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ERDF

Factsheet
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# Implementing Energy Efficiency projects via Energy Performance Contracting with support from ERDF financial instruments in Poland

European Commission

European Investment Bank

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# Abbreviations

| Abbreviation | Full name |
|---|---|
| CPR | Common Provisions Regulation |
| EU | European Union |
| EPC | Energy Performance Contracting |
| ELENA | European Local ENergy Assistance |
| ERDF | European Regional Development Fund |
| ESCO | Energy Service Company |
| ESIF | European Structural and Investment Funds |
| GBER | General Block Exemption Regulation |
| HVAC | Heating, ventilation, air conditioning |
| SME | Small and medium sized enterprise |

# Introduction

The European Union's (EU) energy policy recognises Energy Performance Contracting (EPC) as an efficient and effective tool to achieve ambitious decarbonisation targets. The Energy Efficiency Directive[1] defines EPC as "… *a contractual arrangement between the beneficiary and the provider of an energy efficiency improvement measure, verified and monitored during the whole term of the contract, where the works, supply or service in that measure are paid for in relation to a contractually agreed level of energy efficiency improvement or another agreed energy performance criterion, such as financial savings*".

The key advantage of EPC compared to traditional works contracts is that the EPC client pays for energy and/or cost savings and not for equipment. Additionally, the EPC provider, usually an Energy Service Company (ESCO), brings together several competences that normally need to be procured separately - the design and implementation of energy and/or cost saving measures, energy management and the identification of the most suitable financing solutions.

In the case of deep renovation of buildings, energy savings are usually not sufficient to repay the investment and operational cost in a time that is acceptable to EPC providers and third-party financers. Therefore, these projects often need some grant support to make operations financially viable. Cohesion Policy funding[2] can combine grants and financial instruments to support EPCs, addressing this issue and reducing the cost of financing.

In December 2022, fi-compass organised a workshop for Polish regional managing authorities with the purpose of identifying ways to combine financial instruments with grants to renovate public buildings using EPCs. While the workshop's focus was support to public buildings, the takeaway away points are largely applicable to other building types – including commercially used buildings or multi-apartment residential buildings. The solutions identified in the workshop are also applicable in other Member States. This factsheet aims to summarise the key points and solutions discussed in the workshop.

1 Directive (EU) 2023/1791 of the European Parliament and of the Council of 13 September 2023 on energy efficiency and amending Regulation (EU) 2023/955.
2 For more information see: European Structural and Investment Funds (ESIF) and Energy Performance Contracting (EPC) (fi-compass.eu).

# What is EPC?

EPCs are contractual arrangements between EPC clients (usually the building owner) and an EPC provider (usually an ESCO), where the EPC provider invests in energy efficiency measures and guarantees energy savings over the duration of the contract[3].

The EPC provider performs several tasks that are traditionally procured separately. These are typically: the **design** of the intervention; the **implementation** of the energy efficiency measures, the maintenance of the assets, energy management and potentially provision of (part of) the **financing**.

Key features of EPC arrangements, compared to traditional procurement through works contracts, are:

- EPCs offer solutions where energy efficiency improvement investments are financed directly from saved costs;
- Contractual payments from the EPC client to the EPC provider are based on predefined outcomes/results (e.g., % of guaranteed energy savings achieved) rather than actual costs;
- The EPC provider takes responsibility for the energy performance risks;
- Savings (energy and/or financial savings) are guaranteed by the EPC provider and determined by a predefined and transparent measurement and verification protocol;
- The EPC provider supports the long-term use of energy management and actively supports its client in the implementation of an energy management system; and
- The EPC provider supports its client in finding the most suitable financing solution.

The **lifecycle** of a public sector EPC project can be divided into several distinct phases. The description below reflects the common market practise in the EU.

