



Combined FI for ESCOs/Energy Performance Contracting

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 #ficompass





Combination of financial instruments and grants for EPC projects

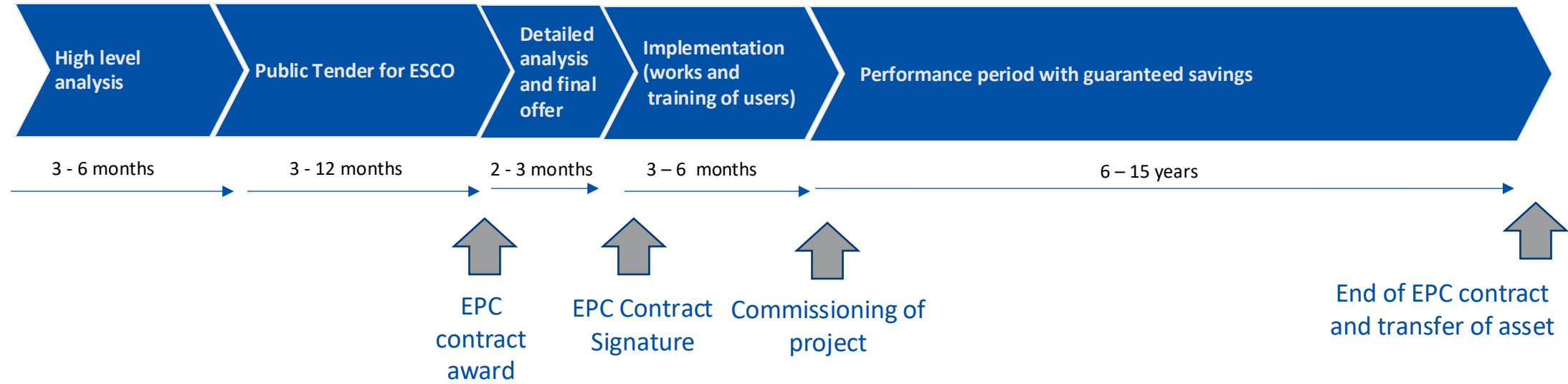
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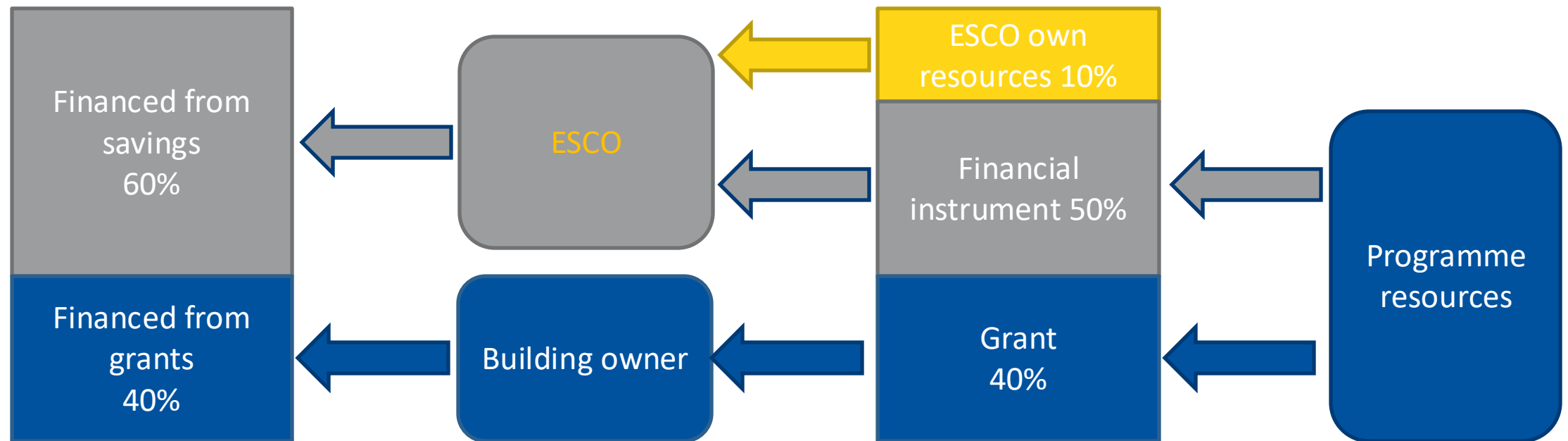
Life cycle of an EPC project





