

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

Government Decision
No. 690 of 13.11.2009

**Ministry of Regional Development and
Construction –**
public central authority in the construction and
regional development sector

Government Decision
No. 662 of 10.11.2009

Energy Efficiency Agency –
administrative authority in the field of EE & RES

Government Decision
No 1173 of 21.12. 2010

Energy Efficiency Fund –
institution focused on identification and financing
of EE & RES projects

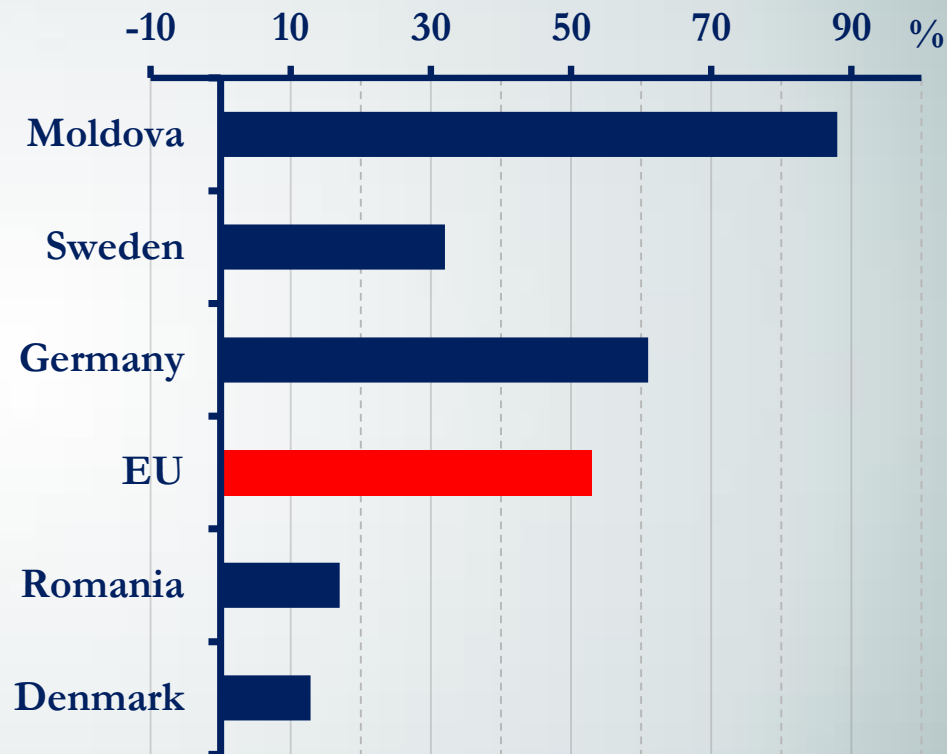
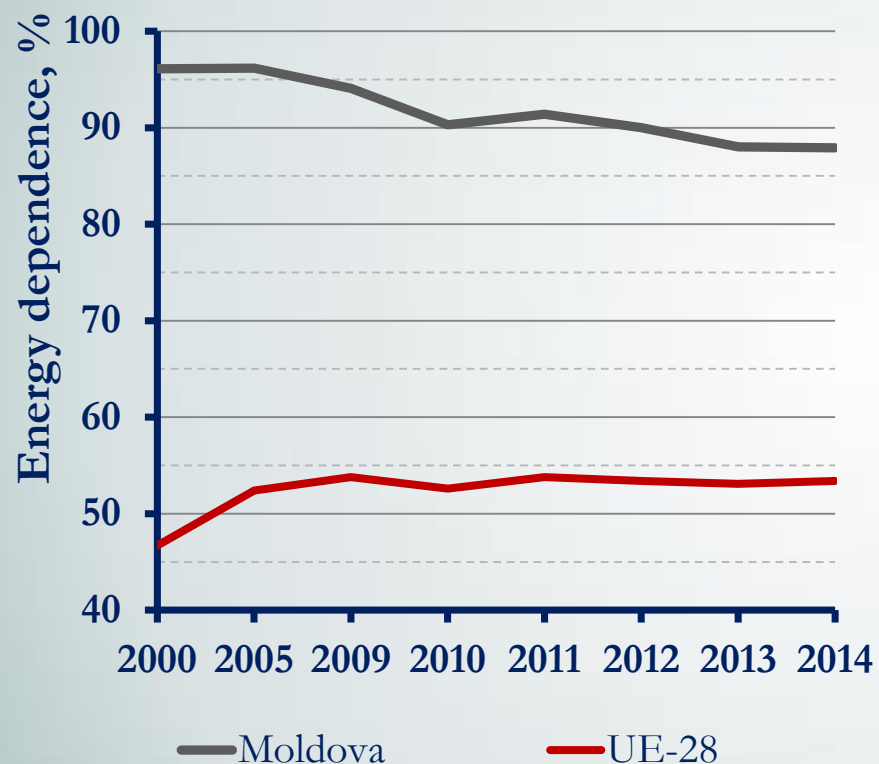
Law
No. 160 of 12.07.2007

