CITIZEN FINANCING for ENERGY EFFICIENCY

# Citizen funding market assessment report

Author: Energinvest (EI)

*CitizEE*

*Scaling up Public Energy Efficiency Investments via Standardising Citizen Financing Schemes*

www.citizee.eu

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement № 847147

# TABLE OF CONTENTS





This project has received funding from the European Union's Horizon 2020
research and innovation programme under grant agreement № 847147

# TECHNICAL REFERENCES

| | |
|---|---|
| PROJECT ACRONYM | CitizEE |
| PROJECT TITLE | Scaling up Public Energy Efficiency Investments via Standardising Citizen Financing Schemes |
| PROJECT COORDINATOR | Silvia Caneva silvia.caneva@wip-munich.de<br>Sonja Wilhelm sonja.wilhelm@wip-munich.de<br>**WIP Renewable Energies** |
| PROJECT DURATION | May 2019 – April 2022 (36 months) |

| | |
|---|---|
| REPORT NAME | CitizEE_D3.1 |
| DOCUMENT: | D3.1 |
| WORK PACKAGE | WP3 – Analysis and support actions for the design of CFs4EE Financing Schemes |
| TASK | T3.1 - Current state assessment of Citizen Funding market |
| DISSEMINATION LEVEL* | PU |
| LEAD BENEFICIARY | 2. Energinvest (EI) |
| CONTRIBUTING BENEFICIARY/IES | 1. WIP, 2. Energinvest (EI), 3. SUER, 4.GOPARITY, 5. VEB, 6.REGEA, 7.VIPA, 8. ECN |
| DUE DATE OF DELIVERABLE | 30 August 2019 |
| ACTUAL SUBMISSION DATE | 09 December 2021 |

PU = Public

PP = Restricted to other programme participants (including the Commission Services)

RE = Restricted to a group specified by the consortium (including the Commission Services)

CO = Confidential, only for members of the consortium (including the Commission Services)

| Version | Date | Beneficiary | Author | Approved |
|---|---|---|---|---|
| V1.0 | 28 November 2021 | Energinvest (EI) | Jean-François Marchand, Lieven Vanstraelen, Miguel Casas | |
| V1.1 | 09 December 2021 | Energinvest (EI) | Jean-François Marchand, Lieven Vanstraelen, Miguel Casas | Sonja Wilhelm (WIP) |
| | | | | |
| | | | | |



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement № 847147

## ACKNOWLEDGEMENTS

The work described in this publication has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement Nº 847147.

## DISCLAIMER

This document reflects only the authors' view and not those of the European Community. This work may rely on data from sources external to the members of the CitizEE project Consortium. Members of the Consortium do not accept liability for loss or damage suffered by any third party as a result of errors or inaccuracies in such data. The information in this document is provided "as is" and no guarantee or warranty is given that the information is fit for any particular purpose. The user thereof uses the information at its sole risk and neither the European Community nor any member of the CitizEE Consortium is liable for any use that may be made of the information.





This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement Nº 847147

# Citizen funding market assessment report

## INTRODUCTION

The development of the citizen funding market represented by cooperatives and crowdfunding platforms presents an opportunity for public authorities to further leverage private finance through the development of Citizen Financing Schemes to channel resources towards segments of the market such as energy efficiency that are currently not covered or insufficiently covered by traditional financing players. The objective of this report is to analyze existing experience where public financing instruments (PFI) were used to support the set-up of Citizen Financing Schemes. The report explores financial cooperation between public authorities and cooperatives/crowdfunding platforms by assessing the strategic and operational considerations of combining public funds with citizen funding through Public Financing Instruments and presenting several case-studies that could be used by Pilot Regions as a first step when developing their CFs4EE Financing Scheme.

The report is structured as following:

- The section 1 gives the definition of the citizen funding models, respectively the cooperative funding model and the crowdfunding model.
- The section 2 gives an overview of typical public financing instruments (PFI) currently used by public authorities to overcome financial barriers in the energy efficiency sector and leverage private investments.
- The section 3 gives a description of the main models observed on the market of public financing instruments support to citizen funding operators and complete the description with related examples.

## 1. DEFINITIONS

### 1.1. Cooperative Funding model

The cooperative funding model is a model by which the citizen takes a stake in the capital of a company holding assets through the purchase of cooperating shares. We distinguish two main models in the energy and/or energy efficiency sector:

- Energy cooperatives or REScoops
- Financing cooperatives or FINcoops

Both models call for Citizen Funding, but their approach differs significantly.