Financing EPC+ projects

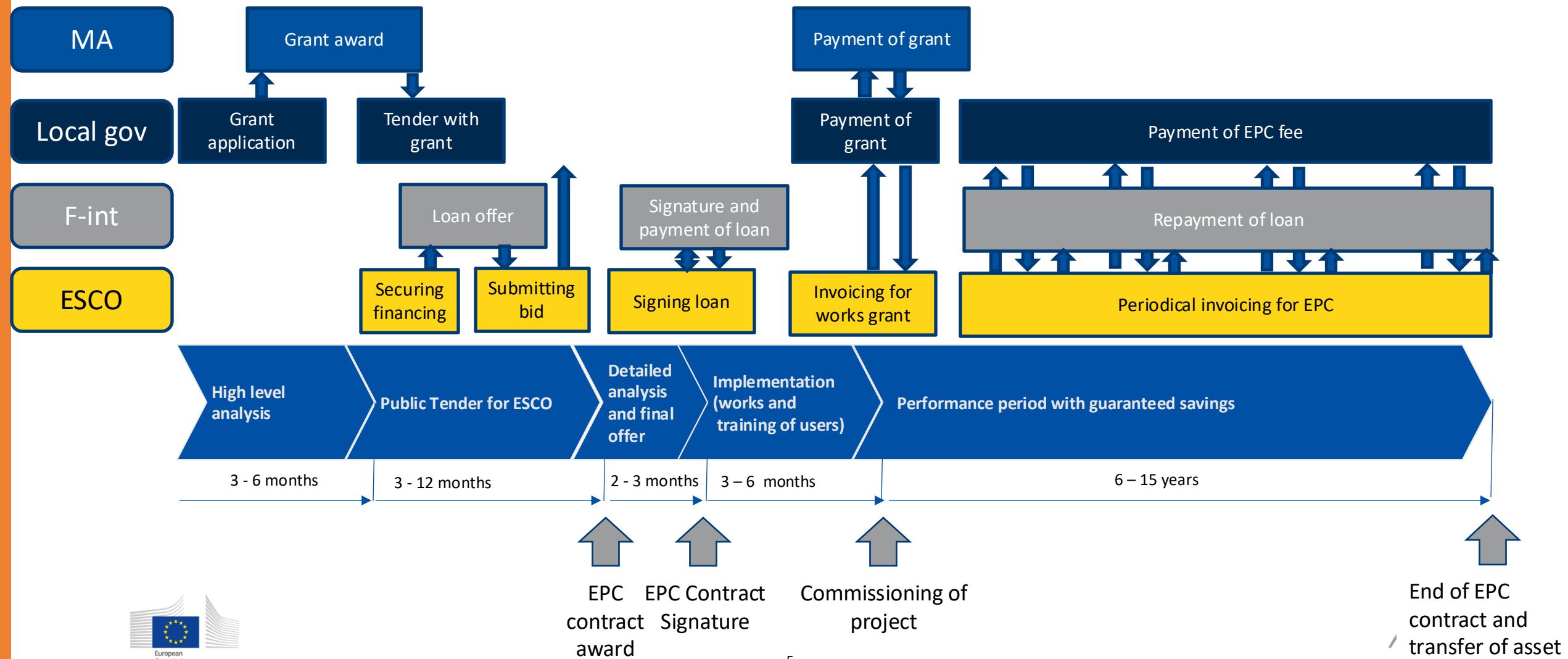
Combination in 2 operations





EPC+ combination in 2 operations

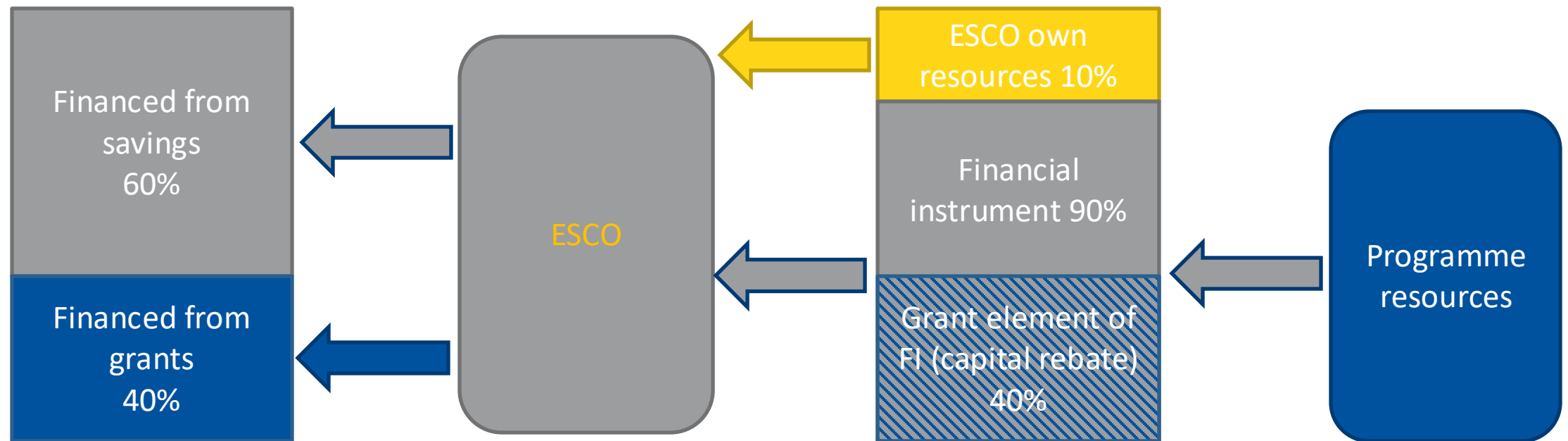
Lifecycle





Financing EPC+ projects

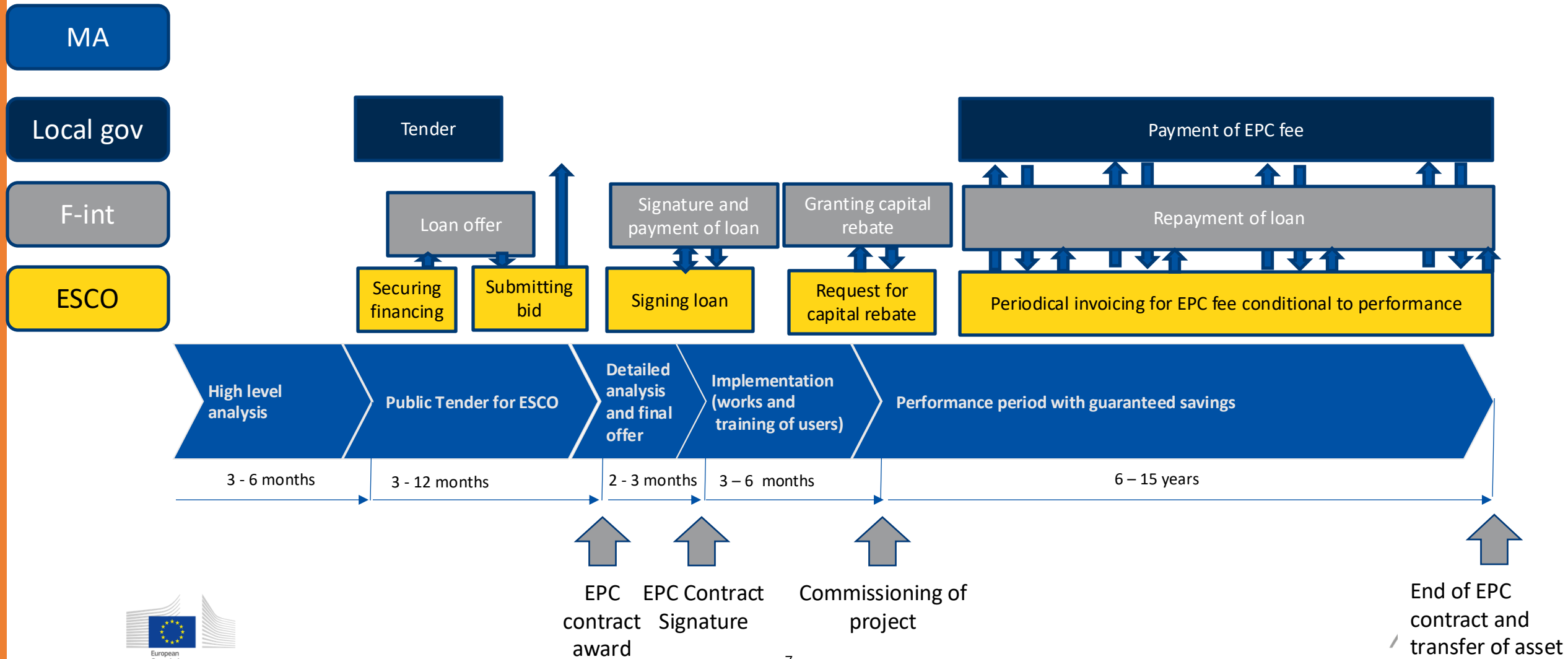
Combination in 1 operation





EPC+ combination in 1 operation

Lifecycle





Case studies: EPC in Slovenia, Italy and Czech Republic

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EPC for health sector building renovation in Marche, Italy





Marche – Italy: EPC in the health sector

- **Objective:** Using EPC for comprehensive renovation including renewable energy sources
- **Scope:** 3 regional hospitals and 2 health centres (in 3 tenders)
- Duration: EPC contracts are signed over 15 years

Financing of the EUR m investment cost:

- ESIF grant (40%) paid to the regional health authority, grant is passed on to ESCO; **4.0m**
- ESIF interest-free loan (42% of the investment) for 8 years with one year grace period; **4.1m** (90% upfront – 10% at completion of project)
- ESCOs to provide remaining amount from own resources (18%)

To have sufficient scale for a financial instrument the health sector projects are part of a regional: **Energy and Mobility Fund (EMF)**

- The preparation of projects and grant/loan scheme was financed by EU-grant under the project MARTE





Marche – Italy: EPC in the health sector

Lessons learned

- Preparation is key
- Local governments were hesitant to use new form of implementation – only the regional health authority used EPC
- Strong commitment from region and financial intermediary is needed
- Difficulties with expenditure reports
- State aid is a challenge
- **Region wants to continue with EPC in 2021-2027 period**



The San Benedetto del Tronto (AP) hospital has gone green. Improvement from G to A1 in less than 2 years despite COVID-19 related lockdown



Public building renovation using EPC in Slovenia





Slovenia: National EPC Programme

- 2014-2020 1.8million m² public building stock to be renovated
- Estimated investment volume EUR 415m
- Available resources from OP EUR 171.7m
 - Grants EUR 146m
 - Loan instrument EUR 25m
- Establishment of strategic development project:
 - Set up of project office, inventory of buildings,
 - Preparation of project documentation with ELENA technical assistance
 - Establishment of EPC model contract approved by Ministry of Finance and Eurostat (off-balance for public sector)
- Set-up of financial instrument in order to increase competition among ESCOs