National Agency for Energy Regulation –
institution focused on energy sector regulation

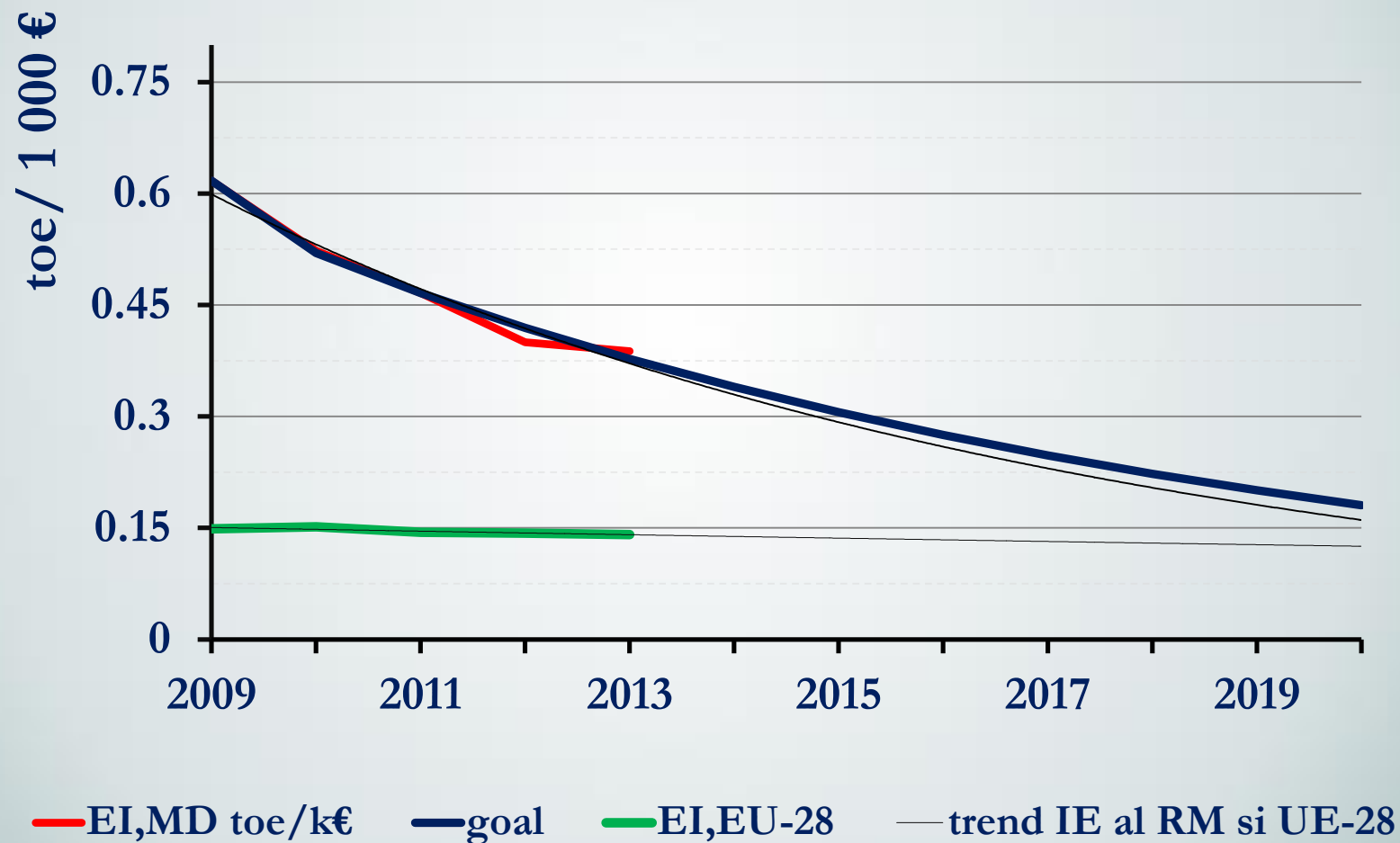
Government Decison
No. 767 of 11.08.1997