#### 1.1.1. Energy cooperatives or REScoops

Energy cooperatives, also called REScoops (Renewable Energy Sources Cooperatives), are characterized by their cooperative business model, meaning that citizens are involved in both the decision making and financial & economical participation. Thereby, Energy Cooperatives do not necessarily have the legal statute of a cooperative, but rather distinguish themselves by the way they do business. They are cooperatives in the sense of the ICA (International Cooperative Alliance) definition, i.e. “autonomous associations of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise”. In practice, the organizational structures of Energy Cooperatives vary, and include different legal forms such as partnerships (including public-private partnerships (PPPs) with local authorities), cooperatives, community trusts and foundations, limited liability companies, non-profit customer-owned enterprises, housing associations and municipal ownership. Energy cooperatives typically develop all of part of the following activities: the generation, consumption, distribution, storage, supply, aggregation of energy from renewable sources, as well


This project has received funding from the European Union’s Horizon 2020
research and innovation programme under grant agreement № 847147

as the provision of other support services to members (for instance energy efficiency/demand side management services) and to other organizations.

Energy cooperatives can have a different business model, and this defines their way of working. A study conducted by REScoops Europe, mapping different cooperatives in Europe, categorized Energy Cooperatives into 6 clusters according to their business model (Rescoop, 2012):

1. **Business Model 1 - A group of local citizens:** The cooperative is small and mainly runs on volunteers. It is a bottom-up approach as an answer to their identified needs. They develop small local projects. The funding of the cooperative mainly comes from the members.
2. **Business Model 2 - Regional-National REScoop:** This model can arise when a local group of citizens scales-up and take on bigger projects. Or when an external actor gets different actors together. The focus here is to meet local needs as well as seizing an opportunity. Both volunteers and employees work on the projects. As the projects get bigger, they rely more on partnerships for financing the investments.
3. **Business Model 3 - Fully integrated REScoop:** These REScoops integrate multiple services: generation, supply, distribution, and other services. Often these cooperatives are already operating for a long time and are able to function independently on the different dimensions of the energy sector.
4. **Business Model 4 - Network of REScoops:** A REScoop can have the business model of incubating new local REScoops, by giving access to capital and expertise. By replicating their best practices, they scale up the REScoop model. This approach takes advantage of the economies of scale.
5. **Business Model 5 - Multi-Stakeholder governance model:** A governance structure that gathers all the relevant stakeholders in provision and consumption of renewable energy. It does not develop projects itself but gathers project developers, cooperatives, consumers and at the same time interacts with policy makers and authorities.
6. **Business Model 6 - Non-energy-focused organization:** Typically, this form arises when local actors are not mainly concerned about the energy production. For example, a farmer's cooperative who put on a wind turbine on their land, or an educational institution who has a community energy program as a side project."

### 1.1.2. Financing cooperatives or FINcoops

The FINcoops, also called financing cooperatives, are positioned in the middle between the REScoops and the commercial developers. They do offer financial participation to citizens, but this participation is limited. There is no democratic participation nor is there ownership of the citizens or any services to members. FINcoops are often cooperatives founded by commercial developers as a financing vehicle associated with another company that owns the energy assets. The citizen participation is purely financial and often takes place via a subordinated loan. FINcoops generally issue several classes of shares, with a certain class of shares reserved for representatives of the parent company that owns the energy assets. Citizens can then join freely, but to a limited extent, by buying shares of another category and are only entitled to a limited dividend. To date, FINcoops are mainly used by developers to finance renewable energy projects but we can think that the model will also be used in the future to finance energy efficiency projects, especially by large ESCOs. In the Citizee project, we focus on both models: REScoops and FINcoops.

## 1.2. Crowdfunding model

Crowdfunding is the process of raising through open calls small amounts of money from a large number of individuals to fund a specific initiative, project or business. These open calls (campaigns) usually state the funding needs and the purposes of the project, defining a limited funding period. The projects usually have relatively small funding targets – although there are some exceptions. Typically, on the two sides of a crowdfunding transaction there is a project developer who sets up a crowdfunding campaign on one side (campaigner), and many people who give money to realize the project on the other side (contributors). The campaigner can collect funds directly, but often a web-based intermediary (so-called 'crowdfunding platform') will assist in publishing campaigns, reaching contributors and collecting funds. These platforms usually perform certain screening and monitoring functions as well, and they



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement № 847147

typically charge a fee for these services. Broadly, crowdfunding platforms can be broken down into four categories: debt, equity, donation, and reward.

1. **Debt platforms:** With debt-based crowdfunding (also known as crowdlending), funders lend money to a company and look for interest payments as well as the full repayment of the principal.
1. **Equity platforms:** With equity- based crowdfunding, funders invest in the capital of a company with a view to earning a portion of the profits made by the company funded through the crowdfunding campaign.
2. **Donation platforms:** They raise funds from contributors who do not expect a monetary or non-monetary award in return. Their motivation is philanthropic and could include contributions to local community projects or global causes.
3. **Reward platforms:** They offer the crowd non-monetary rewards in exchange for their contribution. Rewards are often used by businesses aiming to bring an innovative product to market.
4. **Hybrid platforms:** Platforms offering various campaign types, and that must also be considered. The most common combinations are debt-equity and donation-reward platforms.

