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EU policies on the promotion of energy services

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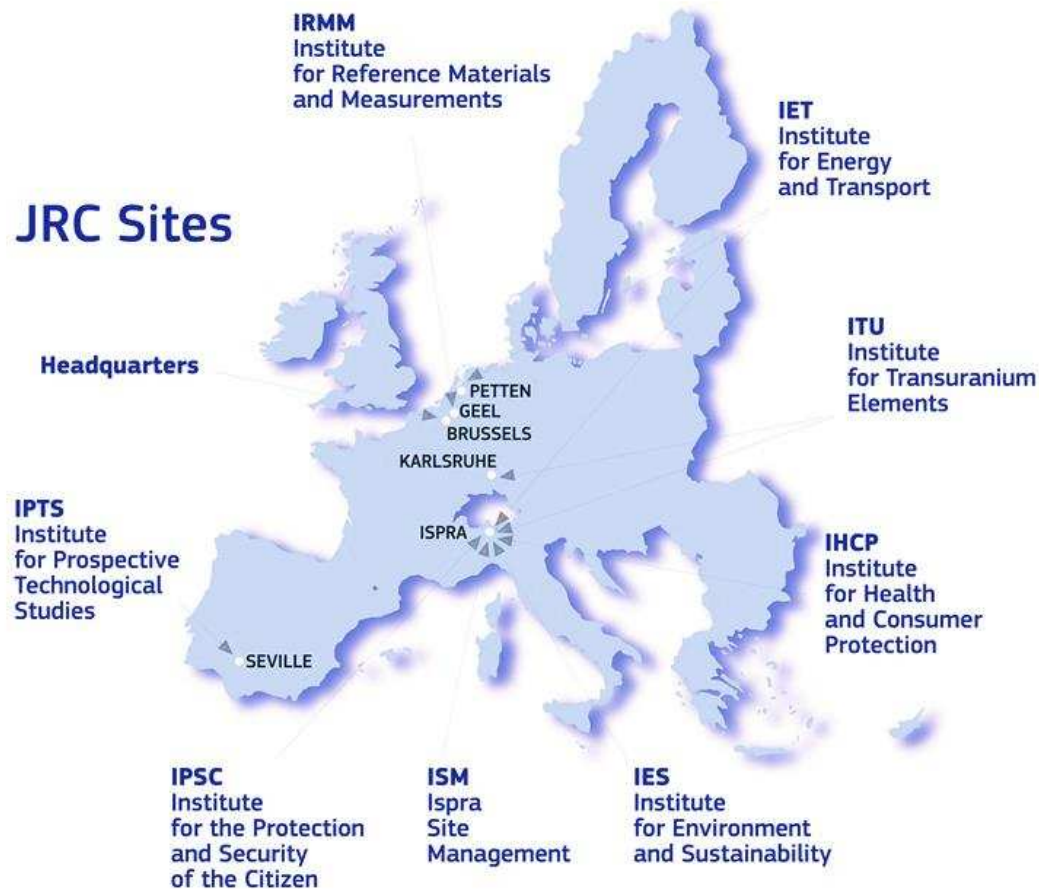
BASREC Conference

Ministry of Economy, Warsaw
17/11/2015

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The Joint Research Centre (JRC)



- **European Commission's in-house science service**
- **Established in 1957 (Euratom Treaty)**
- **Supporting EU policies with independent, evidence-based scientific and technical support**
- **7 Institutes (Directorates) in 6 locations**
- **~ 3.000 staff (2015)**
- **1370 publications in 2014**



