



Ministerul Economiei
și Infrastructurii
al Republicii Moldova

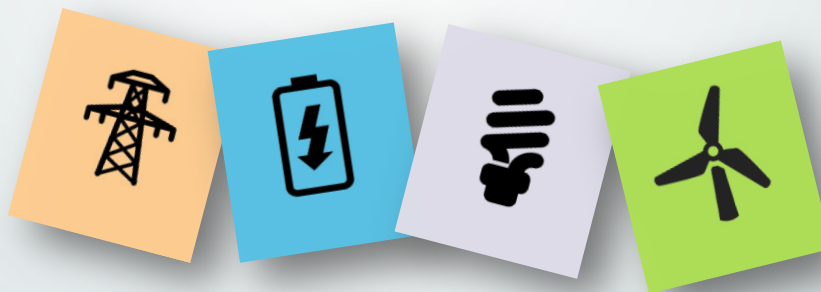


EU4Energy

EU4ENERGY ACTION STEERING COMMITTEE

RENEWABLE ENERGY POLICIES IMPLEMENTATION IN THE REPUBLIC OF MOLDOVA

THE ROLE AND IMPACT OF BIOMASS RESOURCES



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Ministry of Economy and Infrastructure

GENERAL CONTEXT

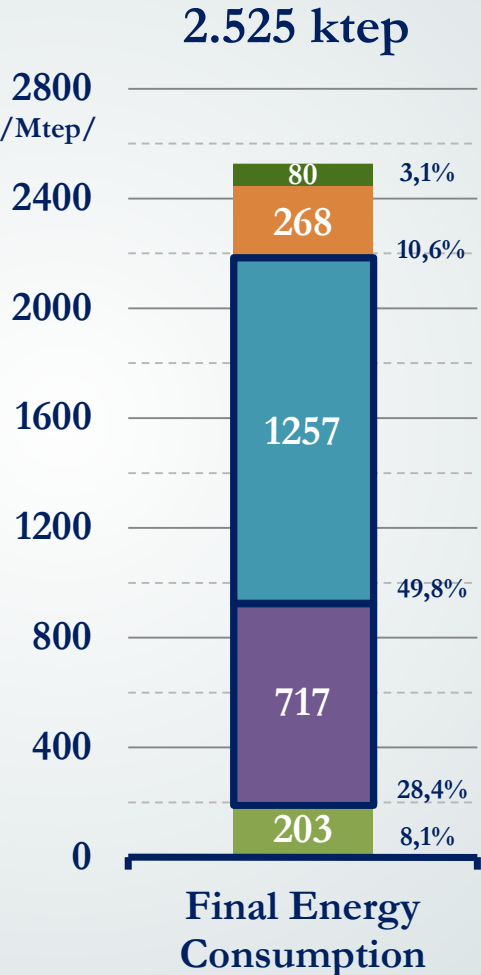
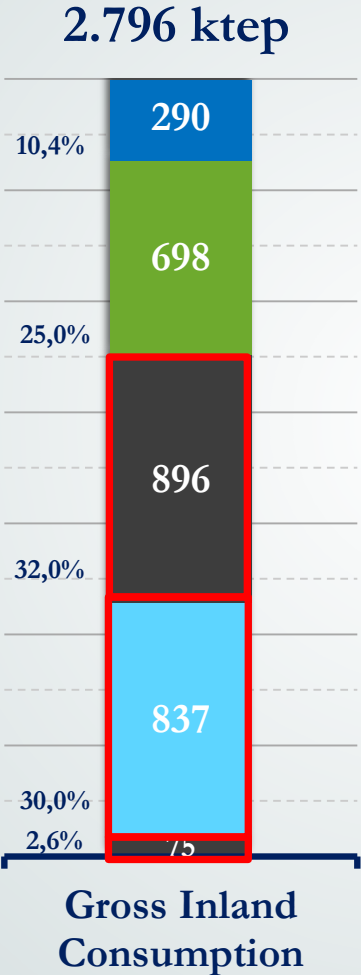


