



# FROM STRATEGY TO ACTION: local urban regulation on energy performance in buildings

## BRAȘOV MUNICIPALITY (Romania)

### Summary

Building sector accounts for 40% of Romania's energy requirements. It offers the largest single potential for energy efficiency.

In accordance with Romanian Law, the energy certifications of buildings will be mandatory as from 01.01.2010 – in case of selling or renting dwelling houses or flats, and from 2007 – in case of new buildings.

One of the main obstacles to energy efficiency is usually the lack of real support through subsidies and incentives for those who decide to save energy.

This is the main aspect tackled in this Shining Example.

*For more detailed information please read below...*



### Short presentation of Brașov Municipality

Brașov is the capital city of Brașov County, situated in the central part of Romania. Brașov is a mountain city located at an altitude of 600-800 m, and has a long heating season (approx. 6 months), which translates into important energy consumption.

Brașov was one of the first Romanian municipalities to join Agenda 21. Now in Brașov there are two important actors in sustainable development: ABMEE – Local Energy Management Agency and AMB – Brașov Metropolitan Agency.

Brașov defined its municipal energy strategy and started implementing it. One of the most important issues identified was the district heating. The system generates a lot of losses and is undergoing a process of retrofitting.



# Sustainable energy development approach

Building sector accounts for 40% of Romania's energy requirements. It offers the largest single potential for energy efficiency. EPBD 91/2002 has been transposed into Romanian legislation through Law 372/13.12.2005 which came into force on 01.01.2007. In accordance with Law 372/2005 the energy certifications of buildings will be mandatory in Romania as from 01.01.2010 – in case of selling or renting dwelling houses or flats, and from 2007 – in case of new buildings.

## **How Braşov municipality started:**

The Local Urban Regulation on Energy Performance of Buildings was developed as a part of NEC project – NEw Concept of local sustainable development in pilot communities. The main activity of NEC was the energy certification of buildings in the project area. Based on the results, local and regional authorities planned the future political initiatives and established new regulations including new buildings standards.

Braşov project team consisted of representatives from Braşov municipality and staff of ABMEE – Local Energy Management Agency. The first step was to analyze the state of legislation in the field of energy performance of buildings. The second step was to perform energy certification in 24 buildings of Tractorul District – the project area defined in NEC.

CLASS classification-	Number of buildings	Percent
A+	0	0%
A	0	0%
B	0	0%
C	0	0%
D	0	0%
E	0	0%
F	1	4%
G	23	96%
<b>TOTAL</b>	<b>24</b>	<b>100%</b>

## **Energy certification of Buildings**

24 buildings were certified using specialized energy certification software – CLASS. The buildings were chosen based on the following criteria:

- Different typology of buildings: administration buildings, block of flats, single building, school, commercial, enterprise or businesses
- For each typology different year of construction
- For each typology different constructive structures

The results have been disseminated at local level to authorities, stakeholders and companies in a workshop, on July 2007.

One of the priorities resulted after the analysis was the thermal rehabilitation of blocks of flats which, at that time, were using 37 - 49% of the entire energy at population level.

Retrofitting the blocks of flats built before 1985 – especially those built with big panels or mixed structure – concrete and masonry was also identified as a priority.

The Municipality analyzed the results of energy certifications in order to generalize the conclusions for the entire city and to find out which are the main demands that could be supported by the local administration.

The main identified obstacles to energy efficiency were:

- Lack of real support through subsidies and incentives for those who decide to save energy
- Lack of knowledge at citizens level regarding legal requirements in energy certification field
- Lack of knowledge about good practice procedures of energy rehabilitation for buildings which could lead to an important decrease in energy consumption and could improve comfort
- Energy auditors weren't consulted before starting a thermal rehabilitation because many citizens do not afford to pay the consultancy
- Expensive investments with a long term payback period



### **Current situation in Braşov municipality:**

Based on the results, local authorities developed the regulation for new and existing buildings and planned the future political initiatives in this sector.

The Municipality decided to implement a multi-annual plan for substitution of the existing combined heat and power system with more efficient systems and has reconsidered its approach towards using renewable energy sources (biomass and solar panels).

The level of awareness of the citizens was increased in the field of energy efficiency. Local authorities received feedback from the end users on support needs and other expectations.

## Main achievements

The cost for the creation of the new local regulation in the frame of NEC project was: 12.340 EUR.

The New Local Regulation states the following obligations for the municipality:

- To hire an energy manager to deal with: monitoring energy consumption and energy management for public buildings; implementation of the national laws and local regulations.
- To evaluate the technical specifications concerning the energy efficiency of the new equipment to be purchased. This will be one of the assignment criteria in public tenders.
- Building permits will be issued based on: a feasibility study of the technical solution chosen and an energy audit performed in compliance with the legal provisions.

The new regulation states the basic principles of thermal energy rehabilitation and the subsidies and financial incentives for the owners who implement concrete measures.

## Suggestions for other municipalities

It is important to get a clear picture of the situation at local level, taking into consideration the planned development and the input from local stakeholders and entities.

The local regulation must be based on the national legislation and must be in accordance with EU laws, considering the deadline for enforcement of the laws.

The regulation should be clear and comprehensive, and should be disseminated to citizens.

Citizens should be able to make easily use of these tools, while the tools themselves should provide real incentives in order to be used by the population and companies.

## MODEL NATIONAL COORDINATOR FOR ROMANIA

### **ORAŞE ENERGIE ROMANIA (OER)**



**Oraşele Energie în România – OER** (The Romanian Energy-Cities Network) is a non-governmental organization, gathering 27 members, important municipalities interested in improving the energy efficiency in public services (district heating, public lighting, water and gas supply, waste collection and storage, local transportation, etc.) and in promoting the renewable energy and the environment protection.

**OER** network is a useful tool for disseminating technical and commercial information with regards to equipment, technologies and policies in the energy field.

The main activities are:

- Participation in national, regional and international events

- Participation in European Projects
- Training for local authorities representatives
- Publication and distribution of info-bulletins and other publications.

## Further information

Contact person: **Camelia RAȚĂ**  
 Position: Executive Director  
 Organisation: OER - Romanian Energy Cities Network  
 Address: 23 M. Kogălniceanu Bdv. bl. C7, room 301, Brasov, 500 090, Romania  
 Tel/Fax: 0040 268 474 209  
 E-mail: [camelia.rata@abmee.ro](mailto:camelia.rata@abmee.ro), [office@abmee.ro](mailto:office@abmee.ro)  
 Web: [www.oer.ro](http://www.oer.ro)

*This case study was prepared by OER as a part of the MODEL project which is supported by the European Commission (DG TREN – EACI Agency) under the IEE Programme as well as by ADEME, the French Energy Management Agency.*

*The sole responsibility for the content of this shining example lies with the authors. It does not represent the opinion of the Community. The European Commission is not responsible for any use that may be made of the information contained therein.*

**MODEL website: [www.energymodel.eu](http://www.energymodel.eu)**  
 © 2008 MODEL

Project  
Coordinator



Official partner



With the support of:

**Intelligent Energy**  **Europe**

and

