

ENERGY EFFICIENCY AGENCY OF THE REPUBLIC OF SERBIA

ACTIVITIES OF SERBIAN ENERGY EFFICIENCY AGENCY

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Serbian Ministry of Science and Technological Development
European Commission
EU Research Information Event
Towards Integration into the European Research Area

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Serbian Energy Efficiency Agency - SEEA

- ***The Serbian Energy Efficiency Agency (SEEA) is a national non-profit organization***
 - *It was founded in May 2002 by the Decree of the Government of the Republic of Serbia and*
 - *with the financial support of EU (EAR - CARDS 2002)*
- ***The legal status of the SEEA was changed by the Energy Law on 1 August 2004***
 - *It has been established as a special republic organization with the status of a legal entity*
- ***Human resources***
 - *12 permanent staff*
 - *2 experts hired on contractual basis (WB - Serbian Energy Efficiency Project)*
 - *It is necessary to further strengthen the capacities of the Agency*



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Serbian Energy Efficiency Agency

Mission and Duties

- *The SEEA develops and proposes programmes and measures;*
- *Co-ordinates and stimulates activities intended to achieve rational use and saving of energy, as well as increase in efficiency of energy use in all sectors of consumption especially in:*
 - *Buildings sector*
 - *Municipal infrastructures and*
 - *Industry*
 - *(Transport)*
- *Stimulates wider use of renewable energy sources and co-generation*

Serbian Energy Efficiency Agency

Mission and Duties

- *Collects data on energy consumption;*
- *Proposes measures for obtaining financial resources and for technical assistance, including monitoring;*
- *Proposes financial support and priority projects and monitors results following implementation of projects;*
- *In coordination with relevant Ministries, cooperates with similar international, foreign and local institutions; and*
- *Performs other activities at the request of the Government of the Republic of Serbia.*



Serbian Energy Efficiency Agency

Financing

- **State budget of the Republic of Serbia**
 - Only for running costs, and
 - Projects of the EE and RES – NGO (20 projects for the last 3 years)
- **EU (EAR) Grant €5M - CARDS 2002 / 2002-2006**
 - € 3.75 M for Programs – Demonstration Projects
 - Grant for running costs of SEEA (continue till May 2008)
- **Kingdom of Norway /2002-2007**
 - Technical and financial assistance to Ministry of Mining and Energy and SEEA for institutional and capacity buildings, about € 300.000 annually



Serbian Energy Efficiency Agency

Financing

- **Kingdom of Spain /2007-2008**
 - *Technical and financial assistance for use of wind energy in Serbia, € 204.000 measurement and feasibility study for wind farm*
- **/2009-2010**
 - *Technical and financial assistance for use of solar energy in Serbia, Demonstration Project and Study of the Solar Energy Potential*
- **World Bank**
 - *Energy Efficiency Project in Serbia*
 - **IDA credit and IBRD loan**
 - (2004-2012) (**\$ 25 M + \$ 30 M**)
- **Other financial sources**



Energy Efficiency in Buildings

Demonstration Projects

16 Municipalities/Projects

Municipal Public Buildings

Total Investments: > 1,400,000 €

Grant amount: 897,000 €

Financing Source: EAR

Per Project: to 70%

Realization period: 2005 – 2006

Energy Efficiency measures relate to:

- Building envelope (roofs, walls, windows)
- Heating system
- Building interior lighting



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Energy Efficiency Project in Serbia

IDA credit YF3870-1,

PART B. Public buildings – schools and hospitals

Realization period: 2004. – 2012.

IDA credit YF3870-1- WB (\$ 25 M)

