



D2.5 Country Report on Recommendations for Action for Development of EPC Markets

SPAIN



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Abbreviations

- ESCO: Energy Service Company
- EPC: Energy Performance Contract
- EED: Energy Efficiency Directive
- EESI: European Energy Service Initiative
- EIB: European Investment Bank
- IDAE: National Energy Agency

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1 Summary

The present report aims at providing recommendations for action for the successful development of the EPC market in Spain. The report focuses on identified barriers and success factors for the implementation of EPC projects.

The report is building on the results of the survey carried out by Escan consulting, the market knowledge of the authors, data and information gathered by two other similar projects, the European Energy Service Initiative¹ (EESI) and the ChangeBest project². It is also intended as a continuation on the work of the European Commission's Joint Research Centre – Institute for Energy, and more particularly on its 2012 Status Report on Energy Service Companies Market in Europe³ and Spanish ESCO market 2013.

The main recommendations for development of the EPC market are included in this report:

This project elaborates the *Code of Conduct* not only at European level but also national specific document: By adhering to the EPC core values of the Code of Conduct, EPC providers and customers develop solid foundations for 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.

Avoiding the *main legislative and administrative barriers* and a *governmental strategy* are necessary in order to develop the energy efficiency services market and the implementation of Energy Performance Contracting, EPCs.

In Spain only *few information, dissemination and education measures* focused on the market of energy efficiency services at governmental level are carried out; and measures about EPCs are hardly ever done. Also *the financial difficulties* for available soft loans should be overcome to boost the market of Energy Performance Contracting.

¹<http://www.european-energy-service-initiative.net/eu/toolbox/national-reports.html>

²http://www.changebest.eu/index.php?option=com_content&view=article&id=43&Itemid=10&lang=en

³<http://publications.jrc.ec.europa.eu/repository/bitstream/111111111/15108/1/jrc59863%20real%20final%20esco%20report%202010.pdf>

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2 Introduction

2.1 Methodology

The contents of this report are based on two main sources:

- the results of a nation-wide EPC survey which was sent to the country's main actors within the EPC market
- the market knowledge of the authors, as well as research from local / national literature (publications and studies, legislation documents, official statistics and databases)

The first step in collecting the data used in this document was to distribute a survey focused on Energy Performance Contracting (EPC) to the country's most relevant energy services companies, organisations and finance houses. The survey contained questions around four main areas: existing ESCOs and national EPC market; EPC models, financing models and policy initiatives. The answers were then analysed and the results were presented in a previous report in aggregated form (Transparensense National Report on identified barriers and success factors for EPC project implementation).

This report goes one step further and makes a series of recommendations tailored for Spain's national EPC market. These recommendations are based on the information gathered from the respondents to the surveys (in written form or in conversations), as well as on the authors' knowledge of the national market and of any relevant literature / research piece.

This report aims at showcasing the successful experiences for EPC providers in Spain and separating what has been proven to enhance the EPC offering from what constitutes potential barriers. The recommendations contained in this report have been made in order to tackle the issues highlighted in the previous Transparensense report (Transparensense National Report on identified barriers and success factors for EPC project implementation). The authors believe that EPC providers / customers and the EPC industry as a whole will benefit from replicating the success factors observed within the national market. These recommendations should be seen as "best practice" guidelines and disseminated within Spain in order to improve the quality of the EPC market.

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2.2 What is Energy Performance Contracting

Energy performance contracting (EPC) is when an energy service company (ESCO) is engaged to improve the energy efficiency of a facility, with the guaranteed energy savings paying for the capital investment required to implement improvements. Under a performance contract for energy saving, the ESCO examines a facility, evaluates the level of energy savings that could be achieved, and then offers to implement the project and guarantee those savings over an agreed term.

A typical EPC project is delivered by an Energy Service Company (ESCO) and consists of the following elements:

- **Turnkey Service** – The ESCO provides all of the services required to design and implement a comprehensive project at the customer facility, from the initial energy audit through long-term Measurement and Verification (M&V) of project savings.
- **Comprehensive Measures** – The ESCO tailors a comprehensive set of measures to fit the needs of a particular facility, include energy efficiency and in addition, can include renewables, distributed generation and water conservation.
- **Project financing** – The ESCO arranges for long-term project financing that is provided by a third-party financing company, typically in the form of a bank loan.
- **Project Savings Guarantee** – The ESCO provides a guarantee that the savings produced by the project will be sufficient to cover the cost of project financing for the life of the project.

Energy Performance Contracting allows facility owners and managers to upgrade ageing and inefficient assets while recovering capital required for the upgrade directly from the energy savings guaranteed by the ESCO. The ESCO takes the technical risk and guarantees the savings.

