



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

Italy



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Contents

1	SUMMARY	2
2	INTRODUCTION	3
2.1	Methodology	3
2.2	What is Energy Performance Contracting.....	3
2.3	Definition of EPC and EPC provider	4
3	EPC CODE OF CONDUCT	6
4	GOVERNMENTAL STRATEGY TO BOOST THE EPC MARKET	7
5	REMOVAL OF LEGISLATIVE AND ADMINISTRATIVE BARRIERS	8
6	INFORMATION DISSEMINATION, EDUCATION AND NETWORKING	10
7	FINANCIAL INSTRUMENTS TO SUPPORT EPC	11
	REFERENCES.....	12
	DEFINITIONS AND GLOSSARY.....	13

Report on recommendations for action for development of EPC markets in Italy



1 Summary

The present report aims at providing recommendations for action for the successful development of the EPC market in Italy.

The report is building on the 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 2010 Status Report on Energy Service Companies Market in Europe³.

The present report includes recommendations and ideas for Italian public agencies and government but not only, starting from the anonymous survey performed during Transparense project and based on the EPC market state of art.

Recommendations are based on legislative and administrative barriers, information dissemination, education and networking, and financial instruments to support EPC market: it has been demonstrated in several projects that the coordination between the client, the operation and management personnel, and ESCOs could actually reduce overall costs by streamlining the process. But this coordination could arise only from mutual trust and a deep knowledge of EPC process: the EPC process success passes through the promotion of awareness and communication initiatives aimed to increase the awareness of citizens and businesses about the opportunities resulting from energy efficiency. But passes also through the support of new financial instruments and the removal of administrative and legislative barriers that in Italy appear to be a great obstacle for market actors, especially in this time period (The Transparense survey, see <http://www.transparense.eu/it/pubblicazioni/>), made it clear that respondents are not generally satisfied (about 90%) with the government support for EPC policy).

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

² http://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>

Report on recommendations for action for development of EPC markets in Italy



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 Italy'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 Italy 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 Italy in order to improve the quality of the EPC market.

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

Report on recommendations for action for development of EPC markets in Italy



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.

2.3 Definition of EPC and EPC provider

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

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.

Report on recommendations for action for development of EPC markets in Italy



“**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 Transparense 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.

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.“

Report on recommendations for action for development of EPC markets in Italy



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 Italy will benefit from adherence to the Code of Conduct.

4 Governmental strategy to boost the EPC market

The Transparense survey (see <http://www.transparense.eu/it/pubblicazioni/>) made it clear that respondents are not generally satisfied (about 90%) with the government support for EPC policy (when asked how they judge your government's policies in supporting the development of EPCs in the country). This is a trend noted in different study reports and it is often noted that more could be done to help the EPC industry at a government/institutional level. This is not always true for energy efficiency, since the percentage of unsatisfied companies decrease to about 50%.

The result is quite clear: respondents call for higher support from the government in terms of policies, financial incentives and subsidy programs, thinking that this is a major barrier to the expansion of the ESCO industry.

It is really important to note how EPC business diffusion is limited by institutional barriers according to ESCO respondents: they noted “subsidy or policy uncertainty” and “regulation / lack of support from the government” as the main barriers (see the graph below).

Further, the Italian government is in the process to adopt the Energy Efficiency Directive 2012/27/EU imposing obligations on Member States to support energy services market (model contracts, provision of information, removal of barriers...). An important attention has to be given also to article 18 that regards Energy and Saving Companies. With the adoption of the Directive, it is expected that in the next years the market for Energy Performance Contracts will grow especially in the public sector industry. The Directive should be adopted by June 5, 2014.

In a very recent conference organized by Kyoto Club in Rome (October 28, 2013), M.Capra (Ministero dello Sviluppo Economico) has clearly described the roadmap of the adoption and the key points of the Directive focusing on the current Italian situation⁷.

One of the measures that could help the government to boost EPC market is the implementation of National Action Plans (PAEE in Italy). These plans could be seen as a win-win situation since the public buildings will be identified and the EPC market could grow with the implementation of EPC on these buildings.

The adoption of the Directive should be seen as an opportunity to incentive and to help the EPC growth through different measures.

