



EUROPEAN COMMISSION
Directorate General Transport and Energy

SAVE II PROJECT – 1998
 Contract SA/299/98/DE

Development and implementation of concerted regional actions for
 the realisation of energy saving projects in the building sector

EXECUTIVE SUMMARY

The co-ordinator of the project is the City Administration of Rathenow c/o Energy Agency Rathenow, Germany. Partners within the project are:

- Stadtgemeinde **Judenburg**, c/o Energy Agency Judenburg-Knittelfeld-Murau,
- Union of Local Authorities of **Kilkis** c/o Energy Agency of Kilkis
- **MVV Consultants & Engineers** GmbH (former MVV InnoTec)
- and the associated partner City Administration of **Zlotow**

The project period was from **April 1999 to November 2001**.

The European Commission's **SAVE Programme co-financed the project with 31%** of the total project costs.

The consortium of the project consists of experienced regional Energy Agencies and consultants, which are able to perform the project tasks in a good quality level. Their experiences on project development were especially valuable for the high-browed project elements, such as feasibility studies, development of financing models, preparation of training curricula and manuals.

The **main aim** of the project was achieved, to demonstrate that concerted and well co-ordinated activities in a region relating to project preparation, finance acquisition and accompanying measures can provide the basis for the realisation of a series of energy saving projects in public buildings. Special focus was given to the development of methodologies for the stimulation of private and public co-operation.

The project consist of **four components, focussing:**

- (i) standardised solutions for the implementation of rational use of energy in buildings
- (ii) Innovative management and financing options
- (iii) education and training and
- (iv) information and dissemination.

The outputs of the work programme, which comprised 12 actions are brought in relation to the achieved specific objective within the following table:

Specific objectives achieved	Results of the project, available as annex of the main report
<ul style="list-style-type: none"> • Preparation of demonstration projects for RUE and RES • Documentation of efficient methods for the planning and implementation of energy saving measures in public buildings 	<ul style="list-style-type: none"> • 33 Case studies on planned and realised energy saving projects in Rathenow, Kilkis and Judenburg
<ul style="list-style-type: none"> • Utilisation of international know-how and experiences on implementation in this sector 	<ul style="list-style-type: none"> • List on literature, simulation and calculation software, case studies and training materials
<ul style="list-style-type: none"> • Development of a strong co-operation within the administration to orient all building investments towards an optimal use of energy and to adapt procurement routines, possibly through legislation 	<ul style="list-style-type: none"> • Building catalogue Rathenow, Judenburg-Knittelfeld, Kilkis and Zlotow • Guiding steps on planning of new investments and rehabilitation of buildings and lighting systems considering energy saving aspects
<ul style="list-style-type: none"> • Raising awareness for the public-private partnership in the region 	<ul style="list-style-type: none"> • Reader on the theory and case studies of Private-Public-Partnership

Specific objectives achieved	Results of the project, available as annex of the main report
<ul style="list-style-type: none"> Integrated energy management and control systems in buildings or building complexes and industrial areas 	<ul style="list-style-type: none"> Assessment of Integrated energy management and energy saving measures in technology and Business Centre Rathenow and in AiZ Business Centre in Zeltweg
<ul style="list-style-type: none"> Standardisation of energy consumption control and energy accounting methods at local / regional level 	<ul style="list-style-type: none"> Energy accounting and energy saving technologies for SMEs in Judenburg / Austria
<ul style="list-style-type: none"> Development of a financing model for energy saving projects with public and private participation Utilisation of regional and national support programmes for the innovative development and financing of energy saving projects 	<ul style="list-style-type: none"> Reader "Contracting in the energy sector – Introduction and application" is annexed separately to the report Outline of the development of an Energy Efficiency Fund (EEF revolving fund at municipal level) including project screening process
<ul style="list-style-type: none"> Draft of educational packages on energy saving for schools (teaching material for energy saving technologies, changing user behaviour) Creation of an educational partnership within the region 	<ul style="list-style-type: none"> Pilot project TEACH - Training pupils for Energy Analysis in sCHool buildings, English Handbook for initiation and running of energy-saving projects in schools
<ul style="list-style-type: none"> Transferring the methodologies and results and increasing energy efficiency awareness in other Regions in Eastern Europe 	<ul style="list-style-type: none"> Demonstration project for Energy efficiency contracting with schools – outline of revolving municipal energy efficiency fund Transfer of the project results in energy saving contracts in schools to Ukraine for targeted replication Regular meetings with Polish partners accompanied by training and energy audit activities
<ul style="list-style-type: none"> Training on project development and implementation of RUE for intermediates such as installers, planners 	<ul style="list-style-type: none"> Presentation – Contracting- Investment Finance and Planning, Preparation of a feasibility study Energy consultant courses TEEM – Training on Environmental Energy Management in buildings
<ul style="list-style-type: none"> Use of advanced information and communication tools for energy and environmental saving (databases, Internet search, videos, multi-media software application) 	<ul style="list-style-type: none"> Results of the project are presented in internet homepages of the EA Rathenow and Judenburg, links from and to other key-websites are established

The project had a **strong international cooperation component**, expressed by active contribution to other European initiatives, such as other EC supported projects within the Thermie, Synergy and SAVE programme and European Networks. Dissemination of the results and methods was realised through organisation of local workshops, presentation at regional and international events, contribution of case studies to RUE databases and presentation of the project results in the Internet.

The efficiency of the project can be expressed by the following **figures on saved energy**. Through the active work of the Energy Agency **Rathenow** about 20 energy saving projects in public buildings could be imitated, developed and realised. An **annual saving of energy of 600 MWh** is achieved by of own municipal and attraction of other public investment amounting to about 82.000 €.

Similar positive results can the Energy Agency of **Judenburg** show: **2.200 MWh annual energy savings** through own municipal and attraction of other public investment amounting to 900.000 €.

Worth mentioning is the aspect of **sustainability** of the project. **All partners will continue its work** on initiation and implementation of energy efficiency after the completion of the project. The documented results leave no room for doubt that the work of the Agencies is efficient and generates payback in terms of public budget savings. By this the municipalities, which are the bodies responsible for the Energy Agencies, expressed the will to continue the basis financing of the Agencies. However the Agencies will have to offer more and more parts of their services on a commercial basis to private clients in order to keep the high level on energy consultation, tools and clout. There is the expressed wish of all project partners to participate in EU financed projects in this sector in their future work.

For further information about the project, please consult the Internet homepage of EA Rathenow: <http://www.brandenburg.de/kommunen/rathenow/eprojekt/index.htm>