

Workshop

"Opportunities and Challenges: ESCOs in Romania - a solution to a wider accessibility to energy efficiency measures especially in poor areas"

17 November 2014 Hotel Capital Plaza, Bucharest, Romania

Presentations

- Brief presentation of the UNDP-GEF project "Improving the Energy Efficiency in Low-Income Households and Communities in Romania" - Mr. Mihai Moia, Project Coordinator, UNDP Romania
- 2. ESCO Demo Projects in Ukraine, John O'Brien, GEF Regional Technical Advisor, Climate Change Mitigation, UNDP Europe & CIS, Istanbul Regional Center, Turkey
- 3. ESCO/EnPC in Romania, EBRD representatives, EBRD Romania
- 4. ESCO Demo Projects in Hungary and Ukraine with local communities for fuel poverty mitigation, Mr. Vaszko Csaba, Climate Change and Energy Programme, WWF Hungary
- 5. ESCO Development Experience-based Best Practice: Tackling energy efficiency in Municipal Sector and Social Housing especially in poor areas ESCO approach, Mr. Louis Philippe Lavoie

The workshop's focus was on <u>ESCO best practices</u>, as a mean to stimulate energy efficiency <u>measures</u>, possibly alleviate fuel poverty and enable a wider access to financing energy efficiency <u>measures</u>. The workshop's aim was to stimulate discussions that will also try to explore the feasibility of linking fuel poverty alleviation to ESCO type of investments in poor areas, as a potential way of financing energy efficient building retrofits and lower energy bills.

The workshop presentations focused on: (i) ESCO investments, as main objective of EBRD projects; (ii) ESCO investments for financing energy efficiency measures, especially in poor areas; (iii)



investments which don't represent an ESCO classic model for generating alternative income for local communities.

Conclusions of the workshop:

1. UNDP GEF ESCO Rivne project: boiler rehabilitation through grants from UNDP and the Municipality of Rivne. Business model applied: build, own and operate. The main mistake was from the project design, it is important to define from the beginning what is ESCO and what can do for the project, the financial mechanism has to be understood and the payback period, a grant is not an investment and cannot be amortized so in the tariff could not be included the cost of the equipment, thus it did not make it profitable.

Problems with ESCO Rivne project:

- I. The project focused on boiler construction and rehabilitation
- II. Grants prevented a pure private sector approach and distorted the market
- III. The heating tariff in Ukraine was set on an annual basis and tariff levels were too low. After the project had finished, also subsidies for gas have been removed.
- IV. ESCO Rivne had no balance sheet, had difficulty for borrowing money and could not finance projects using its own resources
- V. The business model did not show large profits
- VI. The legislative basis in Ukraine did not encourage shared savings contracts
- VII. People working in ESCOs should have a financial background, the project manager did not have such background

As a conclusion it is challenging, but possible to create a successful public – private partnership & ESCO but only with a lot of hard work, oversight, and ability to learn from mistakes. Effectively addressing legal, regulatory, and policy barriers is the key to achieve transformational changes. The ability to undertake Adaptive Management while the project is underway is absolutely essential. It is important to also understand that activities and outputs can be changed in order to better achieve successful outcomes. In the same time, it is important to understand that 100% grants can distort the market.



2. EnPC/ESCO in Romania: EBRD proposed scheme for ROP 2014-2010 is a direct management by the Managing Authority for the ROP (MA), through an EE grant scheme, with ESCO/EnPC involvement. For local authorities the best option would be to submit the financing request and the budget for the investment will be co-financed through EU and ESCO budget on his behalf with shared savings and co-financing by ESCO.

EBRD has prepared through consultations with stakeholders at national level, local municipalities and ESCOs a draft for EnPC, to be negotiated and discussed with relevant stakeholders, a model for negotiating contracts between local municipalities and ESCOs.

EBRD provides specific support for Romania in EE financing scheme in public buildings and public lighting, preparing the grant scheme financed under ROP 2014 – 2020, in order to reduce the payback period for ESCOs and to guarantee savings for local authorities. The ESCO will implement the design works and investments, relieving the local authority from all technical and financial aspects, the local authority will come in this partnership with well-prepared personnel that will have to monitor the contract clauses and risks and variables – such as the price of energy, consumers' behaviour, etc. The EBRD's technical assistance provided for local authorities can form these personnel, providing training in marketing, awareness and technical assistance on what means monitoring the contract after implementing the EE measures.

