

Title of the measure:	RO27 – Programs for thermal rehabilitation of the multi-level residential buildings built-up 1950-1990
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General description

The Government adopted in 2002 the Government Urgency Ordinance 174/2002 regarding the establishment of special measures for thermal rehabilitation of some multi-level residential buildings, which was approved by the Law 211/2003, further amended and modified by the Law 260/2006. The GUO 174/2002 establishes special measures for the thermal rehabilitation of some blocks of flats (condominiums) that were built during the period 1950-1990 in order to increase the energy performance of these buildings. The blocks of flats - condominiums that are going to be rehabilitated are included in the annual thermal rehabilitation action programs developed by the Ministry of Development, Public Works and Housing on the basis of the proposals submitted by the municipalities taking into account the eligibility criteria and the main criteria established by the law. The special measures for thermal building rehabilitation to be established by energy expertise and energy audit and according to the law they may include:

- Heat insulation of the building shell (exterior walls and roof) as well as of the basement, replacement or double glaze of the windows and exterior doors, construction works and painting of the external walls and other structural and non-structural parts of the building shell;
- Works for reducing the thermal losses of the pipes and furniture from the basement of the building.

The coordinators of the annual programs are the mayors of the municipalities, cities and localities, respectively the district mayors of Bucharest. They put in place the necessary measures for developing the energy expertise and energy audit of the building and to conclude the conventions with the owner association of the buildings that are included in the annual programs in order to continue the actions for designing and carrying out of the building thermal rehabilitation works.

The necessary funds for the energy expertise and audit, feasibility study and design of the thermal rehabilitation works for the buildings included in the annual program are provided by State budget allocations.

The funds for the carrying out of thermal rehabilitation work are shared as follows:

- 34% from State budget allocations. These allocations are approved on a yearly basis, and funds are provided out of the budget of the Ministry of Development, Public Works and Housing.
- 33% from funds approved for this use on a yearly basis by local authorities.
- 33% from maintenance funds of the owner associations.

The construction authorization for carrying out of the thermal rehabilitation works of the buildings included in the annual programs are issued free of charge.

The methodological norms for applying the GUO 174/2002 were approved by Government Decision 1070/2003, modified by the Government Decision 1735/2006.

Annual programs for thermal rehabilitation of the multi-level residential buildings developed so far included the following actions:

- in 2005 the program included 23 buildings located in different climate zones of Romania, for which the energy audits were performed and the energy performance certificates were issued. Also the technical designs for the thermal rehabilitation works were developed.
- in 2006 the thermal rehabilitation works of some buildings included in the 2005 programs were carried out and the energy expertise and energy audit were performed for 614 buildings in 28 localities.
- in 2007 the feasibility studies and the technical designs of the thermal rehabilitation works for the buildings included in 2006 program were performed. Also the thermal rehabilitation works were initiated in 13 buildings in different localities and they were finished until the end of 2007 in 6 of these buildings.

According to the Census of Population and Housing, nationally 39% of all homes are located in residential buildings block, most being built during the centralized economy at standards in force in that period and having a high degree of wear. Rehabilitation of these buildings with financial support from the budget was started in 2002 by approving Government Emergency Ordinance no. 174/20021.

Support measures introduced in 2002 was enlarged in 2009 by Government Emergency Ordinance no. 18/20092. By Government Emergency Ordinance no. 18/2009 published in Monitorul Oficial no. 155 in March, 12th2009, with completion of the Law no. 5/2010, published in Monitorul Oficial no. 8 in January, 11th2010, they set the intervention works for thermal insulation of the blocks of flats built by projects developed in the period 1950-1990, the necessary steps to elaborate works, the finance way, as well as the obligations and responsibilities of public administration authorities and owners associations.

These works are considered local public investment aimed to increase the energy performance of housing blocks so that the specific annual consumption energy calculated for heating to fall below 100 kWh/m2 useful area in terms of economic efficiency.

Starting from 2009, the financing for rehabilitation works is ensured by:

- 50% from allocations from the state budget, within the limits of the funds annually meant for within the budget of Ministry of Regional Development and Tourism,
- 30% from funds annually meant for within local budgets,
- 20% from the repair fund of the owners' association.

Local public administration can also provide, within the funds annually meant for, besides 30% share, the partial or total taking over of the payment for the works corresponding to the 20% share of the owners' association.

The Ministry of Regional Development and Tourism through the meaning of Research National Institute in Constructions and Constructions Economy – INCERC Bucharest monitors the energy performance of buildings and sets specific data banks. For these works, the construction authorization is issued without being necessary to pay the legal taxes toward State Inspectorate in Constructions and the Social House of Constructions.

The multi-annual Program for financing works meant to thermal rehabilitation of buildings received in 2009 a sum of 360 million RON (about 85 million Euros). More order of minister approved the division of this sum by localities and approved the list of the buildings to which the works were to be developed. According to Order no. 1045/2009 the final list included 1,257 blocks of flats with 51,677 apartments.

The Program continued in 2010, but because of the economic crises the sum allocated from the state budget was 150 million RON (about 35 million Euros), according to Order of MDRT no. 1032/20102. The list of the buildings included in the multi-annual program financed in 2010 is attached to the respective order and contents 896 blocks with 40,670 apartments.

It must not be yet consider that in 2009 were rehabilitated 1,257 blocks with 51,677 apartments and in 2010 were rehabilitated 896 blocks with 40,670 apartments. The lists with the blocks in attachments at Orders nos. 1045/2009 and 1032/2010 are lists related to a multi-annual program and not a program for the respective year. The number of apartments included in the list approved for 2010 is less than the one from the list approved in 2009 because of both ending the works at some apartments and getting out of the new list of some blocks/apartments due to diminishing of the available funds.

For 2011 the sum allocated to the respective program is 150 million RON (about 35 million Euros), according to Order MDRT no. 1158/20113. The list of the buildings included in the multi-annual financed program for 2011 is attached at the respective order and contents 1,336 blocks with 54,861 apartments. There are many situations when, from different reasons, the population took their own measures regarding the increase of heating performance in the apartments in blocks built during the period 1950-1990.

Impact evaluation (methods and results)

Methods

According to the estimations included in the National Energy Efficiency Action Plan, energy savings of up to 25% can be achieved through the implementation of thermal renovation measures set out in the annual programs, in comparison with the situation prior to renovation.

The heat insulation of buildings can be carried out in phases, thus its effects, from the point of view of the reduction of the consumption of energy, will be seen on a cumulative basis. A complete return on the investment will be achieved in approx. 6-8 years, depending on the type of work carried out. Working from figures gathered from energy audits on buildings included in annual heat-insulation schemes for 2005 and 2006, the following is estimated for the period covered by the NEEAP (2007-2010):

- about 250 multi-storey buildings upon which only insulation work will be carried out,
- about 36,000 MWh/year energy savings (about 3,000 toe/ year, respectively 0.2% from the final thermal energy consumption of the residential 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 (Fuels/Electricity)			12,000 toe (502 TJ)	

Measure Impact Level		
low	✓ medium	high

References

http://ec.europa.eu/energy/demand/legislation/doc/neeap/romania_en.pdf