

15th Meeting of the Eastern Partnership Platform 3 on Energy Security

IMPLEMENTATION OF ENERGY EFFICIENCY AND RENEWABLE ENERGY POLICIES IN THE REPUBLIC OF MOLDOVA

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ENERGY SECTOR REVIEW

- The Republic of Moldova is highly dependent on energy imports, 88 % of the energy consumption is covered from import
- Very high energy intensity (roughly 3 times over EU average)
- The share of RES in final energy consumption is about 13,25% (according to the 2014 Energy Balance)

The lack of own resources and high energy intensity sets the energy efficiency and renewable energy sources as a top priority



GENERAL OBJECTIVES

1

- reducing the primary energy consumption by 20% until 2020

2

- increasing the share of renewable energy sources in the overall energy balance up to 20% in 2020

3

- increasing the share of biofuels to at least 10% in the total amount of fuels used in 2020

4

- reducing the GHG emissions by 25% until 2020

EE & RES PROMOTION LEGAL FRAMEWORK⁽¹⁾

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

Law No.117 of 23.12.2009

- **Energy Strategy 2030**
- **Law on promotion of renewable energy use**
- **Law on Energy Efficiency**
- **Law on the energy performance of buildings**
- **Law on heat and cogeneration promotion**
- **Law on eco design**
- **Law on energy labelling**

Gov. D No.102 of 05.02.2013

No.10 of 12.07.2007

No.142 of 02.07.2010

No. 128 of 10.10.2014

No. 92 of 29.05.2014

No. 151 of 17.07.2014

No. 44 of 02.07.2014

EE & RES PROMOTION LEGAL FRAMEWORK(2)

- | | |
|--|------------------------------------|
| • Regulation on energy services | GD No. 1093 of 31.12.2013 |
| • National Energy Efficiency Program 2012-2020 | GD No. 833 on 10.11.2010 |
| • National Renewable Energy Action Plan until 2020 | GD No. 1073 of 27.12.2013 |
| • National Energy Efficiency Action Plan 2016-2018 | <i>public consultation process</i> |