ENERGY DEPENDENCE

IN COMPARISON

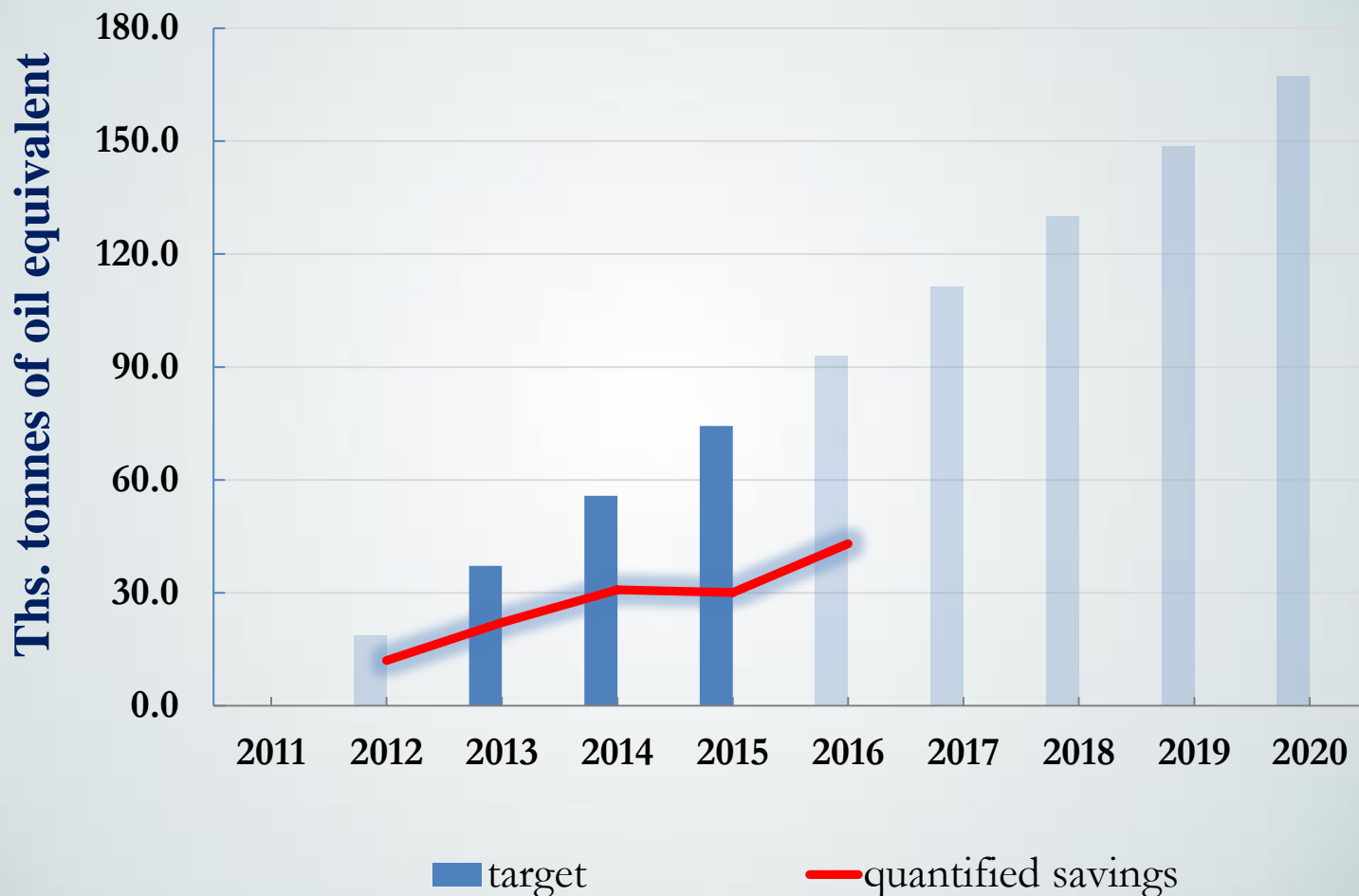


PRIMARY ENERGY INTENSITY



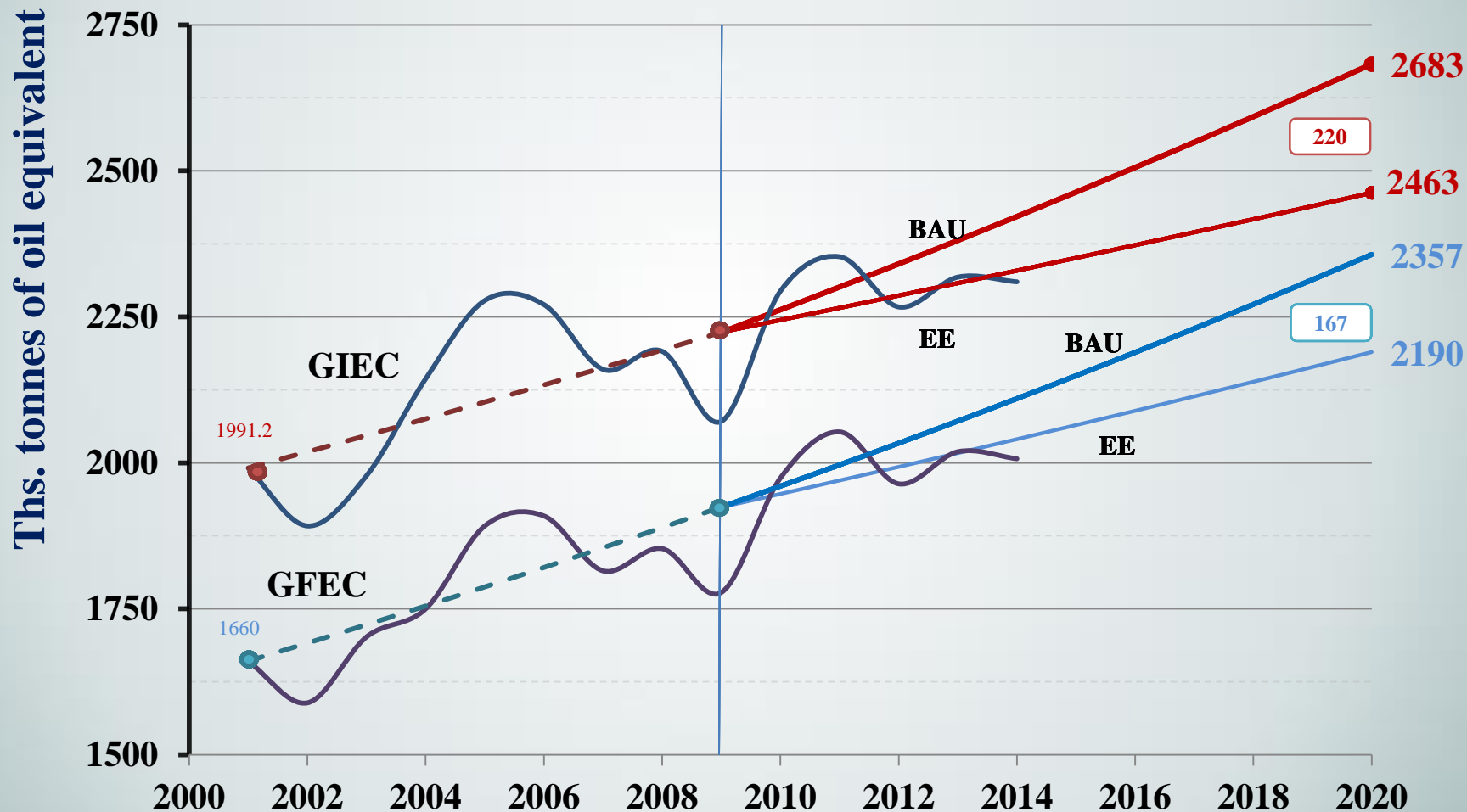
FULFILLMENT OF NATIONAL EE TARGETS

ACCORDING TO NEEAP 2013-2015