KEY ENERGY FIGURES

ENERGY CONSUMPTION BREAKDOWN /2016 y./

 - IMPORT

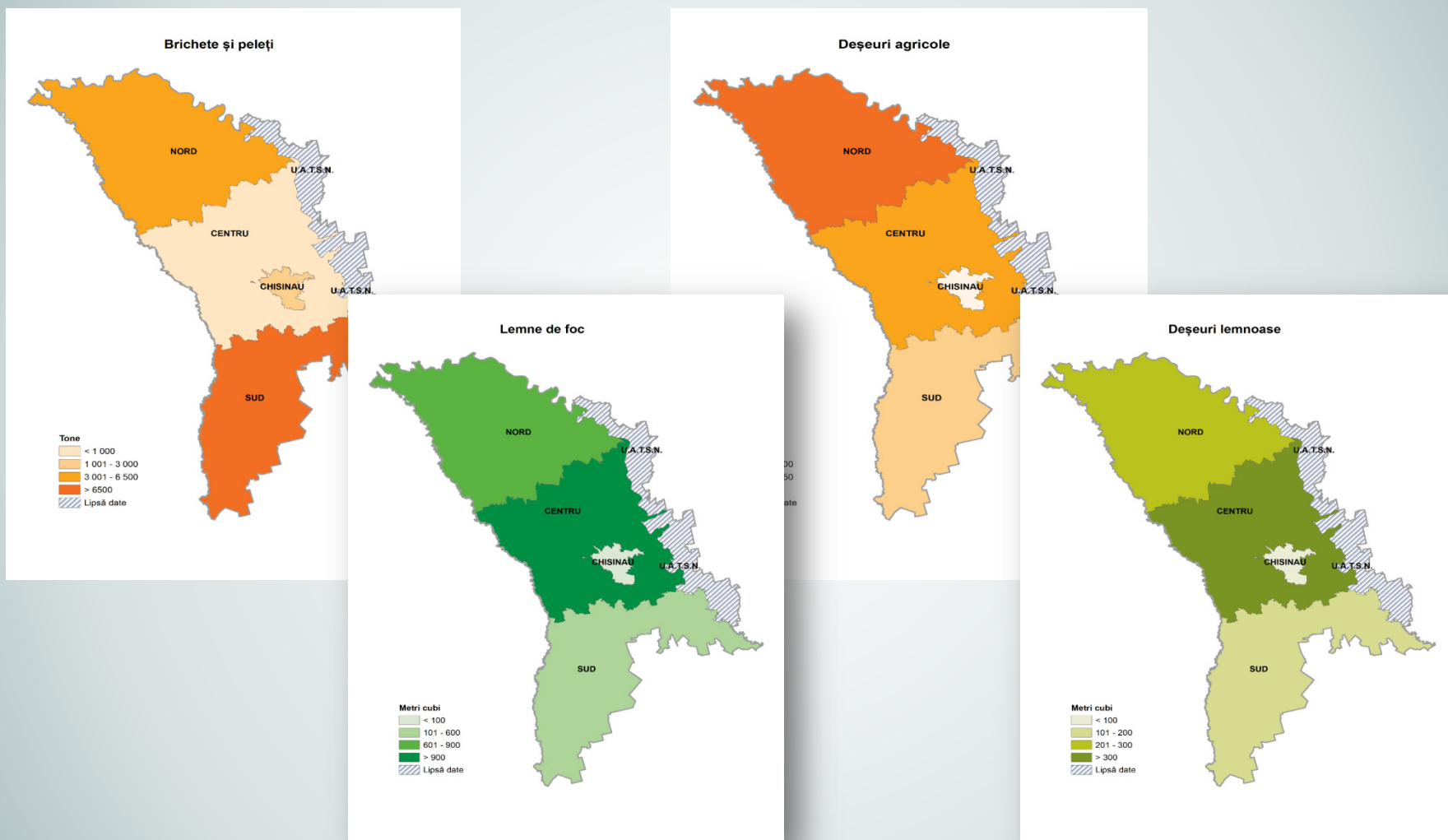
- electricity
- biomass
- oil
- natural gas
- coal



