



# **“State of affairs in Energy Efficiencies Policies and Measures and Energy Efficiency Indicators”**

## **Republic of Moldova**

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**BUILDING PARTNERSHIPS FOR ENERGY SECURITY**

# Agenda



1. Legal and institutional framework for energy efficiency
2. Overview of the main Energy Efficiency Policies and Measures in place or under development
3. Stakeholders involvement
4. Use of energy statistics for energy efficiency monitoring
5. Main issues / challenges faced

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# 1. Legal framework for energy efficiency policies (1)



Law on Adherence of the RM  
to the Treaty establishing the  
Energy Community

Law No.117 of 23.12.2009

- |   |  |
|---|--|
| • Energy Strategy 2030                                | Government Decision No.102 of 05.02.2013 |
| • Law on Energy Efficiency                            | No.142 of 02.07.2010                     |
| • National Energy Efficiency<br>Program 2012-2020     | GD No. 833 on 10.11.2010                 |
| • National Energy Efficiency Action<br>Plan 2013-2015 | GD No. 113 on 07.02.2013                 |
| • Creating energy statistical system                  | GD No. 141 on 24.02.2014                 |

**LEGAL FRAMEWORK TO BE DEVELOPED/ APPROVED**



Methodology on calculation of  
energy savings

the final drafts are available

# Institutional framework for energy efficiency policies (2)



- **Ministry of Economy** – public central authority in the energy sector
- **Ministry of Regional Development and Construction** – public central authority in the construction and regional development sector
- **Energy Efficiency Agency** – administrative authority in the field of EE & RES
- **Energy Efficiency Fund** – institution focused on identification and financing of EE & RES projects
- **National Agency for Energy Regulation** – institution focused on energy sector regulation

Government Decision  
No. 690 of 13.11.2009

Government Decision  
No. 662 of 10.11.2009

Government Decision  
No 1173 of 21.12. 2010

Law  
No. 160 of 12.07.2007

Government Decison  
No. 767 of 11.08.1997

## 2. Overview of the main Energy Efficiency Policies and Measures in place or under development



### NATIONAL ENERGY EFFICIENCY PROGRAM

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 (NEEAP) and National Renewable Energy Action Plan (NREAP), to be newly approved every three years.

The NEEP shall be updated once in a three years period or, if necessary, according to the technical advancement and amendments operated to EC Directives.

## 2. Overview of the main Energy Efficiency Policies and Measures in place or under development



### NATIONAL ENERGY EFFICIENCY PROGRAM (2)

Sectors covered by NEEP :

- Energy transformation/conversion sector;
- Industry sector;
- Constructions sector;
- Transportation sector;
- Public sector.

Measures to be implemented:

*-investment stimulation;*

*-promotion of RES;  
raising/growth;*

*-energy consumption reduction;*

*- promotion of energy efficient tyres*

*-promotion of energy labelling;*

*-promotion of energy efficient street lighting systems;*

*-promotion of the use of energy-efficient equipment/technologies, etc.*

*- biofuels promotion;*

*- public awareness*

*- cogeneration promotion;*

*- losses reduction;*

# 3. Stakeholders involvement

## Financing institutions in EE



Financing institutions in EE: UNDP, USAID, GIZ, SIDA, EBRD, EIB, JICA, etc.



Moldovan Sustainable Energy Financing Facility II  
- 22 MEuro

Moldovan Residential Energy Efficiency  
Financing Facility - 35 MEuro



Energy and Biomass Project – 14.56 + 9.5 Meuro (by 2017)



Energy Efficiency Fund - 27 MEuro (by 2015)



## 4. Use of energy statistics for energy efficiency monitoring



1. Energy efficiency indicators
2. Data provided by companies, Financing institutions, etc.
3. *Audits*
4. *Data collected from the participants at the National Competition "Moldova Eco - Energetica"*

