



CONCERTED ACTION
ENERGY EFFICIENCY
DIRECTIVE

Energy efficiency services programming and EPC market development

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CA EED Study Visit: Energy Performance Contracting in Slovenia

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Energy Contracting in Slovenia: 2001 - 2018

"We will leave a steam engine **free of charge** to you. We will install these and will take over for five years the customer **service**. We **guarantee** you that the coal for the machine costs less, than you must spend at present at fodder on the horses, which do the same work. And everything that we require of you, is that you give us a third of the money, which you **save**.,,

[James Watt, 1736-1819]

EPC Code of Conduct

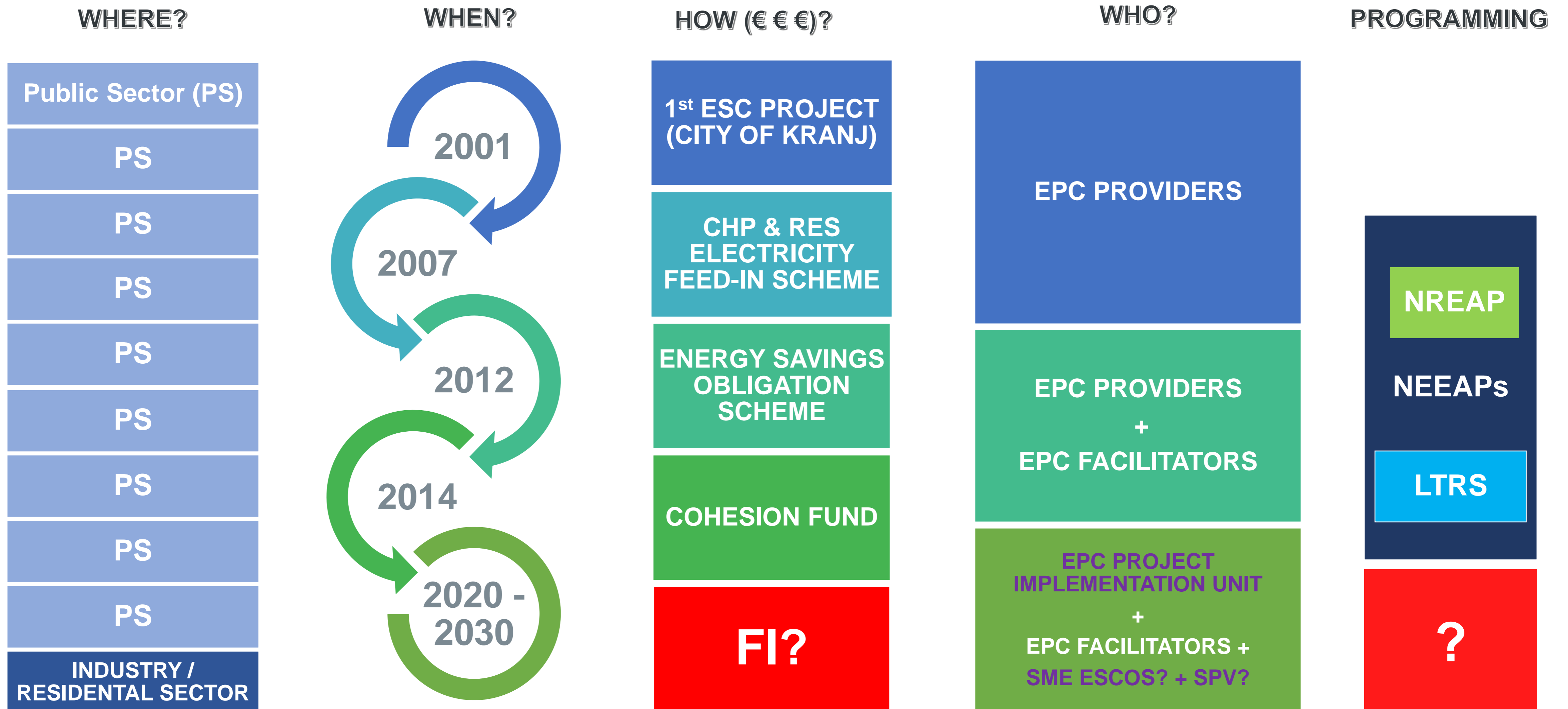
1. The EPC provider delivers **economically efficient savings**
2. The EPC provider takes over the performance **risks**
3. Savings are **guaranteed** by the EPC provider and determined by **M&V**
4. The EPC provider supports long-term use of **energy management**
5. The EPC provider **supports** the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