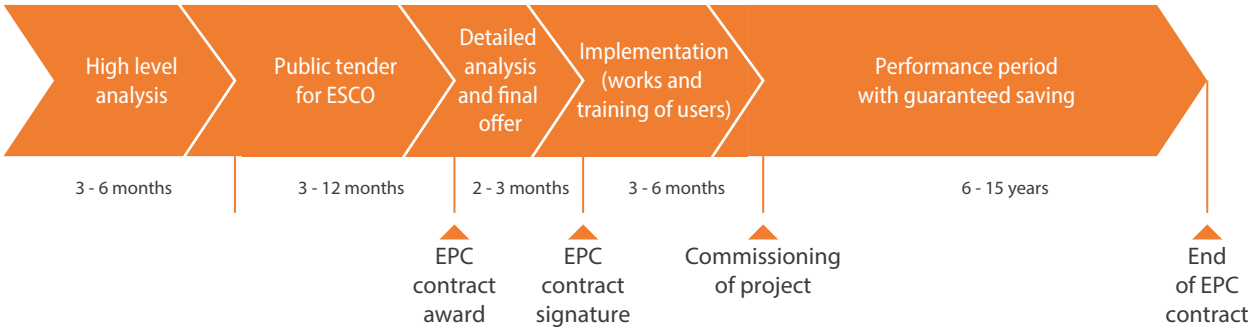
- The building owner undertakes a **high-level analysis** of the buildings to be renovated. This analysis is undertaken to identify assets that can be considered suitable for EPC and to assess the possible scope of intervention. The analysis includes information on the buildings, but also on energy consumption;
- The information from the high-level analysis is used to prepare the **public tender** documentation. Depending on the complexity of measures and practice in the specific market, the intervention is procured using an open tender, negotiated procedure or competitive dialogue. For more complex projects and in more developed markets, negotiated procedure or competitive dialogue are the prevalent forms of procurement. At the end of the procurement process the **tender is awarded** to the winning bidder;
- The EPC provider that is awarded the contract undertakes a **detailed analysis** of the possible intervention. After submitting the **final offer**, the **EPC contract is signed** between the EPC client and the EPC provider;
- The EPC provider **implements** the energy efficiency measures, which may include the installation of HVAC (heating, ventilation, air conditioning) and lighting equipment, the installation of an energy management system including sensors, the installation of on on-site renewable energy generation and insulation of the building envelope. In addition, the EPC provider trains the building occupants in using the equipment appropriately. After completion of the works, a third party undertakes the **commissioning** and **verifies** if the works have been undertaken according to the pre-agreed standard;

3 This document focusses on EPC with guaranteed savings. Alternatively, there also exists a model where achieved savings are shared between the EPC provider and the EPC client. The shared saving model being less suitable for comprehensive building renovation and the combination with investment grants.

- During the **performance period**, the EPC provider is paid for the achieved savings compared to the **guaranteed savings**. The EPC provider may implement further energy saving measures during the duration of the contract, maintain and eventually replace the equipment installed. The fee paid from the EPC client to the EPC provider is used to repay investment cost, to cover the operational cost and the profit margin of the EPC provider;
- At the **end of contract**, the EPC client fully retains the energy savings from the intervention. The end of the contract may include the transfer to the asset from the EPC provider to the EPC client.

During the stages 1-3, the building owner may be supported by a consultant (facilitator), advising on technical, legal and financial aspects during project preparation and during the procurement process.

Figure 1: Project life cycle of a public sector EPC project




## Experience with EPC in Poland

Poland has large investment needs in energy efficiency in buildings and in public infrastructure. Almost all projects have been realised through work contracts, co-financed by grants. The investment needs exceed the amount of grant funding available from EU and national sources. Currently, EPC plays only a minor role in the renovation of public and private buildings[4] and there are about 50 ESCOs providing EPC in the Polish market. The majority of companies are small and medium sized enterprises (SMEs) and they primarily renovate multi-apartment buildings or undertake smaller projects in the industry. Only a few larger international companies undertake EPC projects in the public sector with high investment cost.

The Polish EPC market has not developed to its full potential for several reasons. There is currently a lack of awareness, understanding and trust in EPC compared to traditional work contracts among public authorities. There have been regulatory uncertainties regarding the procurement of EPC and the treatment of such projects on the balance sheet of public entities. EPC is considered not suitable for deep renovation when the cost for investment and energy management cannot be covered from energy savings alone and there have been difficulties to combine EPC with Cohesion Policy funding. Additionally, especially smaller local EPC providers have difficulties to secure long-term financing.

In 2021, Poland revised its Energy Efficiency Act, providing certainty on the procurement and sets out the conditions the financing from the EPC provider does not increase local government debt. The massive increase of energy prices seen from 2021 onwards led to increased interest in EPC as a way to secure external financing and achieve guaranteed savings.

4 Sergi Moles-Grueso, Paolo Bertoldi, Benigna Boza-Kiss "Energy Performance Contracting in the EU – 2020-2021" JRC Science for Policy Report, 2023.

