Status of development of ESCO market and policies in Bosnia and Herzegovina

Ministry of Foreign Trade and Economic Relations
Biljana Trivanovic

Geneva, 18th April 2013.
In the recent period Bosnia and Herzegovina made significant step forward when it comes to the energy efficiency (EE) development.

Both on state and entity levels a lot of activities were done in order to develop energy efficiency legal framework, to promote EE, raise awareness in this filed and attract foreign and domestic investors to invest in EE projects.

Our goal is to make stimulating legislative, regulatory, institutional and financial framework for EE that will also enable and promote development of ESCO model in BiH

Currently, development of EE in BiH is mainly based on the fulfillment of commitments defined within various international treaties and agreements.

Also within various programmes and projects that are implemented or currently ongoing in BiH a lot of activities in EE field have been done, that will in practical term show all benefits of EE and make very good base for future development of ESCO.
By signing the Energy Community Treaty (EnC) BiH committed itself, inter alia, to transpose EU directives related to the EE into national legislation.

All EnC member states, including BiH, are obliged to make a reduction in final energy consumption by 9% compared to the base state in 2010, in the period 2011-2018.

In accordance with the requirements of EE Directive 2006/32/EC, BiH prepared the First National Energy Efficiency Action Plan (NEEAP).

After necessary EE laws at entity levels have been adopted, development of the EEAPS at the local, and the level of public institutions and large consumers will start.

In both entities, a fund for environmental protection and energy efficiency are established.
Legislative framework

Transposition of EU Directives

- Directive 2006/32/EC on energy end-use efficiency and energy services
- Directive 2010/31/EU on the energy performance of buildings
- Directive 2010/30/EU on the indication by labeling and standard product information of the consumption of energy and other resources by energy-related products

- Indicative targets for reduction of energy consumption
- Promotion of EE in end-use and energy service sector
- Requirements for energy performance of buildings
- Energy certification
- Inspection of heating and air-conditioning systems
Legislative framework

- Legislative framework in the field of energy efficiency is at the entity level.
- Drafts of EE laws are prepared in both entities and they are in process of adoption:
  - FBiH - Draft law on Energy efficiency
  - RS – Draft law on Energy efficiency
  - RS - Draft law on Spatial Planning and Construction
- Drafts of secondary legislation have been prepared and will be subject of approval in entities after adoption of above mentioned laws.
- All mentioned laws are in accordance with the EU directives and requirements and as such will be base for future development of ESCO model.
- Some segments of the building construction regulations are already in force in the FBiH, but it is necessary to continue its harmonization with EU directives.
According to the EU Directive 2006/32/EC on energy end-use efficiency and energy services

**Article 4: General target:**
Member States shall adopt and aim to achieve an overall national indicative energy savings target of 9% for the ninth year of application of this Directive, to be reached by way of energy services and other energy efficiency improvement measures. Member States shall take cost-effective, practicable and reasonable measures designed to contribute towards achieving this target.
Operational EE Plans for Public Institutions

- Cantonal EE plans
- Municipal EE plans
- Large consumers EE plans

Operational EE Plans for Public Institutions

- Municipal EE plans
- Large consumers EE plans
Sectoral programs

- Residential sector
- Commercial sector and services
- Industry
- Transport

Cross-sectoral and horizontal programs

- H1: Development and adoption of the basic legislative, regulatory and institutional framework for EE on the Entities and State Level
- H2: Establishment of Information campaign on energy efficiency on the Entities and State Level
- H3: Establishment of Capacity building program on energy efficiency on the Entities and State Level
- H4: Establishment of Information system on energy efficiency on the Entities and State Level, including EE statistics, monitoring and evaluation
- H5: Development and adoption of strategic and planning documents for energy efficiency
- H6: Establishment of institutions on the Entities and State Level playing role of an EE Agency
- H7: Establishment of energy-efficiency funds at entity levels
- H8: Establishment of Municipal Energy Management Units
- H9: Establishment of Regional Energy Efficiency Centres (REES)
- H10: Strengthening Energy Efficiency in Education
- H11: Implementation of qualification accreditation and certification schemes (energy audits)
- H12: Metering and informative billing of energy consumption
Overall indicative target 2018 9% (12,47 PJ)

Residential sector 6,52% (5,25 PJ)

Commercial sector and services 16,8% (1,62 PJ)

Industry 17% (4,82 PJ)

Transport 4% (0,87 PJ)
Buildings

**Study** “Energy Efficiency in Buildings in the Contracting Parties of the Energy Community, Feb 2012, EnCS (ENSI, Norway)”

- **Overall potential** for reduction of final energy consumption in buildings in BiH has been estimated to 5,11 mil MWh/a, which would obtain economic savings in amount of 279,3 mil EUR/a, while the total investment value would reach the amount of 2,12 bil EUR.