Efficiency

Quality

Transparency

ESC/EPC.SI Development: 2001 - 2030



ESC/EPC.SI programming - NEEAP

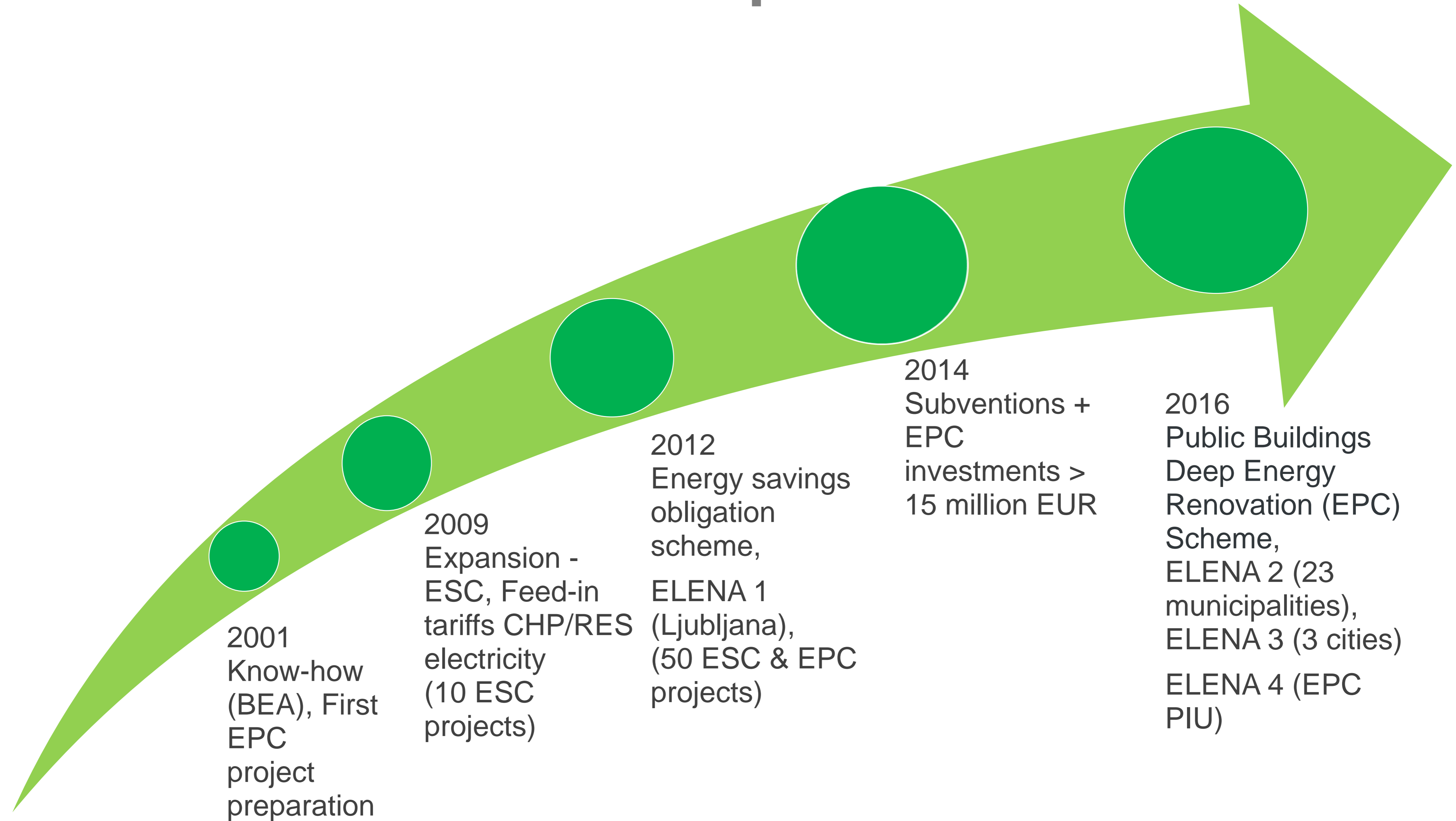
✔ directly related measures

- H.1 Energy performance contracting
- G.2 and G.3 Financial incentives for implementation of EE and renewable energy sources (RES) measures in residential buildings
- G.7. Instruments for financing renovation in buildings with multiple owners
- G.8 Distribution of incentives among owners and tenants in multi-apartment buildings
- G.9 Establishment of a guarantee scheme
- J.2 Financial incentives for the deep renovation of buildings in the public sector
- J.3 Introducing an energy management system in the public sector
- J.5 Public buildings energy renovation projects implementation unit