PART 1

EU POLICY FRAMEWORK

SUPPORTING ENERGY SERVICES

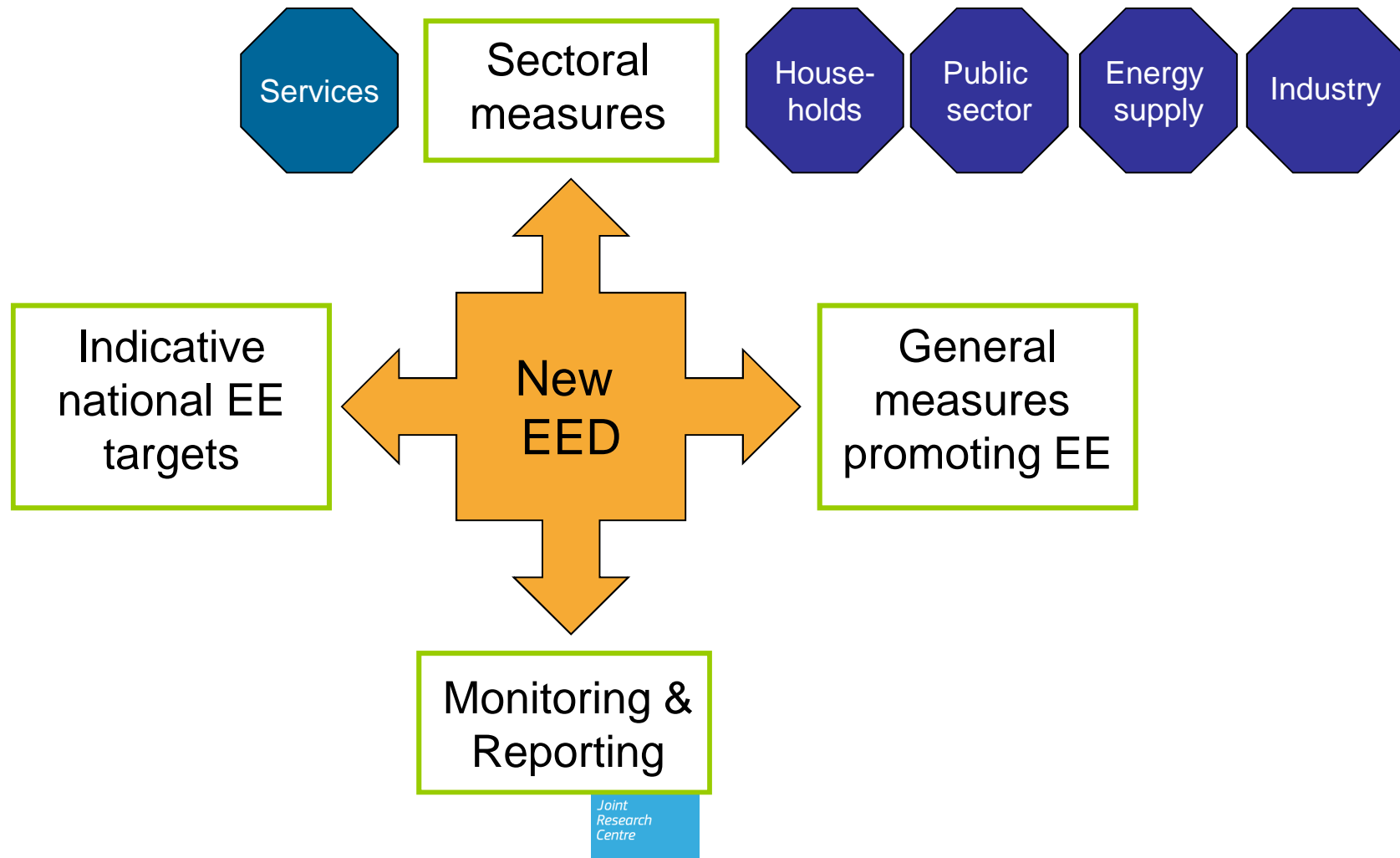


EU Energy and Climate 2030 targets

The EU countries have agreed to the following objectives to be met by **2030**:

- a binding EU target of at least a **40%** reduction in greenhouse gas emissions by 2030, compared to 1990;
- a binding target of at least **27%** of renewable energy in the EU;
- an energy efficiency increase of at least **27%**, to be reviewed by 2020 potentially raising the target to **30%**, by 2030.

