Title of the measure:	**BG 7: Energy Performance Standard for Buildings**

General description

Energy Performance Standard is regulated by Ordinance № RD 16-1058 of 10 December 2009 on indicators for energy consumption and energy performance of buildings, issued by Ministry of Economy and Energy and Ministry of Regional Development and also Ordinance № 7 of 2004 on Energy Efficiency, Heat and Saving Energy in Buildings (supplemented in SG 93/25.10.2013), issued by Ministry of regional development.

Ordinance № RD 16-1058 of 10 December 2009 regulates:

1. terms and conditions for determining indicators for energy consumption and energy performance of buildings;
2. single methodology for the formation of indicators for energy consumption and energy performance of buildings;
3. rules for making scale of classes of energy

Setting the parameters of energy consumption and energy performance of buildings is done at base values of these climatic factors:

1. external computing temperature;
2. average temperature and relative humidity of the outside air;
3. hourly intensity of full sunlight;
4. duration of the heating and cooling period.

Baseline climate factors are determined for nine climatic zones of the country as an Annex to the Ordinance.

For purposes of determining their energy performance buildings considered as integrated systems in which energy consumption is a result of the combined effect of the following main components:

1. building envelope and elements;
2. systems to maintain the microclimate parameters;
3. internal heat sources;
4. residents;
5. climatic conditions.

Energy performance of buildings is determined by a single methodology, which includes:

1. orientation, size and shape of the building;
2. characteristics of the building envelope, the elements and interior spaces, including:
   a) thermal and optical characteristics;
   b) an air;
3. heating and domestic hot water needs;
4. cooling systems;
5. ventilation systems;
6. lighting systems;
7. passive solar systems and solar protection;
8. natural ventilation;
9. systems using renewable energy sources (RES);

10. indoor and outdoor climate conditions.

The Ordinance also determines the classification of the buildings in the country.

Ordinance № 7 of 2004 determines minimum requirements for the energy performance of buildings, technical requirements for energy efficiency - saving energy and heat, as well as methods for determining the annual energy consumption, taking into account the functional purpose and mode of operation of the building, outdoor climate and indoor microclimate, heat loss through the building envelope elements, heat gains from internal heat sources and sunlight. The Ordinance also sets the technical rules and standards for the design of thermal insulation of buildings, including the reference values of the coefficient of heat transfer through the building envelope elements and requirements for moisture resistance, breathability, water resistance and sun protection in the summer.

The requirements of this Ordinance shall apply to the design and implementation of residential and non-residential buildings, including buildings for public services in health, education, culture and the arts, commerce, sport, catering, hospitality and service, and administrative buildings with regulatory indoor air temperature higher than 15°C for the winter period and RH 70% and for the buildings with regulatory indoor air temperature of 12 to 15 °C for winter period depending on the purpose of the buildings which are heated for at least three months a year.

National minimum energy performance requirements for buildings and building components are identified and compared in terms of cost-optimal levels in accordance with the requirements of Commission Delegated Regulation (EU) № 244/2012 Commission from 2012 supplementing Directive 2010/31 / EU energy Performance of Buildings by establishing a comparative methodology framework for calculating cost-optimal levels in relation to the minimum requirements for the energy performance of buildings and building components.

The requirements of the Ordinance shall apply to the design and implementation of new buildings and reconstruction, major renovation, overhaul and refurbishment of existing buildings.

Impact evaluation

Methods

The measure does not have direct energy savings effect. It affects the energy efficiency of the whole sector.

Results

Ex-post evaluation	1995	2000		
direct CO_2 (kt)				
Energy (TJ) (Fuels/Electricity)				
Ex-ante evaluation	1995	2000	2010	2020
direct CO_2 (kt)				

Energy (TJ) (Fuels/Electricity)				

Measure Impact Level		
☐ **low**	☒ **medium**	☐ **high**

Interaction of measures

Historical data

References

http://seea.government.bg/documents/Naredba-RD-16-1058.pdf

http://lex.bg/bg/laws/ldoc/2135497693