

# European EPC Markets and the Code of Conduct as a first step towards Harmonisation and Standardisation

**Jana Szomolanyiova**

**SEVEn – The Energy Efficiency Center, Czech Republic**

4 November 2015, Vienna

# Transparensense project to increase transparency and trust in EPC markets



- aimed to increase the **transparency & trust** in European EPC markets:
  - **EPC markets survey** & analysis and results dissemination
  - **European Code of Conduct for EPC**
  - International **transfer of know-how**, capacity building
- Partners: 20 European countries
- Coordinator – SEVEn (CZ)
- Co-financed by Intelligent Energy Europe Programme (EASME)
- April 2013 – September 2015



# Main barriers to EPC business reported by providers and facilitators

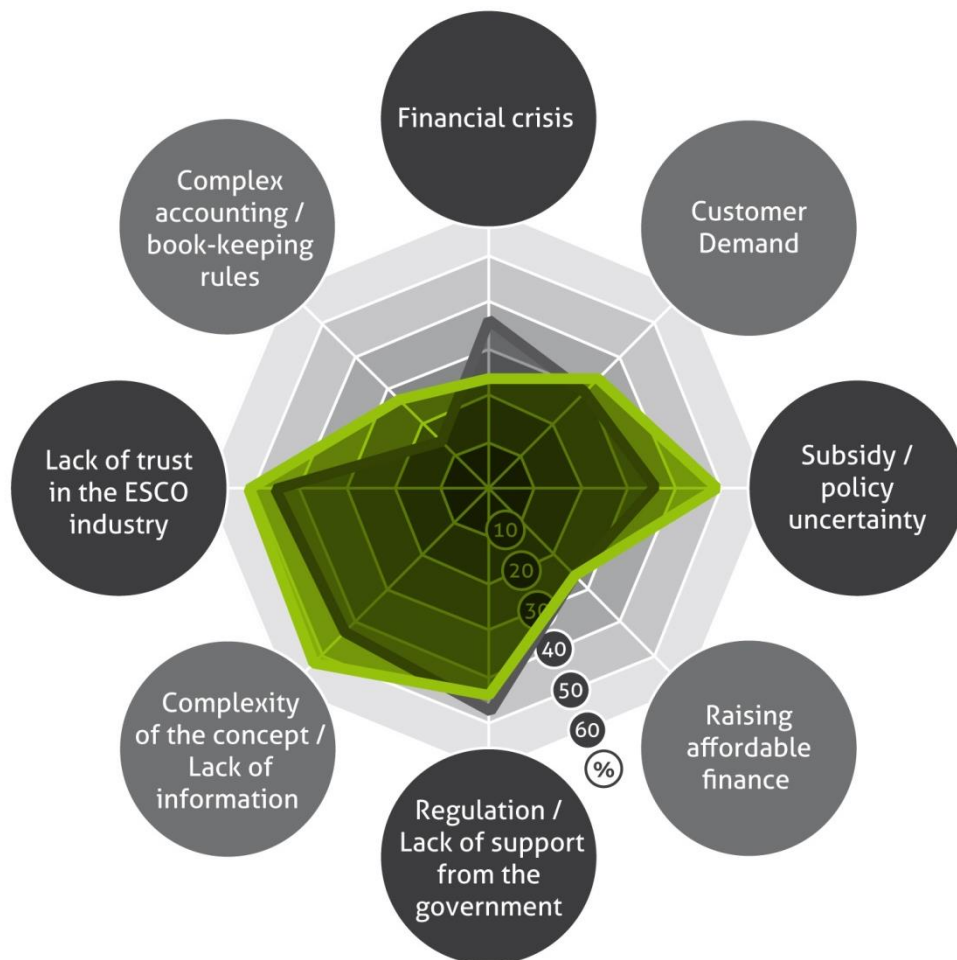
## ■ Transparensense EPC market survey 2013