The ESCO is usually paid a management fee out of these savings (if there are no savings, there is no payment) and is usually obligated to repay savings shortfalls over the life of the contract. At the end of the specific contract period the full benefits of the cost savings revert to the facility owner.

The methodology of Energy Performance Contracting differs from traditional contracting, which is invariably price-driven. Performance contracting is results-driven: ensuring quality of performance. ESCOs search for efficiencies and performance reliability to deliver contractual guarantees.

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2.3 Definition of EPC and EPC provider

While there are a vast number of definitions of EPC within Europe, within Transparensense project we use the EU wide definition provided by the Energy Efficiency Directive⁴ (EED):

“**energy performance contracting**’ means a contractual arrangement between the beneficiary and the provider of an energy efficiency improvement measure, verified and monitored during the whole term of the contract, where investments (work, supply or service) in that measure are paid for in relation to a contractually agreed level of energy efficiency improvement or other agreed energy performance criterion, such as financial savings;”.

At the same time, within Transparensense project, the focus will be given to the EPC projects, where the above mentioned “contractually agreed level of energy efficiency improvement” is **guaranteed** by the EPC provider⁵. This is in line with the EED, as in its Annex XIII, guaranteed savings⁶ are listed among the minimum items to be included in energy performance contracts with the public sector or in the associated tender specifications. Moreover, in the article 18 of EED, Member States are required to promote the energy services market and access for SMEs to this market by, inter alia, disseminating clear and easily accessible information on available energy service contracts and clauses that should be included in such contracts to **guarantee energy savings** and final customers’ rights.

Further, within the Transparensense, we define the companies providing EPC as follows:

“**EPC provider**’ means a natural or legal person who delivers energy services in the form of Energy Performance Contracting (EPC) in a final customer’s facility or premises”

Such definition respects the fact that EPC is only one type of energy services, and is in line with the definition of the energy services provider specified in the EED (for its definition see the glossary at the end of the report). Within the Transparensense texts, we use the commonly used term “ESCO” as equivalent of the energy service provider.

⁴ Directive 2012/27/EU of the European Parliament and of the Council on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC was approved on 25 October 2012.

⁵ Guarantee of energy efficiency improvement is defined by EN 15900:2010 as “commitment of the service provider to achieve a quantified energy efficiency improvement”.

⁶ Annex XIII of the EED lists the minimum item as: „Guaranteed savings to be achieved by implementing the measures of the contract.“

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3 EPC Code of Conduct

An important step towards a transparent and trustworthy EPC market is the acceptance and widespread usage of the EPC Code of Conduct. Such a Code is being developed under the Transparense project and will be publically discussed with all interested parties to reflect their needs and concerns.

The Code of Conduct is a set of principles describing best practice from EPC providers (primarily) and customers (secondly) in the preparation and implementation of EPC projects in order for them to succeed, maximizing the energy and cost saving resulting from the EPC.

The Code is a voluntary commitment and it is not synonymous with any legal obligation. However, acts in violation of the EPC Code of Conduct may cause damage to the EPC providers' and/or the customers' good name. It is also an indicator of the quality requirements for new EPC providers entering the EPC market. The EPC Code of Conduct is an in-depth view of what EPC providers and customers believe the EPC excellence is, and it paints a picture of how customers and EPC providers can expect to be treated as a result.

By adhering to the EPC core values of the Code of Conduct, EPC providers and customers develop solid foundations for 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.

The EPC Code of Conduct aims to improve understanding and awareness of the EPC and raise EPC quality requirements by setting best practice commitments and proposing standards to be met by the EPC providers, in line with other initiatives.

The Code encourages the development of voluntary quality labels and tools for certified energy savings, and ultimately further develops energy efficiency policy. As a result, the EPC market as a whole (level of demand + quality of offer) in Spain will benefit from adherence to the Code of Conduct.

4 Governmental strategy to boost the EPC market

The last National Energy Efficiency Action Plan, NEEAP, 2011-2020, sent to European Commission included a chapter “Dynamization of market of energy services in the building sector”.

At present time (November 2013) the next Plan of Energy Efficiency 2014-2020 is being elaborated by another responsible body, MINETUR Minister of Industry, Energy and Tourism and their strategies are still not public published. It would be recommended to include a chapter on EPC implementation on the public property further than transpose the principles of the Energy Efficiency Directive 2012/27/EU. This proposed chapter should contain at least: identification of the property owned by the government which should be checked for EPC sustainability and concrete time schedule with implementation of EPC on these property.

The Energy Efficiency Plan 2014-2020 should be carried out but also legal and administrative modifications are necessary to avoid that the investment in energy efficiency should be consider to be ‘deficit’ to effects of National Accounting. This has been one of the main barriers for the development on the market of energy efficiency services in the public sector.

5 Removal of legislative and administrative barriers

Avoiding the main legislative and administrative barriers is necessary in order to develop the energy efficiency services market and the implementation of Energy Performance Contracting, EPCs.