ENERGY EFFICIENCY DIRECTIVE



Energy Efficiency Directive - 2012/27/EU

Art. 18

Information dissemination

- Energy services contracts & clauses
- Info on relevant financial instruments

Quality labels

- Encouragement of quality label development, inter alia, by trade associations

Energy Service providers

- Regular updates of list or interface of available energy service providers and

Energy services in public sector

- Publication of model contracts
- Best practices on EPCs

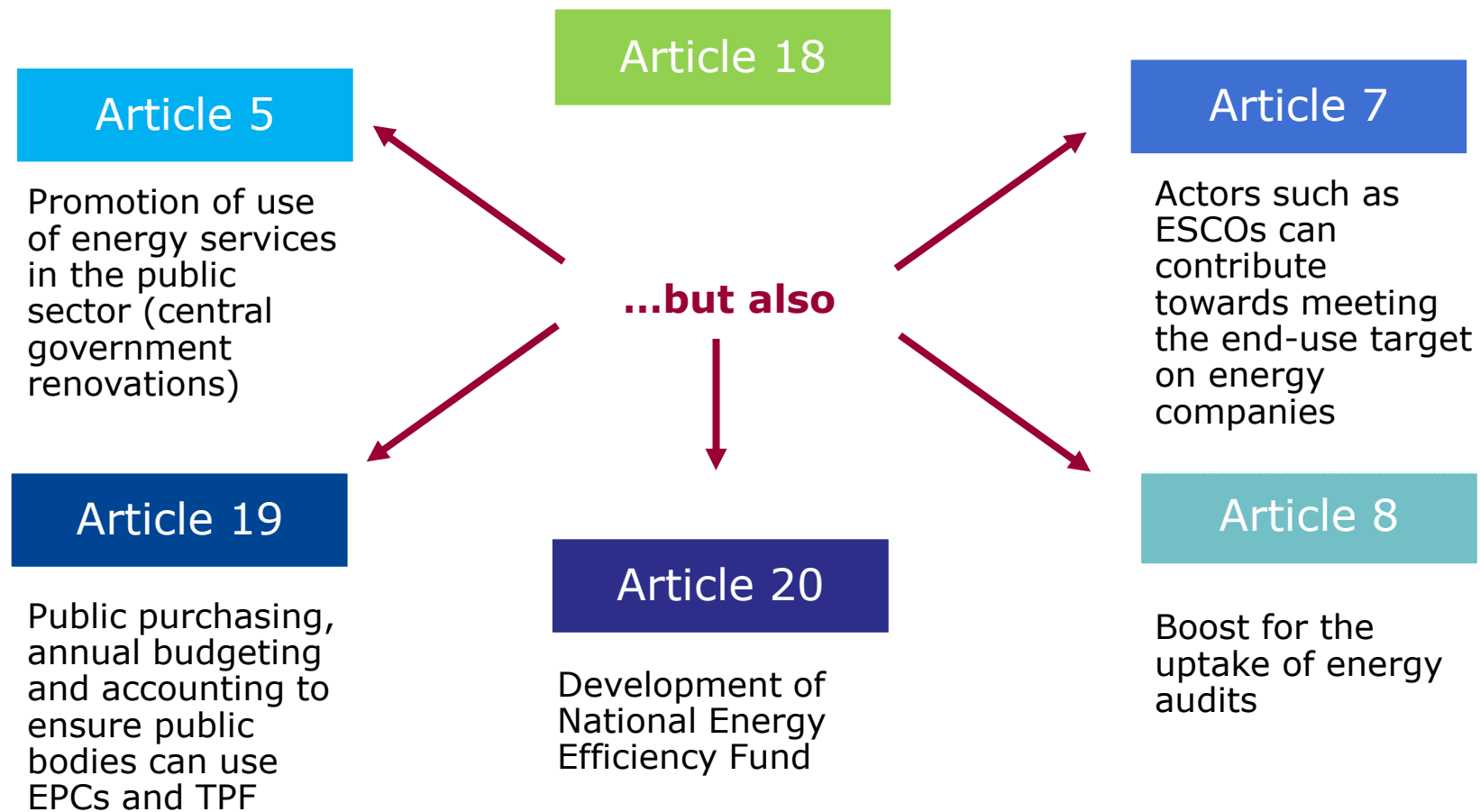
Market Review

- Qualitative review of current/future development of market

Other

- Market intermediaries, independent mechanism for complaints, national contact point for consumers

Energy Efficiency Directive - 2012/27/EU





PART 2

JRC SUPPORT FOR ESCOs

JRC work on ESCOs

Market analysis reports



Expert workshops





Methodology

- Online **survey** combined with expert **interviews** and complimented by national reports, scientific articles, legal documents etc.