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PROGRAMME FUNDED BY THE EU



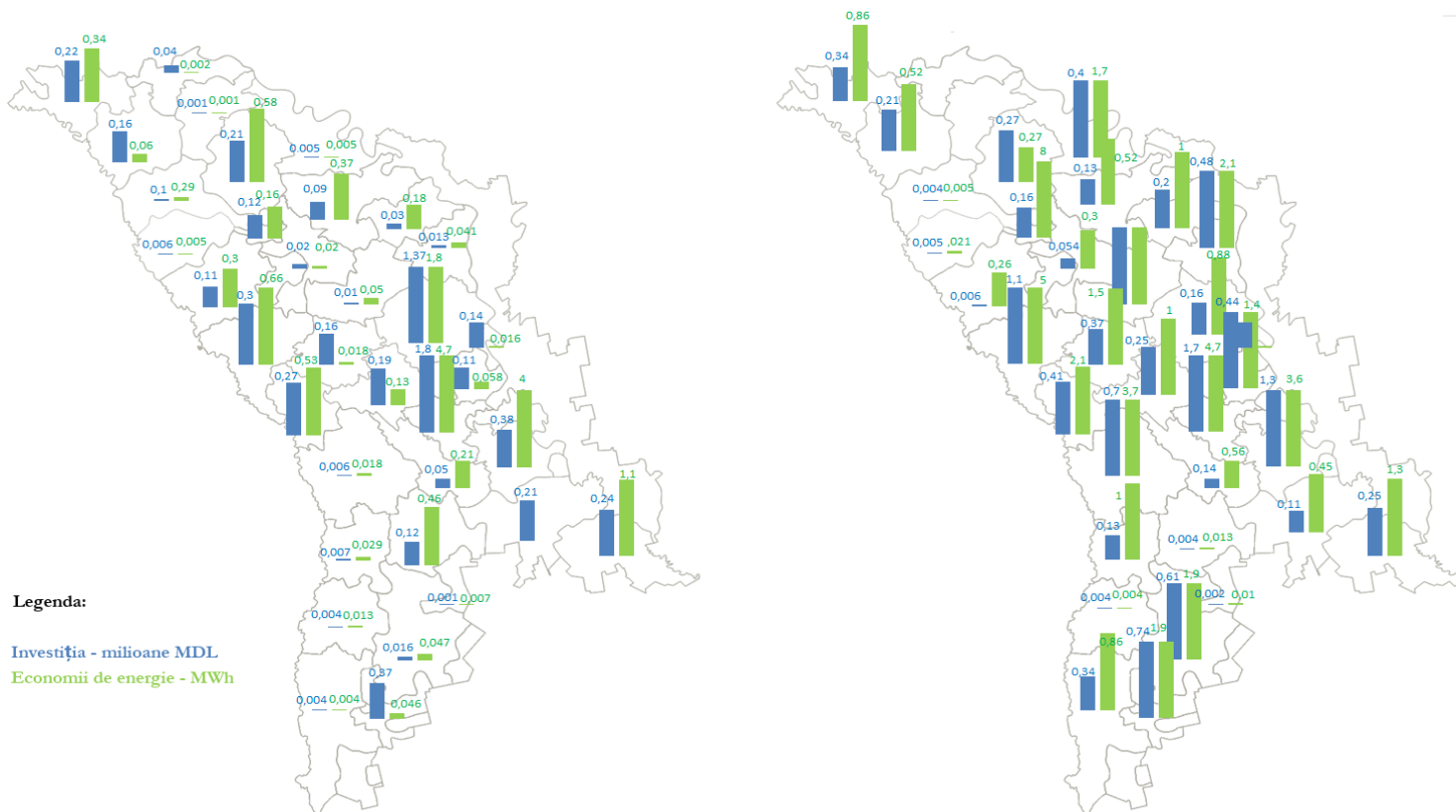
# Example: Monitoring of EE from data provided by companies, Financing institutions



## IMPLIMENTED AND STARTED PROJECTS RES&EE

Sector	Nr. of projects	Investition, M€	Energy savings, MWh
Industrial sector	55	5,50	41.585
Public sector	317	21,65	25.427
Household sector	1 328	4,00	7.414
<b>TOTAL</b>	<b>1 400</b>	<b>31,0</b>	<b>&gt; 74.426</b>

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## 5. Main issues / challenges faced



1. Lack of data / *statistics*
2. *Lack of methodological knowledge in the collection and processing of data (for calculation bottom -up)*

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# 5. Main issues / challenges faced



Available indicators 2014	Residential sector
Yes	Non-electricity energy use of households in toe per dwelling adjusted for climatic conditions (M1).
Yes	Electricity use of households in kWh per dwelling (M2).
No	Energy use in the residential sector for space heating in toe per floor area in m <sup>2</sup> adjusted for climatic conditions (P1);
No	Energy use of households for water heating in toe per inhabitant (P3).
No	Electricity use per appliance type in kWh/year (P4);
No	Electricity use of households for lighting in kWh/year per dwelling (P5).

## 5. Main issues / challenges faced



Available 2014	Service sector
Yes	Non-electricity energy use of the service sector in toe per employee in full time equivalent adjusted for climatic conditions (M3).
Yes	Electricity use of the service sector in kWh per employee in full time equivalent (M4).
Yes	Non-electricity energy use in public service (education; health and social work) in the service sector per employee in the public service sector adjusted for climatic conditions P (6).
Yes	Non-electricity energy use in commercial services in the service sector per employee in commercial services adjusted for climatic conditions P (6).
Yes	Electricity in public service (education; health and social work) in the service sector per employee in the public service sector P (7).
Yes	Electricity in Commercial services in the service sector per employee in Commercial services P (7).
No	Non-electricity energy use in subsector x in the service sector per indicator of activity adjusted for climatic conditions P (6);
No	Electricity use in subsector x in the service sector per indicator of activity adjusted for climatic conditions P (7).

# 5. Main issues / challenges faced



Available 2014	Transport sector
Yes	Energy consumption of road vehicles in toe per car equivalent (M5).
Yes	Energy consumption of rail transport in grams of oil equivalent (goe) per tonne-km (M6).
No	Energy consumption of cars in l per 100 km driven (P8);
No	Energy consumption of cars in grams of oil equivalent (goe) per passenger-km (A1 for P8);
No	Energy consumption of trucks and light vehicles in tonnes of oil equivalent (toe) per tonne-km (P9)
No	Energy consumption of trucks and light vehicles in grams of oil equivalent (goe) per vehicle (A2 for P9);
No	Energy consumption of passenger rail transport in grams of oil equivalent (goe) per passenger-km (P10);
No	Energy consumption of freight rail transport in grams of oil equivalent (goe) per tonne-km (P11);
No	Share of public transport in total land passenger transport in % (P12);
No	Share of rail and inland waterways freight transport in total freight transport in % (P13).

# 5. Main issues / challenges faced



Available 2014	Industry sector
Yes	Energy use of the industrial sub-sector Non-metallic minerals per value added in toe per thousand Euro (M8).
Yes	Energy use of the industrial sub-sector Food and tobacco per value added in toe per thousand Euro (M8).
Yes	Energy use of the all other industrial sub-sectors per value added in toe per thousand Euro (M8).
No	Energy consumption of industrial (further) sub-sectors per value added (M8);
No	Energy consumption of industrial sub-sectors per unit of production (P14)



**Спасибо!**  
**Thank you!**

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**INOGATE Technical Secretariat and Integrated Programme in support of the Baku Initiative and the Eastern Partnership energy objectives**