Slovenia: Decision making process for EPC projects

- Potential beneficiaries apply for ESIF support for energy efficiency measures
- EPC test
 - If cost benefit analysis shows that building is “EPC-able”, grant is conditional to implementation via EPC (up to 40% of CAPEX)
 - if not EPC-able, public procurement for works contract
- Client undertakes energy audit and analysis (potentially with ELENA support)
- Project office supports in public procurement (competitive dialogue)

An **ERDF loan fund** was set up to finance EPC projects

- little interest among ESCOs as conditions were not attractive
- public sector entities faced budgetary restrictions and could not borrow



Slovenia: CŠOD Bohinj

Pilot case

Training centre for school children in Triglav National Park
Renovating building to Zero Net Energy Building (NZEB)
standard

- Investment volume EUR 714,000 (2.105m²)
- 50% financed by ESCO, 50% financed via EU grants and client's own resources

Measures

- reconstruction of the boiler room, retrofitting central heating system, lighting retrofit, installation of ventilation system, advanced building management system, building envelope & joinery
- Switch to biomass fuel and heat pump
- Total energy savings 247 MWh/a (ca. EUR 44,000 p.a.)





Public sector building renovation in the Czech Republic





Czech EPC market

- **Among most advanced markets** in Europe, 20 years of experience
 - High quality of project preparation - facilitation
 - Standardisation
 - Availability of financing
- **Financing:**
 - Combination of EPC with EU and national grants
 - ESCO financing through forfaiting (sale of receivable to commercial banks)
- **Financing:**
 - **ESCOs** provide bridge financing until completion of project
 - **Private banks** purchase future receivables from ESCO
 - **Financing cost** of forfaiting are only marginally higher than normal municipal loans



[European Structural and Investment Funds \(ESIF\) and Energy Performance Contracting \(EPC\) \(fi-compass.eu\)](http://fi-compass.eu)



Czech EPC market

Project details:

- EPC contract signed at the end of 2018; the installation completed by December 2019. Buildings are protected monuments
- Energy savings to be achieved by building modifications, repair or replacement of windows and roof insulation on two buildings, Individual room control of temperature, new lighting and other technical measures

Business case description/economic parameters

- Contract duration: 10 years
- Business model: EPC + grants
- Total cost: 2.5 mil. EUR; subsidy from State Environmental Fund 1.2 mil. EUR
- **Stakeholders/companies involved**

Client: Academy of Fine Arts; ESCO: ENESA; Facilitator: SEVEN



Retrofit of 11 000 m² in 4 buildings of
Academy of Fine Arts in Prague

GHG savings: 695 tCO₂/year

Energy savings (expected): 1.1 GWh/year

Primary energy savings: 2 GWh/year





Additional resources





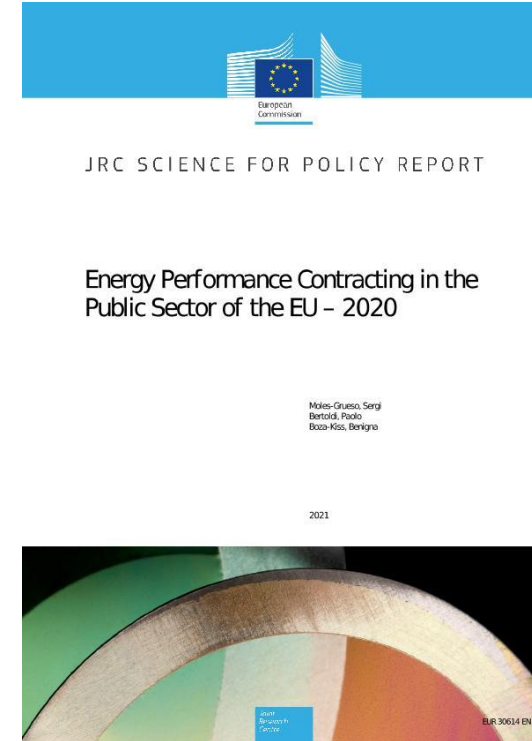
Additional resources to EPC/ESCO



- [What is Energy Performance Contracting? | Energy Efficiency Agency Dublin | Codema](#)