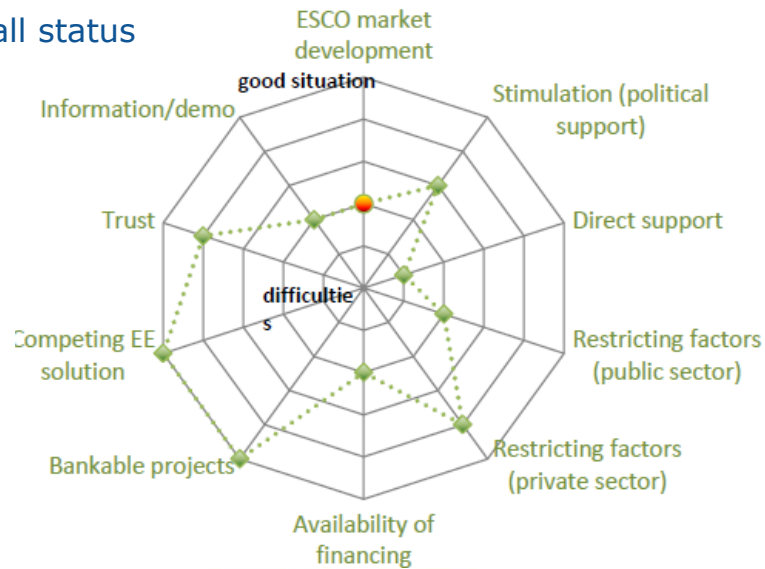
- Country-by-country reviews of ESCO market in the EU and beyond:

✓ Current ESCO market	✓ Financing ESCO projects
✓ Types of projects	✓ Barriers
✓ Regulatory & market factors	✓ Future expectations
✓ Awareness and trust	