EE & RES PROMOTION INSTITUTIONAL FRAMEWORK

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

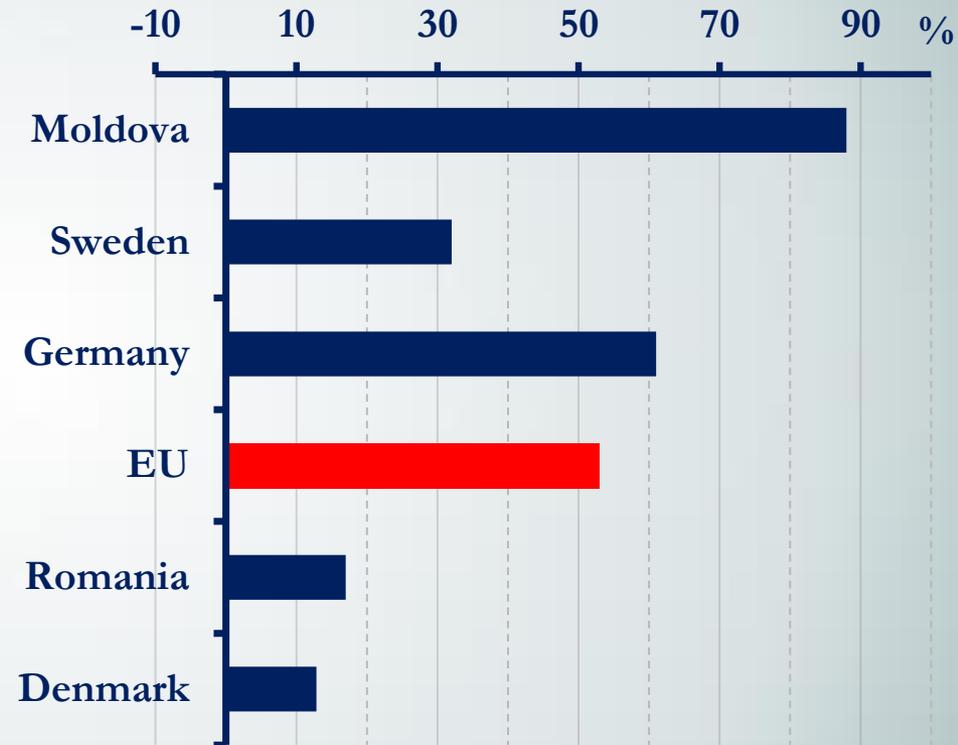
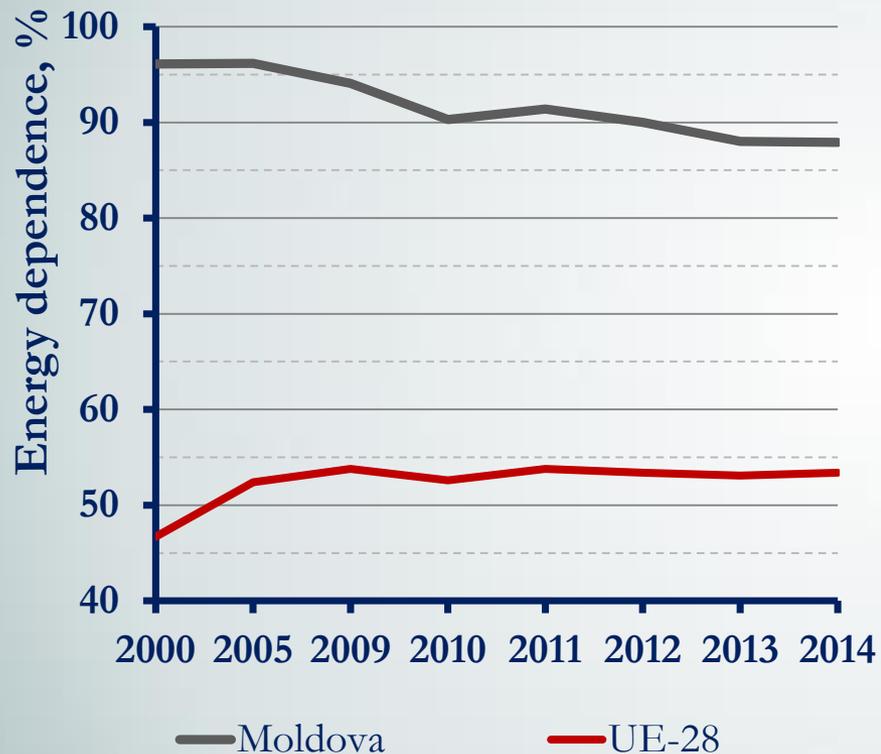
Government Decision
No. 662 of 10.11.2009