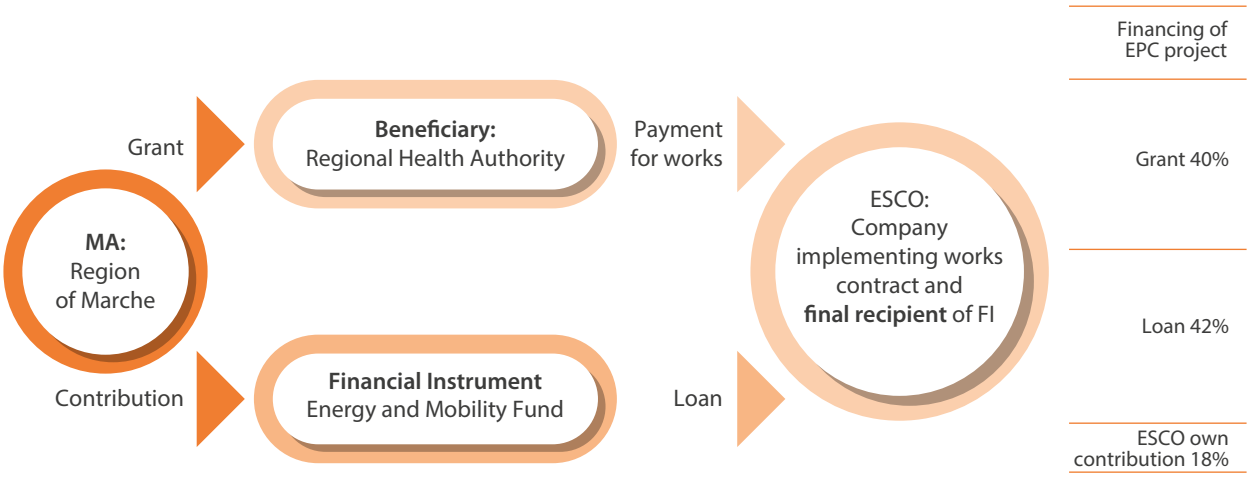
## School renovation in the City of Bytom

The City of Bytom renovated 17 schools using EPC. The project included the deep renovation of the buildings, replacement of the lighting system and the installation of a remote energy management system. The investment guaranteed energy savings of 1.18 GJ, which is 48% of heating energy and 20% of electricity, with a value of EUR 7.9m. The contract volume was almost EUR 11.1m, which consisted of the capital expenditure for the investment and fees for energy management of the installed system for 15 years. The ESCO secured the financing of the project for the duration of the project and the financing is repaid conditional to the achievement of the guaranteed energy savings. To undertake deep renovation, with a simple payback time longer than the EPC contract, the City pays more than the amount of guaranteed savings.

## Existing good practice in combining Cohesion Policy funding and EPC

In the 2014-2020 programming period, the Italian region of Marche undertook deep renovation of health sector buildings. Italy has a well-developed ESCO market, but EPC providers typically have difficulties to secure long-term financing from banks. The region therefore developed a scheme with the support from the EU funded programme 'Intelligent Energy – Europe'[5], that consists of grants and a loan funded from the regional operational programme funded by the European Regional Development Fund (ERDF). The projects were financed with a grant to the regional health authority which covered 40% of the costs and an interest rate free loan which covered 42% of the costs from the Energy and Mobility Fund to the EPC provider. The fund is managed by the commercial bank, Artigiancassa. The remaining 18% was provided by the EPC provider from its own resources. The programme was implemented successfully and there are plans to continue with EPC in other sectors in the 2021-2027 period.

Figure 2: Combination in one single operation in support of an EPC project




5 The support is now available under LIFE -Climate action sub-programme.

The **Czech EPC market** ranks among the most advanced in Europe. It is characterised by high quality projects, standardisation of business models and contracts, and the availability of debt and grant financing. EPC providers finance their projects through a bank loan for the construction period and sell future receivables (forfaiting) to commercial banks for the duration of the contract after completion of the works. As of 2023, most of the projects in preparation are combined with investment grants, mainly from Cohesion Policy funding. This allows for projects where public sector entities, mainly local governments, hospitals and universities, can implement projects without the use of own resources and can achieve a positive cash flow, as the fees to the EPC provider do not exceed the guaranteed savings. A crucial element of the successful development of the Czech EPC market is the strong role project facilitators play in identifying suitable buildings, preparing projects and support public entities during the procurement process. Grants are provided by the State Environmental Fund from the operational programme for environmental protection to the EPC client who reimburses the EPC provider for part of the cost. Projects implemented via EPC receive a grant 5 percent points higher than projects implemented through work contracts.

## Renovation of dormitories of the Czech Technical University in Prague

The project of renovating nine student dormitories includes refurbishment of the building envelope and changes to the heating and lighting system using EPC. The project is expected to generate energy savings of 8.9 GWh/year, which is sufficient to repay a substantial part of the investment cost and the cost for energy management for a contract duration of 10 years. The cost of the project is EUR 8.5m, of which EUR 2.2.m are funded from the operational programme for environmental protection in form of a grant.

## Combining grants and financial instrument to support EPC projects

The Common Provisions Regulation[6] (CPR) allows for two types of combination of financial instruments and grants: in one and in two operations.