- industry
- transport
- residential s.
- public s. & services
- agriculture

ENERGY CONSUMPTION IN HOUSEHOLDS

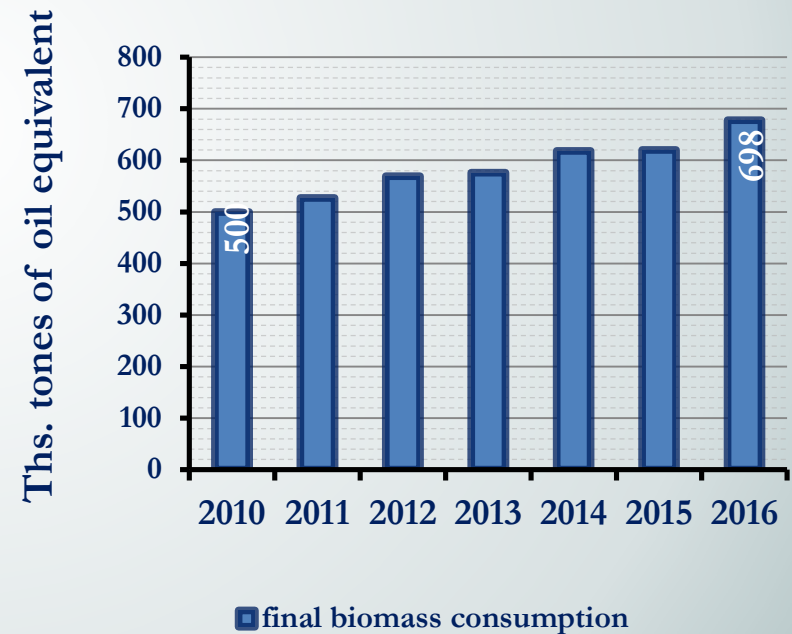
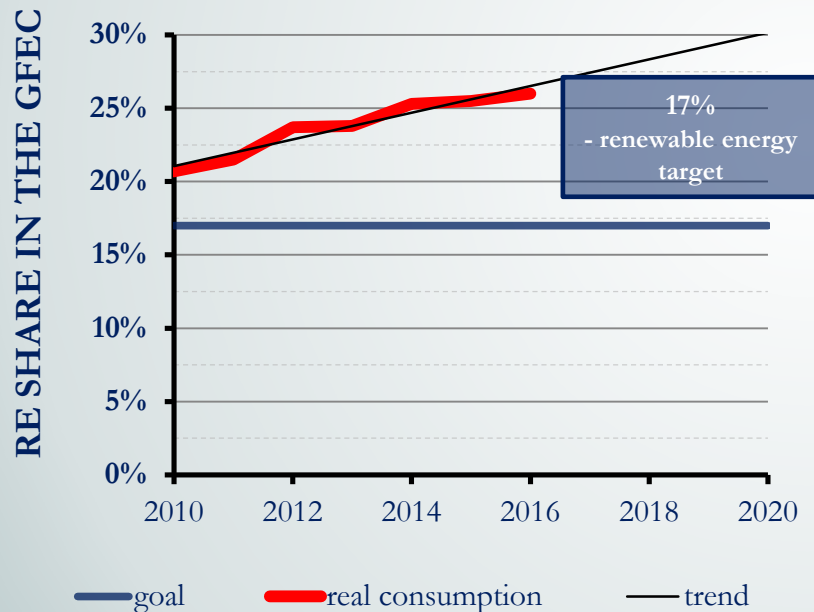
MAPPING THE RESULTS OF OF THE SURVEY



Note: National Bureau of Statistics Report. Energy Consumption in Households. Results of the survey on energy consumption

