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INCREASING TRANSPARENCY OF ENERGY SERVICE MARKETS

Country Report on EPC Pilot Projects Evaluation and use of Code of Conduct

LITHUANIA

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Transparense project

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1 Introduction

Within the framework of the project TRANSPARENSE, which receives support from the program IEE (Intelligent Energy Europe) of the European Union, European EPC Code of Conduct has been developed (hereinafter Code) for energy service providers (ESCOs) implementing EPC projects. The objective of the Code is to increase the transparency of the EPC markets and ensure the high quality of the energy services provided by the ESCO. By adhering to the EPC core values and code of conduct, the ESCOs and customers develop a solid foundation for a working partnerships based on trust and confidence. They are expected to utilise the Code in order to further develop energy efficiency services to meet their goals and expectations which shall be evaluated at a later stage.

In addition, the developed EPC Code of Conduct will be tested and evaluated in at least 25 EPC pilot projects. This will also provide feedback on the Code. The outcome and results of the evaluation will be used in all country reports by the Transparense project partners in this work package.

This report presents the evaluation of the Code application in the pilot projects in Lithuania. The major stakeholders (both client and ESCO side) in the pilot projects of the country have been interviewed / asked to supply relevant information. For this, detailed questionnaires have been used (see Annex), which were the main data source for the analyses included in this report.

The main objective of this evaluation is to assess whether the application of the Code in Lithuania manages to ensure the defined quality criteria in practice, what the success factors are and which barriers might still exist, which should be further addressed.

2 Barriers and success factors for the pilot projects

2.1 Barriers

The legislation of the Republic of Lithuania is not sufficient for EPC activities.

The market of energy services is not well developed and there are only a few energy service companies, which want to start EPC in Lithuania. The majority of ESCs on the Lithuanian market act in the district heating sector (in particular, heat generation and supply). The most popular type of contract in Lithuania is very similar to one of the key energy contract types – the chauffage (heating) contract.

The household sector for EPC is associated with high risks. It concerns the way the customer makes a decision (in condominiums decisions are adopted by voting, which requires time-consuming explanatory efforts at the beginning of the project), the customer's solvency, long duration of the project and the complexity of project management.

Although the implementation of energy efficiency projects in condominiums is a complex process associated with the said risks, the implementation of projects in multi-apartment residential houses without a condominium set up is also complicated. However, it may be true to say that another obstacle limiting EPC activities is a slow process of incorporation of condominiums of flat owners in multi-apartment buildings and lack of initiative on behalf of the public.

A major circumstance suppressing the development of energy services in public buildings is the existing practice of upgrading public buildings (owned by municipalities or the state). Funding received from the EU Structural Funds, i.e. investments must be made within a certain defined period, which is why their fragmentation or postponement until sometime in the future and compensation from the savings envisaged are not attractive. If own budgetary funds were used for the upgrading of buildings and efforts were made to optimise investment costs, the hiring of energy services companies would become attractive. With the existing method of funding, an enterprise implementing energy efficiency measures have significantly fewer liabilities than an ESC and does not give any guarantees of energy savings while the funding is provided by the consumer proper. Practically all project implementation risks are borne by the energy consumer, i.e. the savings planned will be achieved if: energy saving possibilities are identified accurately, the measures proper are implemented with quality and at optimal prices and the project implementation is coordinated seeking to maximise energy savings.

Budgets for the maintenance of public buildings are annual, i.e. in accordance with the current procedure savings attributable to energy efficiency improvement measures do not remain with the body or organisation but are returned to the state budget.

In the sectors of services and industry, there is a lack of substantiated and reliable information about possible savings due to energy efficiency improvement projects and their economic attractiveness. Enterprises often lack the competence needed and cannot identify cost-effective energy saving opportunities. These questions could be answered by an energy audit.

Business entities use the services of enterprises implementing energy efficiency improvement measures. However this form of cooperation is often not an ESC but one-off provision of services.

