Workshop on Regional and National Studies on a Gap Analysis between the Performance Objectives of the Framework Guidelines for Energy Efficiency Standards in Buildings and Implementation of Current Building Energy Efficiency Standards

Findings of the study in the Republic of Moldova

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Electricity Consumption in Moldova in 2019, Mill kWh



In the Republic of Moldova, buildings (residential, service, commercial) consume about 78% of the electricity.

Energy consumption by sector in Moldova in 2019, TJ



The residential, service, commercial sector consume about 56% of the final energy.

Gap analysis



National EE indicators

Class A = 50 kWh/m2/year; NZEB – 2021 (if technically, economically and functionally **feasible**)

UNECE Framework

• building heating and cooling requirements –

up to 25 kWh/m2/year

 total primary energy use in buildings' conditioned spaces, including heating, ventilation, cooling and hot water, can be limited to 45 kWh/m2/year

• including plug-in loads (appliances) -

up to 90 kWh/m2/year

CONCLUSIONS

- Legal: NDC2 are not in line with EE targets; Secondary legislation is not updated to new decarbonization commitment; Mandatory energy performance monitoring requirements are absent, Energy Certificate of the building is not integrated in business model on the market.
- **Capacity development:** Specific incentives for improving compliance with more ambitios building energy codes are absent; low awareness on the benefits of energy efficiency at the individual level can preclude or limit the introduction of energy efficiency measures both at individual and community level
- **Technology:** low readiness at national level to implement advanced clean technologies. Life-cycle cost is not used to assess the new technologies.
- Investments and financial incentives: ESCO marked underdeveloped due to missing financial instruments; Low energy prices (due to subsidy) also make the payback periods for energy efficiency improvements too long to be considered attractive by banks, other financial institutions and population.

RECOMENDATIONS

- Energy Efficiency targets (including Building's) to be updated to NDC2 climate targets (MEI)
- Renewable energy consideration to be mandatory for building design and certification (MEI, MARDE)
- Certification of existing residential and non-residential buildings to be implemented in marked model (MEI, MARDE)
- The minimum energy performance standards should be more ambitious for both new and existing buildings. (MEI)
- To introduce the initial incentive for purchase of energy saving technologies. (MEI, AEE)
- Digital tools to be considered to enhance flexibility and clean energy deployment
- Financial incentives should be introduced to encourage investment in the longlasting high efficiency improvements, including ESCO contracting. (MEI, AEE)
- The stakeholders in the building sector should be educated on the importance of building energy codes in order to increase support for compliance and effective implementation of the energy efficiency policy. (MEI, AEE, MARDE, home owners associations, suppliers of building products, research institutions, NGO)

The national impact of the Study

- The Ministry of Regional Development and Construction (former Ministry of Economy and Infrastructure) started revision of the Law no.139 on Energy Efficiency (with support from EnCS). To be completed by end of 2021.
- The Energy Strategy 2030 to be updated
- Raised Awareness at national level, and discussion with experts
- Role of ESCO to be improved. A national study under public consultations.

Thank You !

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