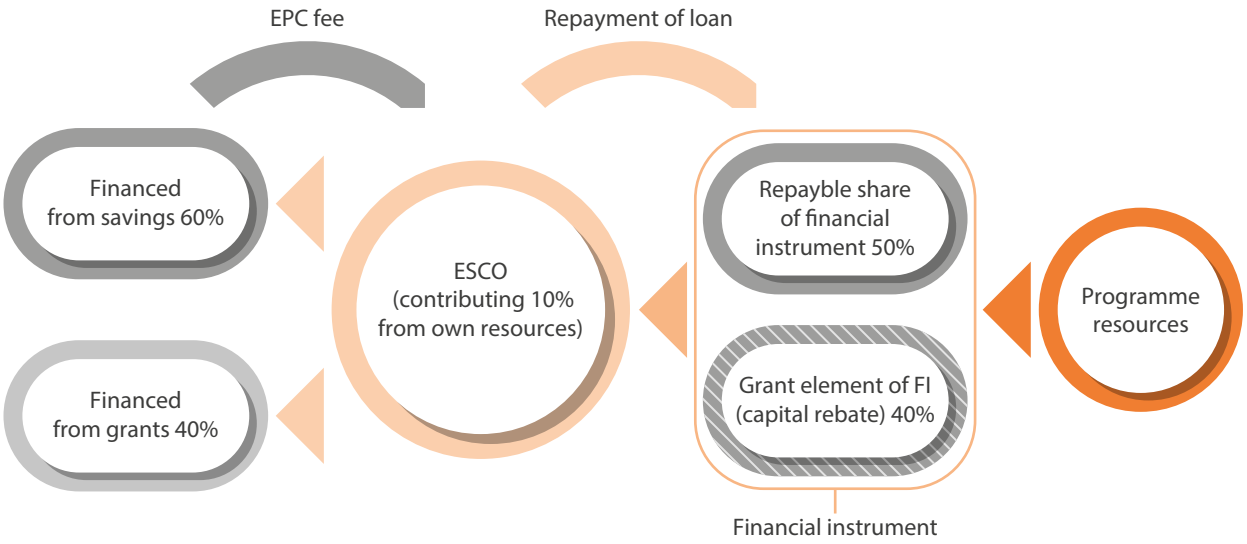
### Combination in one single operation

Combining grants and a financial instrument in one single financial instrument operation is significantly simpler in the 2021-27 programming period compared to previous programming periods. When a financial instrument and a grant are combined in a single operation, the CPR's rules for financial instruments apply to both the financial instrument and the grant part.

For illustrative reasons, the combination of a **loan with a capital rebate** is used, but other forms of financing (guarantee) and other forms of grant support (e.g.: capital rebate, capital grant, technical support grant) are also possible.

In the example below, the EPC provider is the final recipient of both the financial instrument and the grant component of the support, and it will be the one repaying the loan.

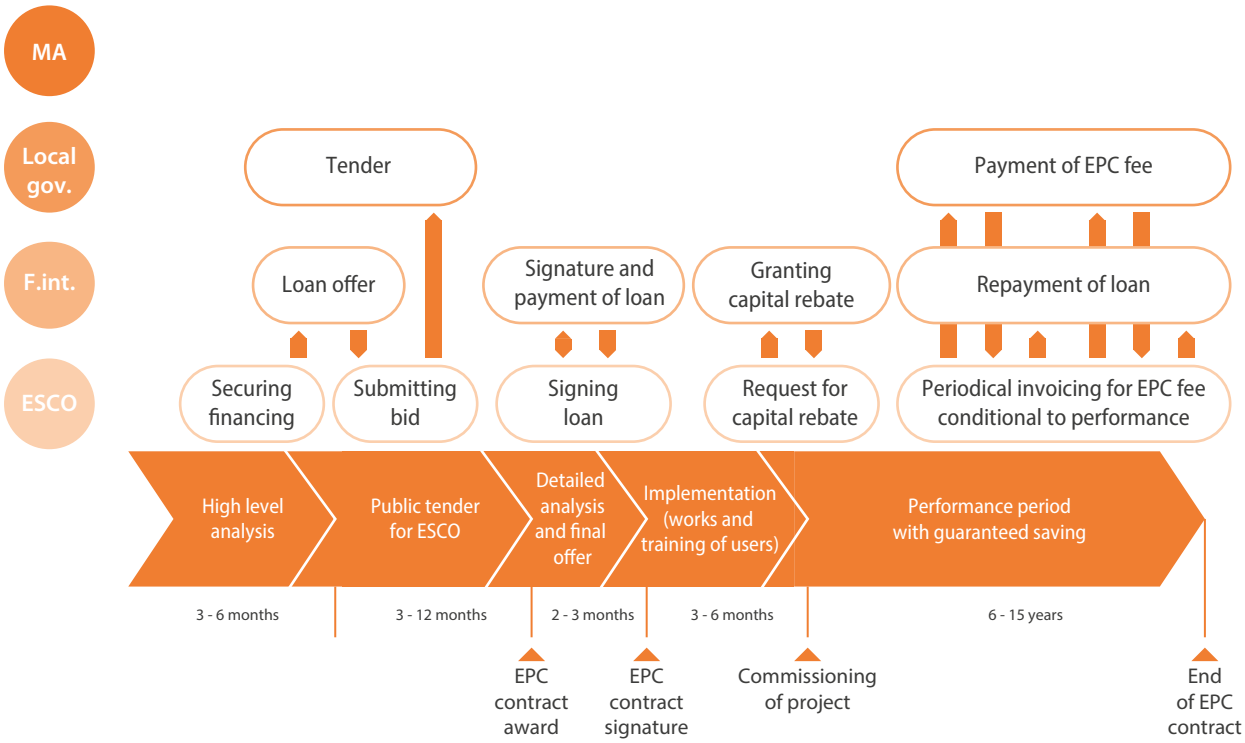
Figure 3: Combination in one single operation in support of an EPC project