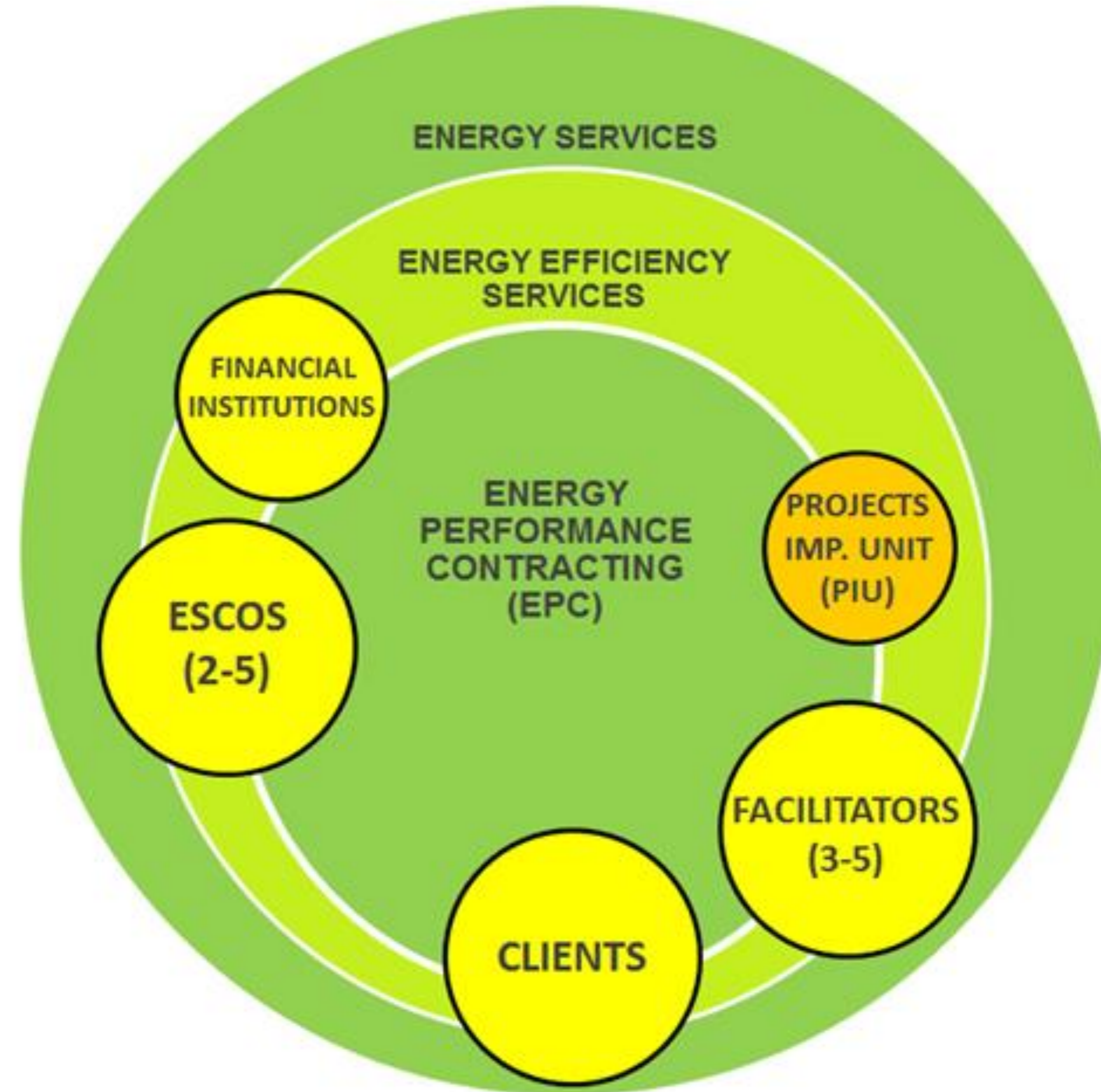
✔ indirectly related measures

- H.3 Information, awareness-raising and training schemes for targeted public
- H.4 Education and training
- J.6 Support scheme for the renovation of built cultural heritage and other special building groups
- J.7 Preparation of sustainability criteria for public buildings renovation

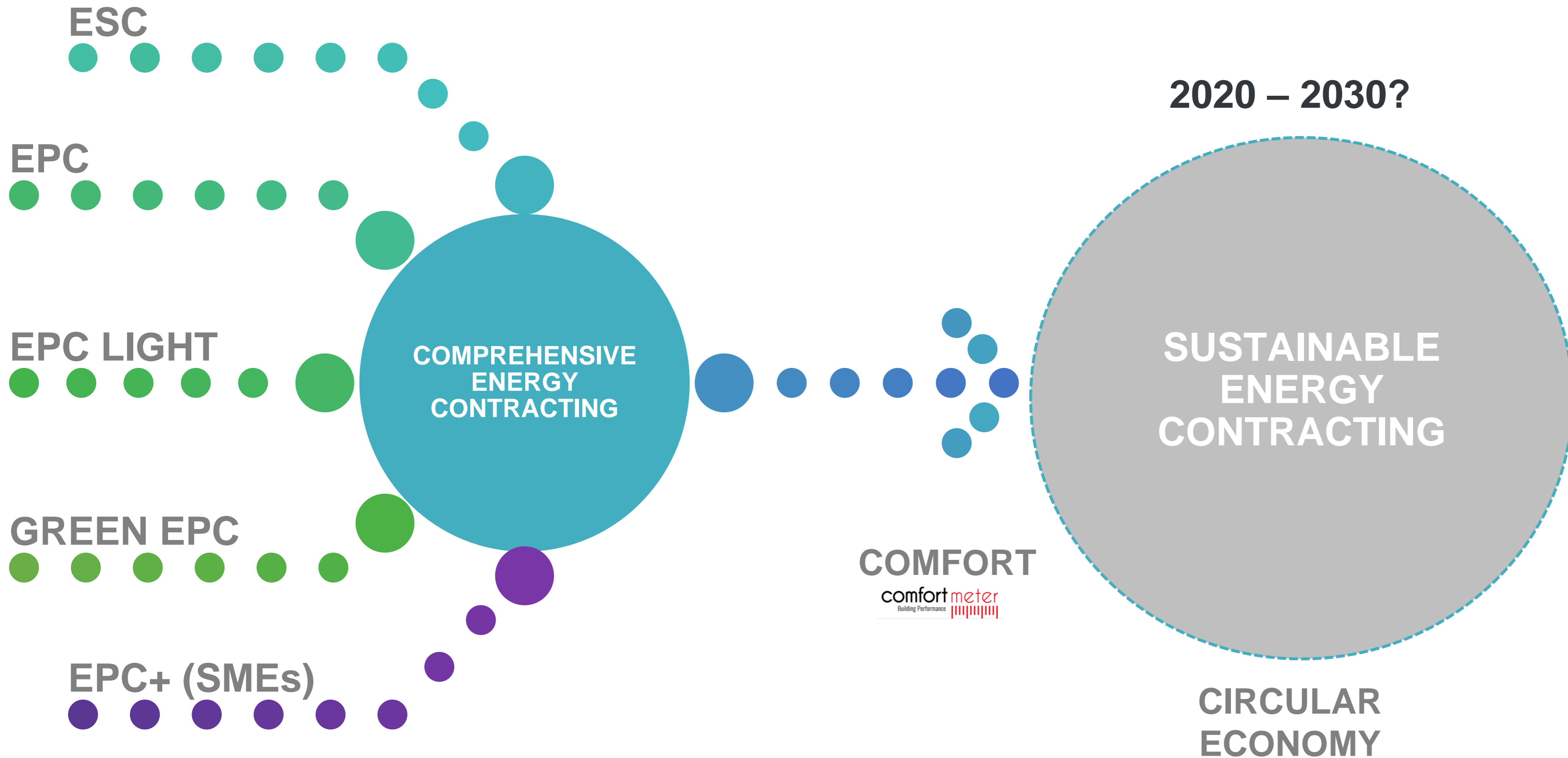
ESC/EPC.SI market development milestones