- 144 EPC providers



## ■ Transparensense EPC market survey 2015

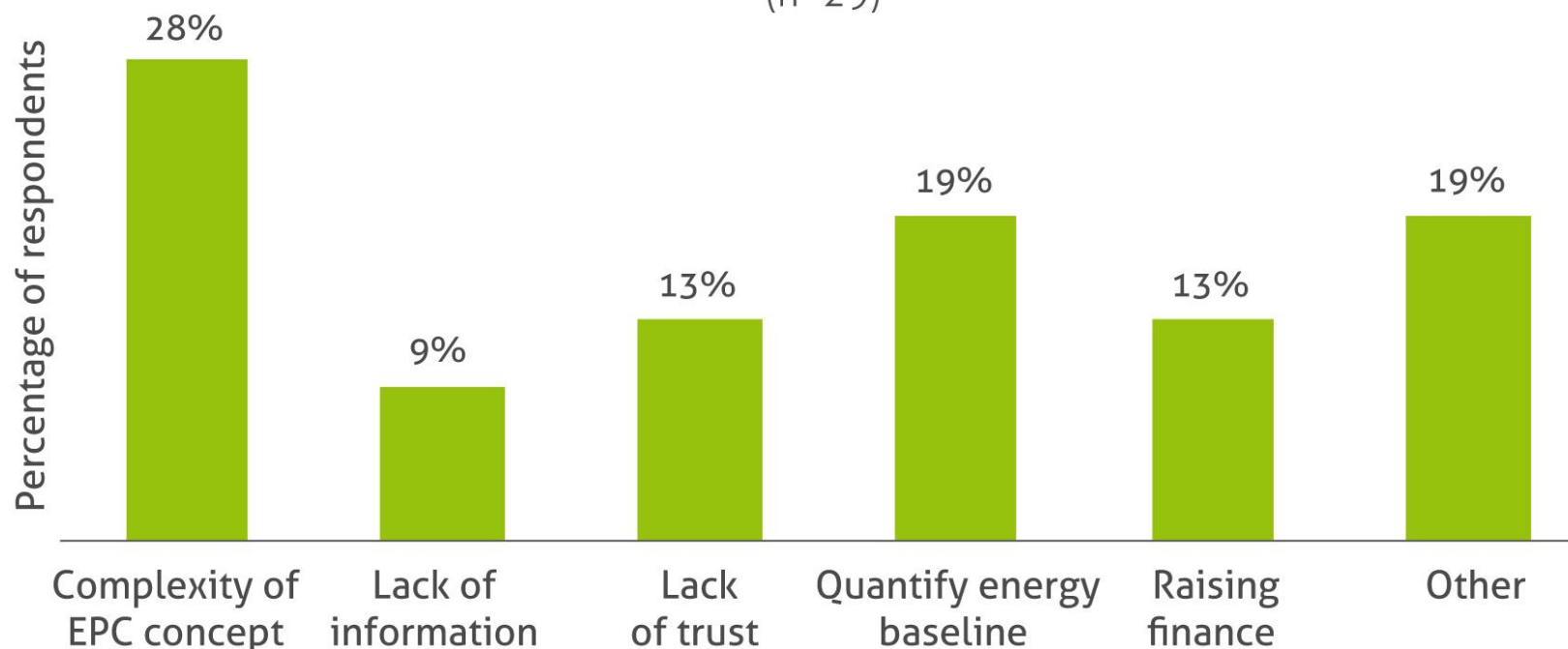
- 81 providers
- 60 facilitators



# Main barriers to EPC reported by the clients – concept complexity

## Biggest barriers in preparation and development of pilot projects

(n=29)



- Reported in Transparensense survey among 29 clients of pilot projects

# Main drivers to EPC business – cost reduction and customer demand

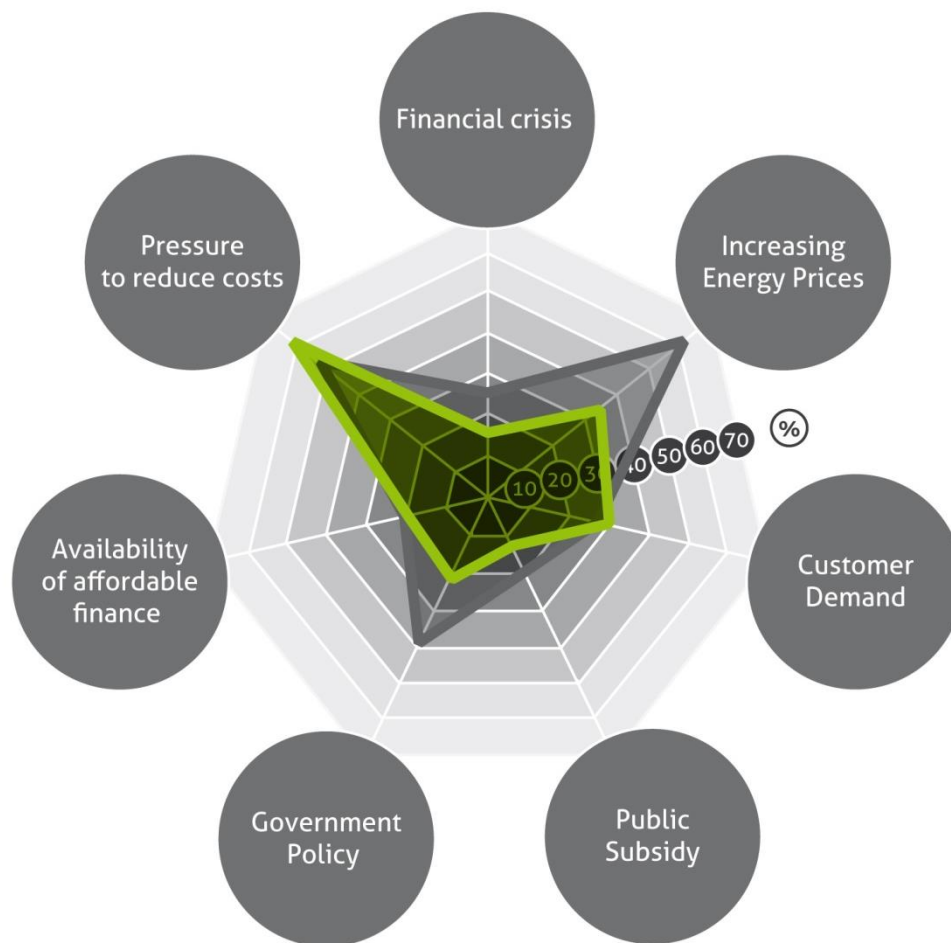
- **Transparensense EPC market survey 2013**