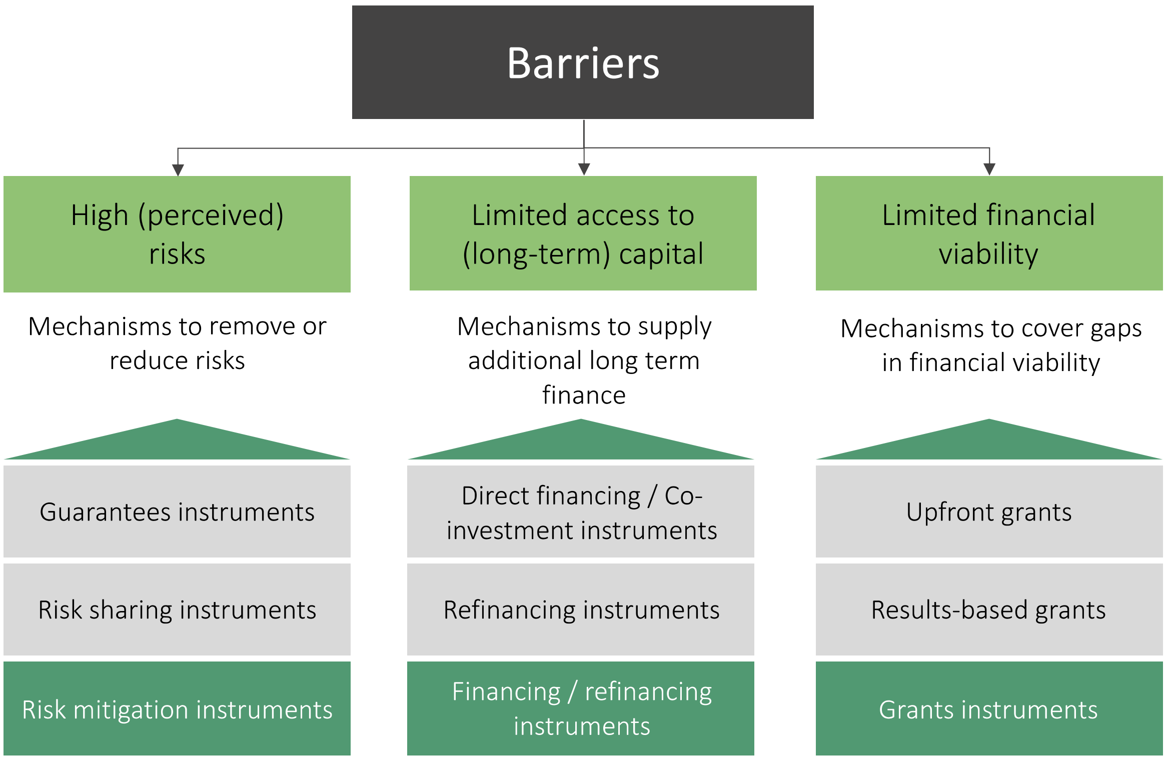
In the Citizee project, we focus on the debt-equity platforms acting on the energy market (RES & EE).

# 2. PUBLIC FINANCING INSTRUMENTS TO CROWD-IN PRIVATE INVESTORS

Public Financing Instruments (PFIs) aim to address and overcome the dominating financial barriers that prevents the realization of investment projects by influencing their financial profile and, by doing so, leverage additional public and private financing in order to cover the financing gaps. The most established Financing Instruments could be classified as follow:

- Risk mitigation instruments: mechanisms to remove or reduce risks.
- Financing/refinancing instruments: mechanisms to supply additional long-term finance.
- Grants (and assimilated) instruments: mechanisms to cover gaps in financial viability.

**Figure 1. Key financial barriers and related financing mechanisms**






This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement Nº 847147

As shown in the figure 1, there is an immediate relationship between the financial barriers to address and the financing mechanism options to be used.

## 2.1. Risk mitigation instruments

Risk mitigation instruments address the barrier of high (real or perceived) risks for lenders or investors by covering part of the risk of payment default, either through a guarantee or first-loss absorption. They positively influence the financing costs (for both debt and equity), the loan maturities and the size of the debt component (key instrument to increase the amount a bank or an investor is willing to lend to Energy Efficiency projects). There are various ways to structure risk mitigation instruments for Energy Efficiency projects, either through:

- Guarantees agreements.
- Risk-sharing loans.
- Subordinated debt, structured finance and layered funds.

### 2.1.1. Guarantee agreements

Partial risk and credit guarantees are the most suitable instruments to address risk perceptions among lenders, in particular in markets where collateral requirements are high but where liquidity is no longer an issue.

- Partial risk guarantees: cover losses caused by specific risks such political, regulatory risks but also operational and technology risks.
- Partial credit guarantees: cover losses in the event of a debt service default regardless of the cause of default.