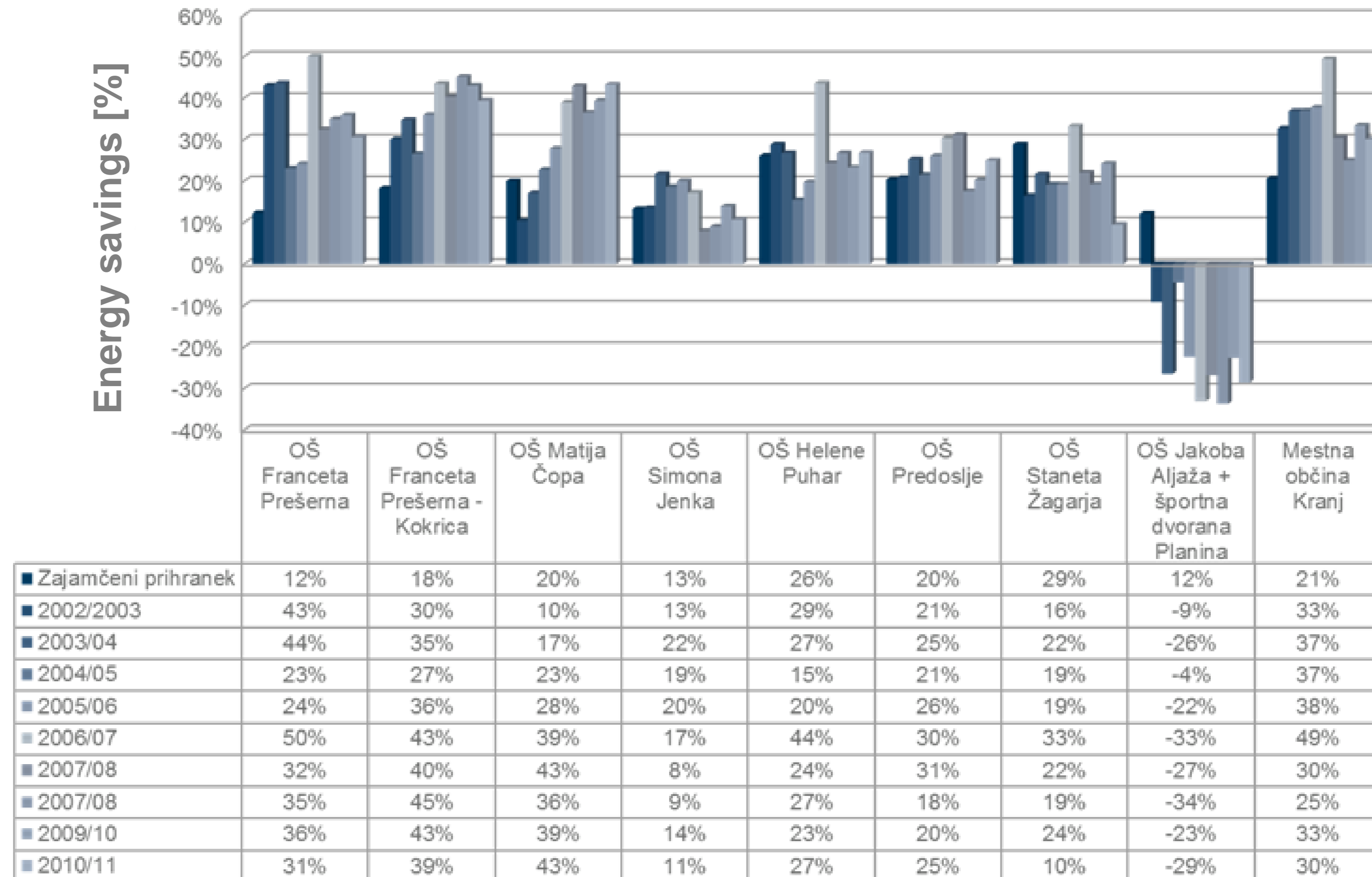
EPC.SI market stakeholders



SI: Energy Contracting Models



City of Kranj: 1st ESC Project (2002)



City of Kranj: 5th EPC Project (2018)