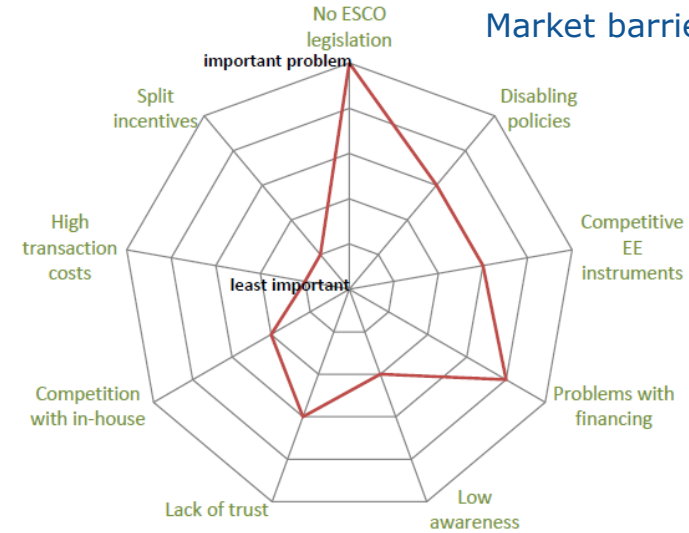
- Databases of ESCOs and ESCO projects

Polish Market Review 2013

Overall status



Market barriers

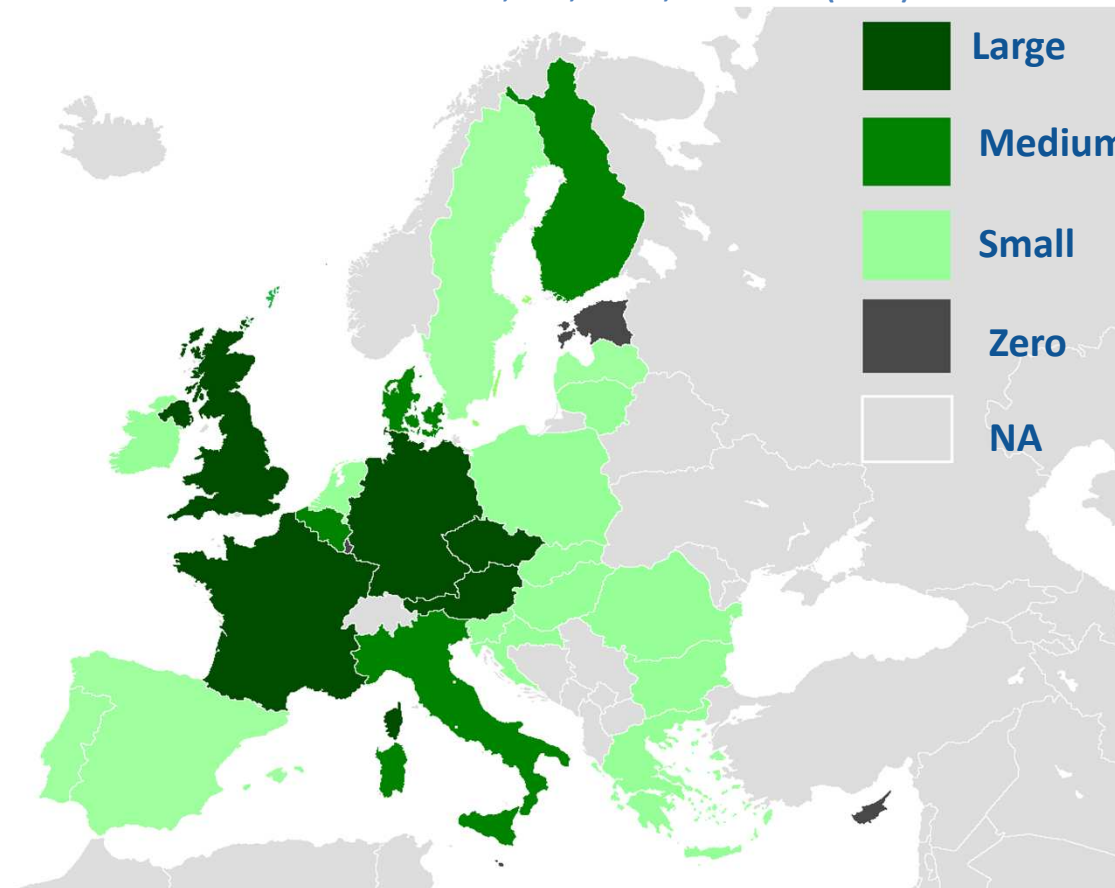


Poland in a snap-shot:

Number of ESCOs	ca. 30, of which ca. 10 are active
ESCO market size and potential	market size: €10-25 million annual turnover market potential: €25-75 million
ESCO market trend	getting off the ground
ESCO association	none
Typical ESCO projects	space heating, air conditioning, control and automation, lighting. building envelope projects are increasing public sector buildings
Main type of contract	BOOT, outsourcing (guarantee is often excluded)

ESCO markets across the EU (2013)

Source: Bertoldi, Kiss, Panev, & Labanca (2014)





European market development

2010-2013 market changes

- During the past ca. 3 years most of the European ESCO **markets have grown in size** and/or developed their complexity. Thus the average European ESCO market has improved.
 - more ESCOs;
 - more projects;
 - areas where they were rare before (household, even transport)
 - higher level of institutionalization.
- Development is also observed in case of **non-EU countries**.
- The growth has been stimulated **by demand**, i.e. an expansion of interest from the side of **potential clients**
- Active framework and positive impact of the **EU level legislation and programmes**



European market development

2010-2013 market changes

- **Few mature markets:** DE, CZ, FR, AT - even these can expect to go through significant growth in the future.
- The ESCO sector was able to **kick-off in** several typical **non-ESCO countries**, such as Denmark and Spain.
- **Decrease or deterioration** of the ESCO sector was **rare** during the observed period (HU, maybe AT?, maybe SE?).
- Large differences between national markets – they are only slightly transferable.
- The geographical distribution of ESCOs and projects is uneven also within countries.