- 144 EPC providers



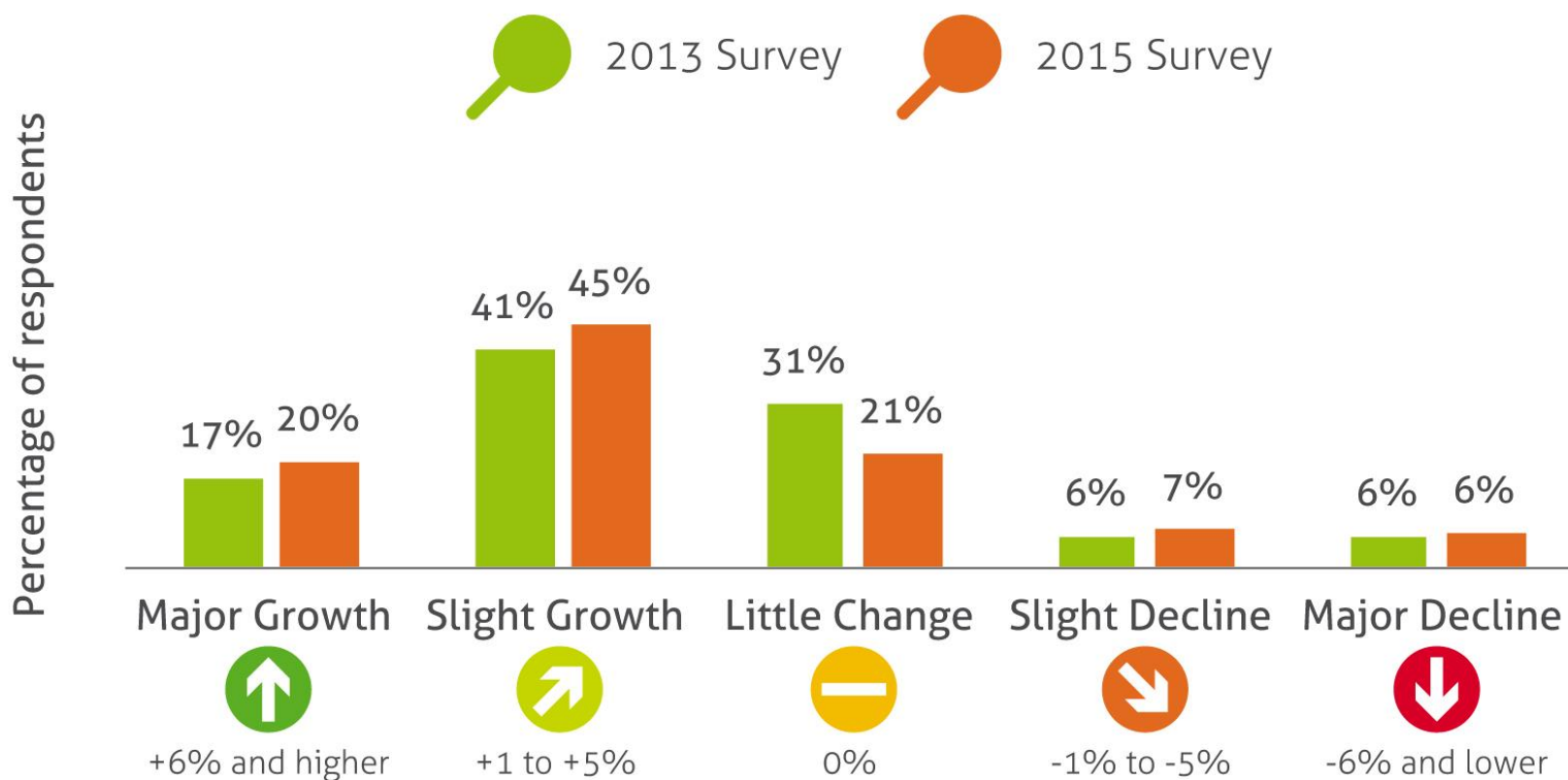
- **Transparensense EPC market survey 2015**

