



Results of CWP.01.AM and CWP.08.MD

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ITS Combined Event on lessons learned on Energy Performance Contracts (EPC), EU experience and applicability in the Partner Countries RWP.09
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BUILDING PARTNERSHIPS FOR ENERGY SECURITY

Objectives of the activity (AM-90/ CWP.01.AM)



- To increase the capacity of 30 engineers selected by the ESCO Association for developing and accessing EE and RES projects;
- To increase the number of bankable EE and RES projects through capacity building of engineers;
- **To develop proposals for improving legal and regulatory framework for energy services**
- To develop draft legal acts for secondary legislation and/or regulations to improve SE lending environment.

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1. Improvement of the current legislative framework



Decree proposes the following five concrete measures

1. Legal entity responsible for implementing the foreseen measures;
2. Disseminate information on energy services to the public;
3. Making available and maintaining an open list of energy service providers;
4. Supporting public authorities to assume an exemplary role in the take-up of energy services
5. Monitoring and evaluating the functioning of the energy service market and making proposals for its improvement.

Objectives of the activity (MD-119/ CWP.08.MD)



Assist the EEA in developing the following:

- EPC template for the public sector;
- EPC template for the private sector;
- Methodology for energy performance contracting in the public sector;
- Guidelines for the elaboration of terms of reference for energy performance contracting in the public sector.

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1. Improvement of the current legislative framework



ITS developed Guideline and Basis of EPC Tenders:

- Full-fledged Energy Performance Contracts;
- The documents and templates have been prepared in a tried and appropriate way
- Rigid conditions and follow-up techniques - guarantee the building owner a pay-back of investment within the agreed time;
- Minimisation of risks for both parties - facilitation the growth and development of ESCOs.

2. Public procurement procedure



- Current legislation on public procurement - one of the key obstacles for implementing EPC in Moldova
- Moldova is in the process of changing its public procurement procedures - conformity with Public Procurement Directive of EU 2014
- Once transposed, this will remove the identified barrier to EPC

3. Financing.



- In 2012-2015, the EEF financed 169 projects (14.2 mln EUR)
- Results of these projects - case studies for the potential application of feasible EPC contracts.
- As long as the Fund finances 80% of the investment without proper requirements for the measurement and verification of the achieved savings, no building owner will opt for EPC
- Potentially, EEF can change the financial support scheme and start financing EPC projects in the future - minimised risks for ESCOs and a lower interest rate

4. Finding profitable energy saving measures



- The contractor's skill to propose energy saving - a hard-earned experience and is developed and honed over time.
- The qualified, certified energy auditors (in EU) are very good in academic work, but they have limited skills on the actual result of proposed measures.
- EU experience shows: approximately half of buildings under EPC are less than expected, but in the other half - greater than expected.
- Powerful case for aggregating a larger number of buildings together for an ESCO contract

5. Reference value (baseline)



- The baseline should be established with respect to actual energy consumption
- EPC might not be applicable for buildings in which owners do not maintain statutory indoor climate
- Most of local budgets in Moldova do not have enough resources to maintain proper indoor climate during the heating seasons.
- IMSP Asociatia Medicala teritoriala Botanica 2014.
 - Theoretical payback period – 7 years
 - Real payback period – 29 years
 - EPC (incl. ESCO's fee & % on bank credit) – 40 years

6. Minimum building portfolio needed for a successful EPC.



- Overhead costs for the ESCO are high and need to be spread-out.
- The risk to guaranteed savings is high and from the ESCO's profit there should be a minimum level of contingency
- EU experience shows: approximately half of buildings under EPC are less than expected, but in the other half - greater than expected.
- Normally a portfolio of buildings of at least 30 000 m² built-up area is required and the situation in Moldova has to evolve whereby an ESCO can undertake an EPC for portfolios of such size

7. High overhead costs and ESCO risks.



Swedish experience shows that the cost is about double for the ESCO than in the normal contracting model. Nevertheless, some building owners continue to use the EPC model for the following reasons:

- Decision-makers give high value to the guaranteed savings and that they will get back the invested amount in 10 years
- When an EPC contract is signed the full contract amount will be allocated. In the normal contracting model - easy to postpone the energy saving measures and allocate funds for other purposes
- Under EPC the risk is shared with the ESCO

8. Commencement of the EPC model in Moldova.



- It is strongly recommended to start with smaller projects. All could be done as per the EPC model except that the savings should not be guaranteed
- Each one of the potential Moldovan EPC contractors needs to carry out at least three small projects without guaranteed savings in order to gain highly valuable experience
- It is highly recommended to adopt the follow up model that is a part of the EPC template presented by the ITS

9. When is the EPC model preferable?



- In EU, as well as in Moldova, not all energy saving projects will suit the EPC model
- The situation in Sweden for example is, in fact, that the majority of projects are not carried out following the EPC model
- The EPC model is not a 'one-size-fits-all' solution and various other options are applied worldwide but each according to the local situations.

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THANK YOU

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