



CA EED

Financing EPC for the public sector

WG 4.3 Legislative frameworks for EPCs and financial options

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EPC market in Europe

Obstacles and Potential

Potential of EPC market in the public sector is not exploited due to:

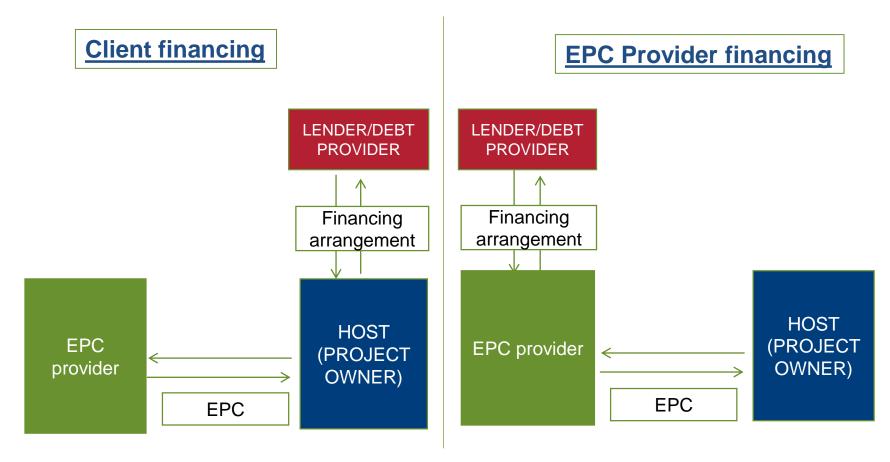
- Lack of information and awareness
- Lack of trust and track record
- Project development capacity of project promoters
- Procurement process
- Statistical treatment of EPC
- Access to finance for EPC providers
- Competition with investment grants



Financing EPC – challenges and approaches



EPC Financing



or a combination of both





EPC in public buildings

Financing Challenges

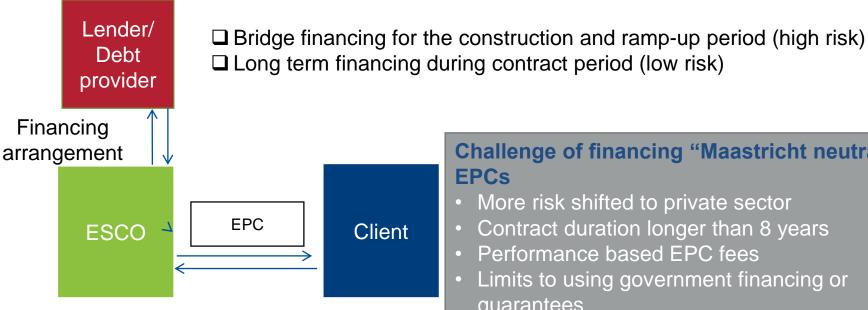
- Project preparation cost
- Long-term payback times
- High risk during implementation, but low risk during performance period
- ESCOs have limited balance sheet
- Financial intermediaries may not be familiar with business model
- Access to finance in view of "Maastricht constrains"
- Potentially not all investment can be paid back by energy savings





ESCO financed EPC

The financial challenges



- ☐ Combining financing and technical solution
- ☐ ESCO has limited borrowing capacity due to equity/debt ratio

Challenge of financing "Maastricht neutral" EPCs

- More risk shifted to private sector
- Contract duration longer than 8 years
- Performance based EPC fees
- Limits to using government financing or quarantees

Possible solutions

- Standardised templates
- Best practises
- ESIF financial instruments



What type of financing for EPC?

Loans

- Long-term financing, as long as contract duration
- Stable interest rate during contract period
- Grace periods for the implementation period

Guarantees

- Reducing risk of default for financial intermediary
 - Project risk: technical and performance risk
 - Counterparty risk: ESCO and EPC client

Forfaiting

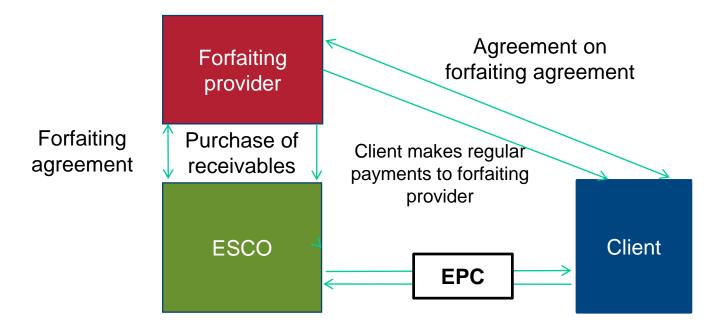


What is forfaiting?