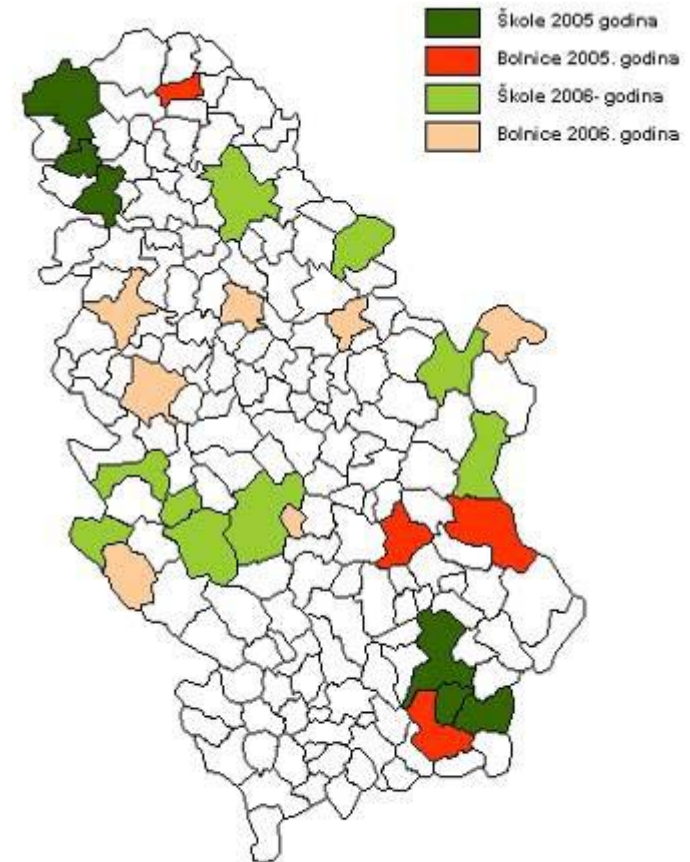
2005. – 10 buildings

6 schools and 4 hospitals

2006. – 18 buildings

10 schools and 8 hospitals

Green Award 2007 - WB



Projekat unapredenja energetske efikasnosti



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Energy Efficiency Project in Serbia

IDA credit YF3870-1, IBRD loan YF7466 WB

Project supplement financing (\$ 30 M)

Realization period: 2010. – 2012.

IDA credit YF3870-1, IBRD loan YF7466 WB (\$ 28 M)

Credit objectives:

- *Rehabilitation of Heat supply System of CC Nis and implementation of EE retrofit measures within 20 buildings of Hospital Complex*
- *Other - Energy Efficiency improvement of Public buildings in health, education and social care sectors:*
 - *Schools: 40 + 20 (lighting only)*
 - *Hospitals: 20*
 - *Social care institutions: 10*



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Energy Efficiency in Industry/1

Industrial energy audits and training programme

- *Implementation: Sep 2003-April 2004*
- *Consultant: LDK, Greece*
- *Financing source: EAR*

Training programme for industrial Energy Management Systems

- *Implementation: April - October 2005*
- *Consultant LDK, Greece*
- *Local partners: REEC Belgrade and Novi Sad*
- *Financing source: EAR*

Industrial energy audits and development of EA methodology

- *4 Seminars jointly with regional chamber of commerce*
- *Contracts with 4 Regional Energy Efficiency Centers (REEC)*
- *Financing source: EAR*



Energy Efficiency in Industry/2

Demonstration of general energy auditing in industry

- *Consultant COWI, Denmark*
- *Implementation: August – November 2006*
- *Financing source: EAR*

Training in financial engineering

- *Consultant NEEG, Norway*
- *Implementation: December 2003 – May 2004*
- *Financing source: Kingdom of Norway, multi annual programme of technical and financial assistance to EE in Serbia*

Training in Energy Management System for food industry

- *Consultant NEEG, Norway*
- *Implementation: December 2004 – June 2005*
- *Financing source: Kingdom of Norway, multi annual programme of technical and financial assistance to EE in Serbia*



Energy Efficiency in Municipalities

Demonstration Projects

11 Municipalities/Projects

- **Energy efficiency in Municipal services / €170,000**
 - 5 projects - Street lighting
 - 2 projects - Water supply
- **Energy efficiency in District Heating / €350,000**
 - 4 projects / Heat substations & buildings' installations

Two realized Trainings:

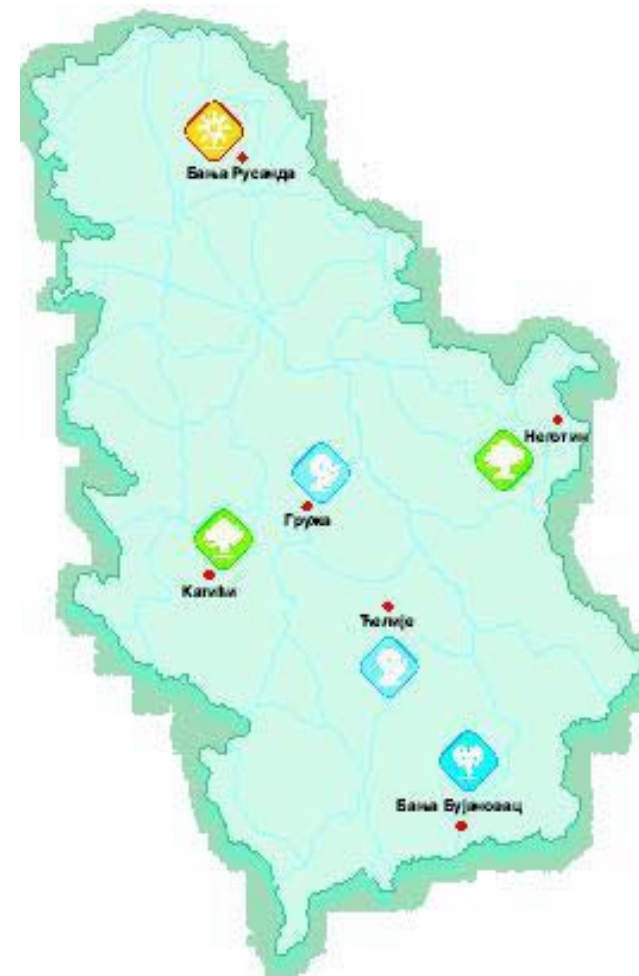
- **Energy Management in Municipalities**
(Dec. 2004/ Feb 2005)
- **Energy Planning in Municipalities**
(Jan. 2005/Oct. 2005)



Renewable Energy Use Demonstration Projects

*Special EARs found for RES
development of € 200,000:*

- 2 seminars:
 - "Biomass for Energy" 2005, Vrnjačka Banja
 - "Geothermal Energy" 2005, Vrnjačka Banja
- 2 demonstration projects:
 - Biomass Fired Boiler in Elementary School "Mićo Matović" in Katići
 - Construction of Small Hydropower Plant at Gruža Lake



Renewable Energy Use

- 4 feasibility studies: 2005/2006
 - "Utilization of Biomass in Centralised Heating Systems in Negotin "
 - "Small Hydropower Plant at Lake Čelije"
 - "Solar Energy Utilization for Heating in Special Hospital of the Spa Rusanda "
 - "Geothermal Energy Utilization in The Spa Bujanovac "
- Wind Energy Use: 2007/2008
 - Installed masts: Titel, Veliko Gradište, Negotin
 - Feasibility study for Negotin
 - Donation of Kingdom of Spain: **€204,000**
- Solar Energy Use: 2009-2010
 - Technical and financial assistance for use of solar energy in Serbia,
 - Demonstration Project and Study of the Solar Energy Potential
 - Donation of Kingdom of Spain: **€200,000**



Norwegian Program

Norwegian Government has for five years (2002-2007) actively supported activities in Serbian energy sector: technical assistance and financial support

Results/Deliverables

- *SEEA, MOME*
- *Regional energy efficiency centers REECs – 5 (Belgrade, Novi Sad, Kragujevac, Nis, Kraljevo)*
- *Industrial energy efficiency network (SIEEN)*
- *Kyoto Protocol, CDM, Energy Planning on local Level, Building labeling*

Financing source

- *Kingdom of Norway, multi annual programme of technical and financial assistance to EE in Serbia*

And more ...

Energy Efficiency Agency ...

- *has improved the educational process in Serbia:*
 - *by inclusion of EE and RES issues in primary school physics textbook for 6.7, and 8 grades, and*
 - *by introduction of RES subject in electrical technical secondary schools (73 schools)*
- *has organized and participated in numerous (various) conferences and seminars*
- *participates in the preparation and drafting of regulations:*
 - *The incentives for the wider use of RES,*
 - *The Law on the Rational Use of Energy,*
 - .



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And more ...

Energy Efficiency Agency ...

- *participates in various EU-funded projects:*
 - *BIOM-ADRIA (biomass)*
 - *TEMPUS (education)*
 - *Project to strengthen cooperation between agencies in the Balkan region*
- *participates as users and participant in projects funded by the Ministry of Science and Technological Development of the Republic of Serbia*
- *has received a special award of the official Internet portal DGTREN and Manage Energy for 2007, for significant contribution in the field of education on EE in the region.*

And more ...

Energy Efficiency Agency ...

- *is the official partner in the Serbian campaign launched by the European Commission - Sustainable Energy Europe*
- *supports various global actions such as:*
 - *Day of the Planet Earth*
 - *World Energy Efficiency Day*
 - *Earth Hour etc.*
- *has excellent cooperation with the European Commission in particular with the Directorate-General for Energy and Transport (DGTREN) and JRC (Joint Research Center).*



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Energy Efficiency Agency of the Republic of Serbia has become a recognized institution and address ready for cooperation



THANK YOU FOR YOUR ATTENTION!

REPUBLIC OF SERBIA

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