

TRANSPARENSE Improving the Transparency of EPC Markets Across Europe

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Project Summary



- coordinator SEVEn (Czech Republic)
- 20 partners from 20 EU member states
- project lasting from 1. 4. 2012 till 30. 9. 2015
- Main goal of Transparense project is to increase the transparency and trustworthiness of EPC markets throughout Europe by developing EPC code of conduct and supporting transfer of know-how and experience across the countries.



TRANSPARENSE Major outputs & expected results



- WP1 Administration and Consortium Management
- WP2 Market for EPC in Europe
- WP3 Enhancing know-how and institutionalisation of the EPC supply side
- WP4 Codes of Conduct
- WP5 EPC pilot projects
- WP6 Communication & dissemination

TRANSPARENSE Definition of EPC by EED (1)



EED definition of energy performance contracting:

— "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"

TRANSPARENSE Definition of EPC by EED (2)



- Guranteed savings are key characteristics of EPC also according to the EED :
 - Annex XIII specifies that "Guaranteed savings to be achieved by implementing the measures of the contract." are listed among the minimum items to be included in energy performance contracts with the public sector or in the associated tender specifications
 - Art. 18 specifies, that Member States shall promote the energy services market and access for SMEs to this market, inter alia, by 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

TRANSPARENSE Alternative definition of EPC by EC JRC



- Under an energy performance contracting (EPC) arrangement, the ESCO develops, implements and finances (or arranges financing of) an energy efficiency project, and uses the stream of income from the cost savings, to repay the costs of the project, including the costs of the investment.
- Essentially the ESCO will not recover all of its costs unless the project delivers all or more of the energy savings guaranteed.

Paolo Bertoldi, EC JRC: ESCO Europe, Copenhagen, January 2013

TRANSPARENSE Important features of EPC - guarantees



- EPC contract between ESCO and the client contains guarantees of savings and regulates allocation of financial and technical risks for implementation and operation during the entire project duration
 - financing is not necessary part of the EPC project ensured by the ESCO (client can find more suitable financial source beside the EPC project and ESCO will primarily implement the measures and guarantee the savings)
 - volume of investment is achieved by the guaranteed savings
 - clear and transparent list of steps to be performed to implement a measure (or package of measures)
 - ownership transfer of the installed energy saving technologies to the client immediately after the measures installment

TRANSPARENSE EPC is a win-win model



Common interest on both sides - ESCO and client:

- Good prepared combination of the saving measures
- Optimal level of investment (not too low, not too high)
- High level of energy savings (benefits for both)
- Motivation to achieve savings by the end of the contract

TRANSPARENSE EPC Code of Conduct



- Goal of Transparense project is acceptance and usage of the EPC code of conduct among the EPC market actors
 - to increase transparency, quality and trusworthiness of the EPC services
 - and thus support increase of the EPC demand
- The EPC Code of Conduct
 - is a broader set of principles describing the behaviour expected of the ESCOs and clients in the preparation and implementation of EPC projects
 - in order for the EPC projects to succeed, maximizing energy efficiency improvement measures' energy and cost savings and their sustainability



- 1. EPC projects are economically efficient
- 2. EPC provider takes over technical and commercial risks
- 3. Savings are fully guaranteed by EPC provider
- 4. ESCO supports long-term use of energy management
- The relationship between the client and the ESCO is long-term and equal
- All steps in the process of EPC projects are transparent and can be justified
- 7. Support in financing of EPC projects
- 8. EPC projects require qualified staff
- 9. ESCOs and clients keep contract terms
- 10. The ESCO focuses on high quality and care in all steps of project implementation



1. EPC projects are economically efficient

- Within the EPC projects the ESCO aims to economically efficient combination of the energy efficiency measures. That is such combination of the measures that maximises the net present value of the project under condition that all the requirements set by the client are fully respected.
- The net present value of the project are future cost savings less the total project costs (including costs of equipment installed, financial services, M&V).



2. EPC provider takes over technical and commercial risks

- Remuneration of the EPC provider is performance based;
- EPC provider bears commercial as well as technical implementation and operation risks and guarantees the outcome and all inclusive cost of the services for the duration of the contract.



3. Savings are fully guaranteed by EPC provider

- The ESCO guarantees the savings of energy and/or related costs. The ESCO is obligated by the contract to repay savings shortfalls over the life of the contract. The client is committed to inform the ESCO about any change in the operation of its facilities during the contract duration. At the end of the specific contract period the full benefits of savings revert to the facility owner.
- The contractually agreed quantified energy efficiency improvement should be defined in a fair and transparent manner based on realistic assumptions and appropriate methodology defined in the contract.



4. ESCO supports long-term us of energy management

- The ESCO together with the client actively motivate employees and work continuously with them over the contract term in a way that energy management is actively performed even after the contract is terminated.
- This supports the energy and cost savings to sustain after the contract period.

TRANSPARENSE EPC market survey in 20 EU countries



Survey respondents

- The survey was sent and communicated to most major EPC providers across the 20 EU countries involved in the Transparense project, through direct meetings, phone conversations or emails. The survey was filled in in full by 141 of them.
- A slightly different survey, modified for a different target audience - banks and finance houses - was also sent to the major banks and financiers across the 20 EU countries. Responses were obtained for 42 of them.

