

european energy * service initiative 2020



ABOUT EESI 2020

The aim of the EESI 2020 project is to contribute towards the EU 20% energy saving target, through significantly broadening the application of energy performance contracting (EPC) by means of the systematic implementation of long-term energy efficiency projects in 9 large city regions.

Berlin Energy Agency	Germany
SEVEn, The Energy Efficiency Center	Czech Republic
Graz Energy Agency	Austria
Norwegian Energy Efficiency Inc	Norway
Codema – Dublin's Energy Agency	Ireland
European Labour Institute	Bulgaria
Factor 4	Belgium
Catalan Energy Institute	Spain
North-West Croatia Regional Energy Agency (REGEA)	Croatia



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Executive Summary

ecommendations for overcoming some of the barriers to improved energy efficiency of existing EU building stock are presented in this Position Paper. It draws on the experience of practitioners across 9 European regions, who have deployed the concept of energy performance contracting (EPC) to help tap into the vast potential for improved energy efficiency in buildings. This is key to better productivity, energy security, job creation and lower carbon intensity.

Energy performance contracts aim to increase confidence among building owners and investors that the engineering measures in which they invest will, in practice, deliver the expected energy and cost savings. A related aspect of some contracts is a financial instrument that offers the opportunity for third party investment in the up-front capital cost of the energy-saving measures, in return for a share of the savings in the ongoing running costs.

From the experiences of the partners in the EESI 2020 project the following recommendations are now presented:

- Create new ways to work within and around the recent Eurostat ruling which determines that the capital expenditure undertaken by an energy services company "shall be recorded on the government balance sheet"
- Put more attention on expanding the private sector EPC market, which is not affected by the Eurostat ruling. There is still a large market outside of the public sector building stock
- 3. Recognise the role of *Project Facilitators* in the realisation of specific EPC projects, and train more *Project Facilitators* at regional level
- 4. Encourage programmes aimed at improving national frameworks for EPC and financially supporting the EPC clients. For example, the National Energy Services Framework in Ireland and the BAFA programme in Germany

A central message of this Position Paper is that the barriers to EPC can only be overcome through professional guidance from qualified *Project Facilitators* who understand the complexity of the EPC model and who can develop good communications and build trust among the parties to the contract.

EPC IN EUROPE

nergy efficiency is an issue that has been identified as a top priority at the highest level in the European Commission. It is key for productivity, energy security, job creation and lower carbon intensity, yet many Member States face challenges in meeting their EU 2020 target for energy efficiency.

While improving the energy efficiency of the building stock generally makes sense to political and technical experts, the building owners themselves and the financial lending institutions that can help fund the capital investments are not convinced that the future energy savings, and the returns on their investments, are fully reliable. It would also appear that the high expectations among some political institutions are not borne out in practice.

By way of background, many of the existing buildings across Europe were constructed before the first oil crisis in 1973, when energy was cheap and little consideration was given to energy efficiency. Today, when these building owners wish to improve the energy efficiency of their buildings they must replace the old inefficient boilers with modern highly efficient heating and cooling systems, upgrade the insulation in the building fabric and replace light fixtures and other electrical equipment.

These type of measures can be expensive and the building owners must evaluate the capital investments against the potential cost savings in energy bills over the longer term. Even if the contractors assure the building owners of the future energy and cost savings there exists a lack of confidence that the promised savings will be realised in practice. Against this background, energy performance contracting has introduced a new twin-track approach:

- The energy performance contract provides a hard guarantee to the building owner that the projected energy (kWh) and cost (€) savings will be delivered and maintained over time, through a binding long-term (5 to 15 year) contract with the supplier of plant and equipment usually an energy services company (ESCO). In the event that the targets are not realised the ESCO must pay financial penalties
- In many contracts the ESCO also offers access to third party finance, allowing the facility owner the additional benefit of reducing the upfront capital investment, as the investments are repaid directly from the saved energy costs
- This concept of energy performance contracting, as a means of delivering guaranteed energy efficiency in existing buildings, has gained considerable traction in some EU regions yet is quite unknown in other regions