6 Regulation (EU) 2021/1060.

- The building's owner undertakes a preliminary analysis of the building stock and includes the information on the available financial instrument, including a grant component, into the tender;
- The bidding EPC providers secure bank financing including the capital rebate from the financial intermediary and include the support from the financial instrument in their offers;
- The financial instrument allows for higher energy savings during the contract period, lower financing cost, lower collateral requirements and a maturity of debt which matches the contract duration. A competitive tender procedure should ensure that the advantages of the grant component are passed on to the EPC client;
- At the project's commissioning, a third party verifies that the project is completed according to the agreed specifications. The verification report is submitted to the financial intermediary which will write off part of the loan.

Figure 4: Project life cycle in case of combination in one operation



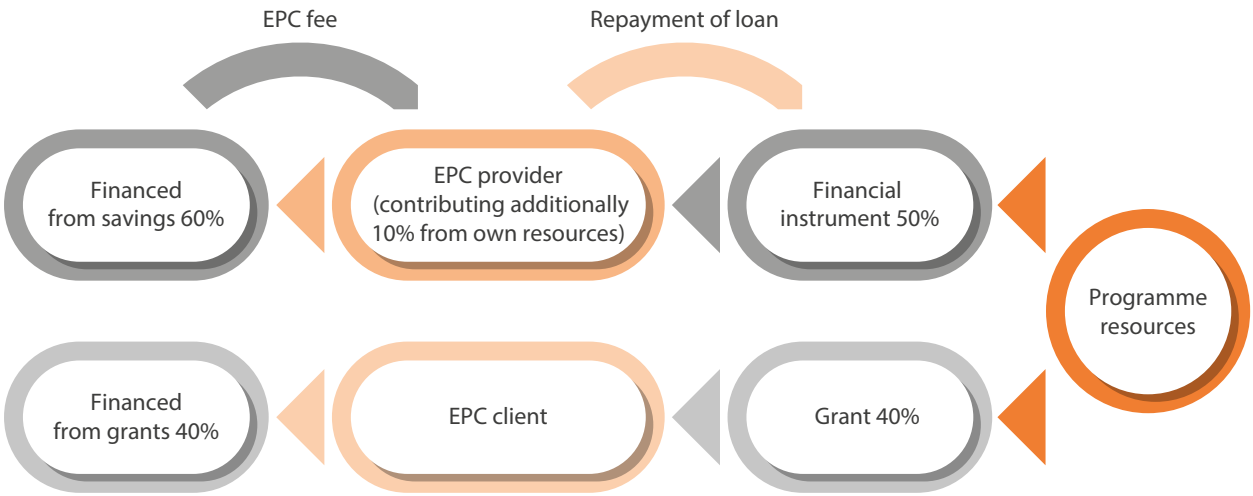

Combination in one operation has significant advantages compared to combining grants and financial instruments in two separate operations (below):

- There is no need to synchronise the tender of the EPC project with a separate call for grants, as the grant is included in the financial instrument operation;
- The EPC provider does not need to secure separate bridge financing for a grant as this is already provided by the capital rebate;
- The loan contract between the EPC provider and the financial intermediary does not need to be amended when the design of the project changes under the condition that all measures are eligible under the financial instrument.

## Combination in two operations

When a financial instrument and a grant are combined in two operations, the two support streams follow different paths. The financial product is financing the EPC provider as the final recipient, as the EPC provider is repaying the loan during the duration of the contract from achieved energy savings. The EPC client is the beneficiary of the grant. The two separate streams of support must follow the respective CPR rules.