The actions that should be undergo in order to remove the legislative and administrative barriers in Spain are:

- The transposition to the national legislation of the Energy Efficiency Directive 2012/27/EU and avoiding the uncertainty generated with the energy sector Reform that included energy efficiency and renewable energy sources of the present Government.

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- The existence of the ESCO as a company that is regulated by normative and the creation of an effective ESCO register for the development of the market of the energy efficiency services.
- The EPC concept is difficult to understand by customers and it is important to define regular administrative items: contracts terminology, guarantees, etc.
- In the National Accounting the investments on energy efficiency should not be considered as 'deficit'. This administrative barrier should be eliminated because several projects have not been developed due to this reason.
- Simplification, centralization and coordination of the public policies about energy efficiency. A public tendering process is often managed by two or three different Ministries.
- Generally there are not many EPC project in Spain and the Government should promote and use this model to incentive the market.

6 Information dissemination, education and networking

In Spain only few information, dissemination and education measures focused on the market of energy efficiency services at governmental level are carried out; and measures about EPCs are hardly ever done.

For example, at the *III Energy Efficiency Services Congress* celebrated in October 2013 in Bilbao, only one communication focused on EPC about a successful case of a Sweden Town – hall was presented.

Nowadays it is important to highlight the active role of ESCO associations searching for the development of the market. The Associations is a tool to contact different companies to work together in projects, provide update information to ESCOs about regulations, policies, provide assessment to prepare the “best offer”, etc.

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Associations also organise meetings, Congress etc. In Spain three ESCO Congresses have been organised in 2011, 2012 and 2013. At the First ESCO Congress more than 800 people attend it and it was celebrated with the Ministry of Energy; in the III ESCO Congress- October 2013 - more than 550 people with the participation of the government of Vasque Region and the Regional Energy Agency, EVE.

It is necessary to focus and to develop information, dissemination and training about the EPC concept and procedures, as Transparensense project carries out with several training courses about the EPC market.

7 Financial instruments to support EPC

One of the barriers for the ESCOs and the EPC business identified by financial institution according the Transparensense Survey carried out by Escan in 2013 is the “raising affordable finance” and the “actual financial crisis”.

Other barrier identified for ESCO market development is support the financial risks.

Key drives are the new credit lines and other support mechanisms. For the last two years some funds and grant programmes are appearing for the energy efficiency market. These support mechanism will support the market and also the EPC model.

Some examples are: the Jessica - Fidae Fund; the Equity Funds, i.e. Green Building Equity Fund I; The Spanish ICO Financial Line; the programmes of the National Energy Agency, i.e. PAREER, Program about loans and grants for energy refurbishment of buildings sector residential and hotels; the new “Assurance of the Guarantee Energy Savings”.

All these support mechanism are more deeply developed in the “Country Report on identified barriers and success factors for the implementation of EPC projects”. Transparensense project.

Definitions and glossary

Term	Definition
energy efficiency (EE)	means the ratio of output of performance, service, goods or energy, to input of energy (as defined by EED)
energy efficiency improvement	means increase in energy efficiency as a result of technological, behavioural and/or economic changes (as defined in EN 15900:2010)
energy management system	means a set of interrelated or interacting elements of a plan which sets an energy efficiency objective and a strategy to achieve that objective (as defined by EED)
energy savings	means an amount of saved energy determined by measuring and/or estimating consumption before and after implementation of an energy efficiency improvement measure, whilst ensuring normalisation for external conditions that affect energy consumption (as defined by EED)
final energy consumption	means all energy supplied to industry, transport, households, services and agriculture. It excludes deliveries to the energy transformation sector and the energy industries themselves (as defined by EED)
guarantee of energy efficiency improvement	means commitment of the service provider to achieve a quantified energy efficiency improvement (as defined in EN 15900:2010)
energy performance contracting (EPC)	means a contractual arrangement between the beneficiary and the provider of an energy efficiency improvement measure, verified and monitored during the whole term of the contract, where investments (work, supply or service) in that measure are paid for in relation to a contractually agreed level of energy efficiency improvement or other agreed energy performance criterion, such as financial savings (as defined by EED)

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EPC provider

means a natural or legal person who delivers energy services in the form of Energy Performance Contracting (EPC) in a final customer's facility or premises

energy service provider /energy service company (ESCO)

means a natural or legal person who delivers energy services or other energy efficiency improvement measures in a final customer's facility or premises (as defined by EED)

energy service (ES)

the physical benefit, utility or good derived from a combination of energy with energy-efficient technology or with action, which may include the operations, maintenance and control necessary to deliver the service, which is delivered on the basis of a contract and in normal circumstances has proven to result in verifiable and measurable or estimable energy efficiency improvement or primary energy savings (as defined by EED)

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