Government Decision
No 1173 of 21.12. 2010

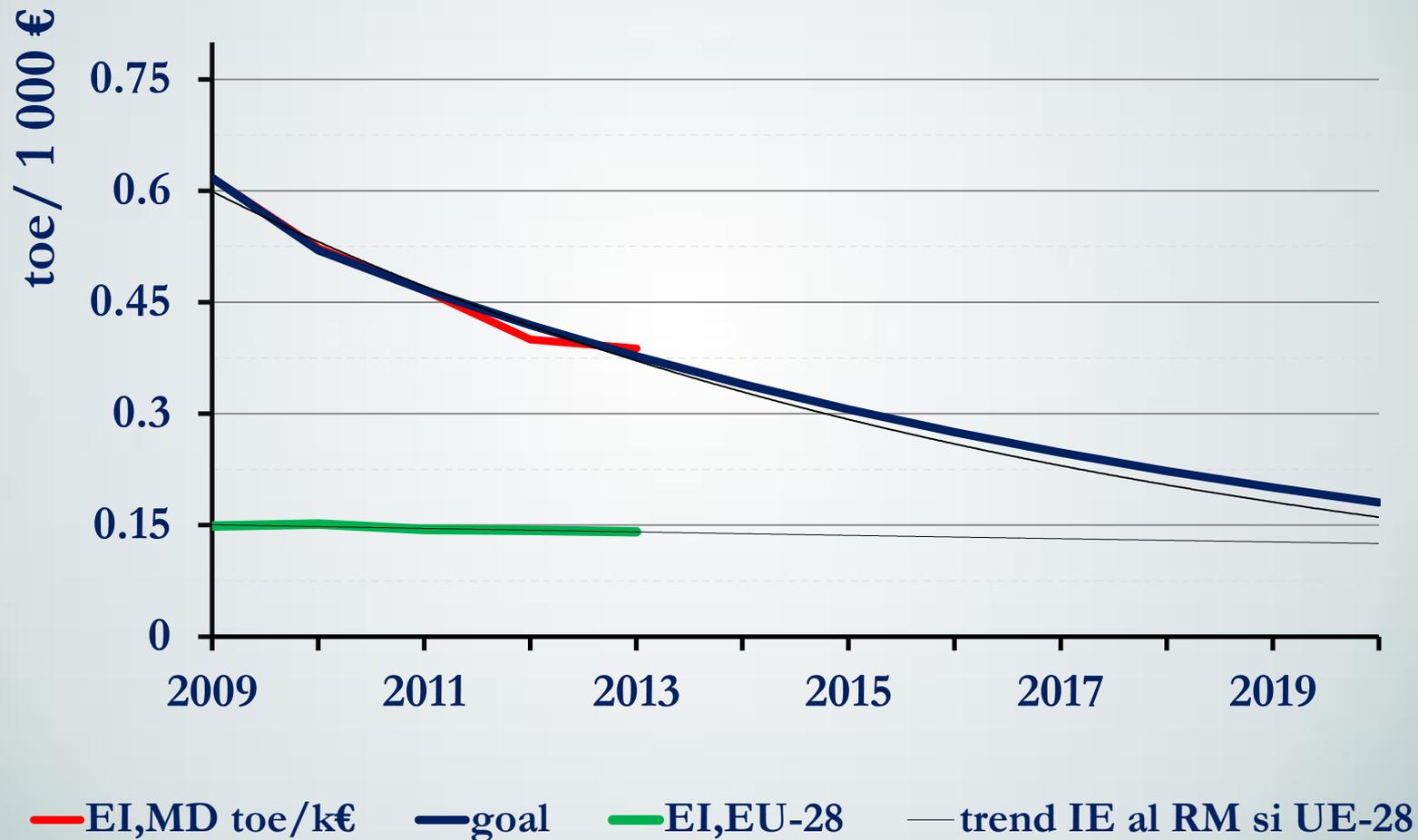
Law
No. 160 of 12.07.2007

Government Decison
No. 767 of 11.08.1997

ENERGY DEPENDENCE IN COMPARISON



PRIMARY ENERGY INTENSITY