#### Description

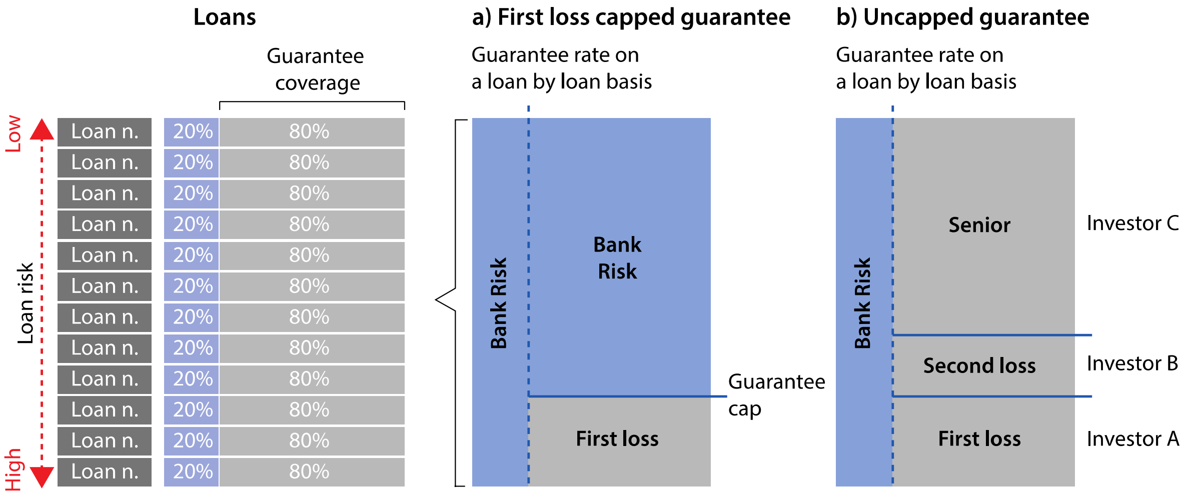
A guarantee agreement includes a public funder that will guarantee all or some part of the risk of loans (or equity) provided by local financial institutions to Energy Efficiency projects in the event that the Final Recipient does not repay the debt. Guarantees can be given for specific large-scale projects with the guarantee agreement adapted to the specific project design or to a portfolio of similar projects, *i.e.* all loans to a certain class of borrowers (portfolio guarantee). Guarantees could be issued directly to banks but also to project beneficiaries and/or project developers (ESCOs/ESCoops) in order to facilitate access to external finance. They could also be issued as counter-guarantees for a commercial guarantor who guarantees the loans given to a Final Recipient by a commercial lender. Losses can be taken over fully or partially by the public funder under various ways:

- Equal risk sharing (“pari-passu”): each partner takes on an equal share of the loss.
- Pro-rata or capped guarantee: the loss is shared according to a predefined percentage between the partners; a typical share of the public party can range between 50% and 80%.
- First-loss guarantee: all losses up to a predetermined maximum amount will be covered by the public institution, while the private institution pays for losses above this amount.
- Second-loss guarantee: all losses exceeding a predefined amount are paid for by the public institution. Potential losses of the private institution are thus capped and cannot exceed the determined amount.



This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement № 847147

Figure 2. Illustration of how a guarantee agreement works at portfolio level




Source: Joint Initiative for improving access to funding for European Union Young Farmers, FI-Compass, EIB 2019.

### Advantages

- Reduces the risks for lenders and enables them to lend greater amounts of finance to Energy Efficiency projects.
- Enables lenders to lend to marginally creditworthy clients presenting attractive Energy Efficiency projects.
- Enables the loan tenor or the grace periods to be extended and the interest rate to be reduced, thus improving project cash flow and viability.
- Increases debt-to-equity ratios, enhancing returns to Final Recipients.
- Actual disbursement is done only in case of default.
- Revolving effect, ability to recycle remaining funds.

### Instrument impacts

- Extended debt volume with high leverage effect
- Reduction of interest rate (depending on the reduction of risk related margin)
- Extension of debt maturity
- Favorable debt amortization/repayment schedule
- Easement of debt covenants
- Extended list of available lenders
- Introduction of new borrowers to the market

### Best practice references

- ESIF « off-the-shelf » Financial Instrument: Guarantee fund for SMEs (Capped Guarantee Portfolio). Provide credit risk protection in the form of a first loss portfolio capped guarantee which reduces the barriers that SMEs face in accessing finance. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0964&from=EN
- EFSI backed Investment Platforms: e.g. BPI France Midcap Investment Platform, French Overseas Territories (RUP) Risk Sharing
- Other references: IFC's Commercializing Energy Efficiency Finance (CEEF) program in Hungary, Czech Republic, Estonia, Latvia, Lithuania and Slovakia. The objective of the program was to encourage financial



This project has received funding from the European Union's Horizon 2020
research and innovation programme under grant agreement Nº 847147

intermediaries to finance Energy Efficiency and Renewable Energy investments by partially guaranteeing their loans in this area, and by providing technical assistance. - http://documents.worldbank.org/curated/en/354531468034750409/pdf/761490BRI0IFC000Box374367B00PUBLIC0.pdf

