Case Study // Round Table SDG 7: Improving the Efficiency of the Energy System

**Establishment and operation of the Budgetary Fund for Energy Efficiency**

**Republic of Serbia**

*Level: national*

**Summary**

In order to achieve its international obligations and strategic goals through support for implementation of energy efficiency investments, Republic of Serbia has established Budgetary Fund for Energy Efficiency (BFEE). Due to the small annual budget, at this stage, BFEE has mainly demonstration and awareness rising effect, however its operation clearly indicates that with properly set technical requirements savings of 40% may be achieved. Operation of such facility has to be constantly improving in order to achieve best possible results.

**Situation**

Energy intensity of Republic of Serbia is 2-3 times higher than in neighbouring EU countries and 4-5 times higher than several times higher than the EU average. In 2014, GDP per capita in Serbia was 4,635 € while the average GDP per capita in 28 EU countries was 27,400 €. Total primary energy supply is largely dominated by coal while more that 45% of the final energy consumption is within the building and services sector (it is shown jointly in Energy Balance).

Ministry of Mining and Energy of Republic of Serbia (MoME) is in charge of energy efficiency policy. There are the two main laws in the field of energy efficiency: Law on Efficient Use of Energy (LEUE) and Law on planning and construction. As a signatory to the Energy Community Treaty Republic of Serbia accepted obligations to implement EU Acquis in the EE field and achieve certain targets in this area.

Thus potential for energy efficiency improvement in Republic of Serbia is evident, however, economic situation and low awareness of energy end users is not favourable for implementation of energy efficiency (EE) projects.

**Strategy**

Republic of Serbia has so far adopted three National Energy Efficiency Action Plans (NEEAP) and has set a target to save 9% of final energy consumption (0.7524 Mtoe) in the period 2010-2018. It is foreseen that 58% of this target should be achieved in the building and services sector, 25% in the transport sector and 18% in industry.

The target in the first NEEAP for the period 2010-2012 was very low, only 1.5%, as at that time, there was no regulation on energy efficiency or financing mechanism to support energy efficiency improvement except some donor/IFI funded projects.

In order to support target achievement LEUE was adopted in 2013 and has introduced several mechanisms aiming to force and support EE among which: Energy Labelling, Energy Management System, Budgetary Fund for Energy Efficiency and ESCO financing.
Budgetary fund for improvement of energy efficiency was established and started its operation in 2014 with the aim to finance/co-finance implementation of energy efficiency measures. BFEE is a budget line in the Budget of the Republic of Serbia operated by the Ministry of Mining and Energy, funded through the Budget of the Republic of Serbia (State Budget) and Donations. Beneficiaries could be legal and private persons. Fund awards financing through Public calls, in accordance with the Annual programme adopted by the Government each year and Rulebook prescribing rules for funds allocation.

Results and impact
- In 2014, the first Public Call was issued for financing energy efficiency projects in municipal buildings. Eleven projects were selected and implemented during 2015 and the first quarter of 2016. The overall level of investment was about €660,000, and resulted in consumption declined by 2 GWh (40 percent) compared to the previous period. Fund is providing maximum 70% of the investment.
- In 2016 two public calls for investment in EE projects in municipal buildings were launched:
  - In the first public call 15 projects were awarded a financing of about €1,000,000 (source of funding - Budget of RS) and are expected to result in savings of about 4.5 GWh (40 percent on average).
  - Second public call was implemented with the support of UNDP and GEF funding. Through this public call 13 projects were awarded a financing of about €200,000 (source of funding - Budget of RS) and USD 500,000 (source GEF/UNDP) and are expected to result in savings of about 3 GWh (40 percent on average).
- In total investment of about €3,500,000 is secured for 39 projects (27 finalized so far) with the contribution from municipalities of about 30%. It is expected that overall energy savings will be about 9.5 GWh (40%) with CO₂ reduction of about 4,200 tCO₂. Most common measures are reconstruction of thermal envelope including replacement of obsolete windows and reconstruction of heating installation (sometimes including fuel switch).
- One of the most successful projects was Energy Efficiency Project in Kindergarten “Poletarac” in Mali Zvornik:
  - Replaced obsolete windows with new polyvinyl chloride (PVC) windows
  - Installed insulation on the roof and outer walls
  - Replaced the existing oil boiler with a new pellet boiler
  - Installed thermostatic valves on radiators
  - Energy consumption before the project 89,048 kWh
  - Energy consumption after the project 28,050 kWh
  - Energy savings 68.5%
  - Total investment €50,000
  - Contribution of the Budgetary Fund 65%

Challenges and lessons learned
- Quality of documentation submitted in the application to the public call is usually not of a good quality
- Applications are often missing some of the documents required by the public call so some potentially good projects are not awarded funds
- There is no separate unit in the Ministry dealing with the operation of the Budgetary fund so preparation of Public Call and its evaluation, monitoring and payment processing for selected projects is difficult and time consuming.
- Being placed in the Ministry, Budgetary fund operation includes a lot of administration and time-consuming decision making process
- BFEE funds coming from the state Budget are available on a yearly basis and are usually awarded based on the success of spending in a previous year. As the process of selection of the projects and their implementation (including public procurement by municipalities) takes often more than a year, some portion of the funds for each year include financing of the projects from the previous years, meaning that there is less money to be awarded to new projects in a new year.

As a feedback from the implementation of the first public call in 2014:
- In 2015/2016 rulebook related to BFEE operation was revised in order to enable easier evaluation of the projects
- Text of the first Public Call for 2016 was also revised and many more predefined forms were introduced, projects scoring was changed so projects implementing more predefined measures had the advantage and some additional technical documentation was requested. In order to facilitate application process a workshop for municipalities was organized and explanations provided. At the website of the Ministry in the public call section, all received questions and answers were regularly published during the time for submission of the applications. Standard model contract was also further improved.
- Text of the second Public Call for 2016, implemented jointly with UNDP, was additionally revised to reflect criteria of GEF funded project and reflect specific situation with two sources of funding. For this public call, UNDP provided technical assistance: in the process of evaluation of applications, checking public procurement documentation prepared by the municipalities before tender issuing, checking technical documentation before payment and sight visits. In this public call, some specific requirements in terms of implementing some parts of energy efficiency regulation and policy were included.
- In order to make further improvement in the field of energy efficiency financing the Ministry of Mining and Energy:
  - started to work on further improvement of the BFEE operation rulebook which would enable implementation of the process of projects selection in two years which would allow selection and preparation of documentation in one and project financing in second year. This should allow spending of the total amount awarded by the State Budget to BFEE and thus enabling increase of these funds and spreading its activities to other beneficiaries as well.
  - initiated introduction of a fee for energy efficiency on energy and energy carriers, which should increase funds available for energy efficiency
  - initiated an IPA funded project aiming to identify legal setup for establishment of a Fund for energy efficiency as an independent institution.

**Potential for replication**
Technical requirements implemented by the BFEE can be replicated in any projects implemented in Serbia or region.
Any funds to be established at a national or any other level may benefit from the experience of BFEE.

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