TRANSPARENSE EPC market survey in 20 EU countries

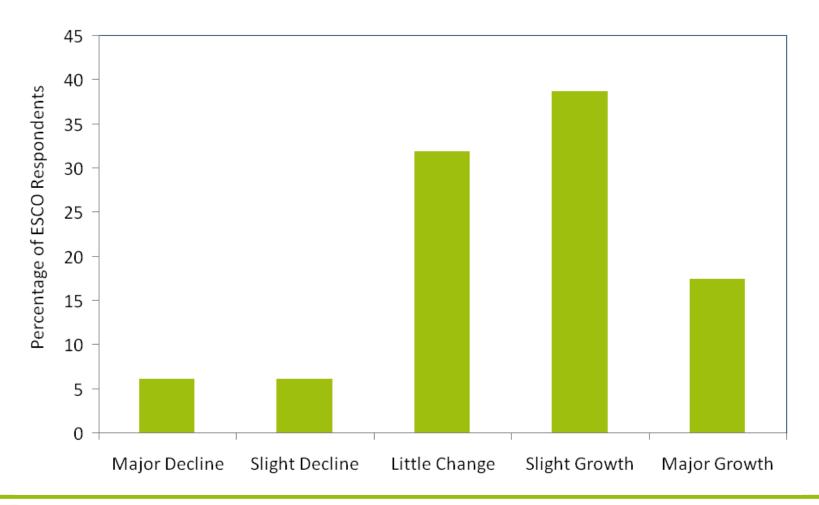


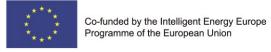
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Evolution of the EPC Market over the last 3 Years

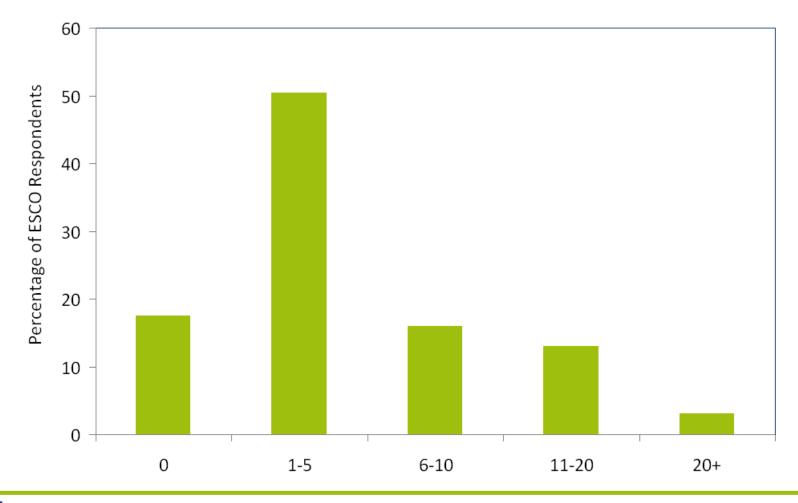


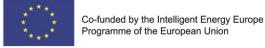


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Number of EPC Projects started in the last 2 years

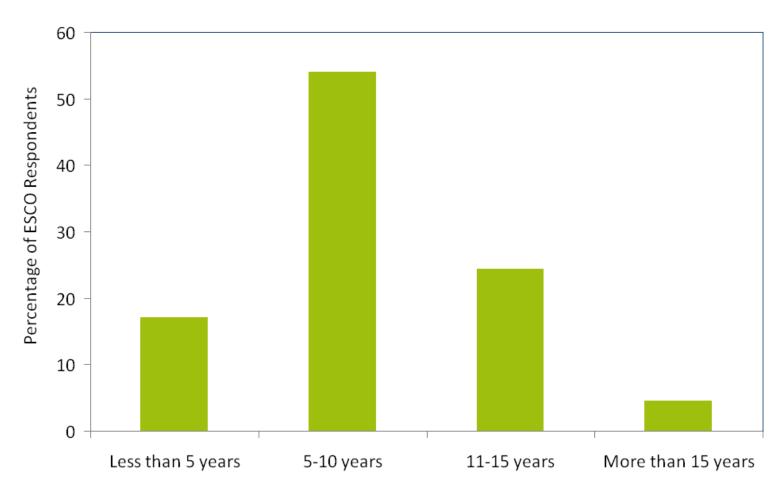




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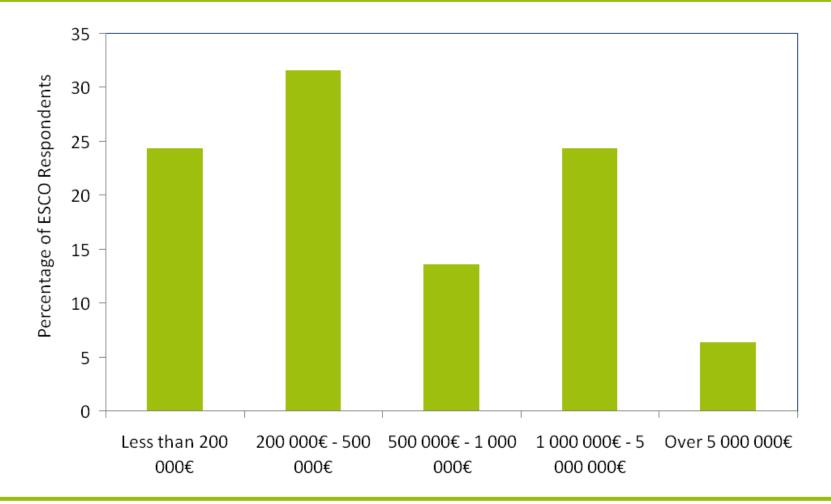
TRANSPARENSE Typical Length of EPC Projects

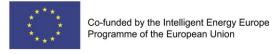




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Most Common investment Outlay for EPC Projects





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4 online databases

- ESCOs
- EPC business models
- Finance models
- Policies
- Overview EPC market barriers and success factors
 - EU summary report
 - 20 national reports
- Policy recommednations for EPC market development
 - EU summary report
 - 20 national reports
- Visit http://www.transparense.eu/eu/epc-databases



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