinate the actions in these fields;
- ensure the implementation of the legal framework in the field of energy efficiency and renewable energy.

ENERGY EFFICIENCY FUND – KEY EE&RES PROMOTION INSTRUMENT

- Promotion of investment projects in the field of energy efficiency and renewable energy sources;
- Provision of technical assistance for development of projects in the energy efficiency and renewable energy sources;
- Provision of financial assistance to EE and RES projects;
- · Direct financial contribution;
- · Acting as an agent or liaison with other financing sources;
- · Ensuring full or partial guarantees for bank loans;
- Assistance in identifying the best financing opportunities.



AVAILABLE RES IN MOLDOVA

- Biomass, hydro energy, solar and wind energy and sources with reduced thermal potential are available on the territory of the Republic of Moldova.
- The current level of renewable electricity is
 2% and comes from small-scale hydropower.
- Development of RES is in its early stages.
 Hydro energy and biomass have the largest share, while solar and wind energy as well as sources of reduced thermal potential are inadequately explored.

AVAILABLE RES POTENTIAL IN MOLDOVA

Type of	Technical Potential		
RES	РЈ		Mil toe
Solar		50,4	1,2
Wind	29,4		0,7
Hydro		12,1	0,3
Biomass	Agricultural wastes	7,5	
	Fire wood	4,3	
	Wood processing wastes	4,7	
	Biogas	2,9	
	Biofuel	2,1	
	Total biomass	21,5	0,5
Total RES potential		113,4	2,7
Low thermal potential energy sources, including geothermal energy*		> 80,0	> 1,9

RES potential has been estimated at 2,7 mil toe

PROJECT "ENERGY AND BIOMASS" - A SUCCESS STORY...

- •The project "Energy and Biomass" is under the process of implementation in 20 districts and UTA Gagauzia
- •The projects from **104 villages**, that include **121** schools, kindergartens, community centers etc., were approved
- •The capacity of biomass heating plants is of app. **25 MW**
- •The beneficiaries of implemented projects are **75442** persons, inclusive **22061** children



Briquettes fired boiler in the gimnasium from the village Bilicenii Noi, district Singerei, Beneficiaries: 186 persons



Pellets/briquettes fired boiler in the kindergarten from village Crasnoarmeiscoe, Hincesti district. Beneficiaries: 200 persons

PROJECT "ENERGY AND BIOMASS" - A SUCCESS STORY...

- 6 briquetting sets of equipment ready to be contracted under the preferential leasing mechanism
- •The subsidy mechanism for procurement of biomass boilers by rural households launched. At least **100** locally assembled biomass boilers to be sold in 2013.
- •One co-generation plant will be piloted in 2013-2014 to use agri-industrial residues for producing power and heat.
- •One Public Private Partnership aimed at increasing the energy security of a community by producing biomass pellets, is under development



Briquetting equipment leased to local entrepreneurs under preferential terms



Biomass boilers sold under the subsidy mechanism

PROJECT "ENERGY AND BIOMASS" – A SUCCESS STORY...

- 3,873 representatives of the local public administration and local leaders, 286 suppliers of biomass fuels and 240 operators have got knowledge and new abilities regarding the modern technologies of production and usage of biomass
- App. 1,5 milion of persons covered by the actions and promotion events in the field of biomass energy (public events, media campaigns, visits, video and audio spots, communication materials etc.)
- Two editions MOLDOVA ECO-ENERGETICA, annual Awarding 2011-2012 in the field of renewable energy sources and energy efficiency, were successfully organized



Energel Bio-Summer Camp



Moldova Eco-Energetica Award Ceremony, 2012 edition

RES BARRIERS AND NEEDS

Legal

Lack of technical standards in place.

Financial

- High cost of imported technologies due to the lack of local production;
- Lack of targeted soft loans to use RES, especially in the rural zones;

Institutional Capacities

- Poorly equipped laboratories;
- No capacities in the regions to help promote and implement RES projects.

Public Awareness

- The time consuming and complex nature of purchasing and installing RE technologies discourages potential customers;
- No training curriculums for the target groups: professionals, youth, public authorities etc.;
- Scarce information about modern and efficient technologies;
- Insufficient information about local and regional projects and their success

DONORS AND INVESTORS' ASSISTANCE NEEDED FOR:

- 1. Implementation of the National Program for Energy Efficiency 2011-2020 and NREAP.
- Additional financial contribution to the Energy Efficiency Fund's budget.
- 3. Implementation of a variety of projects in RES field.





Thank You for Your Attention!

Ina CRETU,
Consultant in the Deputy Prime Minister,
minister of economy office on Energy policies
Ministry of Economy, Republic of Moldova
1, Piata Marii Adunari Naţionale

Chisinau, MD-2033 Phone: (+373 22) 250644 E-mail: ina.cretu@mec.gov.md