⁷ http://www.kyotoclub.org/docs/Roma_281013_Capra.pdf

Report on recommendations for action for development of EPC markets in Italy

In the meanwhile, it is however important to note that a recent Decree (so called “White-Certificates Decree”) has helped the growth of ESCO market in Italy, defining new national targets for the years 2013-2016 in terms of energy savings for electric and gas distribution’s companies (with more than 50 thousand customers). This Decree represents a driver to stimulate the market and the ESCO diffusion, as well as a contribution to the achievement of energy efficiency targets for 2020, and it will serve also as a driver for the application of technologies developed by the domestic industries that, in terms of energy efficiency, occupies a leading position on the international scene.

5 Removal of legislative and administrative barriers

In Transparensense Survey, ESCOs were interviewed about barriers to the EPC business. Looking at the figure below, we can see how the main barriers are more linked to legislative and administrative aspects than to technical issues.

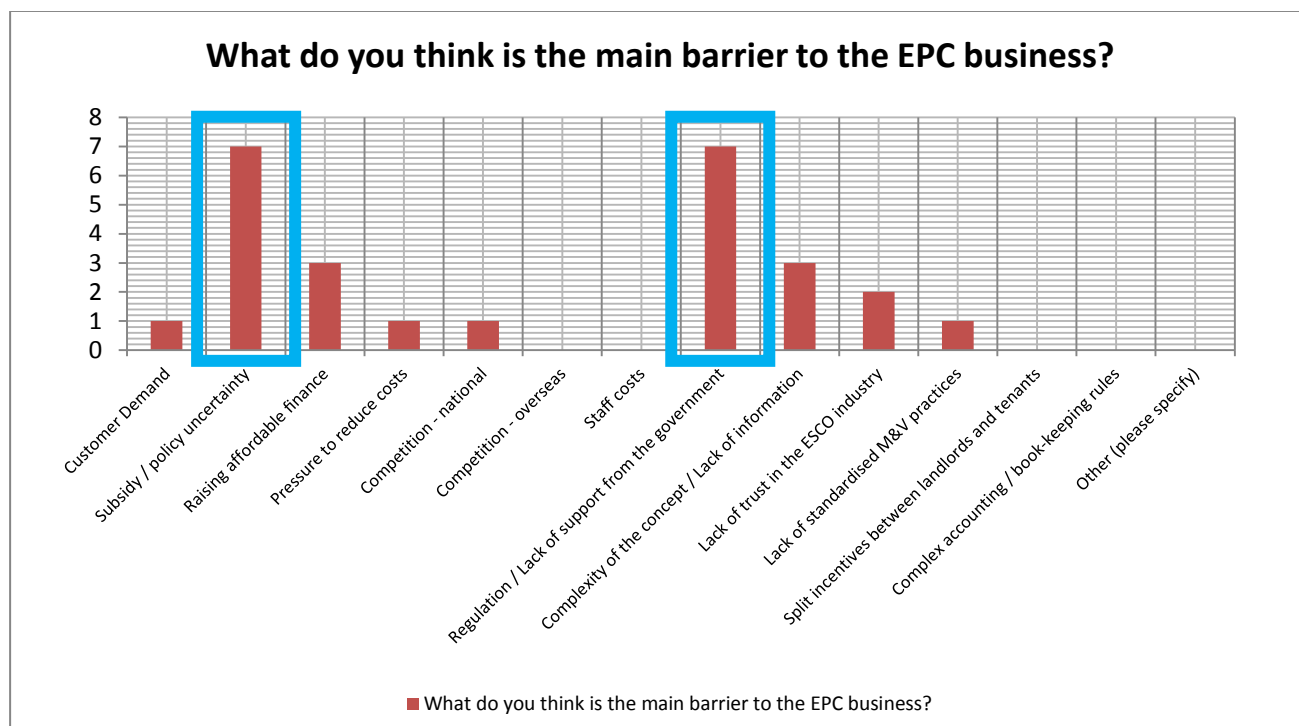


Fig 1. Main Barriers to the EPC business carried on by Italian respondents (Transparensense survey).

Report on recommendations for action for development of EPC markets in Italy



ESCOs interviewed have also underlined the strategies they would suggest to government to boost the EPC market and to remove administrative and legislative barriers:

- Simplification of legislation and of the red tape structure

The institutional and regulatory framework appears to be too complicated for all the actors of the team, from the customer to the ESCO.