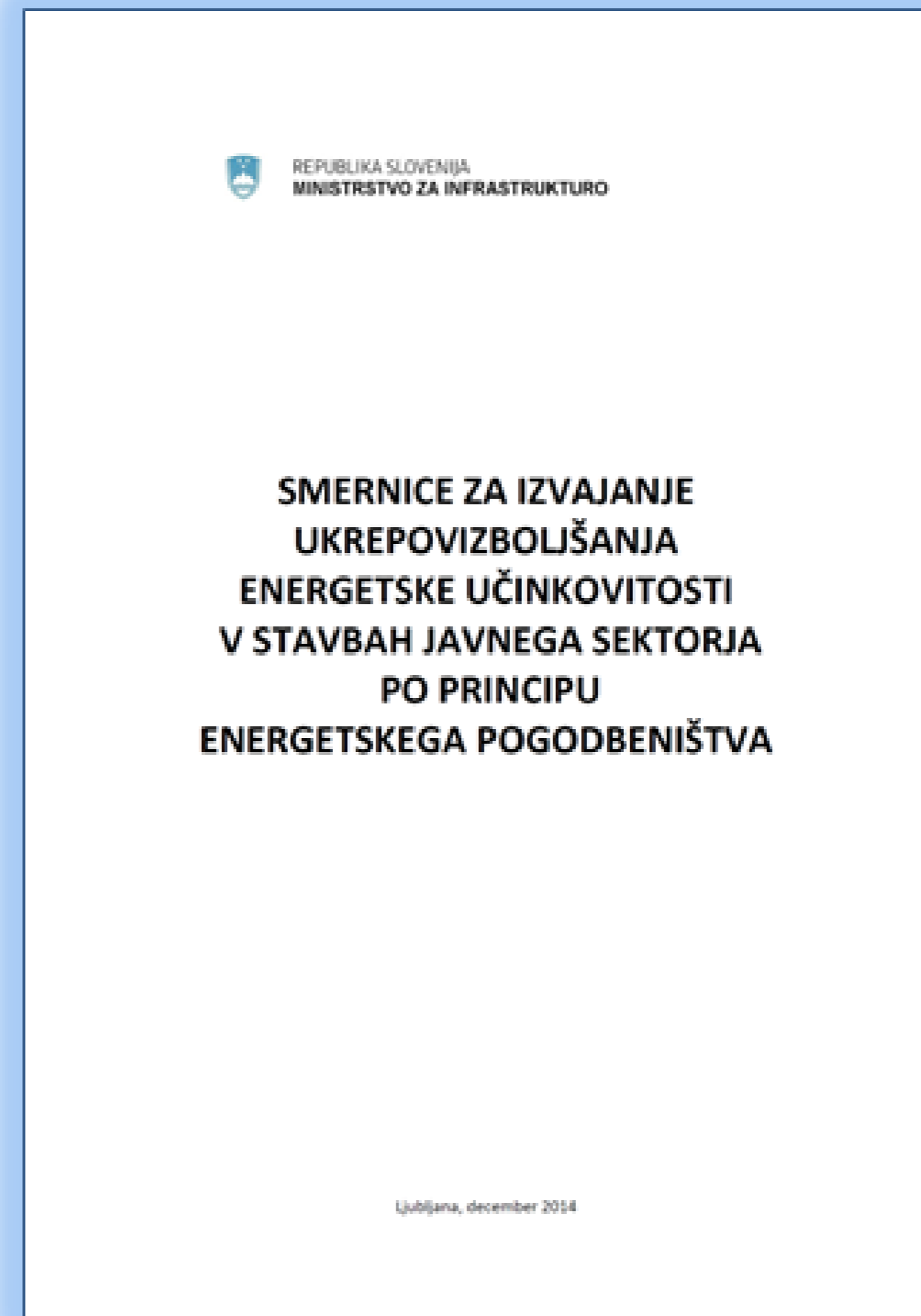
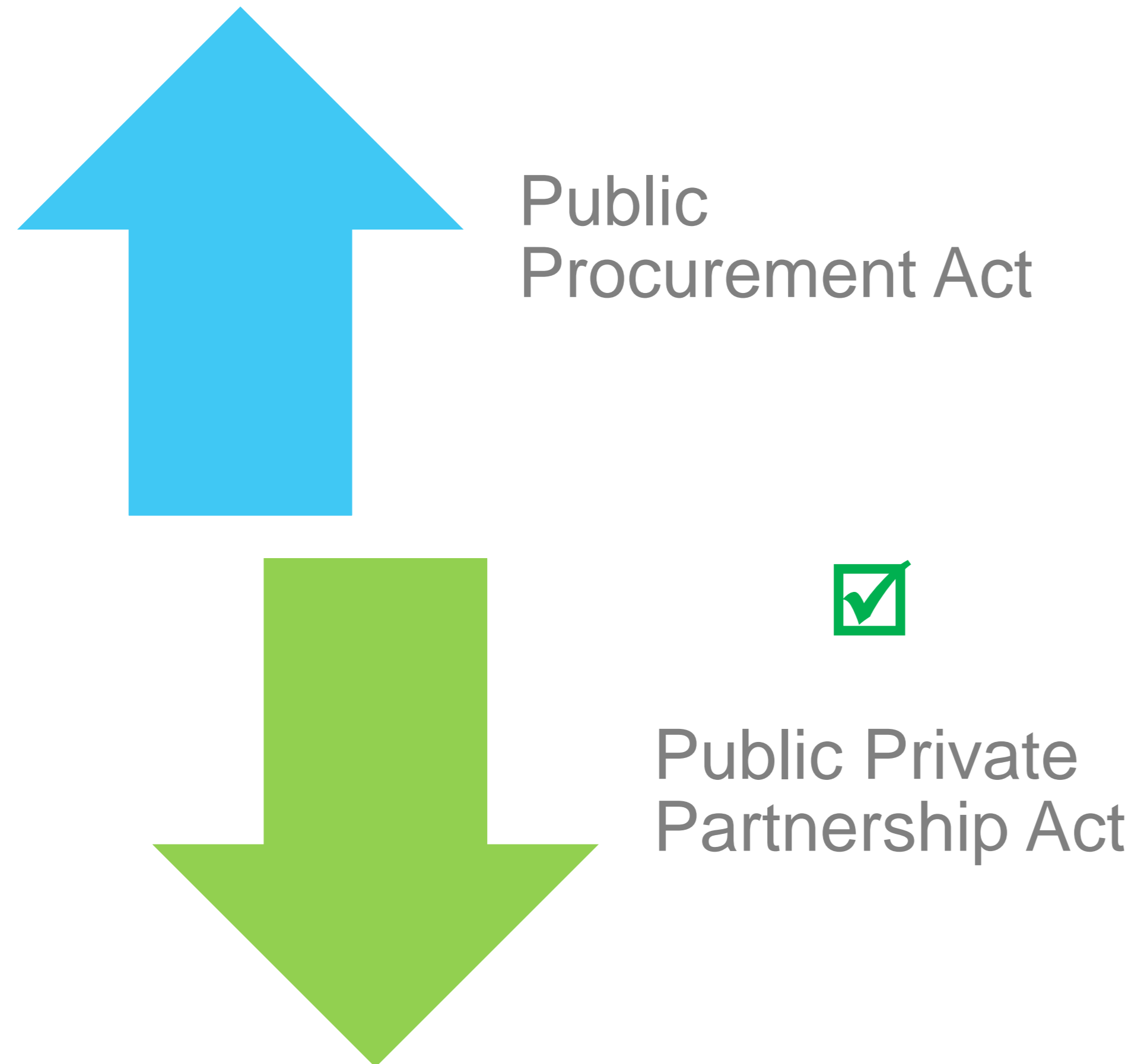
- ❑ 10 buildings: deep energy renovation
- ❑ 12 buildings: energy efficiency measures
- ❑ 6 buildings: energy management
- ❑ 68.450 m²
- ❑ Investment costs 6.180.000 EUR
- ❑ 3 ESCOs
- ❑ EIB European Local Energy Assistance (ELENA) project

