



PROGRAMME FUNDED BY THE EU



## *Republic of Moldova*

**ITS Combined Event on the Benefits and Requirements of the EU  
Directive on Energy Performance in Buildings RWP.08  
Copenhagen, Denmark, 14-18 December 2015**

**BUILDING PARTNERSHIPS FOR ENERGY SECURITY**

# General information



Population - **3,6 mln.**

Surface – **33 700 km<sup>2</sup>**

GDP per capita – **1190,7 USD**

Energy sector (in relation to GDP) – **2,8%**

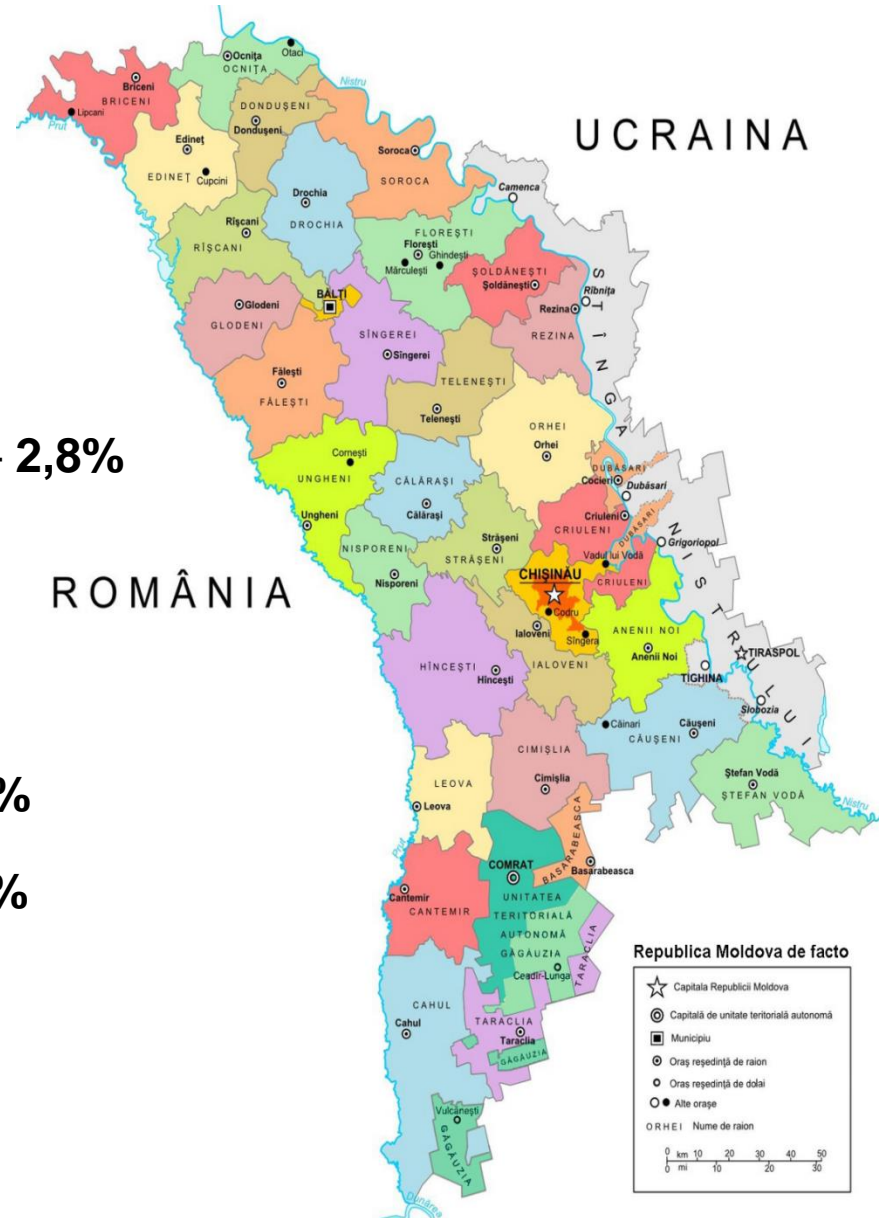
Consumer price index (in relation to previous year) – **100,9%**

Investment (gross fixed) - **18,5 %**

Exports (in relation to GDP) – **29,4 %**

Imports (in relation to GDP) – **66,8 %**

Average gross salary – **242,9 USD**



# General information

Republic of Moldova imports 96 % of its energy resources



**Natural gas 377 USD/1000 M<sup>3</sup>**



**Heating 49 USD/Gcal**



**Electricity 0,07 USD/kWt.h**



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LUKOIL Moldova	USD/l
Super 98	0.91
Premium 95	0.88
Regular 92	0.87
Euro Diesel 5	0.77
GPL	0.47



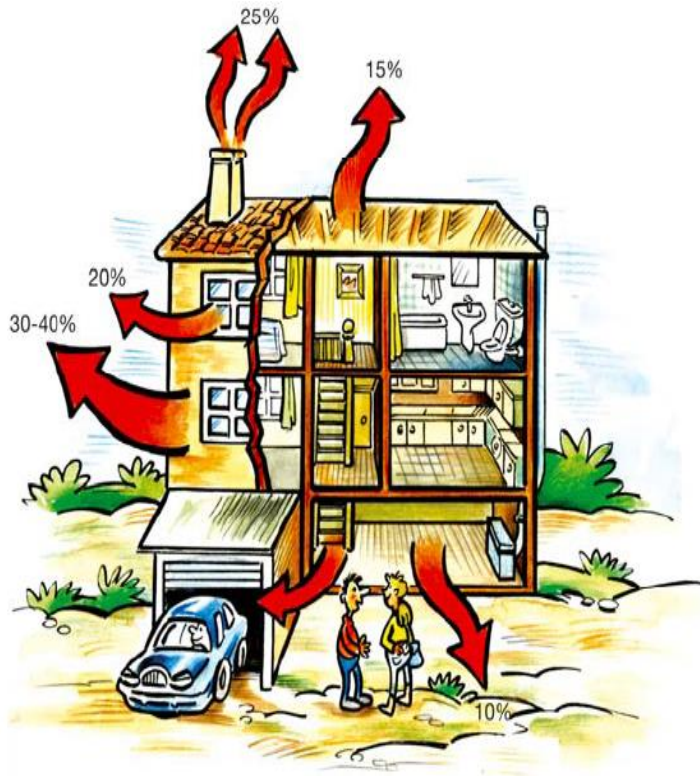
# General information about EE in buildings