- Forfaiting is selling (future) receivables to a financial institution at Net-Present Value (NPV) without recourse to ESCO
- In case of EPC the ESCO sells (all or parts of) the future EPC fees to a financial institution at NPV
- Advantage
 - > ESCO can reduce its debt and undertake new projects
 - Financial intermediary has a long-term, low risk payment stream
- Difficulties
 - What happens if guaranteed savings are not achieved?
 - Financial intermediaries may not be familiar with this form of finance



Forfaiting example





Examples of EPC financing with ESIF



London: LEEF and MEEF

- Greater London Authority has set up the London Green Fund under JESSICA Initiative with EIB during 2007-2013
- One of the funds was the London Energy Efficiency Fund (LEEF) financing public building renovation
- It invested into energy efficiency and decentralized energy
- Project preparation supported by RE:FIT, initially funded by ELENA, currently financed by LEEF reflows
- In 2014-2020 it is continued with the Major of London Energy Efficiency Fund (MEEF)
 - > MEEF has an investment volume of £ 500m
 - Long-term financing up to 20 years





London Case study St Georges £13.3m



The Energy Centre will save the NHS Hospital Trust over £1 million a year that can be spent on improving patient care

Project / Financial Highlights

- Financial Close in 2014 & '15 and practical Completion expected in 2017
- 10-Year Loan
- A low cost and innovative source of funding to an National Health System entity
- LEEF fully funded a £12m Energy Performance Contract (EPC) at St George's, one of the UK's largest teaching hospitals. This was supplemented by a further £1.3m for additional measures
- Flexible finance terms allowed the Trust to realise a significantly higher NPV for the project when compared to other funding options

Technical Highlights

- Installation of a CHP plant, remodelling of an energy centre and broad energy efficiency technology retrofit
- Expected to save 6,300 tonnes of carbon and over £1.2mp.a.
- Project procured through the NHS' Essentia framework (previously the London Procurement Programme)
- The Trust will achieve substantial financial and CO2 savings; reduced maintenance and a more comfortable internal environment for both patients and staff



Financing of Marche health sector EPC

- From 2014-2017 Region of Marche developed an energy efficiency scheme for health sector (MARTE) supported by Intelligent Energy Europe grant
- <u>Objective</u>: Using EPC for comprehensive renovation including renewable energy sources using EU Funds
- Outcome of project: Combining ESIF grants, ESIF FI for and ESCO own resources for project
- Contracts with 15 years duration signed with ESCOs end of 2017
- Implementation started end of 2018



Marche, Italy: EPC in health sector

Financing to project:

- > ESIF grant (max 40%) paid to the beneficiary that will pass it on to ESCO;
- > ESIF interest-free loan (max 35% of the investment) for 15 years by to ESCOs directly;
- ESCOs provide remaining amount form own resources;

The experience from the health sector project inspired the set up of a regional **Energy and Mobility Fund (EMF)**



Marche: Lessons learned

- Need for proper project preparation, such as a solid energy audit
- Return of investment of energy efficiency measures determine contract length
- ESIF funding is important to reconcile contract length and economic payback time of measures
- Need for affordable financing for projects
- Capacity building on EPC
- Interdisciplinary working group to manage call for tender
- Commitment of additional staff with specialised skills duration of contract (15 years)





Sunshine (LV): H2020 Energy Efficiency Finance **Project development assistance**

SUNSHINE

Save your bUildiNg by SavINg Energy



- Finance and execute deep energy renovations of Multifamily buildings (MFB) through energy performance contracting
- deeply retrofit at least 200.000 m² of MFB (ca. 80 buildings) in Latvia
- Aapproximately €30m in investments
- long term Energy Performance Contracting (EPC)
- an online Sharing Platform to foster the ESCO market in Latvia
- Refinancing of ESCO's short-term loans and working capitals by forfaiting receivables from executed EPC
- → More information: www.sharex.lv