Ironworks Acroni – Indoor Lighting EPC (2006)



- ❑ Lighting quality improved significantly (upgrade from 30-100 lux to 300-500 lux)
- ❑ Lighting electric power after refurbishment: 975 kW (52% reduction)
- ❑ Electricity consumption after refurbishment: 7.756 MWh/year (guaranteed 54% savings)
- ❑ Electricity savings: 9.221 MWh/year (guaranteed savings)
- ❑ Investment costs 2.420.000 EUR

Energy Contracting Guidelines



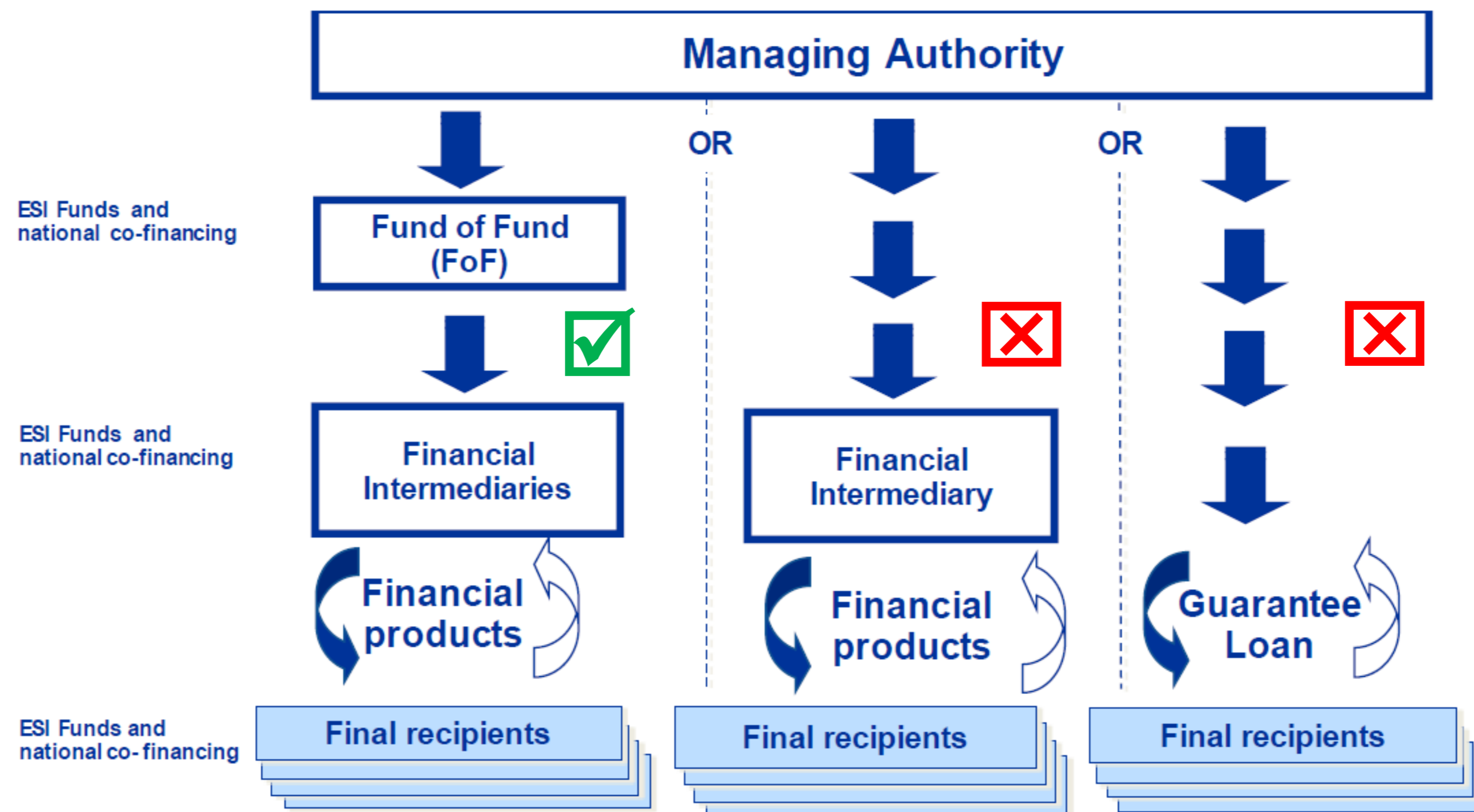
Buildings energy renovation toolbox

- ✔ Instructions and technical guidelines for energy renovation of public buildings
- ✔ Instructions for operation of intermediary bodies and beneficiaries implementing public buildings energy renovation programme
- ✔ Detailed guidelines for the public partners implementing public buildings energy renovation
- ✔ Call to public-private partnership promoters
- ✔ Decision on public-private partnership
- ✔ Concession act
- ✔ Call for tenders
- ✔ Model contract
- ✔ Model agreement
- ✔ Reference book of eligible costs of public buildings energy renovation
- ✔ Guidelines for energy renovation of built cultural heritage

Award criteria for EPC projects cofinanced in the framework of the OP ECP

Award set / Sub-indicator		Weight	Sub-weight	Max. no. of sub-points	Max. no. of points
A.	Energy efficiency and RES				
	1. The ratio between the annual final energy savings and the energy renovated building(s) area	0,50	0,80	100,00	40,00