The legal framework for the provision of energy services in the country is set by the Civil Code regulating the conclusion of transactions as well as the Law on the heating sector stipulating the responsibility of heating and hot water system supervisors.

The legal framework in the Republic of Lithuania is not developed for EPC. Relations between the energy supplier (producer) and the consumer are regulated, i.e. the procedure for calculating energy prices (tariffs) is regulated and relations between the parties are documented in the form of energy sale contracts, etc. Such detailed regulation has impact on the activity of ESCs.

An energy services contract is concluded by and between the consumer and the ESC. The energy supplier is not involved in this arrangement, i.e. the energy supplier as usual issues invoices to the consumer for actual energy consumption while the latter makes payments against those invoices. At the same time, relations of ESCs and energy consumers would be defined in an energy services contract. In this case, relying on the method agreed upon with the consumer, the ESC would assess the actual savings and issue an invoice to the consumer in accordance with the contract provisions. Thus, relations of energy suppliers and energy consumers are clearly separated from those of energy consumers and ESCs. To set standard transaction terms and conditions and thus reduce administrative costs when providing energy services to small consumers, there is a template of the energy efficiency contract in buildings drafted and approved by Order No 4-511 of the Minister for the Economy of 27 October 2008, but until now it is not working.

In Lithuania the market in energy services is not well developed. ESCs active here offer profitable energy saving measures, and services provided and measures implemented reduce energy consumption. More and more such enterprises are emerging. Apart from the ESCs, it is

also worth making reference to the members of the Lithuanian Energy Consultants Association or certified auditors who, in accordance with the provisions of Order No 1-148 of the Minister for Energy of the Republic of Lithuania of 2 August 2012 approving the Procedure for and conditions of conducting energy audits in buildings, installations and technological processes and for the training and appraisal of specialists conducting energy audits in buildings, installations and technological processes, are granted an auditor's qualification to conduct energy audits contributing to the broader application of various energy saving measures and the reduction of energy consumption.

Among the main barriers is no clear legal definition on ESCOs in Lithuania, so there is no legal requirement for this type of companies. ESCO type business licensing and/or certification is not defined. The existing country legal system does not provide financial support that could get ESCO of its activities.

In the absence of clear legal status, there are many different barriers for the establishment, operation and development of ESCO, its promotion, potential clients and financial institutions confidence, etc.

In the absence of clear legal status on ESCOs, EPC, there are not allowed to implement EPC projects in Lithuania, for other ones there is a number of administrative barriers, or a lack clarity on how to financially report on the project in the long-term, lack of interest from government, lack of standard guidelines for the public organizations.

EPC model is directly related to the guaranteed energy savings. So, the assessment of energy savings should be adopted strict legislation on the energy audits, implementation of energy saving measures (quality of implementation) and what is very important – energy savings measurement and verification functions. Currently Lithuanian legislation is insufficient to ensure the guaranteed energy savings. The existing accounting system prevents from potential direct settlements with the ESCO. At present time, an energy consumer for consumption of energy can pay directly to the energy supplier. A more flexible accounting system should be developed, that allows payments for energy consumed through ESCO.

The existing structure of authorities, responsible for energy efficiency improvement, is quite complicated. There is lack of good coordination and cooperation between the existing responsible authorities.

Financial barriers

The financial crisis in Lithuania (from the end of 2008 until now) had huge negative outcomes for initiating and developing ESCO projects. The economic downturn made potential ESCO clients more unstable, reducing their activity, increasing the difficulty in ensuring energy saving and raising the risk of insolvency. The economic downturn has also raised the importance of contractual flexibility. But, on the other hand, the financial crisis and economic restrictions had positive impact as well. The attention was focused on achieving cost for energy reduction through energy efficiency measures and taking advantage of the flexible financing mechanisms offered by ESCOs. Problems still exist in banking and other financial institutions. Lithuanian financial system is dominated by the banking sector, which leaves only 1/5 to other participants in terms of assets. The total number of banks including foreign bank branches is equal to 20. More, than half of assets (about 60%) are concentrated in three major banks: "SEB", "Swedbank" and "DNB" – all of them are fully owned by their Nordic parent banks.