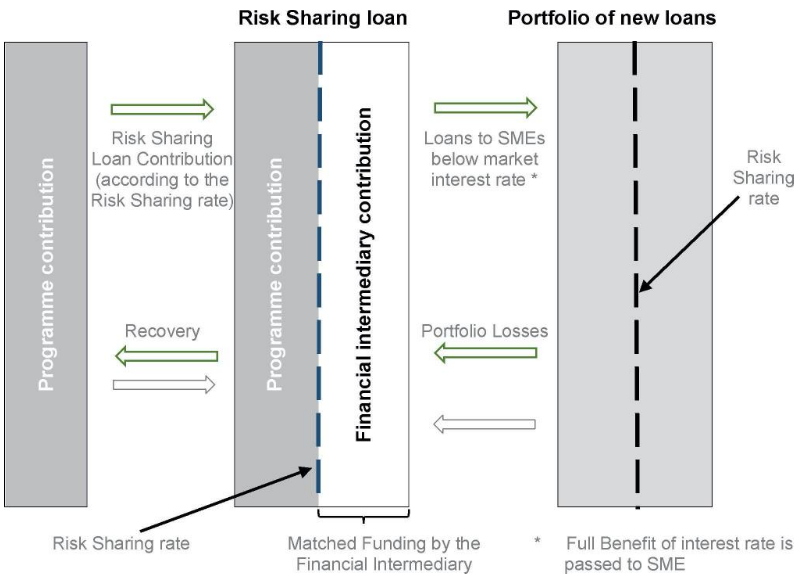
### 2.1.2. Risk sharing loans (on-lending)

A risk sharing loan is a loan blending together public and private funds to provide better access to finance to targeted projects and credit risk sharing to financial intermediaries. Risk sharing loans are suited in markets combining risk aversion and credit resources constraints of the private intermediaries (lack of liquidity) leading to high interest rates.

#### Description

In this structure, public funds are provided to a financial intermediary for on-lending to Final Recipients and blended together with the financial intermediary own's funds to generate a new portfolio of loans with a predetermined limited period of time. From a risk perspective, each loan is made up of a public and a private component. The risk on the public component of the loan is retained by the public operator, reducing the financial losses of the intermediaries in case of default. This reduced risk cost is used to improve the characteristics of the loan (for example grace period, extended maturity, reduced interest rate) agreed in the financing agreement. Losses, recoveries and benefits are borne and shared by the public operator and the financial intermediary in an agreed proportion, most of the time on a pari-passu base.

Figure 3. Illustration of how a funded Risk Sharing Loan works




Source: Commission Implementing Regulation (EU) N° 964/2014 of 11 September 2014

#### Advantages

- Provides liquidity to financial markets and reduce the cost of financing for Final Recipients.
- Enables lenders to lend to marginally creditworthy clients presenting attractive Energy Efficiency projects.
- Enables the loan tenor or the grace periods to be extended and the interest rate to be reduced, thus improving project cash flow and viability.
- Increases debt-to-equity ratios, enhancing returns to Final Recipients.
- Revolving effect, ability to recycle reimbursed and recovered funds.

#### Instrument impacts

- Extended debt volume but with lower leverage effect



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement Nº 847147

- Larger reduction of interest rate (at least 50%)
- Larger extension of debt maturity
- More favorable debt amortization/repayment schedule
- Easement of debt covenants
- Introduction of new borrowers to the market
- Implementation of more ambitious projects with lesser risk

Best practice/references examples

- ESIF « off-the-shelf » Financial Instrument: Loan fund for SMEs based on a portfolio risk-sharing model (Risk-sharing loan) - https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0964&from=EN
- EFSI backed Investment Platforms: e.g. Réseau Canopé Logement social
- Other references: IFRRU 2020 (Instrumento Financeiro para a Reabilitação e Revitalização Urbanas) is a financial instrument that has been established to support urban renewal across the entire Portuguese territory. - https://www.fi-compass.eu/sites/default/files/publications/Financial%20instruments%20for%20urban%20development%20in%20Portugal%20-%20IFRRU%202020_2.pdf

Table 1: Comparing the guarantee and the funded risk-sharing loan instruments

| Comparing the guarantee and the funded risk-sharing loan instruments | | |
|---|---|---|
| Options | PRO | CON |
| Funded risk-sharing Loan | • Provides at the same time liquidity and risk protection to the financial institutions.<br>• Higher impact on the interest rate.<br>• Can provide reduction of collateral requirements. | • Lower leverage (i.e. higher public resources absorption). |
| Credit guarantee instruments | • Provide risk protection to the financial institutions.<br>• Provides reduction of collateral requirements.<br>• Higher leverage (i.e. high impact with low public resources absorption). | • Does not provide liquidity to financial institutions (i.e. they have to use entirely private funds to provide loans).<br>• Impact on the cost of financing (i.e. interest rate) is limited.<br>• Slower reflow of the resources. |

Source: Joint Initiative for improving access to funding for European Union Young Farmers, FI-Compass, EIB 2019.