- 81 providers
- 60 facilitators



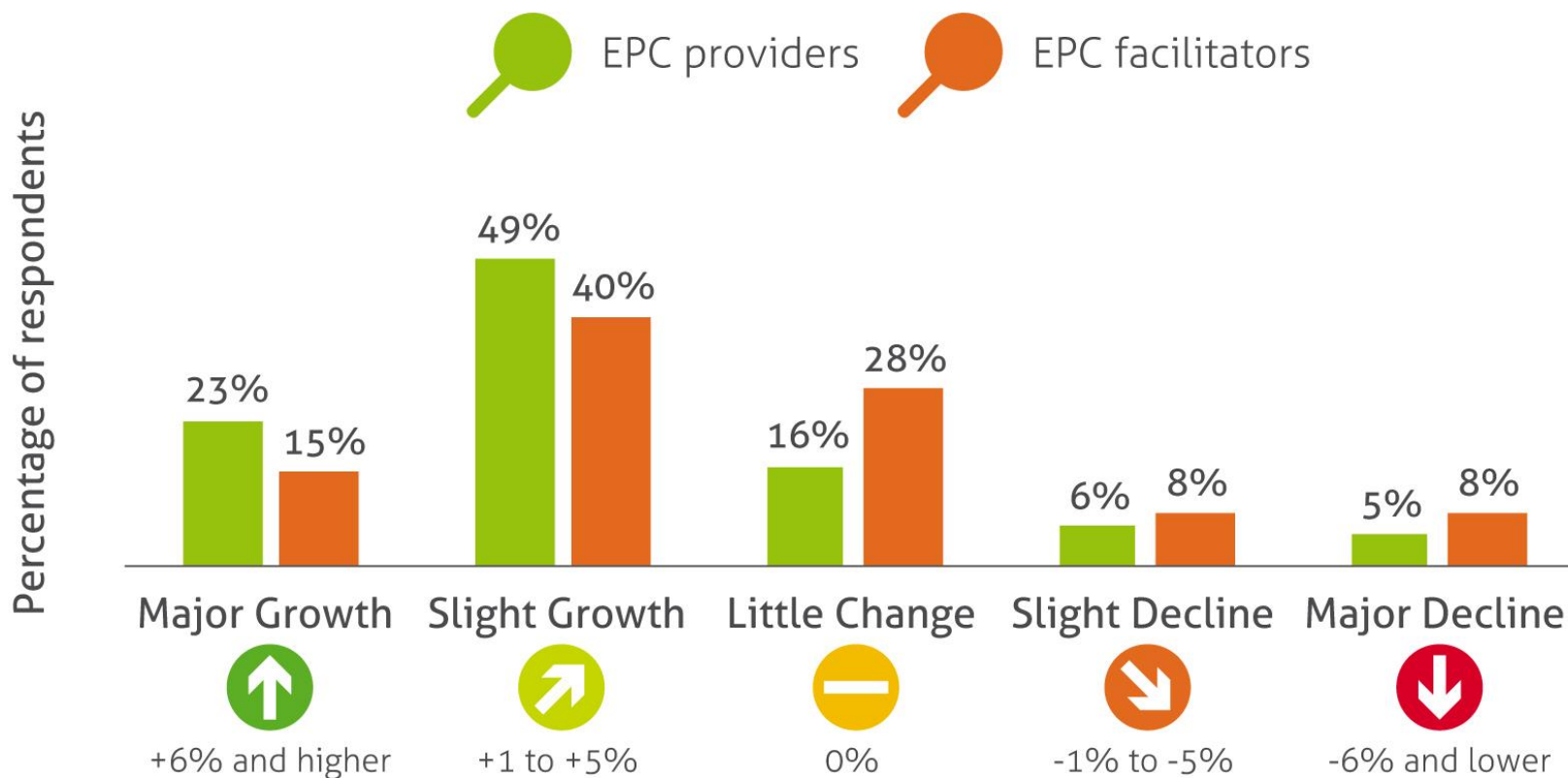
# European EPC markets growing slightly in 2010 - 2015