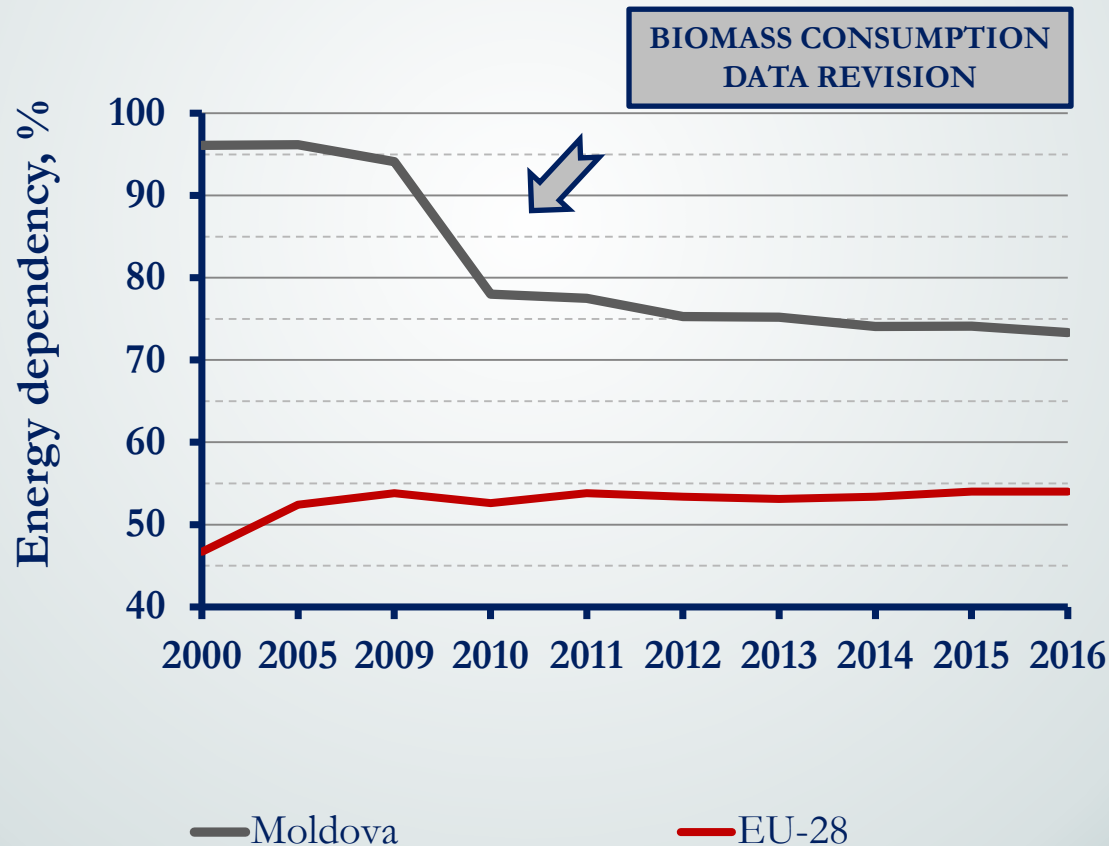
RENEWABLE ENERGY CONSUMPTION

- 1/4 of the country energy consumption is covered by „green” energy, almost the whole amount being used for Heating and Cooling purposes



BIOMASS USE IMPACT ON ENERGY DEPENDENCY

- in 2016 the Republic of Moldova has covered 74 % of its energy demand with imported energy resources



BIOMASS USE

SUPPORTING MECHANISMS



BIOMASS MARKET SUPPORTING MECHANISMS

PRODUCTION AND USE OF BIOMASS FOR H&C-RES

Undertaken "FISCAL /FINANCIAL" activities:

- **reduced VAT** rate from 20% to 8% for the biomass raw material, solid biofuels and heat produced from biomass
- use of **Public Private Partnership model** aiming at establishing a public heating service based on solid biomass resources
- **use of "soft loans"**
financial tool for supporting the local biomass industry



BIOMASS MARKET SUPPORTING MECHANISMS

PRODUCTION AND USE OF BIOMASS FOR H&C-RES

Undertaken "TECHNICAL" activities:

- co-financing, institutionalizing and accreditation of a **solid biofuels testing laboratory**
- **installation of heat meters** in public institutions heated by solid biomass
- „**Agressive**” **promotion** of the biomass / solid biomass use and high efficient technologies



BIOMASS MARKET SUPPORTING MECHANISMS

PRODUCTION AND USE OF BIOMASS FOR H&C-RES

Planned activities:

- Elaboration and implementation of the needed legal framework and procedures to ensure **the treasability of the biomass resources** (analyse the opportunity of introducing the certificate/ guarantee of origin for solid biomass)
- Development of the needed framework and mechanisms for deployment of the **energy crops industry** (on degraded and high flooding risks land)



EXISTING LEGAL FRAMEWORK RELATED TO SOLID BIOFUELS

Law
No. 10
as of 26.02.2016

on the promotion of the use of energy froms
renewable sources

**Government
Decision
No. 1070
as of 27.12.2013**

on approving the Regulation on solid biofuels

Law
No. 7
as of 26.02.2016

on market surveillance of the non-food
products

REGULATION ON SOLID BIOFUELS

MAIN PROVISIONS

- Incorporates **37 European standards** on solid biofuels which were adopted by national authorities;
- Defines **12 types of solid biofuels**;
- Establishes **12 quality criteria** for all types of biofuels – physical and chemical properties
- Assigns the Agency for Consumers Rights Protection and Market Surveillance as the **state body responsible for the sector**