The financial crisis influence on the possibilities to receive loan from banks due to higher access to loan, higher interest rates. Banks need stronger securities, substantially reduced the availability of providers to engage in long term (15-20 years) contracts.

2.2 Success factors

For overcoming existing regulatory, financial, administrative barriers the new Law on energy Efficiency in Lithuania is prepared.

The draft Law on energy efficiency is published in the information system of draft legislation. This draft instrument sets out that energy services will be provided by persons appraised in accordance with the procedure laid down by the Government or an institution authorised thereby, and with a view to creating more favourable conditions for the development of the market in energy services the institution authorised by the Government will publish information on energy services contracts concluded and recommendations on terms and conditions of energy services contracts ensuring energy savings and interests of final customers as well as information on incentive programmes and other measures to support energy efficiency services projects; will promote the creation of quality marks including quality marks of commercial associations; will publish and regularly update a list of providers of energy services and create conditions for consumers to learn about services offered by energy service providers; will draft sample energy efficiency contracts, provide information on best practices in concluding and implementing energy efficiency contracts including the results of a cost-benefit analysis taking into account the application of the lifecycle method and through other

measures will support the use of energy services in the public sector; will compile overviews of the developments on the market in energy services having regard to the implementation of energy efficiency measures listed in the planning documents.

In accordance with the procedure and conditions laid down by the Government or an institution authorised thereby, a joint information centre under the National Control Commission for Prices and Energy will have to provide consumers with comprehensive information on the conditions and procedure for the provision of energy services and energy service providers and other information relating to the provision of energy services.

Complaints and disputes in respect of the provision of energy services will have to be handled by the State Energy Inspectorate under the Ministry of Energy in accordance with the procedure laid down in the Law of the Republic of Lithuania on energy.

In the event of any obstacles relating or unrelated to regulation in using EPC and other energy efficiency services provided that make it possible to establish and/or implement energy efficiency improvement measures, an institution authorised by the Government will have to take steps to eliminate any such obstacles.

Moreover, to support national energy efficiency programmes, a national energy efficiency fund may be established. It will be incorporated, managed and administrated by the Government or an institution authorised thereby in accordance with the procedure and conditions laid down by the Government.

All these incentives are envisaged for the better development of the market in energy services with a view to achieving greater energy savings and energy efficiency improvements.

A big role for initiating and selecting the pilots projects in Lithuania had implementation of Transparense project. Using experience of project partners, from May 2014 the 3 public buildings in 3 different cities, as pilot projects were selected.

These pilot projects are approved by special decision of the Ministry of Energy (Decision of Ministry of Energy No 1-118 at 19 May 2014).

At present time Energy Audit and Investment Plan for one of pilots are prepared (pilot project “Renovation of Police Commissariat Building in city Kaisiadorys, Kaunas Region”). But, until now is lack approved Public procurement documentations. In the middle of June, with support of Transparense project, other Lithuanian experts drafts of all documents are prepared (drafts of documents presented in Attachment).

Also, as success factor was new special support program of the European Bank for Reconstruction and Development (EBRD) in Lithuania. Program started in the March of 2015. The main aim of program – support the Development of the ESCO Market in Lithuania. It includes support for preparation of Public Procurement Tender Documentations.

All these incentives are envisaged for the first Public Tender for EPC in Lithuania.

3 Pilot project implementation

Table 1 List of pilot projects and phases included

Project name	Project phases that already STARTED			
	Phase I - Project Preparation and development	Phase II - Procurement Procedure (after client announces call for tenders by publication of contract notice)	Phase III - Implementation and operation phase (after signing of the EPC contract)	Phase IV - Measurement and Verification (based on the first consumption measurement)
Renovation of Police Commissariat building in city Kaisiadorys, Kaunas Region (public building).	Energy Audit and Investment Plan are prepared and adopted. Energy saving measures assigned.	All documents (drafts) for Procurement Procedures are prepared. The first in the country Public call of EPC for pilot project will be published after official approval of documentation by Ministry of Energy.	EPC contract will be signed after finishing Public Procurement Procedures.	Measurement and Verification of energy will start after implementation of energy saving measures, presented in the EPC.