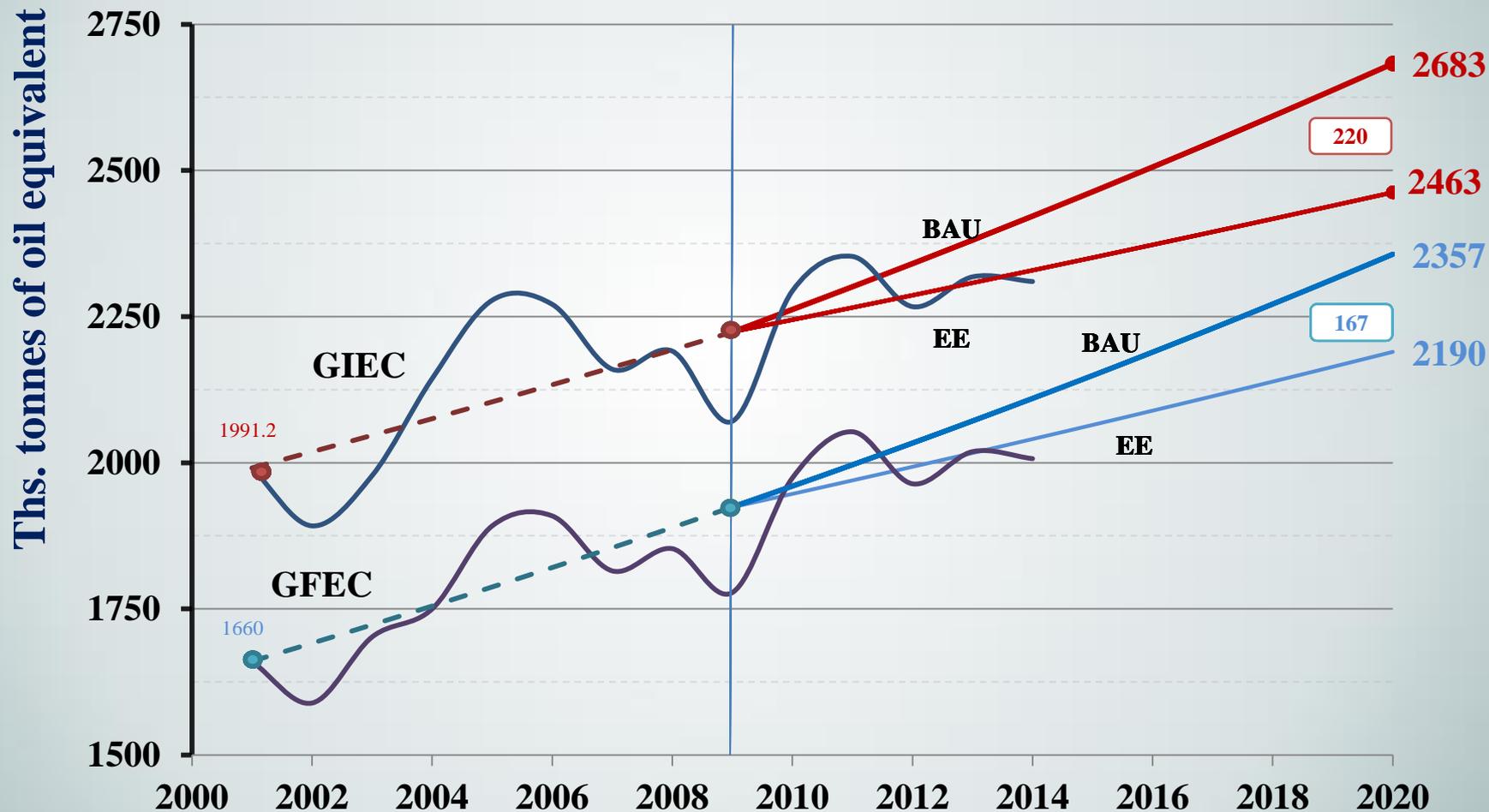
FULFILLMENT OF NATIONAL EE TARGETS

ACCORDING TO NEEAP 2013-2015



FULFILLMENT OF NATIONAL EE TARGETS

ESTABLISHED FOR 2020 /ACCORDING TO NEEAP 16-18 DRAFT/

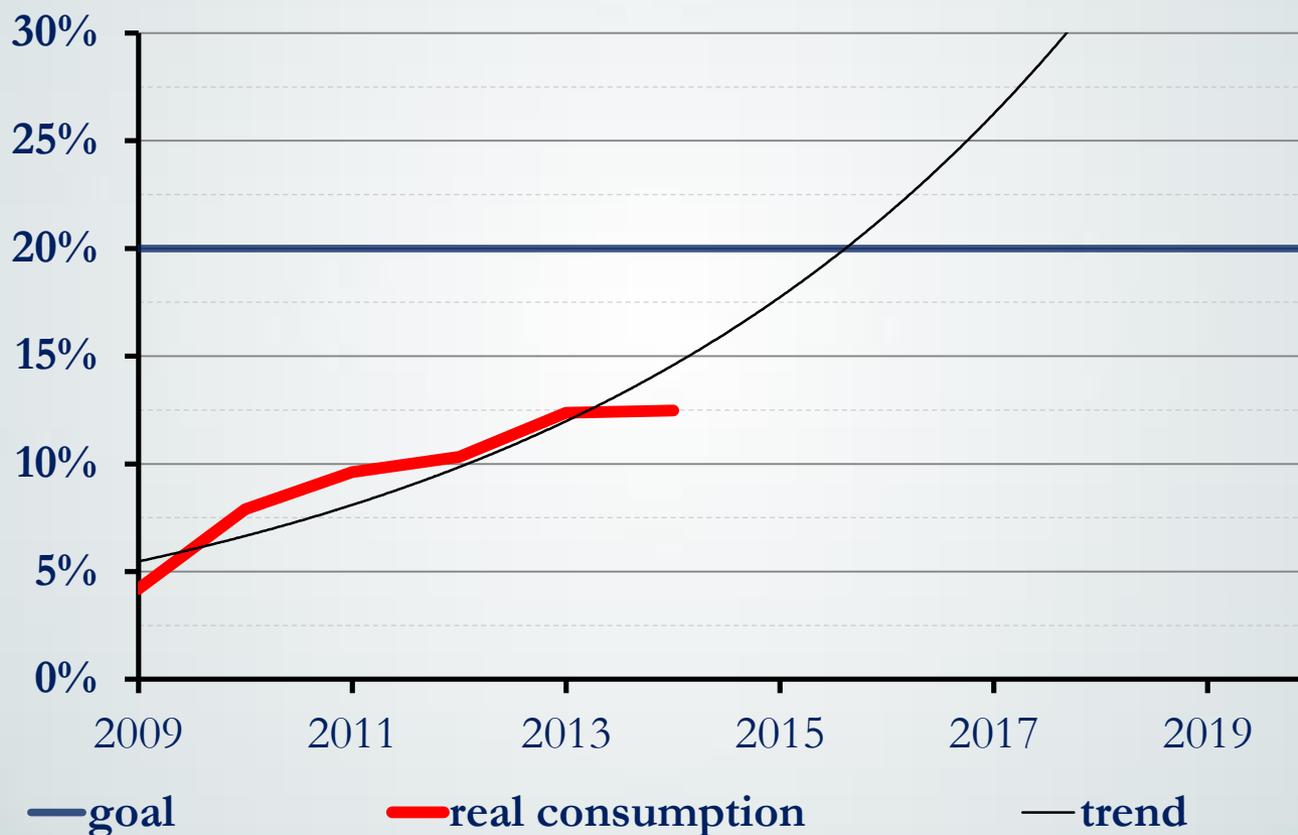


EXISTING RES CAPACITIES

No.	Source	RES capacities, <i>MW</i>	
		E	Î&R
1.	Hydro (non pumping)	16	
2.	Solar PV	2,02	
3.	Wind	1,1	
4.	Biomass		112,57
	– residential sector		37,65
	– Public sector		74,92
5.	Biogas	2,81	
TOTAL		21,93	112,57