### 2.1.3. Risk sharing structures through subordinated debt, structured finance and layered funds

Establishing a senior/subordinated structure or risk tranching structure is an effective mechanism to create a security that helps attract new investors to projects, allowing investors with different risk-return profiles to invest in the same project or in an aggregation of pooled projects through a fund structure. The structure shields investors from losses incurred by the project or the portfolio of projects.

Description

In this mechanism, subordinated debt is placed by a public finance provider along-side senior debt from a lender, absorbing all default losses up to the amount of the subordinate debt. By covering all losses until it is exhausted, the



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement Nº 847147

subordinated debt takes on the majority of the loan default risks and acts as a credit enhancement for senior debt. In the case of a portfolio of assets, the subordination provides credit enhancement by creating multiple tranches or layers with different levels of seniority as relate to the cash flows generated by the project (often structured as a special purpose vehicle (SPV)) to pay the notes, starting with the most senior notes and only repaying subordinated tranches thereafter (mezzanine, junior or first-loss-piece tranche). This is the so-called "waterfall structure" or the "layered structure" (figure 10). In blended finance, public finance providers usually hold the first loss-piece in order to provide cushion to more senior, commercial investors.

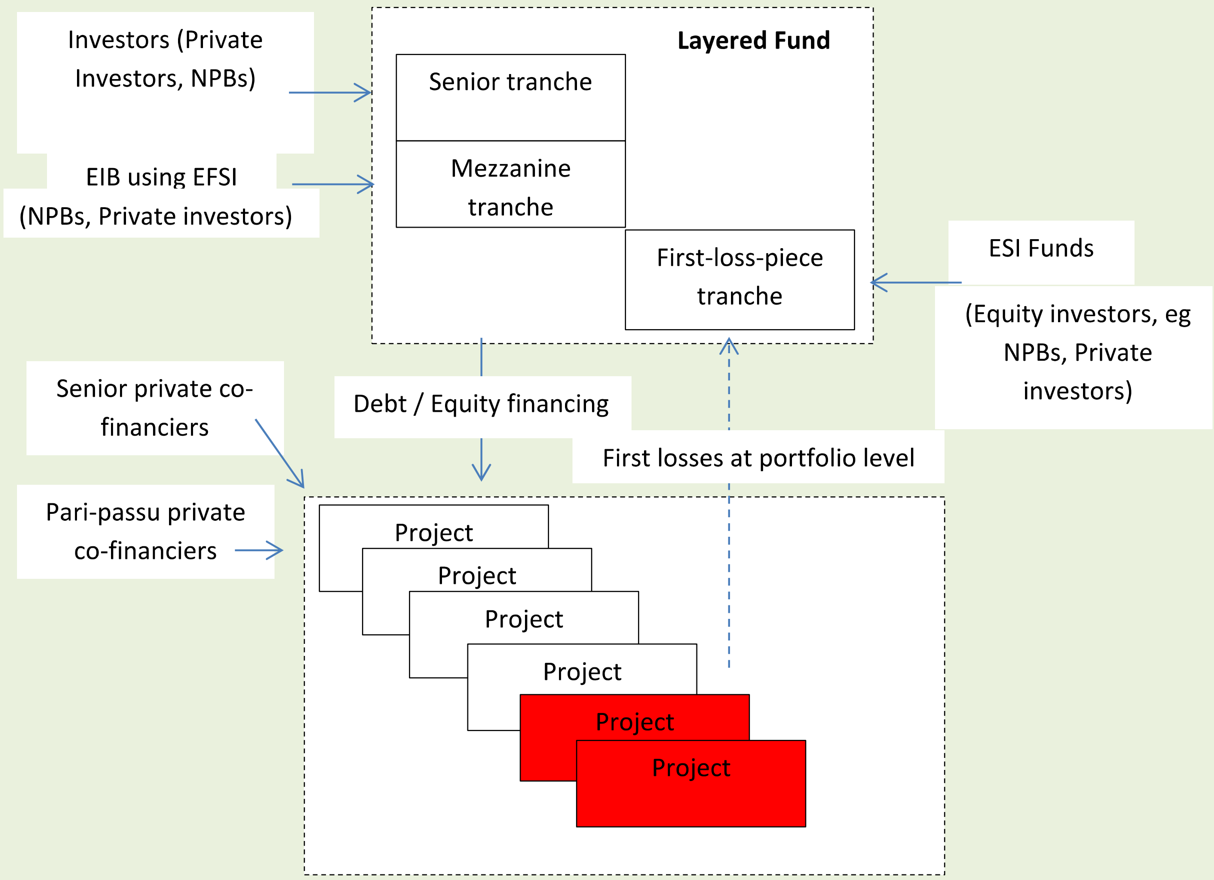
ESI funds as first- loss-piece

In the context of Investment platforms, the ESI Funds can be used to support the risk-bearing capacity of an EFSI Investment Platform in the form of a "layered fund", and leverage other sources of finance, most notably private investors as well as NPBs. The layered fund would typically be structured in 3 classes of risk, clearly segregated in terms of risk and return:

- Senior debt tranche (low-risk-taking): to leverage private and institutional investors.
- Mezzanine tranche: financed by EIB (using EFSI). Open to NPBs and private investors.
- First-loss-piece/equity tranche (high risk-taking): financed by ESI funds or other national/regional public budget funds. Open to NPBs and private investors.

The remuneration and/or reimbursement of the first loss-piece/Equity tranche will only take place after remuneration and/or reimbursement for the Senior tranche holders and the Mezzanine tranche holders respectively, as per normal market practice.

Figure 4. Illustrative scheme of a "layered fund" combining ESI Funds and EFSI




Source: European Structural and Investment Funds (ESIF) and European Fund for Strategic Investments (EFSI) complementarities - Ensuring coordination, synergies and complementarity, European Commission, 2016



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement Nº 847147

The ESI Funds would be committed as first-loss-piece coverage, clearly distinct from the use of EFSI resources via separate records and covering distinct expenditures: in practice, ESI Funds would only be used to absorb the first losses arising from underlying projects up to the limit of the committed amount, whereas EFSI resources would only be used to absorb further losses, clearly distinct from those covered by the ESI Funds.

The combined use of ESI Funds and EFSI can be sought in cases where there is a market failure in risk-absorption capacity and where EIB/EFSI risk-pricing would not market it sufficiently attractive to finance projects mobilizing other private or public sources of funds.

Advantages

- Reduces risk for private investors and can attract various types of investors with different risk-appetites.
- Reduces the level of returns expected by private investors (lowering the cost of the funds)
- Extend the amount and volume of investment relative to the capital (achieving higher impact through financial leverage)
- Significant credit enhancement capacity thanks to layered structure
- Preferential structure to set-up dedicated or multi-purpose debt and/or equity funds
- Allows maximum flexibility in financing projects as layered funds can be structured to deliver guarantees, loans, quasi-equity or equity directly to Final Recipients or through financial intermediaries or a mix of.
- The targeted projects financed by layered funds would typically be further co-financed by private sector entities at senior level (debt) or pari-passu (equity), leveraging additional private finance at project level.

Instrument impacts

- Extended debt volume with high leverage effect
- Potential reduction of interest rate
- Potential extension of debt maturity
- More favorable debt amortization/repayment schedule
- Introduction of new investors to the market
- Implementation of more ambitious projects with lesser risk
- Reduction of transaction costs

Best practice/references examples

- EFSI backed Investment Platform: e.g. CAP TRI Nord Pas de Calais.
- Other references: The Green for Growth Fund (GGF), a layered-debt fund initiated by the EIB and KFW, the German Development bank. This fund leverages risk-capital provided by public institutions with additional private capital to foster Energy Efficiency in South-East Europe, the Eastern Neighborhood and Turkey. The fund provides financing to business and households, mostly through financial institutions - https://www.ggf.lu/about-green-for-growth-fund

## 2.2. Financing and refinancing instruments

Financing and refinancing instruments address the barrier of limited access to capital with the objectives to supply additional cost-effective and/or long-term financing to projects. In the field of Energy Efficiency, the most common financing and refinancing instruments used by public financing institutions are the following:

- Concessional loans
- Fund and holding structures



This project has received funding from the European Union's Horizon 2020
research and innovation programme under grant agreement № 847147