- Definition of clear guidelines for the preparation of EPC tenders and bids,

Internal public personnel are not often instructed and cannot manage properly energy tenders or bids.

- Continuous diffusion of ESCO Certificates,

Standard EN 15900 and Standard UNI CEI 11352 have helped to clearly define the rights and obligations of the ESCo . But to date, only 40 ESCOs have been certified according to UNI CEI 11352 .

- Actions obliging EPC-projects and subsidising dissemination, education and networking,

During recent applications of EPCs, it was noted as customers and public agencies were not so clearly informed about the technical aspects and the potential savings related to the energy efficiency interventions. This could represent a big constraint in the EPC market spread.

- Diffusion of Energy Audits both on public and private sectors.

A detailed Energy Audit represents the first important step to help public and private customers to go through an EPC process.

Report on recommendations for action for development of EPC markets in Italy



6 Information dissemination, education and networking

It has been demonstrated in several projects that the coordination between the client, the operation and management personnel, and ESCOs could actually reduce overall costs by streamlining the process. But this coordination could arise only from mutual trust and deep knowledge of EPC process: the EPC process success passes through the promotion of awareness and communication initiatives aimed to increase the awareness of citizens and businesses about the opportunities resulting from energy efficiency.

To let all actors involved in the project have training and knowledge of EPC market it is important to communicate how EPC market could help their buildings and their businesses.

It is important that ESCO and/or Energy associations communicate to public sector (local and regional administrations) and to private companies/citizens (SMEs, Real Estates, etc.)

Communication should walk together with Transparency and Exchange of information. As noted in Directive 2012/27/EU: *“Transparency, for example by means of lists of energy services providers, can contribute to this. Model contracts, exchange of best practice and guidelines, in particular for energy performance contracting, can also help stimulate demand”*.

Italian government has included energy awareness communication initiatives in the 2014 Agenda to overcome the lack of knowledge on EPC, lack of trained EPC providers and facilitators, and to help the cooperation between all stakeholders.

In this report we want to introduce the idea to institute an Italian Observatory on EPC projects to track the amount, size, nature, scope and results of EPC projects in Italy. This could represent a unique database to collect information and to inform market players, banks, ESCOs, building owners, public agencies, policy makers, and other relevant stakeholders.

Report on recommendations for action for development of EPC markets in Italy



7 Financial instruments to support EPC

Here below there is a synthetic summary of financial measures that could support EPC and EPC market growth according to the main actors involved in the EPC projects and according to the interviews during Transparense Survey.

- TPF, Third Party Financing
- Revolving Funds
- Financial risks not only for ESCOs
- Governmental Incentives
- Guarantee Funds

Let see how these measures could help the EPC Market:

- TPF, *Third Party Financing* (Finanziamento Tramite Terzi) already considered in Directive 93/76/EC, in Directive 2006/32/EC, and by the Action Plan for Energy Efficiency, as well as predicted by several Italian countries energy plans;
- *Revolving Funds* (Fondi Rotativi), through public funding at no interest rates with bank funding agreement and through national guarantee policies. Revolving funds could help competition between ESCOs and this will allow ESCOs to access to a wide market based on experience and technical aspects;
- *ESCOs should not take upon themselves 100% of financial risks*. Customers or clients should provide support to ESCOs. In this way, ESCOs could work more on technical aspects than on financial issues;
- New *governmental incentives* for EPC market based on the location and the situation of a certain area.
- *Guarantee funds* could help to protect technical actors from possible financial problems of the client or the customer.

Report on recommendations for action for development of EPC markets in Italy



References

EVO (2012): Concepts and Options for Determining Energy and Water Savings, Volume I, IPMVP Public Library of Documents, available for download on www.evo-world.org/ipmvp.php

eu.ESCO (2011): Energy Performance Contracting in the European Union, Brussels

Example of citation in the text: “According to the Conclusions and policy recommendations from ChangeBest project prepared by SEVEn (2012), in many EU countries there are significant legislative and institutional barriers...”

http://www.kyotoclub.org/docs/Roma_281013_Capra.pdf

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)
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	means a natural or legal person who delivers energy services or other energy efficiency improvement measures in a final

Report on recommendations for action for development of EPC markets in Italy



company (ESCO)

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)