

## METHODOLOGY

### **for Calculation of Energy Saving as a Result of Implementation of Energy Efficiency Measures Financed by the state institution “Energy Efficiency Fund”**

1. This Methodology establishes a mechanism for calculation of energy saving as a result of implementation of energy efficiency measures.

2. Energy saving calculation under this Methodology shall be performed by the state institution “Energy Efficiency Fund” (hereinafter – the Fund) for:

determining the average consumption of energy resources by the aggregate of all projects financed or co-financed by it;

determining the saving of expenditures for financing of housing subsidies for the population for payment for electricity, natural gas, heating, water supply and sewerage, rent (maintenance of buildings and premises, adjacent territory), collection of household waste and liquid sewage, resulting from implementation of energy efficiency measures as part of the Fund’s programs;

formation of the Fund’s reports.

3. Energy saving calculation under this Methodology shall be made for all buildings where the energy efficiency measures financed (co-financed) by the Fund were implemented.

4. The volume of savings as a result of implementation of energy efficiency measures in a residential building shall be calculated separately for the needs of:

heating;

cooling;

hot water supply.

5. Annual saving resulting from implementation of energy efficiency measures in a building shall be calculated by multiplying the difference between specific consumption of energy by the building, before implementation of the measures and the specific consumption after implementation of the measures on energy efficiency by the heated (air-conditioned) area of the building, (or its part), using the following formula:

$$ES = (q_{\text{before}} - q_{\text{after}}) \times A$$

where ES – annual energy saving as a result of implementation of energy efficiency measures in the building, kWh per year;

$q_{\text{before}}$  – specific energy consumption by the building determined before implementation of energy efficiency measures, kWh/sq.m. per year;

$q_{\text{after}}$  – specific energy consumption by the building determined after implementation of the measures on energy efficiency, kWh/sq.m. per year;

A – heated (air-conditioned) area of a residential building (or its part), sq.m.

Specific energy consumption – a parameter of a building's energy efficiency that determines the volume of energy supplied to the system of heating, cooling or hot water supply for satisfaction of demand for heating, cooling or hot water supply accordingly and is related to the unit of the building's heated (air-conditioned) area.

6. Energy saving calculation in accordance with paragraph 5 of this Methodology shall be made based on the data of the energy certificates executed before and after implementation of energy efficiency measures financed by the Fund, and/or other documents, which are attached to the application for the partial reimbursement of the cost of measures on energy efficiency and submitted for verification of implemented measures on energy efficiency determined by the programs of the Fund.

Before entry into force of the Law of Ukraine “On Energy Efficiency of Buildings”, energy saving calculation in accordance with paragraph 5 of this Methodology shall be made based on the building's energy efficiency parameters calculated in accordance with DSTU B A.2.2-12:2015 “Energy Efficiency of Buildings. Methodology for Calculation of Energy Consumption for Heating, Cooling, Ventilation, Lighting and Hot Water Supply” and DSTU B ‘B’.2.2-39:2016 “Methods and stages of concluding energy audit of buildings”, indicated in the documents attached to the application for partial compensation of the cost of energy efficiency measures and submitted for verification of the implemented energy efficiency measures, which are set out by the programs of the Fund.

7. The total saving of energy as a result of the implemented energy efficiency measures financed by the Fund shall be calculated as the sum of the volumes of energy saving as a result of the measures on energy efficiency implemented in all buildings.

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