ESCO market size across the EU

Investment volume

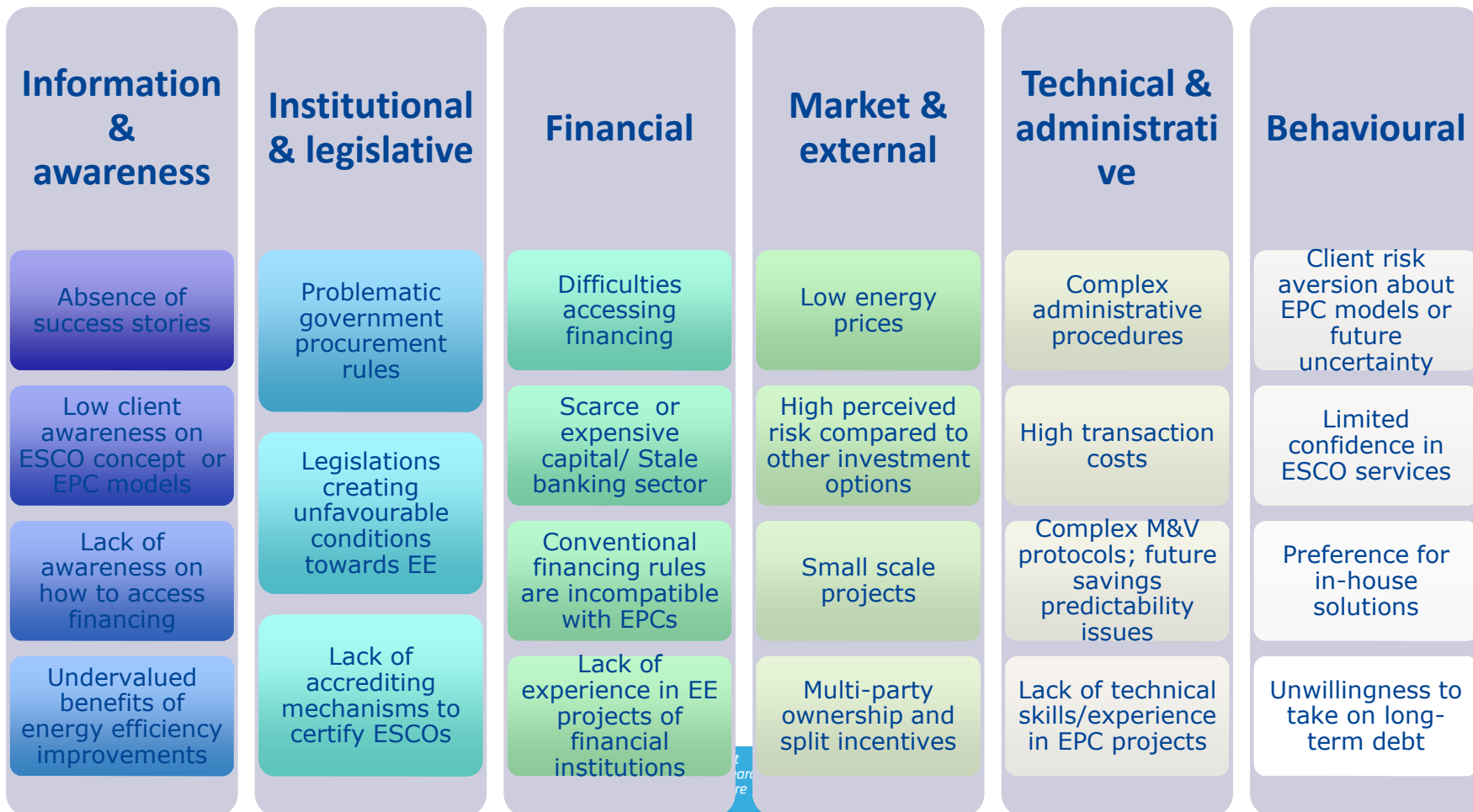
BE	€1.5 million (EPCs)
CZ	€10 million yearly
DE	€1.6-2 billion (2010)*
ES	~ €1 billion yearly
FR	€189 million (2013)
PL	PLN 40-100 million turnover (2011)
SE	SEK 40 million (underestimate) yearly
UK	GBP 180 million

Undertaken projects

AT	15-20 EPCs; 30-35 ESCs
CY	2 EPCs in 2014
CZ	10-15 EPCs yearly
DE	Around 200**
FR	143 EPCs
SE	10 EPCs in recent years