FULFILLMENT OF NATIONAL EE TARGETS

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

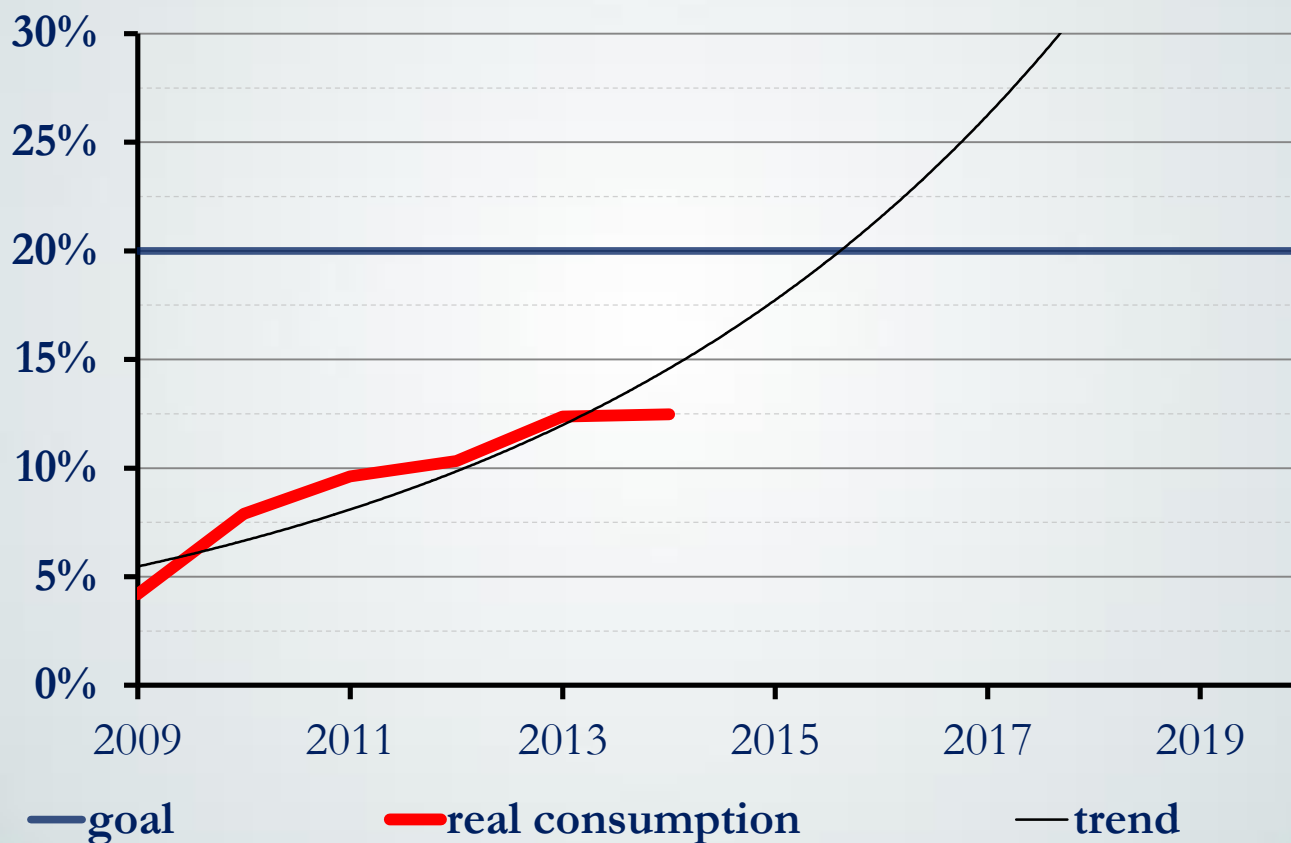


EXISTING RES CAPACITIES

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

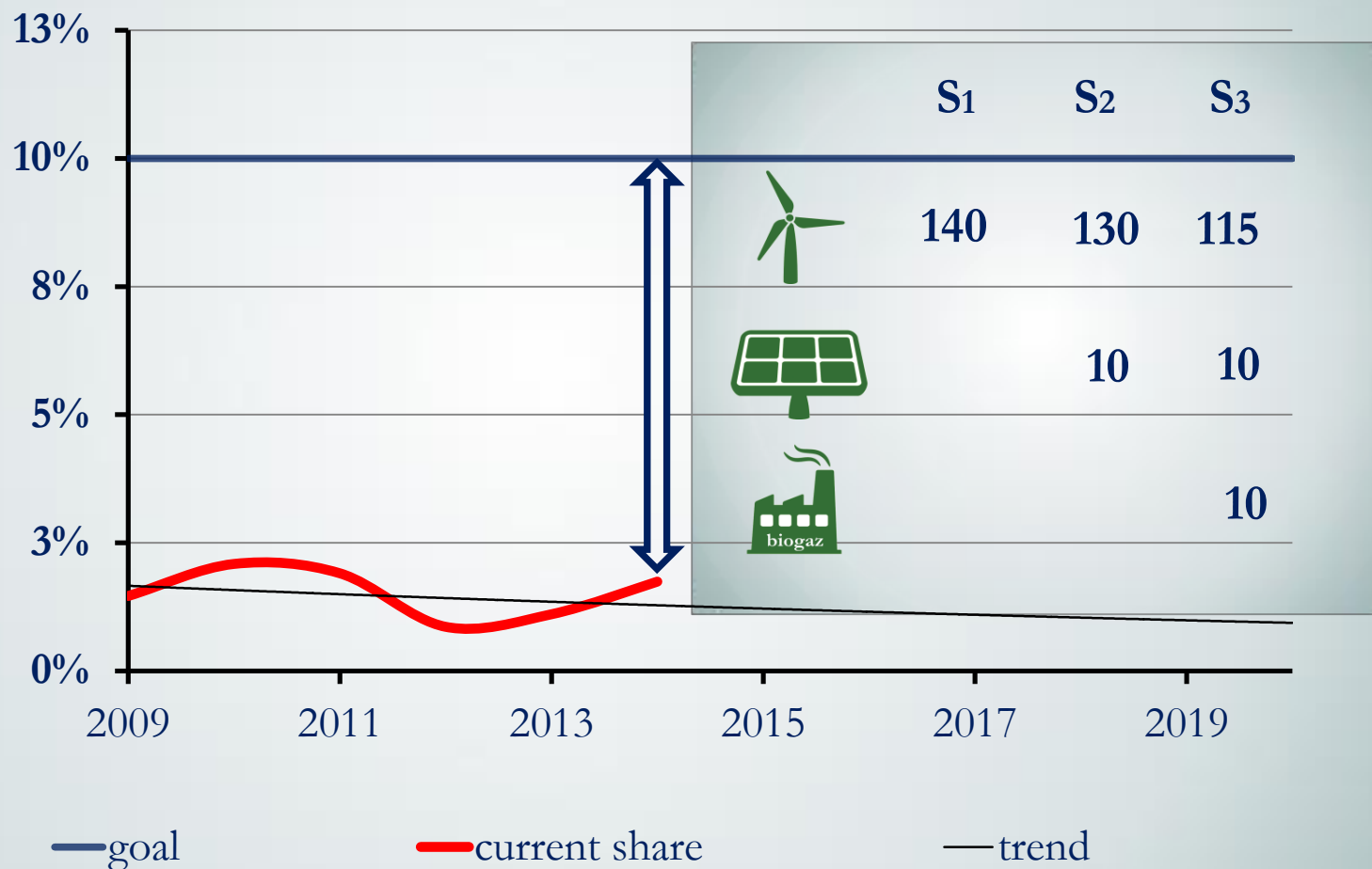