## Development of the national EPC markets in the last 3 years



# Facilitators saw lower growth in 2013-2015

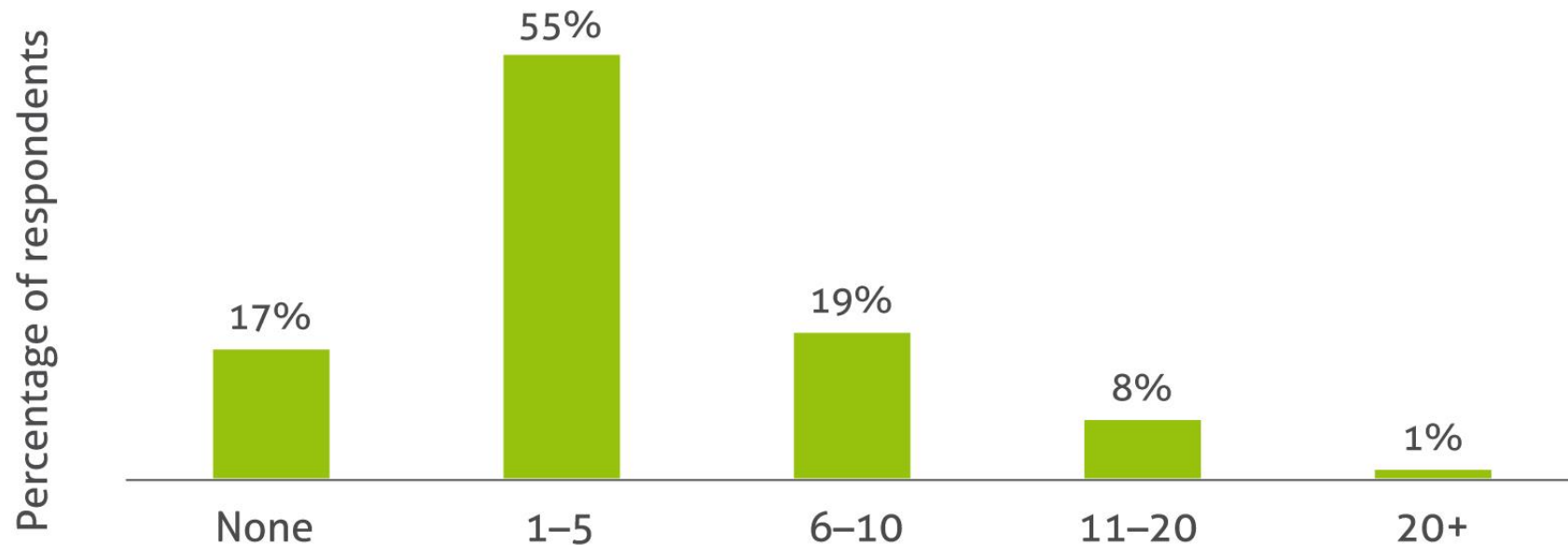
## Development of the national EPC markets in the last 3 years





# 55% of respondents initiated 1-5 EPC projects between mid 2014 - mid 2015

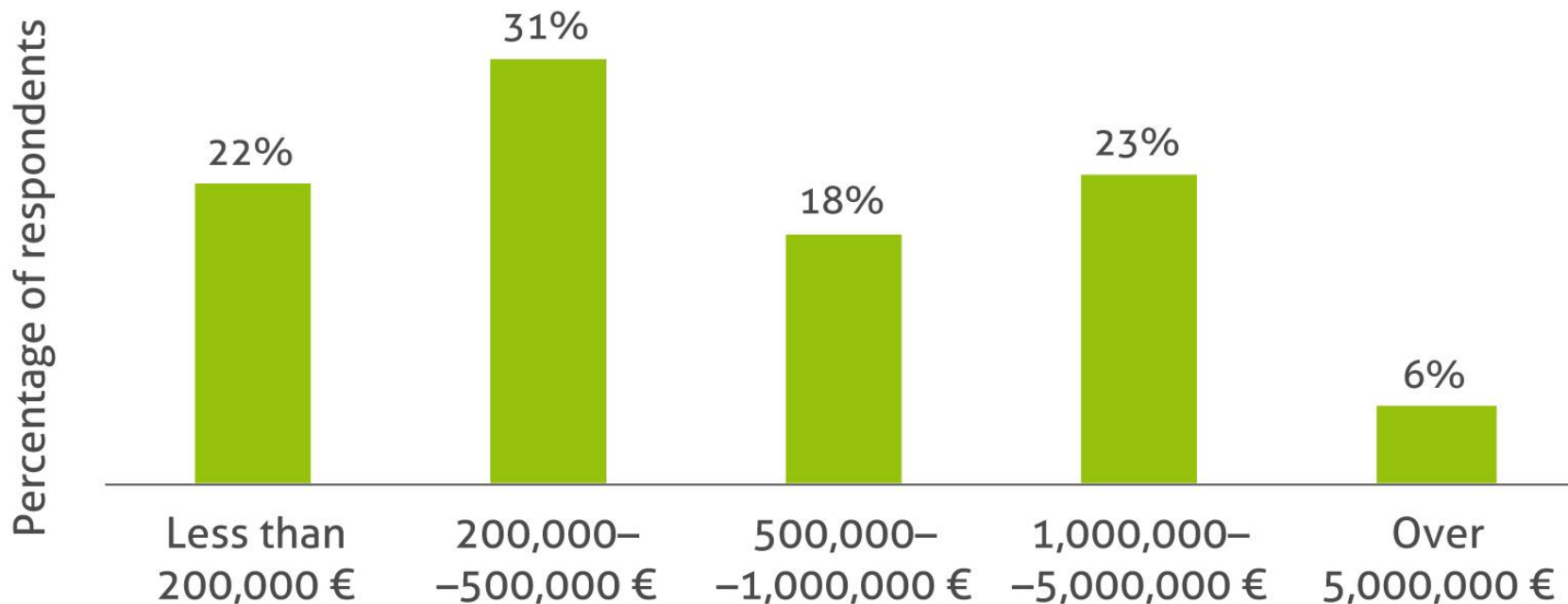
## Number of projects initiated in the last 12 months