Source: JRC analysis based on National Energy Efficiency Action Plans 2014

Barriers to market development



EED policy support for energy services

Source: JRC analysis based on National Energy Efficiency Action Plans 2014

	Legislative measures	Financial incentives	Info. measures	Registry of ESPs		Legislative measures	Financial incentives	Info. measures	Registry of ESPs
AT		✓	✓	✓	IE			✓	
BE					IT				
BG	✓	✓			LT	✓			
CY	✓		✓	✓	LU				
CZ	✓	✓	✓	✓	LV	✓		✓	
DE					MT				
DK			✓	✓	NL			✓	✓
EE	✓				PL	✓			✓
EL	✓		✓	✓	PT				
ES	✓	✓	✓		RO				
FI		✓	✓		SE				P
FR					SI				
HR	✓	✓	✓	P	SK				P
HU					UK			✓	✓

ESP: Energy Service Providers
P: Planned



Energy services market

- Published EPC models: AT, CY, CZ, EL, ES, FR, LU, PL, NL, UK
- Current number of ESCOs still low
 - Germany, Spain, Italy: more than 300-400
 - All other countries: less than 50
- Size of EPC market is generally small
- Current trends in market for energy contracting:
 - Growth: BE, DE, ES, FR, SE and UK
 - Decline: AT, PL
- Future trends in the market for energy contracting
 - Positive trends reported for: CY, CZ, DE, NL

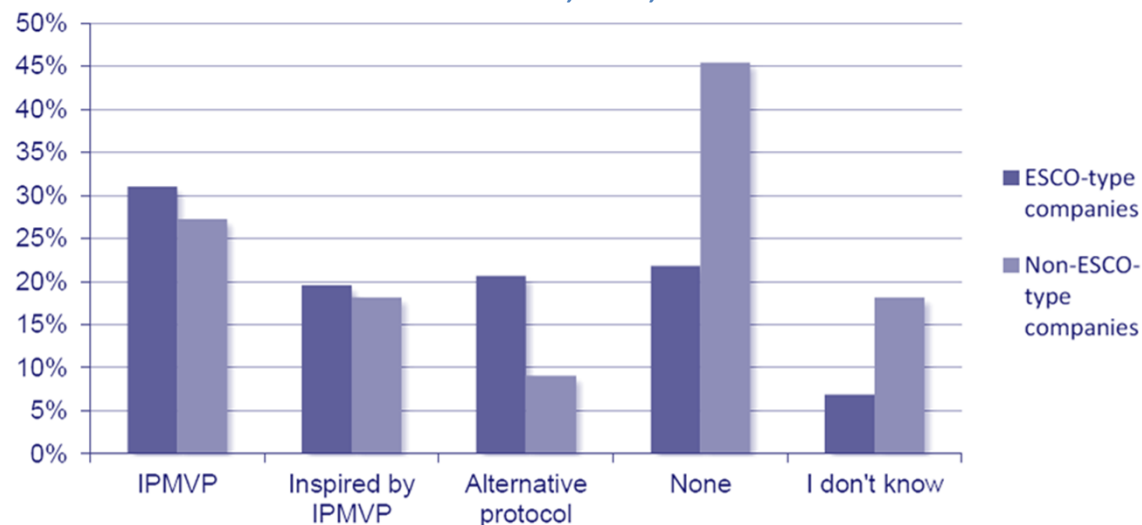
Measurement and verification (M&V)

M&V's pivotal role in the overall project success

- project savings are used to pay the financing obligations of EPCs
- energy savings represent avoided energy consumption

Use of M&V protocols in the energy service sector in 22 EU MSs

Source: ten Donkelaar, et al., 2013





A few summarizing points

Supportive EU policy framework

Large variations in terms of ESCO market development, size, features and frameworks among European countries

But... the markets have more in common than before:

- Almost all markets have grown since 2010;
- More demand driven markets, increasing number of policies supporting ESCO solutions and growing ESCO associations;
- Facilitators gain importance as an effective means to mediate between client and suppliers;
- Model contracts, standards and/or intensive information dissemination are developed and carried out by third parties/market facilitators;
- Participation of a wide range of companies, indicating an open and competitive market.

Thank you



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