Table 2 Overview of the Code of Conduct implementation

Project name	Code of conduct implementation			
	ESCO signed Code	Code included in tender dossier	Code included in contract	Other (please specify)
Renovation of Police Commissariat building in city Kaisiadorys, Kaunas Region (public building).	We have agreement with the potential ESCOs, which are planning to participate in the Tender for the first pilot in Lithuania, for signature CoC after finishing Tender.	Code not included in Tender dossier.	Code not included in Contract.	Code will be signed together with the signature of Contract.

3.1 Pilot project No. 1

Pilot project title – Renovation of Police Commissariat Building in city Kaisiadorys, Kaunas Region (public building).

Energy Audit and Investment Plan are prepared. The main aim of the project – renovation of building. Renovation includes insulation of external walls, roof, replacement windows and external doors, replacement of inefficient lamps and lighting system, reconstruction of existing heating system, installation of measurement equipment for monitoring of energy saving.

Building is built before 1980. Existing heat consumption for space heating – 152 kWh/m^2/year. Expected energy saving after building renovation – 45%.

Energy saving is calculated by energy Auditors and tested by independent energy experts.

The owner of the building – Police Commissariat of city Kaisiadorys. Pilot project was selected by Ministry of Energy with support of Transparense partner (Lithuanian Energy Institute), client (Police Commissariat) and other market players. The main organizer for the implementation of the first pilot project in the country is Ministry of Energy (Department of oil, gas, electricity heat and energy efficiency). The responsible person from ministry – Adviser, Mindaugas Stonkus (Mindaugas.Stonkus@enmin.lt). Responsible organization for the financial side of EPC – Public investment Development Agency (hereinafter – VIPA).

Public investment development agency is preparing and implementing financial instruments for EPC in Lithuania. Managing Director of Agency – Gvidas Darguzas (g.darguzas@vipa.lt).

For communication with stakeholders, ESCOs (who want to start EPC activities), EPC clients, the Communication Strategy was prepared and used (more detailed data presented in Report D6.11 “Communication strategy LEI”). Big number consultations with potential EPC providers and clients were organized. Detailed Code of Conduct was presented and discussed. Questionnaires for evaluation Code of Conduct were completed and evaluated. Serious remarks for prepared CoC not received.

Code of Conduct was the main, result, presented in the number of workshops, seminars and especially in training sessions (organized by Lithuanian Energy Institute in accordance with Transparense programme).

All participants of training events completed Transparense questionnaires for evaluation Code of Conduct. Code of Conduct was promoted in national journals, other publications.

4 Code of Conduct application and evaluation

4.1 Phase I: Project preparation and development

At present time the Energy Audit for pilot is done. Investment plan prepared. Documents of the Energy Audit and Investment plan by independent energy experts are evaluated and approved. Code of Conduct for potential ESCOs, which are planning to start EPC in Lithuania is presented in national seminars, workshops, trainings, consultations, organized by Lithuanian Energy Institute in accordance withTransparense programme. Code of Conduct evaluated by pilot project facilitators and project client. Positive evaluation received. Detailed data presented in the Annex 2.

4.2 Phase II: Procurement procedure

In June 2015all documents for the Public Procurement Tender on EPC are prepared. Draft of the EPC Contract also is prepared and presented (D5-03 Procurement Documents, LT). In documents term and conditions of negotiated procedures with publication of a contract notice for supply of ESCO services to the pilot public buildings are included. 16 Annex to the Public Procurement are prepared and presented. Detailed Methodology for determining calculable annual quantity of for heating purposes, for determining of saving of Electricity for lighting purposes are prepared and presented. Application evaluation procedures are determined.