RENEWABLE ENERGY SHARE IN GROSS FINAL ENERGY CONSUMPTION

RE share in GFEC



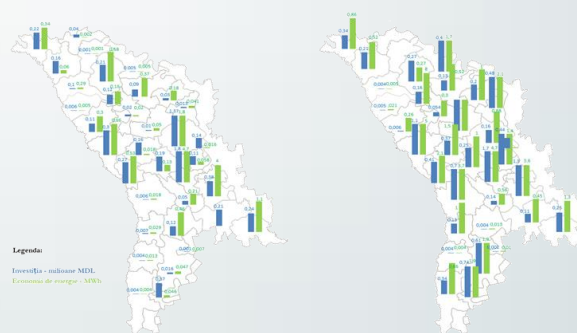
SHARE OF RES-E IN GROSS FINAL ENERGY CONSUMPTION

RES-E share in gross final
electricity consumption



TOOLS FOR ATTRACTING INVESTMENTS IN EE & RES FIELDS

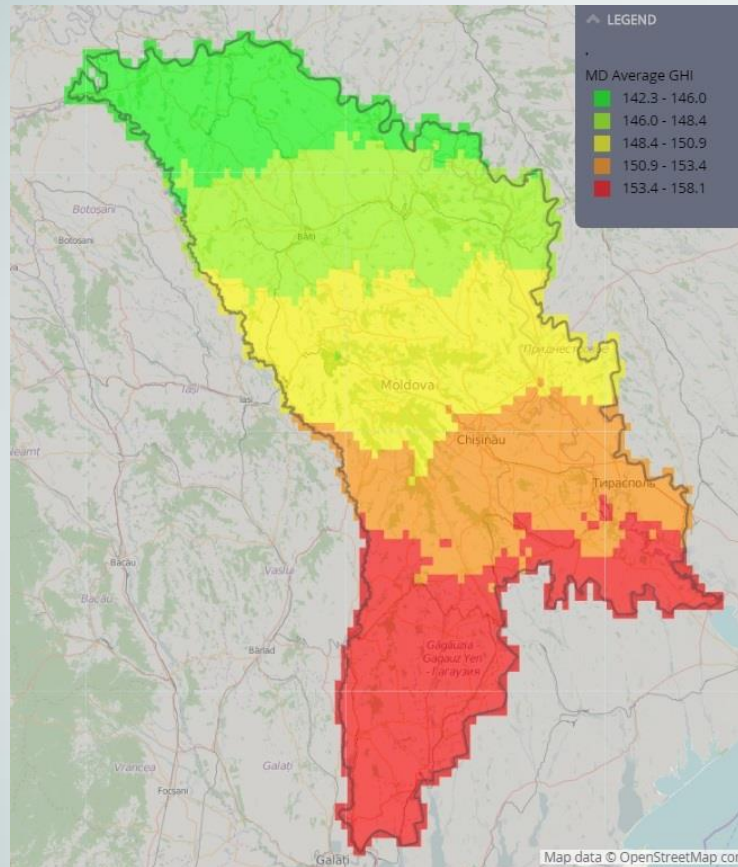
- **Unique Centre /One stop shop/ for informing investors in energy efficiency and renewable energy sources fields**
/carried out by Energy Efficiency Agency/
- **Wind Energy Resources Map** /in process/ and
Solar Energy Resources Map /in process/
- Tax and custom duties exemptions*
- ESCo and PPP legal 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