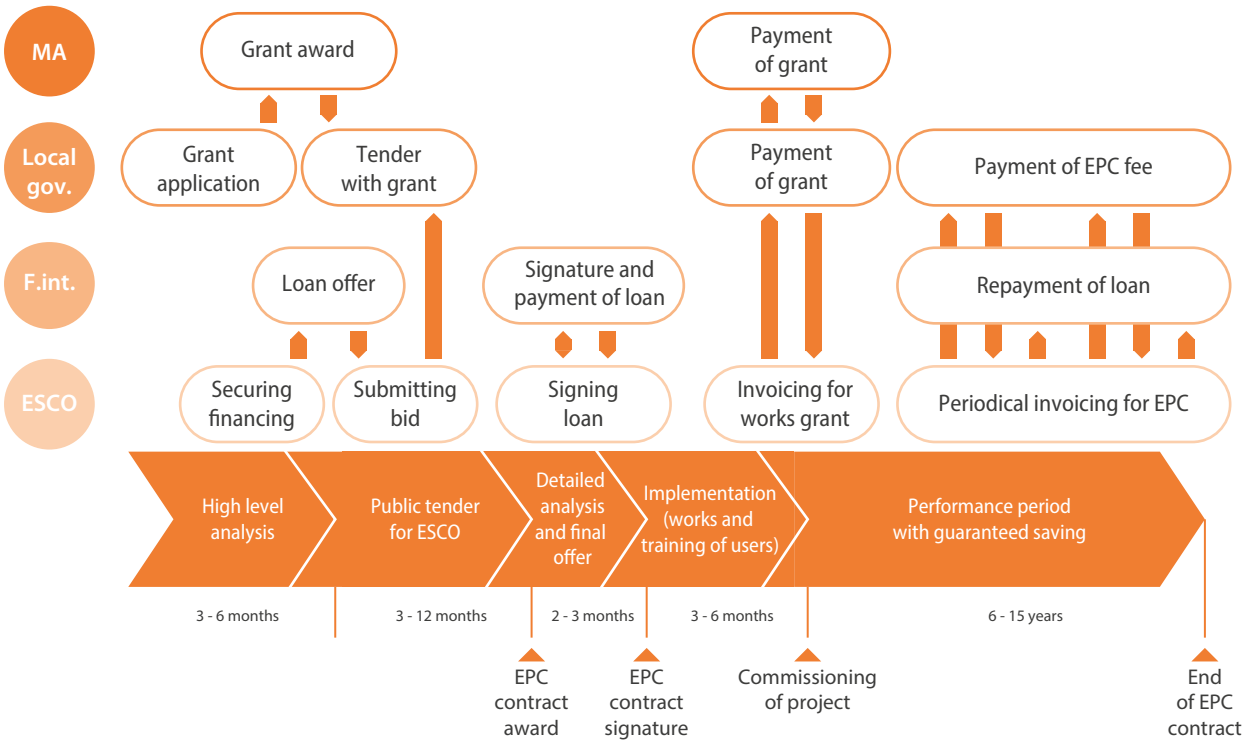
Figure 5: Combination in two operations in support of an EPC project




In public sector projects, the procurement process for an EPC needs to be aligned with the process of grant application and securing the financing from the financial instrument:

- The public EPC client undertakes a preliminary analysis of the building stock and applies for a grant;
- Once the grant is confirmed, the information on the amount of grant is included in the EPC tender. It is advisable that information on the available financial instrument is included in the tender, too. The bidding EPC providers include the investment grant into their offers which allows for higher energy savings during the contract period;
- At the same time, the bidding EPC providers secure financing for their own contribution to the project and may approach the financial intermediaries implementing the financial instrument;
- The winning bidder implements the project with the financing of the financial instrument and bridge financing for the amount to be covered by the grant;
- At the project's commissioning a third party verifies that the project is completed according to the agreed specification, the EPC provider invoices the EPC client's part of the investment cost for the investment grant;
- The EPC client can submit the EPC provider's invoice for reimbursement of the investment grant to the managing authority.

Figure 6: Project life cycle in case of combination in two operations




The project that the EPC provider designs and implements may differ from the original grant application of the EPC client. The EPC provider may, for example, use a different technology to achieve the guaranteed savings than the EPC client originally considered. In the Czech Republic, the grant agreement is modified following the signature of the EPC contract to match the grant proposal with the actual project design to be implemented under the condition that the amount of grant does not exceed the original proposal and all measures remain eligible.

The combination in two operations may offer the following advantages:

- The grant scheme can be part of an energy efficiency scheme for public beneficiaries, that can also finance projects implemented through work contracts,
- The financial instrument can be part of an energy efficiency loan or guarantee scheme for enterprises.

In this case it is important that the grant and financial instrument combination is well coordinated and both forms of support take the specificities of EPC into account. It is also important to consider that EPC providers (ESCOs) as final recipients may not qualify as SMEs and discrimination between different EPC providers according to company size should be avoided.

## State aid

State aid rules may apply to the support to the owners of public buildings with a grant from Cohesion Policy funds. This would be the case if the EPC client, as the final beneficiary of the aid, would be considered an 'undertaking' – i.e., an entity engaged in an economic activity, regardless of its legal status[7] and the way in which it is financed[8]. For example, if the EPC client is a real estate firm that rents out the public building or in case the building is owned by a public entity, if (part of) the activities performed in that building are of an economic nature. In such cases, State aid may be present, provided that the other criteria of State aid are fulfilled[9].