The first in Lithuania EPC Public Procurement Tender will be open, after approval prepared documents by Ministry of Energy (expected time – October 2015).

4.3 Phase III: Implementation and operation phase of EPC/Code pilot projects

Code of Conduct was the main result of the Transparense project, presented in the workshops, seminars, trainings, consultations, organized by Lithuanian Energy Institute. CoC tested on Pilot project “Renovation of Police Commissariat building in city Kaisiadorys, Kaunas Region” facilitators and Client (Annex D5-01 Part A, B). Preliminary agreement for signature of CoC from potential ESCOs (which are planning to participate in pilot project tender) are received.

4.4 Phase IV: Measurement and verification

Detailed methodologies for calculation of energy (heat, electricity) after implementation energy saving measures in pilot project are prepared and presented.

Real energy saving measurement and verification according with prepared methodologies will start after implementation of energy saving measures in the pilot project (public building).

4.5 Evaluation of the wording of the Code of conduct by ESCOs and clients

For evaluation of the Code of Conduct Lithuanian Energy Institute contacted the major energy service companies, which want to start EPC in Lithuania. Series national events (National Steering Committee meetings, seminars, workshops, trainings, consultations) for that were organized. These explain the principles of the Code and how they can be implemented in a best practice project. These allow an opportunity to provide feedback on the uptake of the Code, to share best practice strategies and collect recommendations for improvements to the Code.

Get the results of the surveys showed that the Code of Conduct is well prepared, for biggest part of participants is easy to understand the basic values and principles for the successful preparation and implementation of EPC projects in Lithuania.

Annex 1: EPC Project Evaluation

Methodology

Basis of the evaluation template and questionnaire is the European EPC Code of Conduct (JSI and SEVEn 2014) conducted in the framework of Transparense. The set of principles and values which are described in the Code of Conduct have been taken over for evaluation:

- Values: Efficiency, Professionalism, Transparency
- Principles: Cost Effectiveness, Sustainability, Relationship, Transparency, Comprehensiveness, Financing, Interest in success, Quality

For each pilot project, relevant information is compiled in 3 parts:

- Basic information on the project will be given in **Part A** - this may be filled in by the **Transparense partner**.
- In **Part B** the pilot project **customers** are enquired about the project with a clear focus also on ESCO (and facilitators) evaluation.
- **Part C** collects information from **ESCO**s how/if they consider the Code useful and appropriate

The templates for parts A, B and C are prepared as **separate documents** so the partners can have them separate when sending out to different persons.

The evaluation template request feed-back information during different phases of an EPC project on how effective and practical the EPC Code of Conduct was and also on how the pilot projects were carried out.

The four phases have been outlined in the Code of Conduct document as:

Phase I: **Project preparation and development**

Phase II: **Procurement procedure**

Phase III: **Implementation and operation phase of EPC/Code pilot projects**

Phase IV: **Measurement and Verification**

These phases form the structure of the Part B questionnaire - whereas the above mentioned values and principles will form the criteria and indicators. Each phase has its role in providing the feedback on the proposed EU Code and the pilot projects. The user of this evaluation template will have to decide if all phases are applicable for his/her procedure.

In all four phases a *quantitative evaluation* is foreseen in which data information will be collected – giving also a technical overview of the project. The data will be derived from the selected building(s). As the most important criteria for the selection of a suitable EPC projects are various effective measures and the subsequent calculation of savings these are included as well in the questionnaire. In addition, it also focuses on the amount of investments as well as the method through which the project is financed.

More evaluative and subjective question (*qualitative evaluation*) are also part of the evaluation. The goal of this qualitative evaluation is to select those parameters which have the most significant impact on the quality. At the same time, qualitative evaluation should reflect the satisfaction of the client in respect of the taken actions, technical solutions and the results achieved.

All three questionnaires of each project form the basis for the evaluation in the context of the country reports.

For each pilot project in a country, the filled in parts A, B and C are attached as Annex to this country report in the following.

Annex 2: EPC Project Evaluation (D5-01, Part A, B)