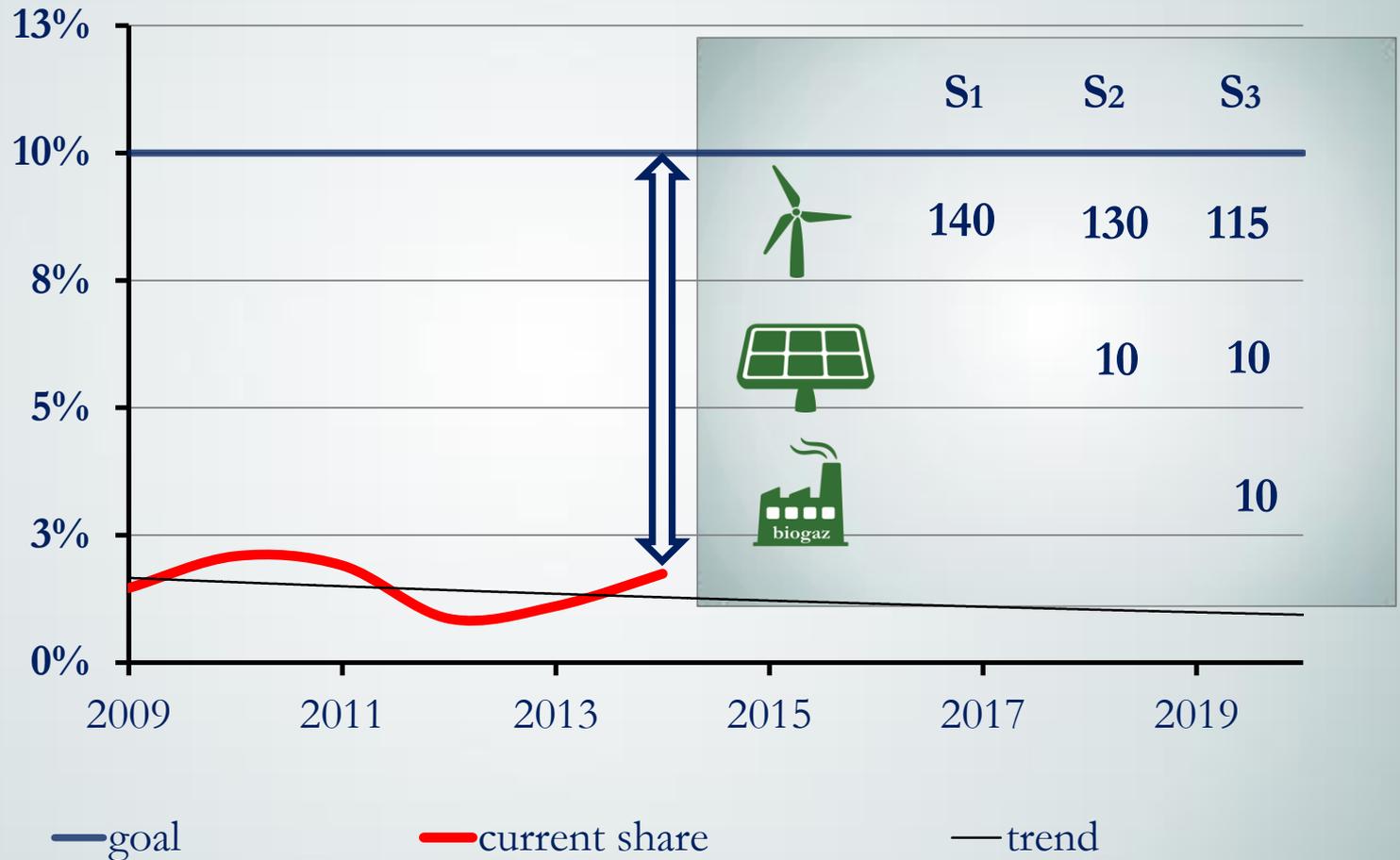
RENEWABLE ENERGY SHARE IN GROSS FINAL ENERGY CONSUMPTION

RE share in GFEC



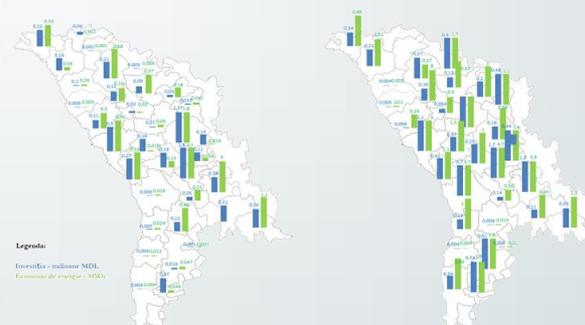
SHARE OF RES-E IN GROSS FINAL ENERGY CONSUMPTION

RES-E share in gross final
electricity consumption



TOOLS FOR ATTRACTING INVESTMENTS IN EE & RES FIELDS

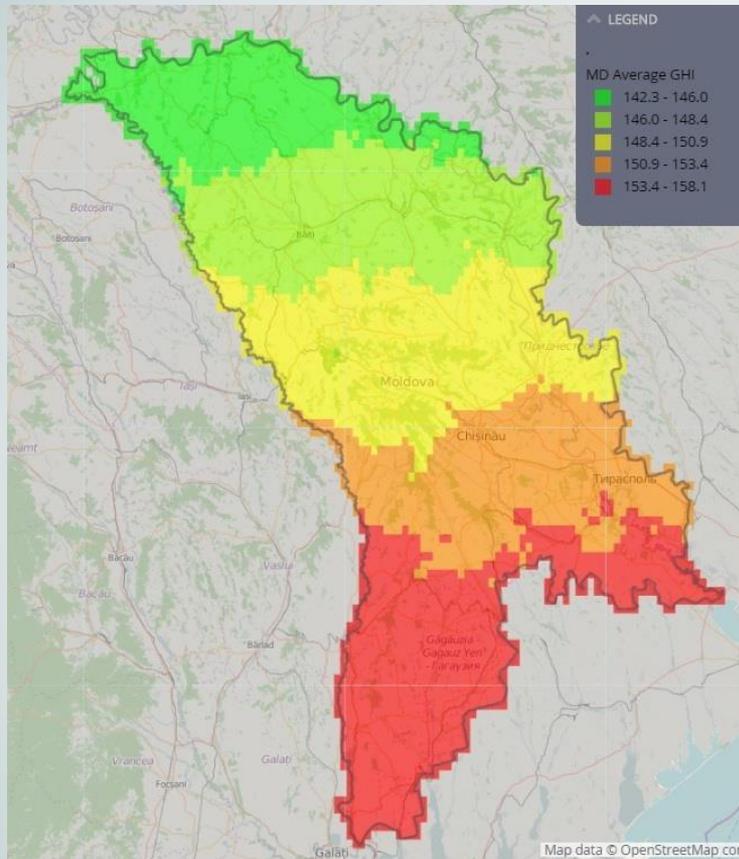
- **Unique Centre /One stop shop/ for informing investors in energy efficiency and renewable energy sources fields**
/carried out by Energy Efficiency Agency/
- **Wind Energy Resources Map /in process/ and Solar Energy Resources Map /in process/**
- Tax and custom duties exemptions*
- ESCo and PPP legal framework in place
- Data base in field of energy efficiency and renewable energy sources
/developed and updates on permanent basis by Energy Efficiency Agency/