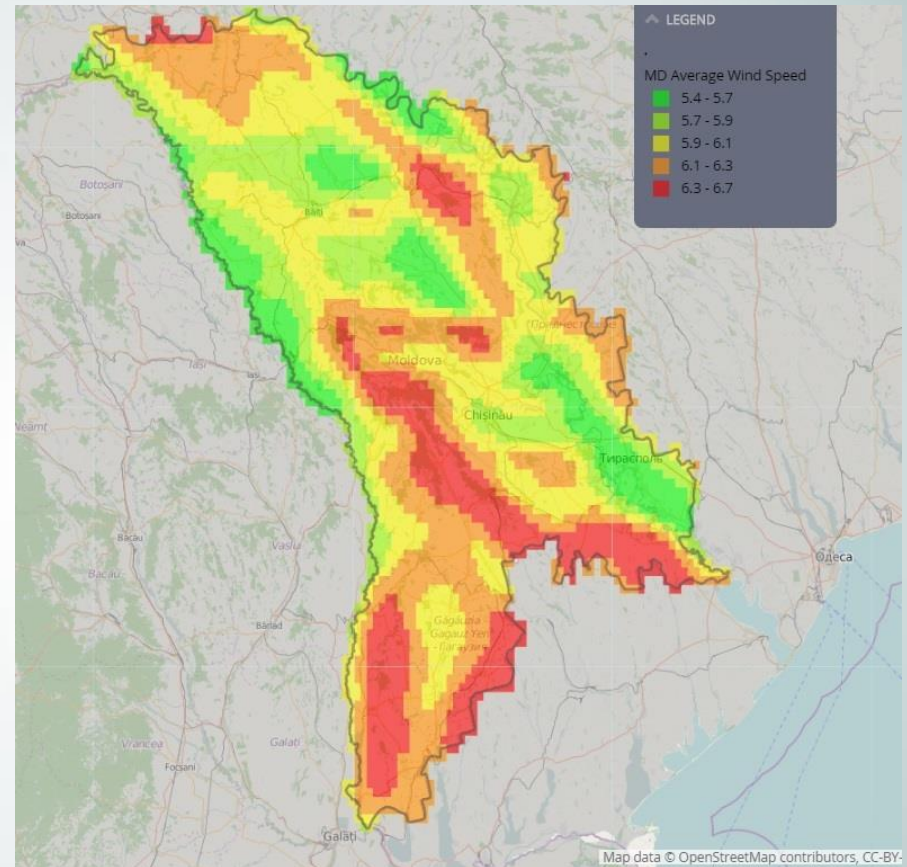
SOLAR₍₁₎ AND WIND₍₂₎ MAP POTENTIAL

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

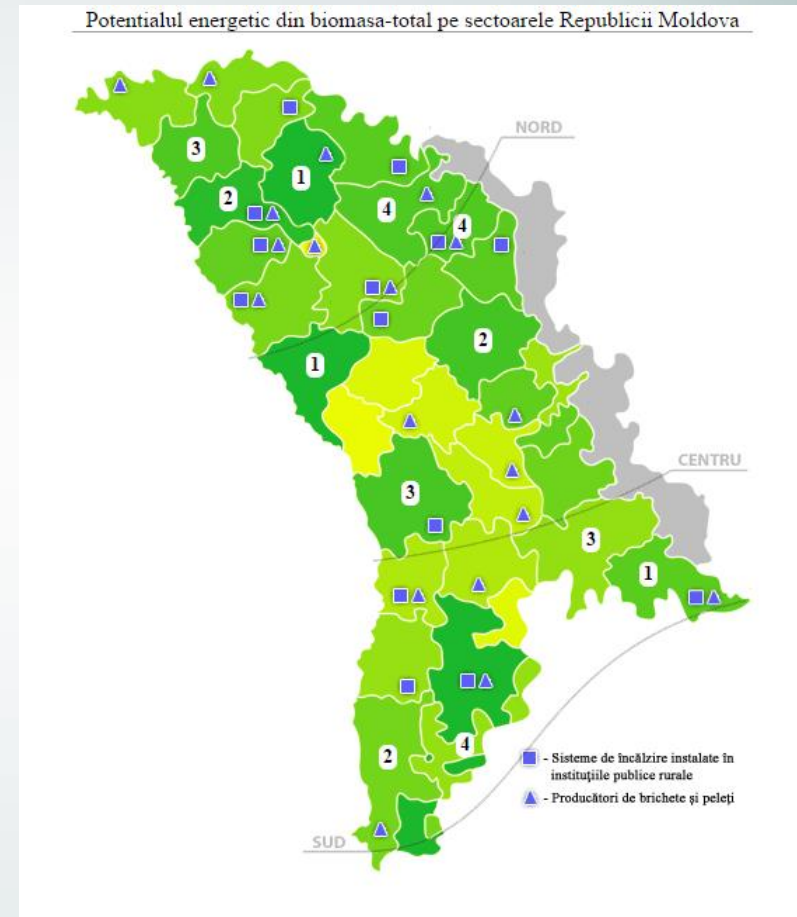
Web portal –www.biomasa.md

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 gas 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.



SUSTAINABLE ENERGY INFORMATION CENTER

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 !