	2. The ratio between additional production of energy from RES and the final energy consumption after energy renovation of building(s)		0,20	100,00	10,00
	TOTAL A	0,50	1,00	100,0	50,00
B.	Cost efficiency				
	1. The ratio between the annual final energy savings and the value of the eligible PPP EPC costs	0,35	1,00	100,00	35,00
	TOTAL B	0,35	1,00	100,00	35,00
C.	Contribution to social change and raising social awareness				
	1. The ratio between PPP EPC 'cohesion operation' investment without VAT and total 'cohesion operation' investment cost	0,15	0,30	100,00	4,50
	2. The 'cohesion operation' investment cost without VAT		0,50	100,00	7,50
	3. Setting up electric vehicle charging station(s)		0,20	100,00	3,00
	TOTAL C	0,15	1,00	100,00	15,00
TOTAL A + B + C				100,00	100,00

Implementation options of FI in the programming period 2014-2020



NEEAP – National Energy Efficiency Action Plan

LTRS – Long Term Renovation Strategy

OP ECP - Operational Programme for the Implementation of the EU Cohesion Policy 2014-2020

OP ECP

LTRS

NEEAP

SI

Back to future: SMART FINANCE FOR SMART BUILDINGS

MAJOR GOALS

More effective use of public funds

- Deploying **Financial Instruments** and flexible energy efficiency and renewable financing platforms
- Building on EFSI II blending with ESIF funds



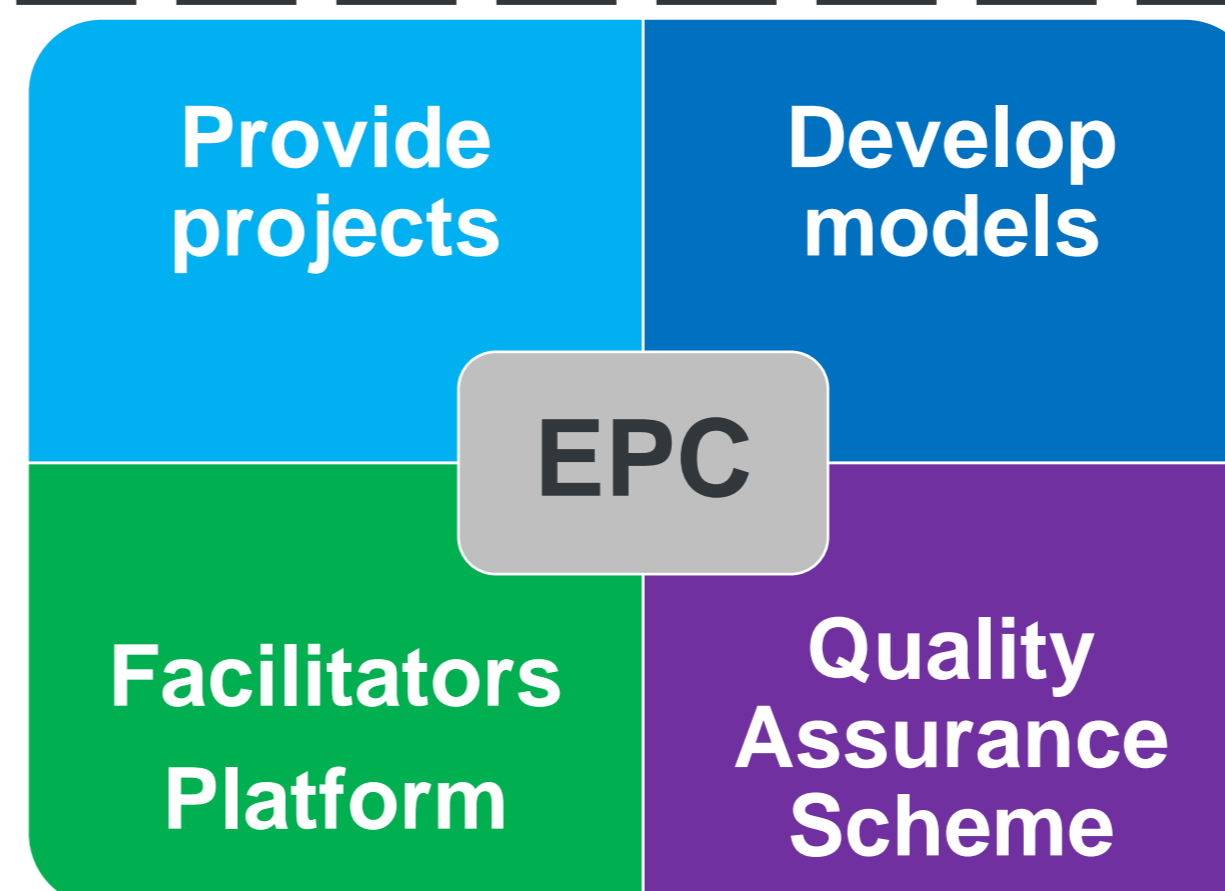
Assistance and aggregation

- Supporting the project pipeline at EU and local level
- **Project Development Assistance** facilities
- "One-stop-shops"
- **EIB ELENA**