LIST OF QUALITY PARAMETERS

Minimum quality criteria set for the solid biofuels:

Normative requirements:

Diameter (e-D)

Length(L) mm

Moisture, M (w-% la obținere)

Ash, A (w-% în stare uscată)

Density of particles , DE (g/cm³)

Additives (w-% masa presată)

Net calorific value, Q (MJ/kg sau kWh/kg)

Normative/informative requirements

Mechanical durability, DU (w-% din brichete după testare)

Nitrogen, N (w-% în stare uscată)

Sulfur, S (w-% în stare uscată)

Chlorine, Cl (w-% în stare uscată)

Ash characteristics after burning (°C)

MOLDOVA ENERGY AND BIOMASS PROJECT



Guvernul Republicii Moldova
**Ministerul Economiei și
Infrastructurii**





2 phases (2011-2014 & 2015-2017)
implemented by UNDP with budget 23.97 M EUR
(23.41 M by EU)

Contribute to a more secure, competitive and sustainable energy production out of biomass, the most viable and readily available local source of renewable energy in the Republic of Moldova

ENERGY AND BIOMASS PROJECT

MAIN PROJECT COMPONENTS



4 Well Thought Components:

- Generate demand
- Create offer
- Develop capacities & Educate
- Communicate & Change



ENERGY AND BIOMASS PROJECT

„GENERATE DEMAND” COMPONENT

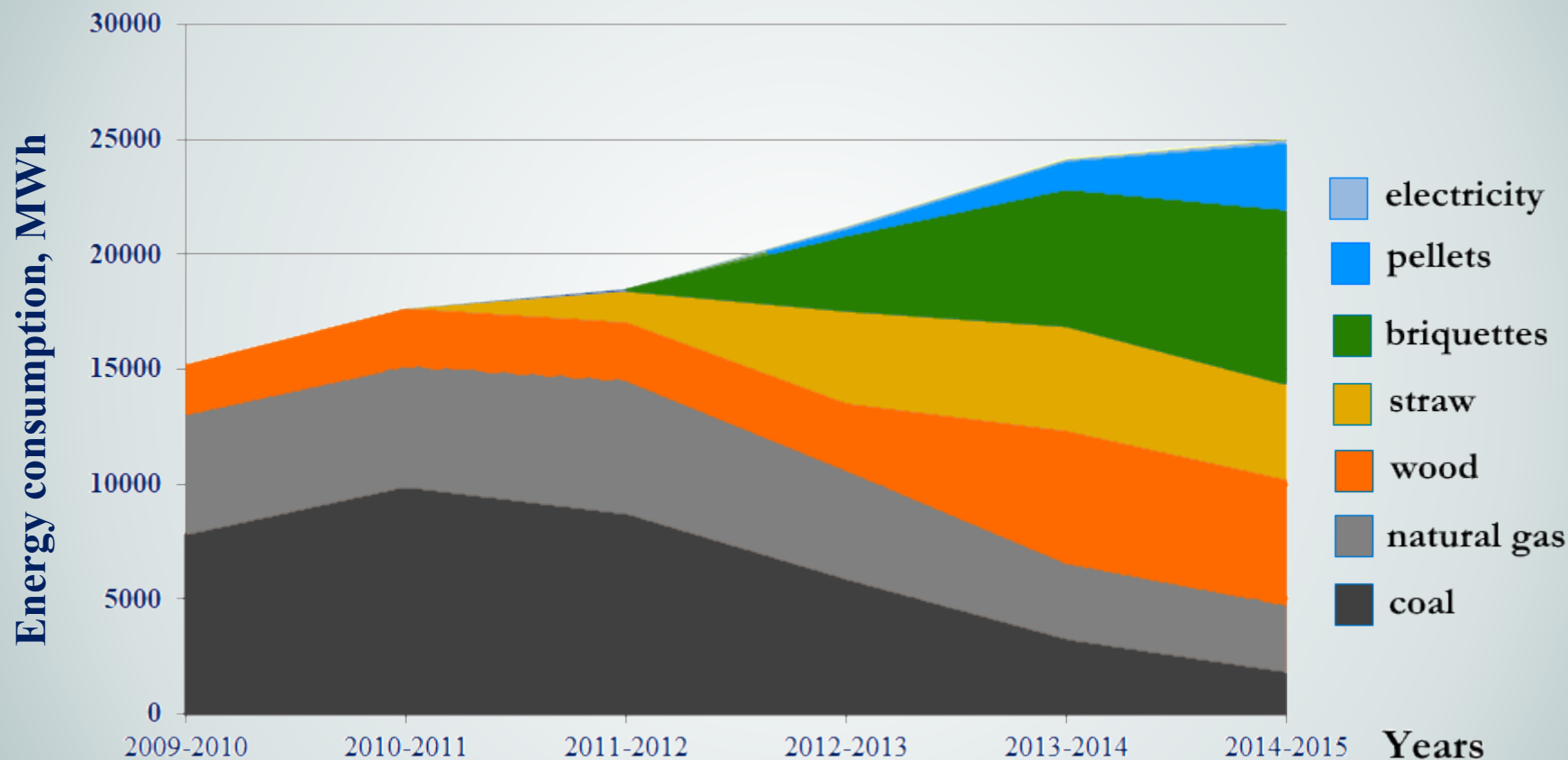


Public institutions switched to green energy:

- 249 schools, kindergartens, community centers, hospitals have modern biomass heating systems
- 48 Solar Hot Water Systems installed in kindergartens and hospitals