* Under public consultation process

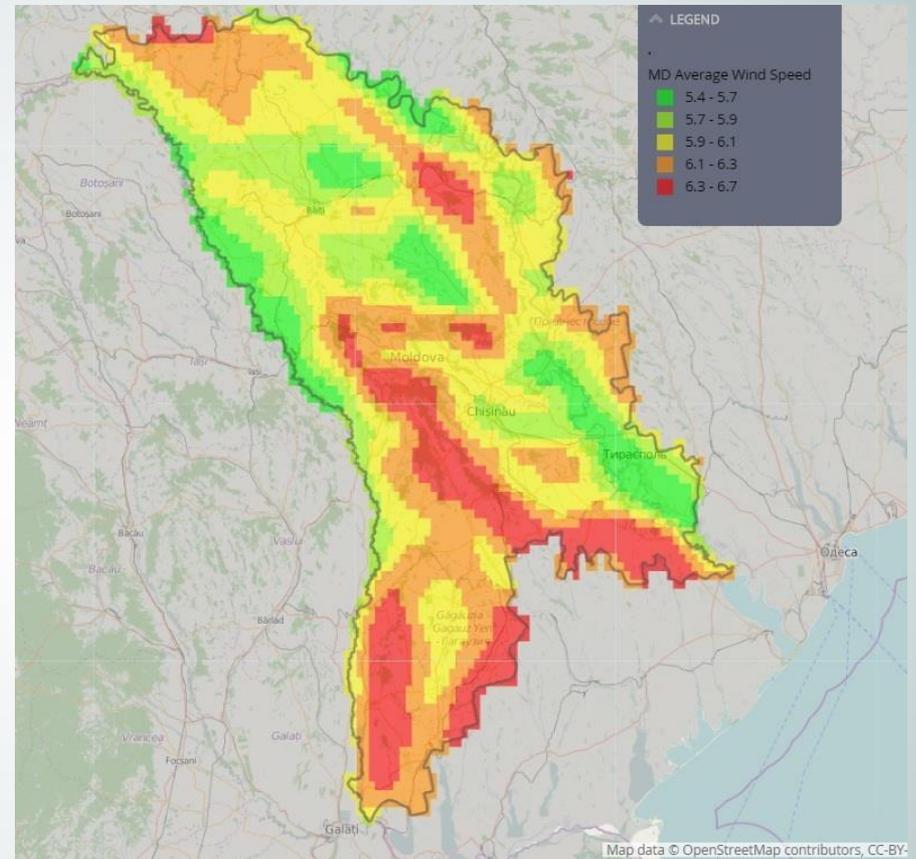
SOLAR⁽¹⁾ AND WIND⁽²⁾ MAP POTENTIAL

DEVELOPED WITH INOGATE SUPPORT



(1)

Platform used



(2)

ArcGis

Types of data used for map development

- Satellite data purchased from NASA
- Data registered by local weather stations (18 units)

STRENGTHENING THE BIOMASS MARKET AND PROMOTING THE BIOMASS USE ⁽¹⁾

- Promoting a legislative initiative on **reducing VAT** rate from 20 % to 0 % for the raw material, solid biofuels and heat produced based on biomass
- Entering into force of the **GD 1070/2013 on solid biofuels**, which ensures the quality of the solid biofuels via introducing an accredited Laboratory on the market
- Promoting the proposal for inclusion in the **Government Decision on measures for preparing the national economy and social sphere for activity during the autumn-winter** the obligation of public institutions managers to purchase and use fuels with the most optimal quality-price ratio

STRENGTHENING THE BIOMASS MARKET AND PROMOTING THE BIOMASS USE (2)

- Promotion of the "**soft loans**," tool as a financial product to be offered for local producers of solid biofuels through the Energy Efficiency Fund
- Funding through Moldova Energy and Biomass Project and/ or EEF the installation of **heat meters** within already existing boilers on biomass
- Drafting the concept of the **biomass (waste) traceability** (considering the introduction of certificate of origin for solid biofuel)
- Drafting the concept of **state reserves of solid biofuels**