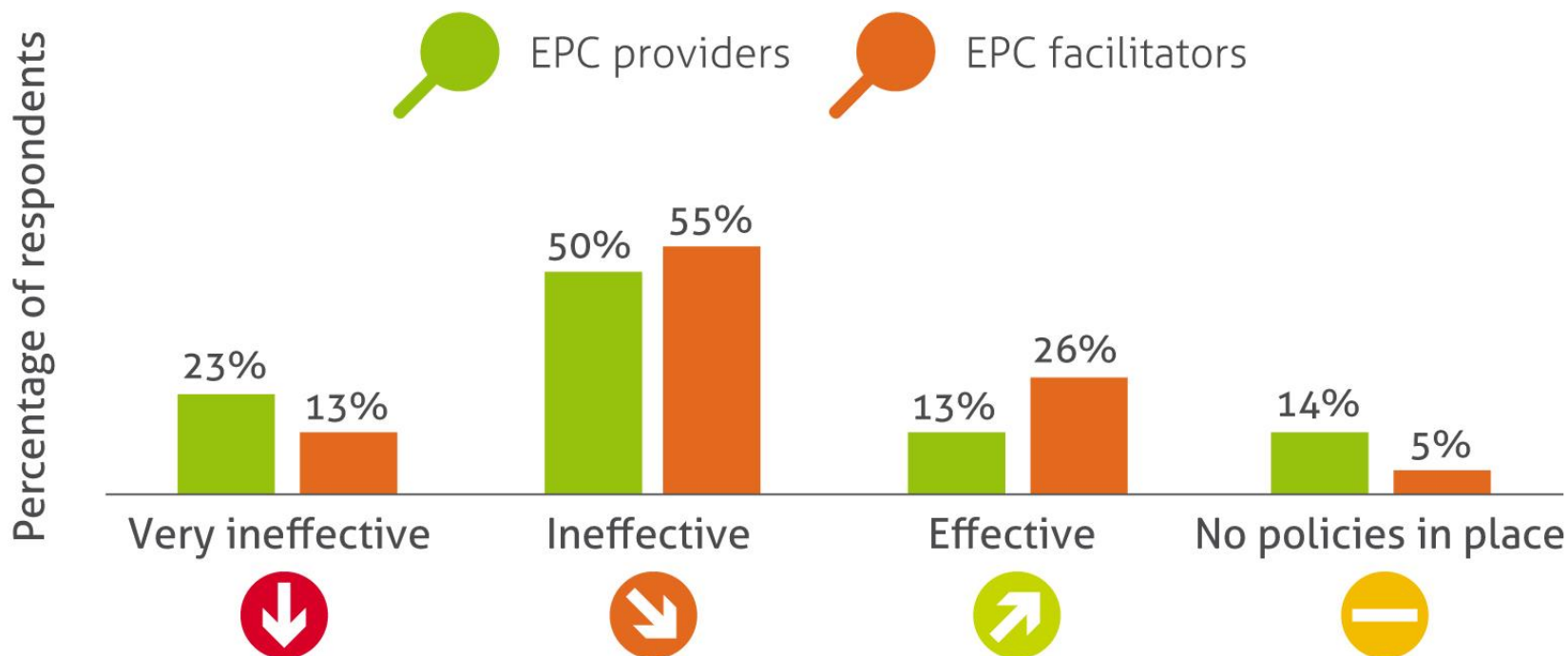
# Most common investment outlay of EPCs: 200,000-500,000 EUR

## Most common investment outlay



# Energy efficiency and EPC policies seen as ineffective by half of respondents

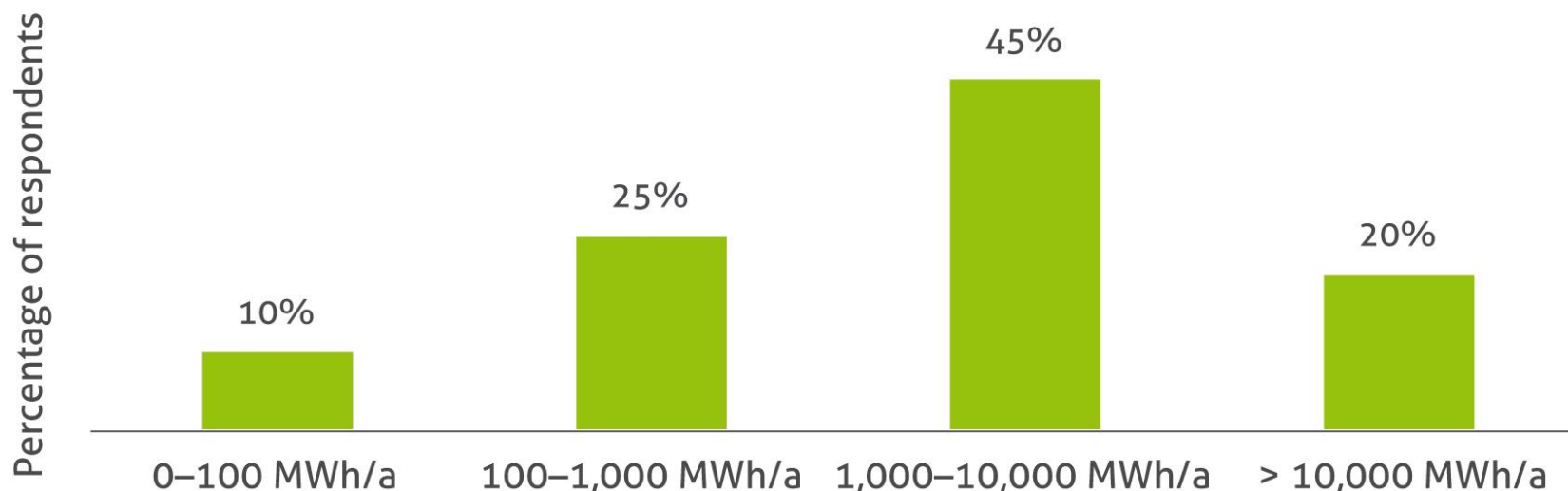
## Effectivity of energy-efficiency and EPC policies



