



Energy Efficiency Programs in Serbia

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Energy Policy

- *Energy Law (2004) – new one is drafted*
- *Energy Development Strategy until 2015*
 - Energy Efficiency increase and wider use of renewable energy sources (RES) – prioritized objectives
- *Programs Implementation Strategy until 2012*
 - 15 parts including Energy Efficiency and RES
- *Law on Rational Use of Energy (in the preparation phase)*
- *Feed-in tariff system for RES electricity (in forced since January 2010)*
- ***Strategic objectives** in the energy sector:*
 - *New investment cycle in the sector*
 - *Strategic partnership and connection with everyone who is interested in connecting their energy and other systems with the Republic of Serbia*
- *Sustainable Development Strategy – till 2017*



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Other programs

- *Standing Conference of Towns and Municipalities*
 - Committee of energy efficiency – working groups (SEEA)
- *Initiatives at the regional (provincial) and local level*
- *Programs of international support (EC, UNDP, UNECE, CEI, Germany, Spain, USA, Japan, Austria, Norway, Netherlands, Sweden, Italy, Greece, Slovakia etc.)*
- *Targeted financing of international financial institutions (EBRD, WB, KfW etc.) and commercial banks*
- *New models for financing: ESCO model and Public Private Partnership (PPP)*


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Some examples

- **Power plant based on municipal waste (Užice region)**
 - 3 MWe; Syntetic gas made by pyrolytic process
- **CHP Plant by company Fermin (Senta)**
 - Biogas from waste water treatment; Investment – 9 mill EUR; 7 mill kWh/y
- **Feasibility Study on the proposed City of Niš Gas-Fueled CHP Plant**
 - US TDA; Objective: determine the economic and technical viability of establishing a 100-150 MW gas fueled CHP
- **Business Center VIG Plaza (Belgrade)**
 - High A class business building (total investment 42 mill EUR); Own resource of geothermal energy; Using heat pump for heating and cooling; production 824 MWh/y
- **Potential for CO₂ emission reduction (tones): 32,76 mill t**


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International cooperation – examples

- *Projects within Interreg, South-East Europe Transnational Cooperation Program (application on different projects)*
- *BIOM-ADRIA project (biomass, Italian partners, 2007-2008)*
- *RES Boat project (RES, 2008-2009., 5 Danube countries: Austria, Slovakia, Hungary, Croatia and Serbia)*
- *Project within TEMPUS Program (trainings for local municipalities, Polish partners, 2008-2009)*
- *Projects within JICA Programs (introduction on Energy Management System at whole levels, 2009-2011; National Action Plans for Mitigations, just started – relevant Ministries)*
- *Cooperation with CRES (SynEnergy project, 2009-2011)*



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Ministry of Science and Technological Development program and NGO support

- 3 SEEA projects within NPEE (buildings – code, electrical appliances in households, CHP)
- 6 SEEA projects within Technological development program (buildings – internal space, sustainable development of Spa centers in Serbia, wind potential, electrical appliances in households (continuation), electromotor, solar collectors
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- 20 NGO projects supported by SEEA (2007, 2008, 2009) – Promotion, Education, RES is included, direct contact with citizens (throughout Serbia)



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Innovation – new approach (example)

- City Library in Tulungagung (Indonesia), young architects from Belgrade – support by SEEA
- Public solar charger for mobile phones, initiative of Belgrade University students – support by SEEA



Technical vocational schools – photovoltaic (PV) panels; SEEA project with Spain support



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Improvement of awareness and education



Sustainable Energy Europe



- Formal introduction in Serbian schools – subjects and lessons
- EU Special Award 2007 for the contribution of education (Denmark, Spain, UK, Lithuania, Romania, Finland, Portugal and **Serbia (SEEA)**)
- Official partner of Sustainable Energy Europe



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How to proceed ?

- Harmonization legislation with EU
- **Capacity building is needed** (secure stable source of financing for programs)
- Introducing other stimulative measures (incentives, energy price etc.)
- Realization of “good practice” and demonstration projects
- International partnership and funding (i.e. IPA)
- Establish Fund for rational use of energy (EE & RES)
- Adopt Law on rational use of energy
- **Improvement of awareness at whole levels**


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