TOOLS FOR BIOMASS USE SUPPORT AND PROMOTION

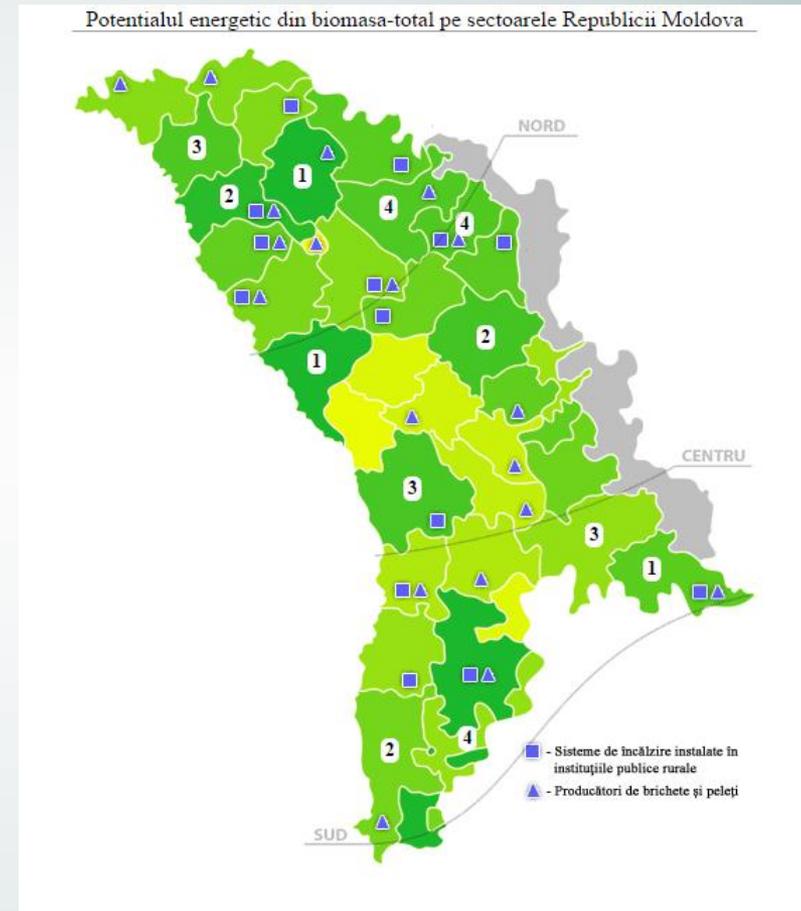
Web portal –www.biomasa.md

Biomass map potential available

Map of installed biomass boilers

b2b and b2c platform

/under development/



FINANCING INSTITUTIONS IN EE & RES

Financing institutions in EE and RES: EU, SIDA, EBRD, EIB, UNDP, USAID, GIZ, 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)



EE&RES AND INFRASTRUCTURE PROJECTS/ INVESTMENTS CURRENT AND FURTHER ACTIVITIES

World Bank project on Chisinau DHS modernisation

40 M\$

on-going

EBRD Project on CHP North (Bălți City)
modernisation /partially financed by E5P/

10 MEUR

on-going

Ungheni - Chișinău natural gaz pipeline construction
in addition to Iasi (Romania) – Ungheni (MDA) existing pipeline

90 MEUR

FS stage

RM-RO interconnections

/2 high voltage electric lines and BtB stations/

500 MEUR

FS stage

Chisinau City Hall project on existing residential/ housing
fund rehabilitation /with a possibility to extent teh support
up to 500 MEUR/

25 MEUR

initiated

EE and RES projects with E5P financial support

120 MEUR

initiated

PROMOTION OF EE AND RES IN THE ROM STATE OF PLAY

1. Consultancy/ informational support
2. Mass-media campaigns
3. Mobile exhibitions
4. Radio and TV interventions, interviews
5. Audio and video spots, infographics
6. Leaflets, brochures, guidelines, instructions, etc.
7. Public events:
 - contests;
 - festivals, concerts feed by solar energy, flashmobs;
 - exhibitions;
 - national and regional Energy Days;
 - round tables, workshops, seminar, etc.



Logo:



FB: Centru de informare pentru Energie Sutenabila

<https://www.facebook.com/CIES12/?fref=ts>



Infografic:

<https://drive.google.com/file/d/0B0B7D9u3HenmVE5uN2RmUUNZbXM/view?pref=2&pli=1>

MOBILE CARAVANAS

PROMOTING USE OF BIOMASS /PHOTOS/



SUN DĂ-I FEST

PROMOTING USE OF RENEWABLE ENERGY



EE & SER PROMOTION

MOLDOVA ECO-ENERGETICĂ NATIONAL CONTEST

2011-2012



2013-2014



2015



Moldova Eco Energetică

În spiritul dezvoltării durabile



Istorii

Eco Responsabile



Idei

Eco Responsabile



Tehnologii

Eco Responsabile

THANK YOU !