# Most common primary energy savings in EPC pilot projects: 1,000 – 10,000 MWh/a

## Primary Energy Savings per EPC project

(n=20)



# Transparensence EPC Market Survey 2013

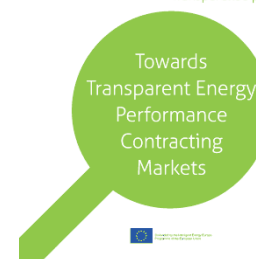
## Results online



- **4 online databases** to help improve transparency and to enable informed decision-making:
  - EPC models, financial models, policy initiatives, EPC providers
- **Reports on EPC market barriers and success factors and reports on recommendation for action – available online**
  - national reports for 20 participating European countries (2013, update 2015)
  - and EU summary report (EEVS 2013)
  - Transparensence Brochure (SEVEN 2015)



Results of the  
Transparensence project



# European Code of Conduct for EPC conducted in a stakeholder process



- The Code of Conduct for EPC defines the **basic values and principles** that are considered fundamental for the successful preparation and implementation of EPC projects
- Single common **European Code of Conduct for EPC** finalised in 2014 to support transparent and trustworthy high quality EPC markets
- Discussed with stakeholders:
  - European level: eu.ESCO, EFIEES, EASME (EC), SC members
  - National level (national workshops): ESCOs, ESCO associations, policy makers, EPC clients and facilitators from 20 countries



# European Code of Conduct for EPC

## Nine principles



1. The EPC provider delivers **economically efficient savings**
2. The EPC provider takes over the **performance risks**
3. **Savings are guaranteed** by the EPC provider and determined by M&V
4. The EPC provider supports long-term use of **energy management**
5. The relationship between the EPC provider and the Client is long-term, fair and transparent
6. All steps in the process of the EPC project are conducted lawfully and with integrity
7. The EPC provider supports the Client in financing of EPC project
8. The EPC provider ensures qualified staff for EPC project implementation
9. The EPC provider focuses on high quality and care in all phases of project implementation



# European Code of Conduct administered by National Code Administrators



- European Code Co-administrators EFIEES and eu.esco
  - appoints National Code Administrator in each country (currently in 21 countries)
- Simple signatory procedure:
  - Download signing form, sign and submit to the relevant National Code Administrator
  - National Lists of Signatories online
- Code of Conduct is a **voluntary agreement**
- No quality control
- Signatories use the signatory logo





# Uptake strategies for the Code of Conduct

- Directly contacting EPC providers
- Involving ESCO associations
- Disseminating and promoting
- Integrating within EPC procurement frameworks and engaging key stakeholders
  - Integrating in tender dossiers (AT, BE, BG, GR, SK)
  - Integrating in contracts (BE, BG, DE, GR, ES, HU, LV, PT, SK, UK)
  - Control mechanism through inclusion in contracts and tender dossiers
  - long-term strategy is to include Code in model documents

# Success story from Netherlands: 33 signatories in 1 day

- 31 March 2015 Code of conduct presented by Dutch partner ECN during the National ESCO Conference in Amsterdam for an audience of 275 people
- Code was signed by 33 new stakeholders publicly at the stage:
  - 21 ESCO's active on the Dutch market
  - other signatories: EPC facilitators and clients
  - ASN Bank



# European Code of Conduct for EPC – Experience from implementation (1)



- Code welcomed by market players – general agreement with the Code of Conduct among the market players in 20 countries
- September 2015: 193 signatories (NL: 37, ES: 19, UK:14)
  - 135 EPC providers (NL: 29, ES: 12, PT: 10)
  - 14 associations of EPC providers
  - 44 EPC facilitator & other entities
- **In the beginners markets Code seen of the highest value:**
  - „New ESCOs very interested to sign to increase their reliability, reputation and use it in the work with potential clients“ (LV)
  - transfer of know-how from advanced markets
  - Ministries plan to implement the Code in official model tender dossiers (BG, PL)



# European Code of Conduct for EPC – EPC providers



## ■ Benefits for EPC providers:

- Definition and harmonisation of EPC within Europe
- transfer know-how to clients
- marketing tool in selling EPC
- unique selling proposition in procurement (AT)
- access to the Code logo – visibility



