ENERGY EFFICIENCY AND RES DEVELOPMENT IN MOLDOVA

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Energy sector overview

- The Republic of Moldova is highly dependent on energy imports.
- 94% of the energy consumption is covered from import.
- Very high energy intensity.

*The lack of own resources and high energy intensity sets the energy efficiency and renewable energy sources as a top priority.*
Challenges to overcome

- Lack of own energy resources (natural gas, oil, coal);
- High energy intensity and poor energy efficiency;
- Low level of renewable energy sources utilization;
- Fuel mix deviation from the optimal one (the imported natural gas prevails);
- Non-uniform location of electricity generation capacities on the territory of the Republic of Moldova creates considerable supply-demand imbalance (poor generation capacity on the right bank of Dniester River, where the electricity generation covers only 30% of the consumption);
- Advanced level of wear and tear / obsolescence (circa 60-70%) of the equipment installed at the power plants, transformer substations and high voltage transmission lines, distribution networks;
- Insufficient investments in the energy sector.
Solutions

In this context firm steps are imposed in the sector at the level of:

- Legislative and regulatory frameworks destined for promotion and implementation of Energy Efficiency measures in the industry and residential sectors, but as well a dramatical increase in RES use.

- Government support for implementation of pilot projects and further support schemes for accession of financial sources for development of projects in both Energy Efficiency and RES in the public and private sectors.
Legal framework

Law on energy efficiency adopted 2010

- Transposes the framework for application of EU Directive 2006/32/CE of April 5, 2006 on energy end-use efficiency and energy services;
- Creation of the institutional capacity in charge of EE and RES promotion and monitoring;
- Provides for periodical national and local EE Programs and Action Plans to be developed and approved;
- Promotes energy auditing;
- Provides for appointment of energy managers for regions and municipalities;
- Promotes the creation of ESCOs, third party financing, energy performance contracting, energy consumption metering;
- Requires setting the minimum energy performance standards, etc.
Legal framework

- **Law on RES** – *adopted 2007, subject to amendments*

- Mandatory purchase of energy and fuels produced from renewable energy sources by suppliers.

- *Proposed amendment* to include the feed in tariffs, which have been elaborated with the support of international donors. The proposed term is 15 years in order to stimulate investments and to guarantee the 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 partially budget supported. The fund will finance both renewable and EE projects. Preliminary estimates showed the ideal size of the EEF would be 20 mln Euro as to hit the 20% EE improvement target by 2020. The same law stipulates the Government commitment to contribute 10%.
Things done - things to do

Regulatory level

- **Energy Efficiency Agency** – *created in 2011*
  Missions:
  - manage the activity in the energy efficiency and renewable energy sectors;
  - ensure the implementation and reach the objectives set out in the national EE and RES programs and coordinate the actions in these fields;
  - ensure the implementation of the legal framework in the field of EE and RES.
Regulatory level

- **Implementation of the government policy:**
  - Participation in elaboration of draft legal acts, including technical regulations and standards;
  - Participation in developing national programs and action plans;
  - Developing pilot projects;
  - Advising central and local authorities on improving the energy efficiency and use of renewable energy sources;
  - Approving projects in the field of EE and RES financed from the state budget and EEF;
  - Coordinating the programs and action plans developed by local authorities.
Regulatory level

- **Developing comprehensive knowledge base and information database:**
  - Taking stock of existing knowledge, activities and opportunities;
  - Developing a reporting system and an extensive database;
  - Developing regulations and methodologies for energy auditing.

- **Networking and Communication**
  - Cooperates with international organizations, institutions and networks in this field;
  - Consults with experts from academia and industry;
  - Disseminates information on EE and RES, including legal framework, financing opportunities and mechanisms;
  - Provides consultancy and information to ESCOs, energy managers, legal entities and persons, which are active in this field.
Regulatory level

- **National Energy Efficiency Plan** – approved 2011

**Primary objectives**
- reducing the primary energy consumption by 20% until 2020;
- reducing the CHG emissions by 20% until 2020;
- increasing the share of RES in the overall energy balance from 6% in 2010 up to 20% in 2020;
- increasing the share of biofuels to at least 10% in the total amount of fuels used in 2020.
The Energy Efficiency Fund – Key EE&RES promotion instrument

- Promotion of investment projects in the field of EE and RES;
- Provision of technical assistance for development of projects in EE and RES;
- Provision of financial assistance to EE and RES projects;
- Direct financial contribution;
- Acting as an agent or connection unit with other financing sources;
- Ensuring full or partial guarantees for bank loans;
- Assistance in identifying the best financing opportunities.
The Energy Efficiency Fund – *work done and planned actions*

- Deployment in 2011 of a total amount of 25 mln lei ~ 2.2 mln USD for EE measures in the public sector - almost 40 projects have been approved;
- Further increase in Government financial support for the budget year 2012, it's worth mentioning that EU Commission has approved a total of 42 mln Euro for support to the development of Energy sector as a whole for 2012 – 2013, the EEF being included as well.
Currently with the support of the UNDP, a project in biomass heating has been implemented, which have incorporated 14 public entities in the Hincesti district. Due to the success of it further similar projects are subject to develop.

Another direction both in public and private sector is the implementation of solar energy projects. Currently there is the development of a 2 mln USD project for solar water heating. The project is in the procurement stage now.

At the moment there are 3 major developers of feasibility studies in wind energy, which are in there final stages of building and environmental permits, of total capacity of 250 MW.
Thank you!