De-risking

- Understanding the risks and benefits for financiers and investors
- **The De-risking Energy Efficiency Platform**
- Commonly accepted underwriting framework



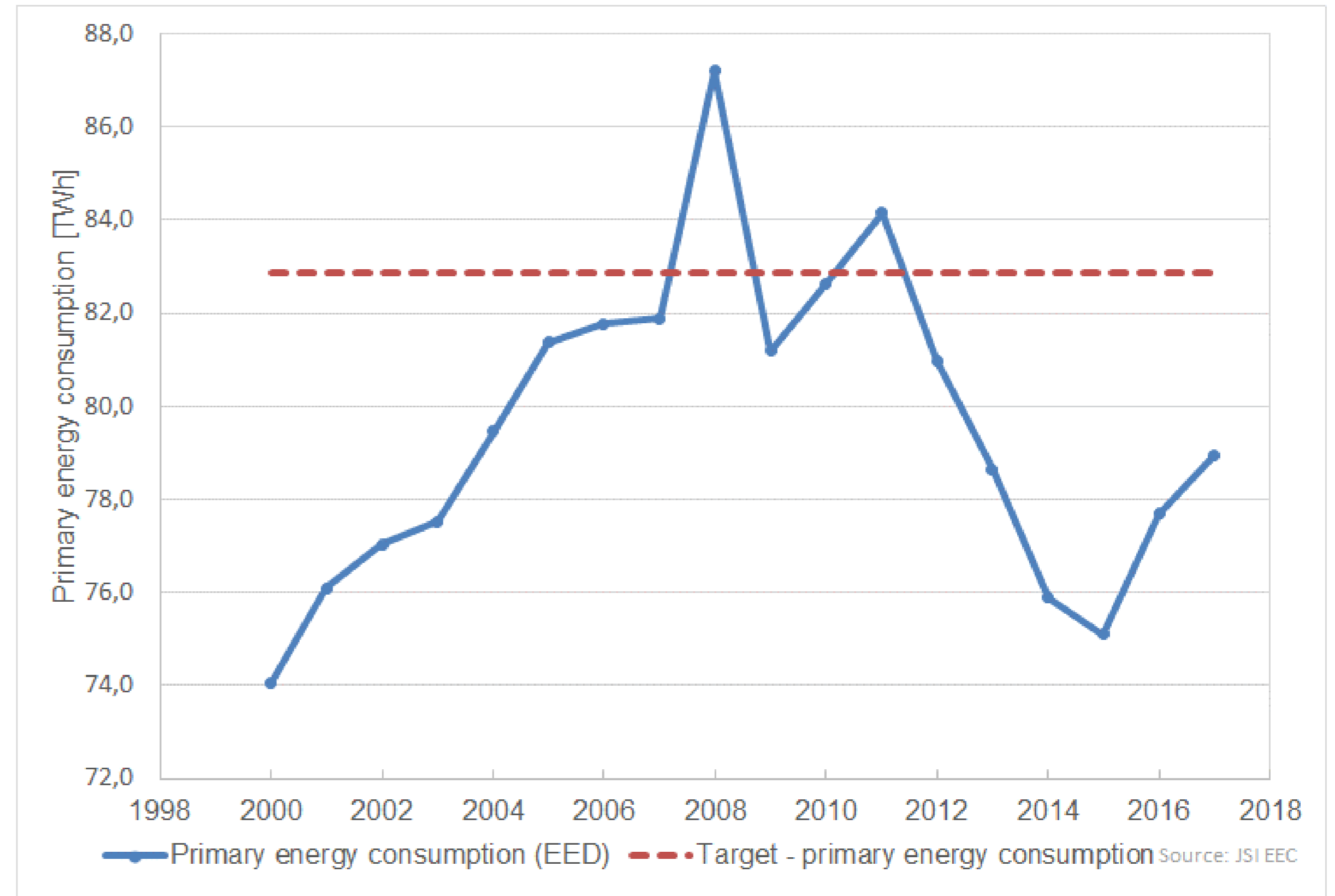
SI

Long Term Renovation Strategy: Huge EPC potential identified

- ✔ Foreseen investments in energy renovation of buildings for the period 2016–2023: EUR 3,166 million (72.7% of investments is allocated in the residential sector, only 10.7% in the public sector, and 16.6% for buildings in the private service sector).
- ✔ Foreseen investments in energy renovation of buildings for the period 2024–2030: EUR 3,137 million, giving a total for **2016-2030 of EUR 6,304 million** (73.6% for the residential sector, 10.3% for buildings for the public sector and 16.1% for buildings in the private service sector). These investments represent a huge potential for further increase of the EPC market volume.

Lessons learned

- ✔ Provide finance
- ✔ Develop projects
- ✔ Build capacity
- ✔ Standardize
- ✔ Long run but need to run faster



Thank you!

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