- In order to implement the predefined targets in buildings sector in BiH, including the Residential sector and a major part of the Commercial sector and services, it is necessary to obtain energy savings in amount of 1,9 mil MWh/a, which would lead to 95 mil EUR/a of economic savings, with corresponding total investment value of 730 mil EUR.
### Buildings

**Study** “Energy Efficiency in Buildings in the Contracting Parties of the Energy Community, Feb 2012, EnCS (ENSI, Norway)”

<table>
<thead>
<tr>
<th>SECTOR</th>
<th>BUILDING TYPE</th>
<th>Savings potential (MWh/a)</th>
<th>Max. savings (%)</th>
<th>Max. investment corresponding to overall potential (EUR)</th>
<th>Indicative targets until end of 2018, by building type (NEEAP)</th>
<th>Investment to reach the targets (EUR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>Individual houses</td>
<td>2,420,100</td>
<td>16 %</td>
<td>535.5 mil EUR</td>
<td>6.52 %</td>
<td>218 mil EUR</td>
</tr>
<tr>
<td>Residential</td>
<td>Multi-apartment buildings</td>
<td>1,595,900</td>
<td>28 %</td>
<td>1,043 mil EUR</td>
<td>6.52 %</td>
<td>243 mil EUR</td>
</tr>
<tr>
<td>Commercial sector and services</td>
<td>Health care</td>
<td>143,500</td>
<td>37 %</td>
<td>64 mil EUR</td>
<td>16.8 %</td>
<td>29 mil EUR</td>
</tr>
<tr>
<td>Commercial sector and services</td>
<td>Education</td>
<td>131,600</td>
<td>34 %</td>
<td>63 mil EUR</td>
<td>16.8 %</td>
<td>31 mil EUR</td>
</tr>
<tr>
<td>Commercial sector and services</td>
<td>Other</td>
<td>822,000</td>
<td>33 %</td>
<td>411 mil EUR</td>
<td>16.8 %</td>
<td>209 mil EUR</td>
</tr>
</tbody>
</table>
Draft NEEAP for BiH envisages implementation of the following financial instruments, as follows:

- **Tax benefits**
- **Soft loans**

The remaining **245 mil EUR** should be covered from own sources.

**Residential sector 461 mil EUR 6,52% (5,25 PJ)**
Draft NEEAP for BiH envisages implementation of the following financial instruments, as follows:

- **Tax benefits**: €143 million by the end of 2018.
- **Soft loans**: Until the end of 2018.
- **Subsidies**: €142.730.000 EUR

The remaining **€126 million** should be covered from own sources.

**Commercial sector and services**

**Estimated amount of funds proposed through financial instruments with goal of achieving indicative targets**

- **Residential sector**: €216 million
- **Commercial sector and services**: €269 million
- **Industry**: €440 million

**NEEAP - Financial instruments**

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Draft NEEAP for BiH envisages implementation of the following financial instruments, as follows:

- **Soft loans**
- **Self financing**

**Estimated amount of funds proposed through financial instruments with goal of achieving indicative targets**

- **Residential sector**
  - 216 mil EUR

- **Commercial sector and services**
  - 143 mil EUR

- **Industry**
  - 440 mil EUR
  - 17% (4,82PJ)

**Bosnia and Herzegovina Presentation**

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In order to implement cross-sectoral and horizontal programs it is needed to obtain financing mostly allocated by the budgets of institutions responsible for implementation. Remaining financing could be obtained by international donor organizations.

<table>
<thead>
<tr>
<th>NEEAP - Financial instruments</th>
<th>Total 52 mil EUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-sectoral and horizontal programs</td>
<td></td>
</tr>
<tr>
<td>1. Development and adoption of the basic legislative, regulatory and institutional framework for EE on the Entities and State Level</td>
<td>0 EUR</td>
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<td>2. Establishment of information campaign on energy efficiency on the Entities and State Level</td>
<td>0 EUR</td>
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<tr>
<td>3. Establishment of capacity building program on energy efficiency on the Entities and State Level</td>
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<td>4. Establishment of information system on energy efficiency on the Entities and State Level</td>
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<td>5. Development and adoption of strategic and planning documents for energy efficiency</td>
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<td>6. Establishment of institutions on the Entities and State Level playing role of an EE Agency</td>
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<td>7. Establishment of energy efficiency funds at entity levels</td>
<td>0 EUR</td>
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<td>8. Establishment of Municipal Energy Management Units</td>
<td>0 EUR</td>
</tr>
<tr>
<td>9. Establishment of Regional Energy Efficiency Centers (REECS)</td>
<td>0 EUR</td>
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<td>10. Strengthening Energy Efficiency in Education</td>
<td>0 EUR</td>
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</table>

**Total: 52 mil EUR**
Barriers and challenges to ESCO development

- BiH has significant potential for improving Energy Efficiency and by it, for development of ESCO model.

- The main barrier for ESCO development in BiH is non-existing of necessary regulatory framework that will define the best way of establishing and functioning of ESCO model.

- Lack of knowledge when it comes to the principle and benefits of ESCO concept, within both public and private sector as well as in commercial banks.

- ESCO project management requires a high interdisciplinary expertise and experience. Apart from the technical experience, it is needed that expert team have required extensive knowledge of banking procedures, legislation and all elements of the financial engineering.

- In the initial stage of development of ESCO model in BiH a transfer of knowledge and experience is needed.

- Some companies in BiH are working on base of ESCO concept, but it is necessary to have systematic approach in development of ESCO.
Factors for promoting and further development of ESCO

The EBRD established a Regional Energy Efficiency Programme for the Western Balkans (REEP).

The Programme is accepted and welcome in BiH.

Programme consists of three windows:

- **1st window** – Institutional capacity building/ regulatory support and new product development for public sector EE:
  - Theme 1: ESCO projects (Legal and technical)
  - Theme 2: General Energy Efficiency policy dialogue (tariff reforms, EPBD, public procurement)

- **2nd window** – Credit lines for financing of smaller scale sub projects in public and private sector, including ESCOs, intermediated by local participating banks

- **3rd window** – Direct financing for medium-sized renewable energy and energy efficiency measures, including for ESCOs
THANK YOU FOR YOUR ATTENTION!

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