Majority of the buildings do not correspond to today's requirements regarding energy efficiency. Most of the buildings are very old (20-60 years)

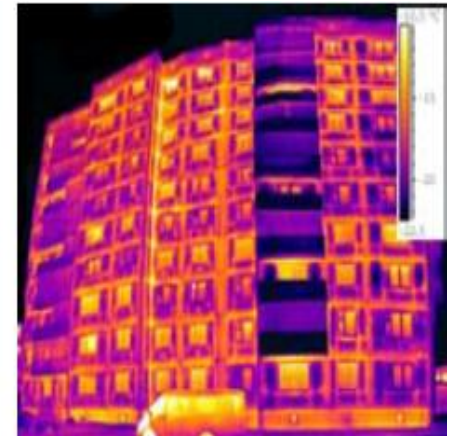
and have very low thermic characteristics.

Buildings use about 45% of total final energy consumption, compared to 40% registered in EU.

Energy intensity in Republic of Moldova is about 3 times higher than in EU, which means that Republic of Moldova consumes more energy obtaining services and goods in comparison with other countries.



In average 75 % of the energy in the buildings is used for heating



# General information about EE in buildings in the country

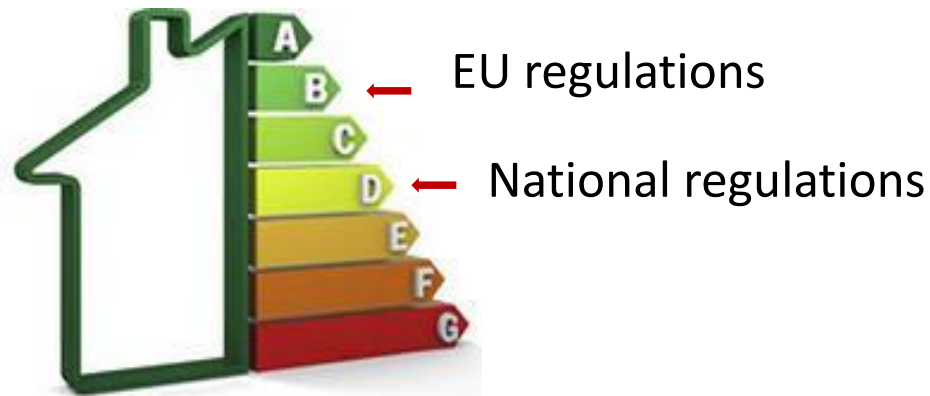


1. Regional Development and Construction Ministry, Agency for Energy Efficiency (AEE).
2. No available statistics about energy consumption in buildings.
3. Approved NEEAP 2013-2015:
  - a. Elaboration of legal framework for energy performance of buildings.
  - b. Promotion of NZEB.
4. Under development NEEAP 2016-2018

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# General information about EE in buildings in the country



According to law on energy performance of buildings:

June 30<sup>th</sup>, 2019 – new public buildings – NZEB

June 30<sup>th</sup>, 2021 – all new buildings – NZEB

AEE – responsible for compliance checks

# Progress in the implementation of Energy Performance in Buildings Directive (EPBD)

- Law nr. 128 from 11.07.2014.
- 3 stages of implementation:
  - 2017 - ventilation, cooling and lighting provisions enter into force on January 1, 2017.
  - 2019 - new public buildings – NZEB
  - 2021 - all new buildings – NZEB

## Legislative Documents

- Building and building units energy performance certification procedure.
- Periodical inspection of heating systems in buildings.



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# Progress in the implementation of Energy Performance in Buildings Directive (EPBD)



National documents under revision:

- NCM E.04.01-2006 Thermic protection of buildings;
- NCM E.04.03-2008 Energy preservation in buildings;
- CP E.04.05-2006 Buildings thermic protection design;
- NCM G.04.07-2006 Thermal networks;
- NCM G.04.08-2006 Thermal insulation of equipment and pipes;
- NCM G.04.10-2009 Central boilers house;
- CP G.04.01-2002 Buildings energy certificate;
- CP G.04.02-2003 Regulation on energy audits of existing buildings and heating and domestic hot water instalations;
- CP G.04.05-2006 Design of thermic insulation of equipment and pipes.

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# Key barriers and challenges



- limited budget
- difficulty in accessing funding
- limited experience in EE
- lack of experts in EE
- Poor knowledge of population about EE
- low income of people
- building improvements have high costs
- low motivational incentives for building improvements from government
- high interest rates for loans
- difficulties acquiring energy performance certification software

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# Next steps toward full implementation of Law and EPBD



1. Calculation methodology for energy performance assesement.
2. Software tool for calculation of energy performance.
3. Minimum energy performance requirements.
4. Energy performance certificate.
5. NZEB.
6. Regular inspection of heating and air-conditioning systems.
7. Energy performance certification.
8. Independent experts and companies.
9. National informational system on energy efficiency of buildings.
10. Development of independent control system for certificates and inspection reports.
11. Promotion of the improvement of energy performance of buildings.