Under competitive dialog, EBRD proposed a two steps system for grant allocation:

- Pre-agreement signed between the Local Authority and MDRAP AM: the Local
 Authority based on an initial audit estimates the measures to be implemented and
 the cost of investment.
- II. Signature of the contract for the grant (the amount is defined by the consumption strip of the building) with the Regional Development Agency, MRDAP and the Local Authority

Between these two steps will be selected the ESCO (the ESCO will provide the list of measures to be implemented): the local authority will submit the financing request to MRDAP – MA of that region, and will sign the contract with MRDAP – MA and the Regional Development Agency, and in parallel the local authority will sign the EnPC with the ESCO. The ESCO will receive the grant and will transfer it to the ESCO at "turn key" (when the



investment has been finalized) and the rest of the investment will be recovered through savings.

3. ESCO Demo Projects in Hungary and Ukraine with local communities for fuel poverty mitigation – WWF Hungary WWF Hungary is implementing two demonstration projects (in Tisza floodplain and in the Ukrainian Danube Delta), which are linking ESCO investments with reducing the climate change effects. The two projects have been designed to test nature and business type of project solution to reduce poverty and to lower environmental risk and to generate new income for local communities. The objective of these projects was to identify, create and communicate practical examples in the region of land use that can significantly contribute to poverty reduction, energy poverty reduction and to conservation, as well.

One of the conclusions was that poor people would never be able to put their money in ESCO projects, but they can invest their resources, their labour and it has to be integrated into ESCO models. There has to be a link between the supply chain of the company and the livelihood sources, the livelihood of the communities.

Given the link between ESCO and the final consumer, the two projects prove that the ESCO scheme can be applied in rural areas, as well, and reveal the possibility of applying this model in Romania.

4. ESCO Development Best Practice: Questioning the Appropriateness of the ESCO Best Practice and Model for Scaling-up EE in the Municipal Sector and Social Housing The presentation included (i) Basic requirements to meet and preconditions toward ESCO development in the municipal sector; (ii) Best Practice: EPC EE projects implementation stages and constraints; (iii) Standard EPC projects financial analysis; (iv) Need for a new EPC model in social housing; (v) New EPC modality financial analysis and modelling.

The discussions around the presentation resulted in the following conclusions:

- ESCO investments in poor areas in residential sector could be risky and it would be very



difficult to direct ESCO type investments for improving energy efficiency in social housing sector, especially to low-income areas;

- Even if the main focus remains on public buildings, the idea of ESCO investments in social housing has to be further explored, as there are a series of financial mechanisms that can facilitate this type of investments;
- ESCO market is not fully developed, there is a need for pilot projects to innovate and to develop a new model for ESCO investments;
- While working with the Romanian Ministry of Regional Development and Public Administration (MDRAP) for the residential buildings scheme, EBRD didn't recommend an ESCO type investment for the residential sector under the Operational Programme for 2014-2020 (under this programme, there are around EUR 800 mil. from the European Commission for energy efficiency in the residential sector).

5. ESCO/EnPC in Romania – EBRD Pilot Project

EnPC, in accordance with EU regulations, proposes an alternative financing scheme for energy efficiency, by replacing public funds with private financing from ESCO companies. The financing model currently applied: ESCO finances investments with commercial payback – City only pays for the rest, using for instance, grants.

There are two project types under development: (i) schools and kindergartens; (ii) hospitals.

At this moment, the contracts are in the negotiation stage and the first tender process will be launched in November-December 2014.

6. The difference between the energy costs of a building and what has been paid for the energy consumption may represent a risk factor for ESCO type investments. In this respect, a map showing the local administrations in Romania which pay on time their energy bills would be a useful tool for the ESCO market.



- 7. There are four pilot projects in Mangalia (Romania) which will implement the EGAIN Forecast technology a climate-based control of heating in buildings, which leads to energy savings up to 15-20%. Ms. Griguta Oprea, representing the company which implements this solution in Romania, questioned the possibility to apply this technology in other municipalities which develop building rehabilitation projects. Within this context, the UNDP-GEF project may facilitate a dialogue with the pilot municipalities which are part of the project for exploring the possibility of their interest in a future cooperation.
- 8. In Romania, the legislative framework for ESCO has been established and the ESCO market has a large potential of development. The type of projects that has been presented during this workshop generates the fact based policy recommendation, based on demonstrative projects at local level.
- 9. EBRD proposals (representing a result of a technical assistance contract between EBRD and MDRAP under ROP 2007-2013) are under evaluation by the Romanian authorities and the final decision is to be made by MDRAP, which represents the Managing Authority for ROP 2014-2020. MDRAP's formal agreement for developing an ESCO type fund will be sent within two weeks. This proposal is in line with European Commission's recommendations for ROP 2014-2020 to have more financial mechanisms (ESCO is a financial mechanism).