## ■ Barriers:

- „**Code already in practice**“ (DE, DK, NO, SE)
- reluctant to be on **the list next to the „no name“ ESCOs**
- ESCOs prefer the **Code is signed by the associations** (AT, CZ, DE, ES)



# European Code of Conduct for EPC – associations



- **Associations of EPC providers (260 members):**
  - European Associations eu.ESCO and EFIEES
  - 12 national associations: AT, CZ, DE, ES (3), IT, SK, UK (2), RO, SE
  - support members to sign the Code (CZ, ES, NL, UK, SE)
  - serve as distribution channel (all signatory associations + associations in PT)
  - 10 National Code Administrators (currently in AT, CZ, DE, ES, IT, NL, RO, SE, SI, UK)



# European Code of Conduct for EPC – recommendations for use



- Discussion guideline
  - Creating common understanding of main EPC principles between client and providers
  - guidance for clients to distinguish good quality services
- Guidance for preparation of tender dossiers and contracts
  - principles required by the client in tender dossier & contract
- Opportunity for the governments
  - minimum requirements
- Marketing tool for EPC providers and facilitators
- Starting point for EPC quality assurance scheme development
- Tool for companies to decide on entering the EPC market



# More information?

- **Visit Transparensense website:** [www.transparensense.eu](http://www.transparensense.eu)
- **Contact co-ordinator: SEVEn – The Energy Efficiency Center**  
Jana Szomolányiova, [jana.szomolanyiova@svn.cz](mailto:jana.szomolanyiova@svn.cz)  
Americka 17, Prague, Czech Republic, [www.svn.cz](http://www.svn.cz)
- **Contact national partners:**  
[www.transparensense.eu/eu/contacts/](http://www.transparensense.eu/eu/contacts/)



# National Partners



<b>EEVS</b>	EEVS Insight	United Kingdom
<b>IJS</b>	Jozef Stefan Institute	Slovenia
<b>BEA</b>	Berliner Energieagentur GmbH	Germany
<b>IVL</b>	IVL Swedish Environmental Research Institute Ltd.	Sweden
<b>Factor4</b>	Factor4	Belgium
<b>e7</b>	e7 Energie Markt Analyse GmbH	Austria
<b>BSERC</b>	Black Sea Energy Research Center	Bulgaria
<b>DTTN</b>	Trentino Technological Cluster S.c.ar.l.	Italy
<b>LEI</b>	Lithuanian Energy Institute	Lithuania
<b>ECN</b>	Energy research Centre of the Netherlands	Netherlands
<b>KAPE</b>	The Polish National Energy Conservation Agency	Poland
<b>ISR-UC</b>	ISR - University of Coimbra	Portugal
<b>ECB</b>	Energy Centre Bratislava	Slovakia
<b>ESCAN</b>	Escan s.l.	Spain
<b>REACM</b>	Anatoliki Development Agency of Eastern Thessaloniki's Local Authorities S.A	Greece
<b>GDI</b>	GreenDependent Institute Nonprofit Ltd	Hungary
<b>Ekodoma</b>	Ekodoma	Latvia
<b>ECNet</b>	Energy Consulting Network	Denmark
<b>NEE</b>	Norsk Enøk og Energi AS	Norway



# Backup

# Key elements of EPC model reflected in Code of Conduct principles (1)

1. **The EPC provider delivers economically efficient savings**
  - The EPC provider aims at an economically **efficient combination of energy efficiency improvement measures**. This combination maximises the net present value of an EPC project for the Client defined as the sum of all the discounted costs and benefits (especially operational cost savings) associated with implementing the project.
2. **The EPC provider takes over the performance risks**
  - The EPC provider assumes the **contractually agreed performance risks** of the project during the whole duration of the EPC contract (the "contract"). These include the risks of not achieving contractually agreed savings as described below as well as design risks, implementation risks and risks related to the operation of installed measures.

# Key elements of EPC model reflected in Code of Conduct principles (2)

3. Savings are guaranteed by the EPC provider and determined by M&V
  - The EPC provider guarantees that the contractually agreed level of savings will be achieved. If an EPC project fails to achieve performance specified in the contract, the EPC provider is obligated by the contract to **compensate savings shortfalls** that occurred over the life of the contract. The excess savings should be shared in a fair manner according to the methodology defined in the contract.
  - Contractually agreed savings as well as **achieved savings are determined in a fair and transparent manner by Measurement and Verification (M&V)** using appropriate methodology (such as IPMVP) as defined in the contract. The contractually agreed savings are determined based on data provided by the Client and realistic assumptions. The achieved savings are calculated as the difference between energy consumption and/or related costs before and after the implementation of energy efficiency improvement measures.

# Key elements of EPC model reflected in Code of Conduct principles (3)



## 4. The EPC provider supports long-term use of energy management

- The EPC provider actively supports the Client in the implementation of an energy management system during the contract period and eventually after the contract period by agreement. This helps sustain the benefits from the project even after the contract period.