In case grant support is given to the EPC provider, the presence of State aid may be excluded if the advantage of the measure (the grant component and the financial product) is quantified and then fully passed on to the EPC client (in which case the compatibility of the aid, if any, should be checked at the EPC client level, i.e. at the level of the final recipient). The full pass-on should be checked on a case-by-case basis, considering costs incurred and savings realised during project implementation, as well as a potential clawback of any grant amount that turns out to be excessive. Otherwise, the support to EPC providers may be considered State aid and in such circumstances the compatibility of the aid with the common market should be ensured also at that level or be exempted based on one of the relevant State aid Regulations, such as the *de minimis* Regulation[10] or the General Block Exemption Regulation (GBER)[11].

The latest GBER amendment has introduced Article 38b, dedicated to aid for the facilitation of EPCs, aiming to support SME and mid-cap EPC providers via financing instruments. However, this article only foresees loans and guarantees as a form of aid – not the grant element in case of combination of a grant and a financial instrument in a single operation. Nonetheless, Article 38b GBER may be used for the financial instrument part of the provided support. It is worth noting that in such a case the State aid assessment can be split into an assessment of two different sub-measures: a measure that foresees grants for the EPC client and a second one for loans or guarantees for the EPC provider. In this case, the grant to the EPC client can be provided either directly either by the managing authority, or by the body implementing the financial instrument (combination in one financial instrument operation), in line with Article 38a GBER for the EPC client and Article 38b GBER for the EPC provider.

Other provisions, such as the maximum duration of the contract and co-financing from commercial financial institutions of the article need to be respected, similarly to the cumulation rules under GBER and *de minimis*[12].

7 For example, even if the EPC client is a public entity, State aid rules would only not apply if the activities performed in the public building do not involve economic activities (e.g., administrative services, police, army, justice, education under public remit and public healthcare services).

8 See point 7 of the Commission's Notice on the Notion of Aid (available at https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52016XC0719(05).

9 See Article 107(1) of the Treaty on the Functioning of the European Union (TFEU): "Save as otherwise provided in the Treaties, any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods shall, in so far as it affects trade between Member States, be incompatible with the internal market."

10 Commission Regulation (EU) No 1407/2013 of 18 December 2013 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to *de minimis* aid Text with EEA relevance.

11 Regulation (EU) No 651/2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty and Regulation (EU) 2022/2473 declaring certain categories of aid to undertakings active in the production, processing and marketing of fishery and aquaculture products compatible with the internal market in application of Articles 107 and 108 of the Treaty (Text with EEA relevance).

12 *De minimis* aid may not be cumulated with other State aid in respect of the same eligible costs if such cumulation would result in an aid intensity exceeding that fixed by the General Block Exemption Regulation (GBER) or decision adopted by the Commission in relation to that State aid.

### Forfaiting and combination of financial instruments and grants

Forfaiting is the sales of future receivables from the EPC provider to a financial intermediary after commissioning of the project. For more information on forfaiting see the fi-compass publication European Structural and Investment Funds (ESIF) and Energy Performance Contracting (EPC).

In case of combination in **one single operation**, the financial intermediary makes the forfaiting cash payment to the EPC provider and a payment of a capital grant for the benefit of the EPC client as the final recipient. In this case a capital rebate is not suitable, as there is no loan which can be partially written off.

In case of combination in **two operations**, the financial intermediary makes the forfaiting cash payment to the EPC provider and the EPC client becomes the final recipient as it is repaying the forfaiting loan through the EPC fee payments. The grant operation is not affected by the forfaiting.

## Way forward

To support the implementation of energy efficiency measures using EPC, several preparatory steps should be undertaken.

- The ex-ante assessment should take into account the financing of EPC. The programmes addressing the public sector (but not only) should include EPC providers as final recipients of financial instruments.
- A support scheme can only be implemented successfully if there are sufficient EPC projects prepared and procured. Therefore, it is important to create awareness among potential EPC clients about the merits of EPC and the support available. The programmes may also include dedicated support for EPC project preparation, to provide support during the stage of preliminary analysis and procurement to public entities. For this purpose, there are support schemes available, such as the European City Facility, the European Local ENergy Assistance (ELENA) or the LIFE Climate action sub-programme.
- Additionally, it is important to engage with financial intermediaries that may not be familiar with the business model of EPC and thus may hesitate to engage in financing EPC providers. The European Investment Bank offers support through the Green Gateway to financial intermediaries which want to increase their capacity in green financing.