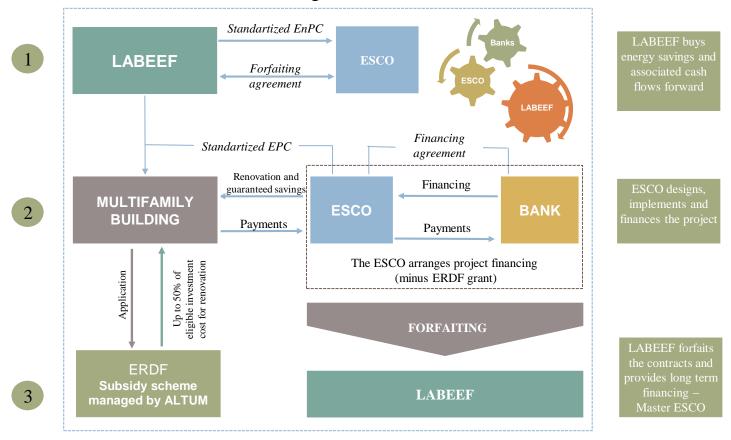




LABEEF: Latvian Baltic Energy Efficiency Fund Forfaiting vehicle for EPC in residential sector

LABEEF ENERGY EFFICIENCY FINANCING SCHEME

Including the use of ERDF



The selection of construction and installation companies must be tendered by ESCOs and approved by ALTUM to ensure competitive selection of contractors and to avoid conflict of interest.



EIB support to implement EPC projects



EIB support to **EPC** market



Awareness raising on the benefits of EPC and its financing

- Awareness sessions on Eurostat rules
- Information on combination of EU grants and EPC

Technical support for EPC projects

- Support for preparing model contracts (but no legal advice)
- Market demand analysis
- Technical assistance through ELENA facility

Sustainable financing of EPC projects

- Lending to banks to on-lend to ESCOs, e.g. Private Finance for Energy Efficiency (PF4EE) http://www.eib.org/en/products/blending/pf4ee/index.htm
- Dedicated financial instrument or investment platforms using resources from Structural Funds and EFSI





EIAH: European Investment Advisory Hub Advisory Hub

Our aim is to strengthen Europe's investment environment and improve the quality of investment projects

A single access point to a comprehensive offer of advisory and technical assistance services

A cooperation platform to leverage and exchange expertise from EIAH partners







An instrument to assess and address unmet needs for advisory support



EIB advisory examples for EPC Advisory Hub

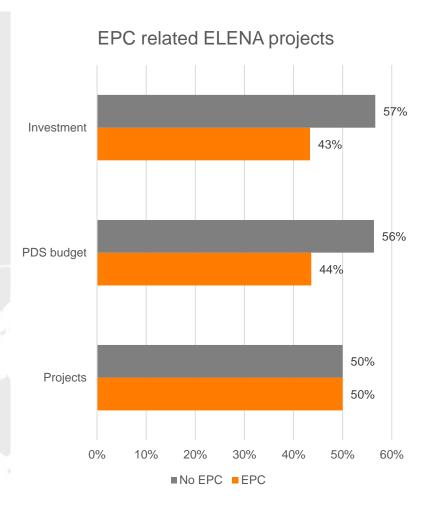
- Financial analysis of street lighting project in Vilnius supported under URBIS
- Developing a Investment Platform for Energy Efficiency tradable assets in Czech Republic
- Smart city and Smart islands study including EPC in Croatia
- Review of the Slovak EPC model contract regarding balance sheet treatment
- Support in the design and implementation of EPC financial instrument in Slovenia



ELENA EPC related supported projects

- Total of 82 projects supported:
 - 29 projects completed
 - 53 ongoing projects
- 41 projects include ESCO/EPCs (public sector)
- Total ongoing & completed investment: EUR 5.4bn
- Total PDS budget for committed & realized projects: EUR 144m







Challenges and solutions of financing EPC in public buildings

Challenges

- Project preparation cost
- Long-term payback times
- High risk during implementation, but low risk during performance period
- ESCOs have limited balance sheet
- Financial intermediaries may not be familiar with business model
- Access to finance in view of "Maastricht constrains"
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Solutions

- > Technical support, standardisation
- > Long-term financing
- Using different forms of financing during project implementation
- "Off-loading" debt from ESCO's balance sheet
- Capacity building of financial intermediaries
- Using "Maastricht neutral" preferential financing,
- > Using grants, e.g. from ESIF

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EIAH support to EPC market





http://www.eib.org/infocentre/publications/all/guide-to-statistical-treatment-of-epc.htm

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