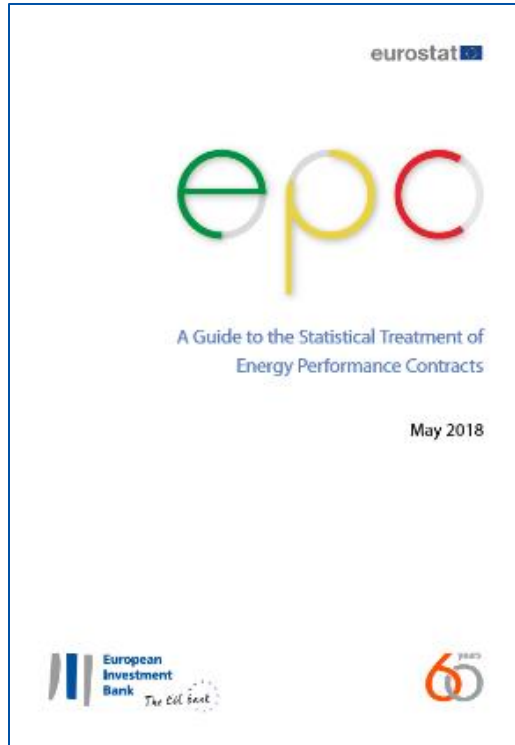
[JRC Publications Repository - Energy Performance Contracting in the EU – 2020-2021 \(europa.eu\)](#)



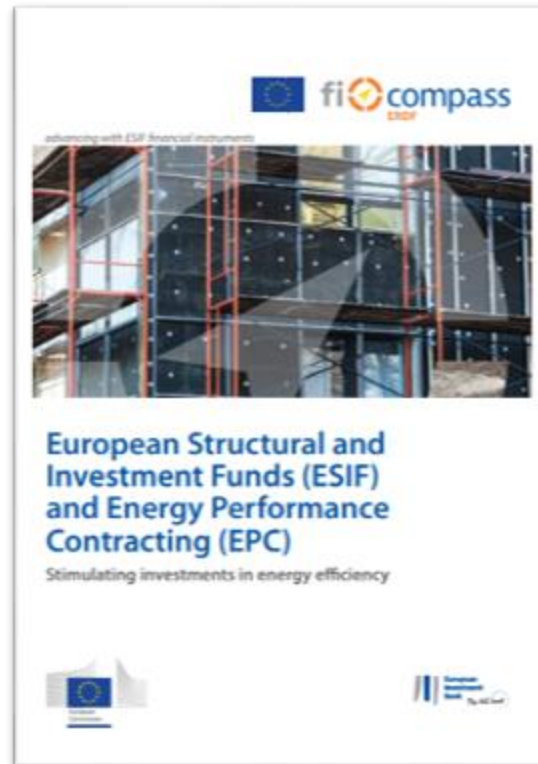
[JRC Publications Repository - Energy Performance Contracting in the Public Sector of the EU – 2020 \(europa.eu\)](#)



Additional resources



[A Guide to the Statistical Treatment of Energy Performance Contracts \(eib.org\)](http://eib.org)



[European Structural and Investment Funds \(ESIF\) and Energy Performance Contracting \(EPC\) \(fi-compass.eu\)](http://fi-compass.eu)



[Implementing Energy Efficiency projects via Energy Performance Contracting with support from ERDF financial instruments **NOT** only in Poland \(fi-compass.eu\)](http://fi-compass.eu)