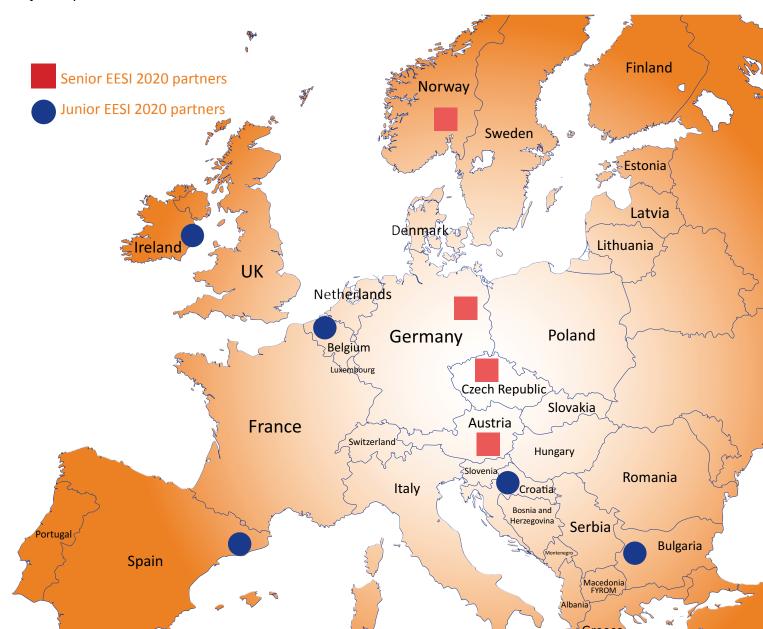


In the EESI 2020 project, which has produced this EU Level Position Paper, the defining strategy for broadening the roll-out of EPC-driven energy efficiency measures is twofold:

- Establishing a strong institutional framework for EPC (for example through task forces) along with a legislative supporting structure, such as energy plans, on the regional level
- Building capacity among EPC Project Facilitators through the transfer of existing know-how from senior partners to the novice, or less experienced, junior partners

Under the EESI 2020 project there has been the successful roll-out of multiple EPC projects in the regions where EPC is already quite well established – in Berlin, Lower Austria, Prague and Oslo. Also, there has also been significant progress in introducing pilot EPC projects in the regions new to EPC – Dublin, Antwerp, Sofia and North-West Croatia and Catalonia.

Once trained to a high professional standard, the new *Project Facilitators* will act as multipliers for the EPC concept in their regions and secure the long-term impact of the project.



BARRIERS AND SUCCESS FACTORS

here are several barriers to EPC, which can lead to low demand on the client side, long timeframes for EPC implementation and a lack of suitable financial products from the lending industry.

One barrier is the complexity of the EPC contract compared with regular contracts for the supply of goods and services. This complexity is necessary to provide a hard guarantee of performance over time, which is the essence of the EPC concept, but it does present a barrier especially in new regions where there are not any local exemplars.

Another barrier is the difficulty in communication between multiple stakeholders across the different professional sectors involved in an EPC: building owners, facility managers, ESCOs, and legal and financial departments.

A new and major barrier to EPC on the financial side is the Eurostat Guidance Note: 'The Impact of Energy Performance Contracts on Government Accounts' (7th August 2015). This ruling determines that the capital expenditure undertaken by an energy services company "shall be recorded on the government balance sheet". It is unfortunately not favourable for third party financing of EPC projects and is having a negative impact on many EPC markets.



Much has been achieved in overcoming these barriers. A key success factor is the role of well-trained professional *Project Facilitators*, working within a strong institutional framework, who support the preparation, negotiation and implementation of the projects on behalf of the buildings' owners.

Another success factor is the creation of 'hot spots' or clusters of exemplar EPC projects where there is local know-how and expertise in identifying appropriate buildings and negotiating the complex contracts to guarantee the performance of energy efficiency measures.

In conclusion, a central message of this Position Paper is that the barriers to EPC can only be overcome through professional guidance from qualified *Project Facilitators* who understand the complexity of the EPC model and who can develop good communications and build trust among the parties to the contract.



RECOMMENDATIONS

1. Eurostat Ruling on EPC

This guidance note is based within the existing EU financial framework, where public debt is limited through the Maastricht Treaty of 1992 and in order for the guidelines for EPC to change it would require a change to the hierarchy of existing EU financial legislation. As it stands, the Eurostat guidelines are in place and there are currently no planned changes to legislation to appease the situation for EPC.

Recommendations:

- Create new ways to work within and around the ruling, possibly by defining exceptions. This issue is more critical in some European markets than in others
- Put more attention on expanding the private sector EPC market, which is not affected by the ruling. There is still a large market outside of the public sector building stock



2. Effective communication

The role of the EPC *Project Facilitators* in the EESI 2020 project has been very positive in raising awareness and knowledge of EPC and helping to bridge the credibility gap within the public sector and the financial institutions. There are now 27 successful new EPC projects already implemented across cities and regions in 9 Member States.

The recommendation to build further on this experience is to train more *Project Facilitators* to engage more positively with relevant stakeholders from all sides. In order to communicate effectively, *Project Facilitators* need to be active listeners and sensitive to the actual needs of the clients, rather than simply reiterating a standard message. The ability to develop trust is paramount. Furthermore, the *Project Facilitators* need to be neutral moderators between the needs of the clients and the requirements of the ESCOs.

Recommendations:

- Recognise the role of Project Facilitators for the realisation of specific EPC projects, and train more Project Facilitators at regional level
- Increase Market Facilitator programmes aimed at improving national frameworks for EPC and financially supporting the EPC clients. For example, the National Energy Services Framework in Ireland and the BAFA programme in Germany



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