Development of ESCO market and policies in the countries of South-Eastern Europe, Eastern Europe & Kazakhstan

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Financing Energy Efficiency Investments for Climate Change Mitigation (FEEI) Project

Long-Term Objective:
Promote an investment environment for self-sustaining energy efficiency and renewable energy projects to be developed and financed to reduce greenhouse gas emissions

Extracts from FEEI Project Documents:

“One of the best ways to address the issue of financing energy efficiency investments is through the creation of specific intermediaries called ESCOs...”

“...the most powerful instrument to trigger the realisation of energy efficiency investments is through creation of ESCOs...”

“ESCOs are important...particularly for dealing with small scale energy efficiency investments.”
Regional Analysis of Policy Reforms to Promote Energy Efficiency and Renewable Energy Investments

- A wide-ranging regional assessment, including analysis of policy framework, existing barriers and case studies to overcome the barriers
- Provides recommendations to develop & implement policy reforms to support market formation and foster a favorable climate for investments in EE and RE

Policy seminars, workshops, International Fora: Energy for Sustainable Development

Network of energy efficiency managers

- National Participating Institutions (NPIs) and National Coordinator (NCs) in the project participating countries
Development of ESCO market & policies

12 FEEI participating countries:
  • European Union countries
  • South-Eastern European countries
  • Countries of Eastern Europe and Central Asia

Overview of ESCO market development:
  • Existence of ESCO in the country
  • Types of contracts signed
  • Types of projects implemented
  • Existing legislative & regulatory framework
  • Compliance with EU regulations
  • Existing barriers and challenges to ESCO success
  • Success factors
<table>
<thead>
<tr>
<th>Country</th>
<th>Bulgaria</th>
<th>Croatia</th>
<th>Romania</th>
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</thead>
<tbody>
<tr>
<td>Existence of ESCO</td>
<td>Enemona SA, Energy Efficiency Systems Ltd +150 companies carrying out energy audits</td>
<td>HEP ESCO, EETEK Holding Plc and several other companies for providing of energy services</td>
<td>Energy Serv S.A, SE-GES, EnergobitESCO, SERVELECT, Krobath Romania SRL, Cothec Energetikai Uzemelteto SRL, Energy Services Group, Luxten Lighting, ENEAS S.R.L</td>
</tr>
<tr>
<td>Types of contract</td>
<td>EPC</td>
<td>EPC</td>
<td>oriented to EPC</td>
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<tr>
<td>Types of projects</td>
<td>EE projects in industrial sector, public buildings (municipal and state), RE projects (small HPP, solar and biomass power stations)</td>
<td>Electricity and heat energy services in private and public sectors, lighting, modernization/reconstruction of existing plants or buildings</td>
<td>Variable speed flow control, lighting revamp, daylight sensors, compressed air efficient use, power grids optimal reconfiguration, heat recovery, heat pumps for heat recovery, on-site cogeneration systems in the industry</td>
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# FEEI: European Union countries

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<td><strong>Barriers</strong></td>
<td>Frequent amendments to existing legislation, corruption, lack of awareness and lack of capacities at the municipal level, lack of financing of EE projects by commercial banks</td>
<td>Unsolved ownership relations, relatively long duration of procedures, lack of ESCO companies and lack of enough good prepared projects</td>
<td>Lack of internal expertise of local banks to evaluate EE projects, restricted capacity to develop fully bankable project proposals</td>
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<td><strong>Success Factors</strong></td>
<td>Operation of BEEF (providing financing for ESCOs), ministries/ departments and municipalities can plan funding for performance of ESCO services within their annual budgets, contracts with guaranteed results in Bulgaria are legally regulated in the Energy Efficiency Act (EEA) and the special Ordinances</td>
<td>1st and 2nd National Energy Efficiency Action Plan (NEEAP), Physical Planning and Building Act as a basis for adoption of regulations on energy performance of buildings, mandatory energy certification of buildings (from 2010), Retrofitting programme for public sector buildings (04/2012-12/2013)</td>
<td>NEEAP established a specific measure for promotion of EPC (chapter: “Promotion of development for ESCO”), local commercial banks started move into EE market, financing mechanism of the National Programme for Increasing EE and RE Utilization in Public Sector for the period 2009-2010 can be used to support contribution to ESCO development</td>
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## FEEI: Countries of South Eastern Europe