- 194, 000 persons benefit from securely supplied and locally produced energy
- Over 600 new jobs established in communities: biomass boilers operators, teachers
- 40.000 tons of CO₂ emissions annually reduced
- Investments: > 13 million EUR, EU funds

PUBLIC SECTOR SWITCHING FROM FOSSIL FUELS

DATA CONSUMPTION ANALYSIS OF 150 PUBLIC INSTITUTIONS



Fossil fuels to renewable energy switching

ENERGY AND BIOMASS PROJECT

„GENERATE DEMAND” COMPONENT



Households and microenterprises switched to green energy:

- Over 1000 families and microenterprises heat their premises with green energy thanks to the subsidy programme
- Subsidies up to 1.300 EUR from EU funds

ENERGY AND BIOMASS PROJECT

„CREATE OFFER” COMPONENT



Biomass boilers production:

- 30 national companies locally assemble or manufacture biomass boilers

Biofuel production:

- 35 biofuel production businesses launched
- 100 new jobs created with direct project support
- Leasing mechanism: 1 M EUR (0% VAT, profit, commission)
- Other new 70 biofuel production businesses launched independently

Biofuel quality:

- First testing laboratory for physical and chemical parameters of biofuels received
- Quality standards developed for biofuels

ENERGY AND BIOMASS PROJECT

„CREATE OFFER” COMPONENT



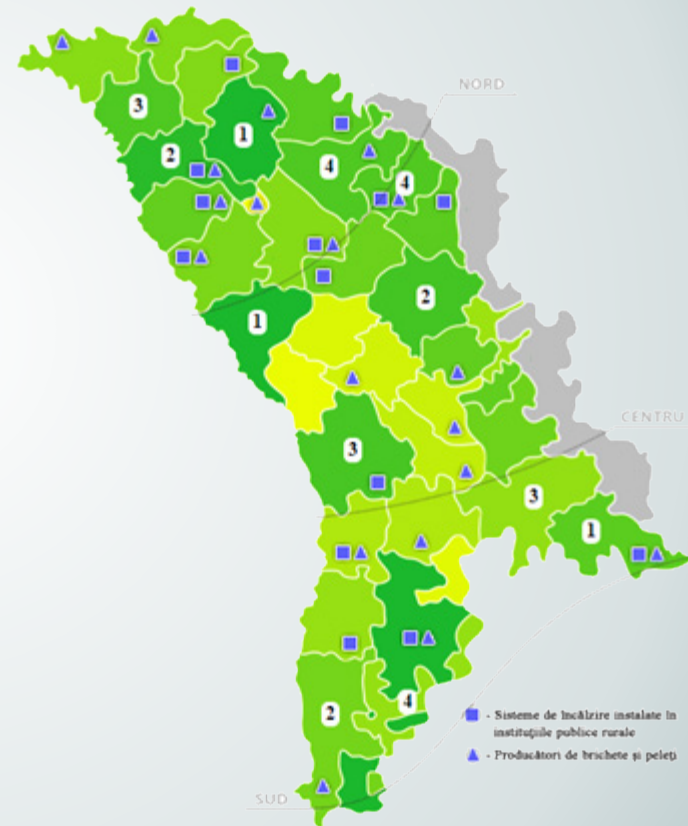
Public Private Partnerships for the provision of bioenergy services:

- Piloted in 1 district & extended in other 2
- Maintenance, storage, operation costs covered by the private partner
- Local authorities pay only for supplied energy

SOLID BIOMASS MARKET SUPPORTING MECHANISMS

TOOLS FOR FACILITATING THE RELATIONSHIP WITHIN THE SECTOR

- Web portal –www.biomasa.md
- Mapping of the Biomass Energy Resources
- Mapping of the nationally installed solid biomass boilers
- „Online” solid biomass market
 - B2B și B2C platforms





Adaugă anunț

Căutare



Testimoniale

FAQ

Contacte

Autentificare

RO



CONSUMATOR

FURNIZOR BIOCOMBUSTIBIL

FURNIZOR ECHIPAMENTE

FURNIZOR MATERIE PRIMĂ

CENTRU DE CONSULTANTA

SERVICII

PRODUSE

- Brichete
- Pelete
- Baloturi paie
- Plante energetice

MATERIE PRIMĂ

- Rumeguș
- Tocătură
- Lemn forestier/ plantații
- Pale
- Coji de nucă
- Coji de floarea soarelui
- Alte reziduuri agricole

ECHIPAMENTE

- Centrale termice
- Linii de producere
- Mașini de balotat
- Tocătoare
- Alte echipamente

SERVICII

- Livrare agent termic

Cumpăr

Vând



Vând linie	4 543 eur	Linii de peletizare	25 nov, 2016
Vând rumeguș	250 mdl	Rumeguș	24 nov, 2016
Ofer servicii de mentenanță	500 mdl	Mentenanță	24 nov, 2016
Ofer servicii de audit energetic	10 000 mdl	Audit energetic	24 nov, 2016
Vând linie de brichetat	30 000 eur	Linii de brichetare	24 nov, 2016
Vând tocator	1 500 eur	Tocătoare	24 nov, 2016
Vând plante energetice	800 mdl	Plante energetice	24 nov, 2016
Cursuri de instruire a operatorilor de cazane p...	900 mdl	Oferte de lucru/st...	24 nov, 2016
VÎND CENTRALA TERMICĂ AGRO UNI 20 KW	61 811 mdl	Pelete	24 nov, 2016
VÎND CENTRALA TERMICĂ DELTA PLUS 12 kW	22 239 mdl	Brichete	24 nov, 2016
Coji de floarea soarelui	700 mdl	Coji de floarea soa...	24 nov, 2016
Baloturi de paie	500 mdl	Baloturi paie	24 nov, 2016
Vând pelete din rumeguș de lemn	3 000 mdl	Pelete	24 nov, 2016

Calculatorul casei tale



Află capacitatea centralei termice necesară pentru încălzirea locuinței, cât combustibil va fi necesar pentru sezonul de încălzire și cât vei plăti pentru aceasta, comparativ cu încălzirea pe gaze naturale sau cărbune.

Detalii

Doriți să cumparați

ENERGY AND BIOMASS PROJECT

„CAPACITY DEVELOPMENT” COMPONENT



Trainings:

- 9.000 project beneficiaries trained (local public authorities, mayors, managers of institutions, operators, entrepreneurs)
- First training center for biomass boiler operators opened
- Biomass Boilers Operators & Foresters specialized in energy plants: new course launched in vocational schools

ENERGY AND BIOMASS PROJECT

„COMMUNICATION” COMPONENT



How to make a change in 7 years?

- Behavior change communication, not only information
- Video, printed, web, social media communication, public events
- Local green energy ambassadors
- Media trainings & media tours
- www.biomasa.md & www.piata-biomasa.md

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 & RES 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!