

Ascession Breeds Success

Towards Class A - Shining examples

... are everywhere and in a town near you...

This Phare-funded demonstration project promotes energy efficiency in residential high-rise built in the 1980's and 90's - a time when energy prices were very low. Block One was chosen due to its replicability: factors such as building fabric, heating infrastructure, ownership and surrounding institutional framework are common to a great deal of multi-family housing in Central and Eastern European Countries



Project Management

The municipality of Radomir part-funded the project and was consulted throughout its implementation. The Committee of Energy was the contracting authority and coordinator while a consortium including the Exergia SA (Greece), ENERGOPROJEKT (Bulgaria) and ICEU (Germany) carried out the works.

Improvements included insulation of the external walls, roof and basement ceiling, repairs to window and door joinery and complete overhaul of the heating system.

For more information see Shining Examples on the Display website!

Key Performance Data

An energy audit of Block One calculated the total energy consumption as:	373 kWh/m ² a:
Space heating energy consumption before refurbishment:	245 kWh/m ² a
Heated Area energy consumption after refurbishment:	132 kWh/m ² a
Calculated energy savings Block One: Annual fuel requirements per m ² of gross building area:	
Before the refurbishment:	198 kWh/m ² a
After the refurbishment:	107 kWh/m ² a
Energy saved:	91 kWh/m ² a or 46%

These savings assume a normal heating pattern. However due to severe underheating originally, some savings were taken as comfort.

Consultation

The 7 story high-rise consists of 21 owner-occupied flats, and with owners contributing to the cost of improvements, resident consultation was vital. This occurred at the design stages and again after the improvements had been executed. Overall, residents reported much improved comfort and reduced energy bills.

Conclusion

This project demonstrates that energy efficient high-rise refurbishment can be successfully coupled to the progressive development of accession countries, by combining institutional and financial support from the Commission, EU15 States and committed municipalities.



www.display-campaign.org

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Partners



EnEffect

EuroACE



Contact

Partner

Energie-Cités - the association of European local authorities promoting local sustainable energy policy (coordinator)

EnEffect - Centre for Energy Efficiency (Bulgaria)

EuroACE - European Alliance of Companies for Energy Efficiency

CEMR - Council of European Municipalities and Regions

ACE/CAE - Architects' Council of Europe

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Intelligent Energy Europe

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