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<td><strong>Existence of ESCO</strong></td>
<td>No ESCO</td>
<td>Few ESCO-type companies</td>
<td>New ESCO oriented activities</td>
<td>No ESCO</td>
</tr>
<tr>
<td><strong>Types of contract</strong></td>
<td>N/A</td>
<td>Guarantees on energy savings and simple payback time</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Types of projects</strong></td>
<td>N/A</td>
<td>Installation of mini-heating systems, boiler exchanges, establishment of tri-generation plants</td>
<td>N/A</td>
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<td><strong>Barriers</strong></td>
<td>Complex non-transparent regulations, legislation is more declaratory than operational, low tariffs, lack of experience of financing EE and RES projects (by commercial banks), lack of appropriate and accessible financial resources, low awareness</td>
<td>Absence of decisional competences in energy matters, lack of coordination between the entities, no EE legislation in place, lack of awareness and capacities to develop EE projects</td>
<td>No dedicated energy efficiency law, no support mechanism in place for ESCO activity, absence of public funding dedicated to EE projects, low electricity and heat prices, no financial incentive for EE, lack of awareness on EE and ESCO potential, lack of financing by local banks</td>
<td>No specific EE law, lack of experience in ESCO projects by local banks, low tariffs for energy, lack of clarity of legal procedures regarding ESCO projects, lack of contract and tender templates, lack of M &amp;V practices, lack of expertise for preparing ESCO projects</td>
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<td><strong>Success Factors</strong></td>
<td>Adoption of the NEEAP, introduction of obligation for energy audits, establishment of EE Fund. Albanian-EU Energy Efficiency Centre may have potential to serve as ESCO.</td>
<td>Compliance with EU regulation as a driver for development of energy regulatory framework, Law on EE has been proposed on entity level</td>
<td>Energy Law foresees new responsibilities for municipalities: energy balancing, energy strategic planning and establishment of local energy markets, energy price liberalization has started, adoption of the EE Law, establishment of the Serbian Energy Efficiency Fund.</td>
<td>Elaboration of municipal Local EE Programmes and Action Plans, consideration for creation of the EE Credit Line by the local banks, by- laws on energy audit and energy performance of the buildings have to be adopted.</td>
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<td><strong>Types of contract</strong></td>
<td>BOOT</td>
<td>N/A</td>
<td>Fee-for-service</td>
<td>Shared saving</td>
<td>BOOT, “turn-key” concept</td>
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<td><strong>Types of projects</strong></td>
<td>Co-generation plants in large industry</td>
<td>N/A</td>
<td>Installation of heat-meters and modern high efficiency boilers in industrial sites, thermal insulation of buildings, application of new industrial high-efficiency technologies</td>
<td>Street lighting, heating, controlled systems, compressed air systems, district heating, projects in municipalities</td>
<td>Co-generation stations, compressed air systems, heat supply systems, cooling, and equipment modernization in small and medium enterprises, projects in municipalities, the first pilot EPC will be implemented in Dnipropetrovsk (by EBRD)</td>
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<td><strong>Compliance with the EU</strong></td>
<td>Not a member of Energy Community, ENP Annual Action Programme (2007) aimed at providing support to implementation of a comprehensive energy policy</td>
<td>Signed MOU (road map cooperation on enhancing energy security and industrial cooperation) between EU and Kazakhstan</td>
<td>EU Moldova Action Plan (2004) under the Partnership and Cooperation Agreement, Contracting Party to Energy Community Treaty</td>
<td>Russia-EU Energy Dialogue (overall cooperation on energy saving, rationalization of production and transport infrastructures, investment possibilities and relations between producer and consumer countries)</td>
<td>Ukraine-EU Action Plan set up a Technical Assistance and Information Exchange Instrument (TAIEX) programme, development of joint instrument (Road Map), Contracting Party to Energy Community Treaty</td>
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<td>Barriers</td>
<td>Lack of legislation on energy services, state monopoly on production and transport of energy, absence of budget planning for more than one calendar year, differentiation of tariffs for private and state owned companies, subsidized energy tariffs for building sector, lack of awareness about ESCO potential</td>
<td>Absence of energy efficiency agency and action plan for EE in place, availability of natural resources precluded development of awareness on relevance of EE projects, limited experience and lack of institutional and financing mechanisms for implementation of EE investment projects</td>
<td>Absence of secondary legislation to guarantee implementation of regulatory framework (e.g. support to development of ESCOs), low level of awareness among population and policy makers</td>
<td>No action or implementation plans have been developed, absence of operational dedicated credit lines by national funds, not completed process of privatization and liberalization in the energy sector, availability of resources provides no incentives to increase of EE lack of interpretation and guidelines from the Ministry of Finance of Russia to customers, providers of energy services and the Federal Treasury on the issue of planning expenditures budget on energy service contracts and payment, accounting, budget and tax accounting operations carried out within the framework of energy service contracts</td>
<td>ESCO market is hindered financially, high interest rates on loan, absence of legislative incentives, lack of a liberalized energy market, information on ESCOs is very scarce, absence of budget planning for more than one calendar year, lack of possibility to receive local guarantees, insufficient support for servicing energy saving measures</td>
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<td><strong>Success Factors</strong></td>
<td>Draft Law on Electricity where activities of ESCO are to be regulated, establishment of International Energy Center (UNDP supported project), awareness raising and dedicated trainings</td>
<td>Plans to develop a new state program &quot;Energy efficiency 2020&quot;, state support for enterprises in the purchase of energy-saving technologies and equipment.</td>
<td>Draft of a national energy efficiency action plan 2012-2014 and a national renewable action plan 2012-2020. In 2013, the Energy Efficiency Fund was established. A Revolving Fund has been created, which partially serves to help the ESCOs' operation</td>
<td>Introduction of EPC in the law which is linked to the budgetary legislation, EE regulation in construction industry and housing sector, introduction of energy audit (on voluntary basis) and &quot;energy passport&quot;, support for energy-saving technologies, introduction of tax incentives</td>
<td>Existence of the State Agency on Energy Efficiency and Energy Saving</td>
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Step 1: Draft information prepared and sent to the NC/NPIs for feedback and comments

Step 2: Comments, updates and corrections received from NC/NPIs and incorporated into final document

Step 3: Publication on Development of ESCO market and policies in the FEEI participating countries prepared and to be issued by the end of 2013
Thank you for your attention!

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http://www.unece.org/energyefficiency.html
http://feei.info/eng/background