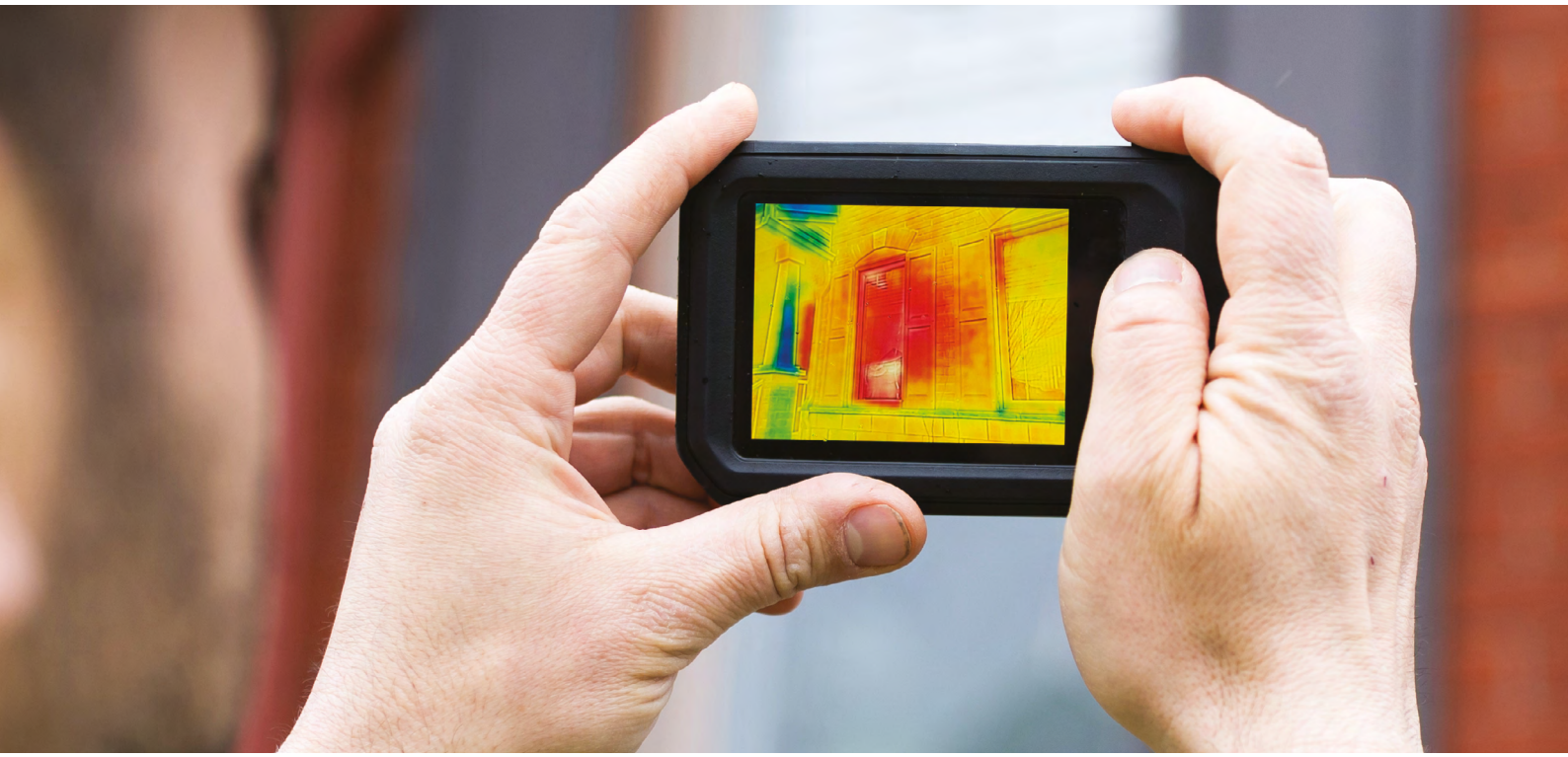
## EU support schemes for EPC projects

EUCF European City Facility

The European City Facility, co-funded from the LIFE programme, helps local governments in their sustainable energy transition. The grant scheme provides simplified financial support with a grant of EUR 60 000 to develop investment concepts for climate action. The ultimate objective is to build a pipeline of sustainable energy investment projects across local authorities and local public entities in Europe. The projects may be implemented by the local governments directly of via third parties such as EPC providers.

ELENA (European Local ENergy Assistance) is a joint initiative by the European Investment Bank and the European Commission under the Horizon 2020 programme. The facility provides technical assistance to public and private entities for energy efficiency and urban transport and mobility projects. ELENA supports among others the cost for technical studies, energy audits, preparing tenders and project management. Several cities and regions have used ELENA successfully for EPC projects. For example the Flanders Region has used ELENA to mobilise an investment programme for EUR 112m in the public sector among many projects using EPC. The City of Ljubljana implemented an investment programme of EUR 49m in energy efficiency in public buildings through EPC with the support form ELENA. The projects were partly financed with grants from the Cohesion Fund.

# Notes



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