- Forfaiting facilities

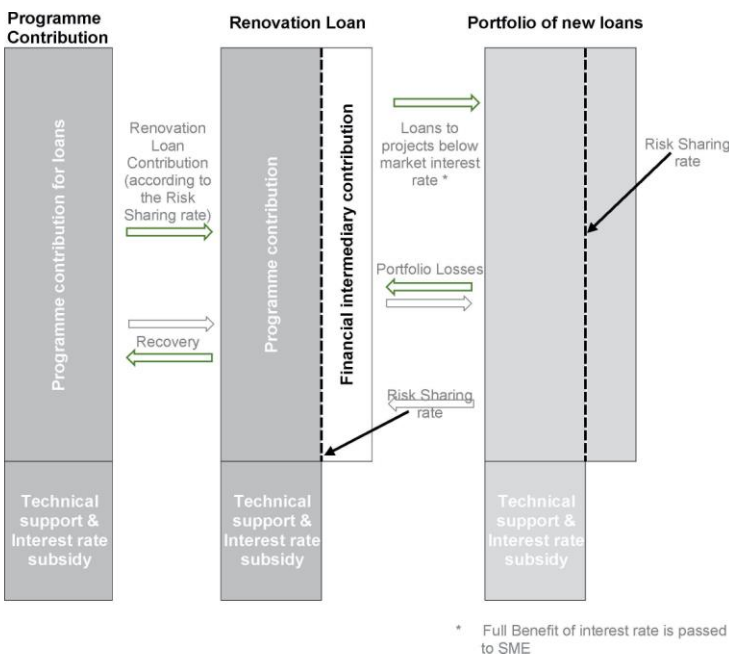
### 2.2.1. Concessional loans

Concessional loans also called soft loans are traditional Financial Instruments used by public funders to decrease financing costs for Energy Efficiency loans and therefore improve access to finance. Concessional terms may include lowering interest rates, extending loan terms, or taking higher risk portions of an investment. They typically offer longer amortization schedules (in some cases up to 40 years) than conventional bank loans. This type of financing is often used in new or less established Energy Efficiency sectors, where a reduction in costs or greater flexibility can support the financial viability of projects.

#### Description

Concessional loans include flexible features like low interest rates and/or long/flexible repayment schedules, including grace period. These features allow to align the debt-service repayment to the project cash flows. By providing this type of concessional finance, the public sector can also leverage private capital investment at project level by signaling confidence in a project. Concessional finance also lowers a project's overall capital financing costs, thus increasing its profitability. This increased profitability allows a project to more easily pay back other lenders. Concessional loans are generally routed either through financial intermediaries, such as commercial banks with public funds that are on-lent to Final Recipients or through a debt fund (see next chapter) that is lent directly to the Final Recipients. This type of structuring is therefore similar to the risk-sharing loans instruments, where the public funds are blended with the financial intermediaries own's funds. But concessional loans may also include additional support notably by having an interest rate subsidy component in a single financial package as a partial debt relief instrument that could further decrease the cost of financing for the Final Recipients. Public subsidies used for interest rate relief have a similar effect as a grant, but as they are tied to a loan, they can be used to leverage investments of a greater size compared with grants. Debt relief is generally only granted once the remaining loan debt has been paid off, but it can also be subject to specific criteria such as achieving a certain level of thermal performance in the case of a building retrofit. The German KFW Energy Efficiency Loan Programs for instance provides such partial debt relief which increase with the level of thermal performance for new buildings and renovation for instance. It ranges from 2.5% to 17.5% of the original loan principal, dependent on the achieved efficiency standard and the type of retrofitting (comprehensive or individual measures).

Figure 5. Illustration of how a Concessional Loan works




Source: Commission Implementing Regulation (EU) N° 964/2014 of 11 September 2014



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement Nº 847147

### Advantages

- Enables lenders to lend to marginally creditworthy clients presenting attractive Energy Efficiency projects.
- Enables the loan tenor or the grace periods to be extended and the interest rate to be reduced, thus improving project cash flow and viability.
- Increases debt-to-equity ratios, enhancing returns to Final Recipients.
- Potential to achieve higher, but limited leverage effect.
- Revolving effect, ability to recycle reimbursed and recovered funds.

### Instrument impacts

- Extended debt volume but lower leverage effect
- Larger reduction of interest rate (up to 100%)
- Larger extension of debt maturity (in some cases, up to 50 years)
- More favorable debt amortization/repayment schedule
- Easement of debt covenants
- Introduction of new borrowers to the market
- Implementation of more ambitious projects with lesser risk

### Best practice/references examples

- ESIF « off-the-shelf » Financial Instrument: Renovation loan, dedicated to residential building sector, based on a loan fund set-up by a financial intermediary with public contributions - https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0964&from=EN
- EFSI backed Investment Platforms: France Efficacité Energétique Logement Social
- Other references: KFW Energy Efficiency Loan Programs in the housing and non-residential sectors – https://www.i4ce.org/wp-core/wp-content/uploads/2015/10/14-09_kfw_case_study.pdf

## 2.2.2. Fund and holding structures

Crowding in private investments through fund and holding structures, such as funds of funds (FOFs), loan funds or equity funds, is another instrument to leverage private investments and bring additional long-term finance to projects. Fund structures are also key models for the aggregation of small and medium-sized projects together to achieve the required size and risks profiles sought by third-party investors as well as to lower the costs of transaction.

### Description

Fund structures can be used to aggregate small- and medium-scale projects into a single asset portfolio. This portfolio can combine projects with different risks profiles as well as include projects financed through financial intermediaries or directly by the fund. This allows to reduce the risks at the portfolio level while it increases the flexibility of deployment as fund structures can operate either directly or through intermediaries. As previously discussed, when set-up as layered funds, they can also allow for the aggregation of different investor types with different risk-return profile appetites, allowing investors to choose between more junior or more senior tranches. This ability of layered fund structures to aggregate both projects and investors with varying risk-return requirements allows to overcome under one roof a number of existing investment barriers linked to sub-investment grade projects, particularly for small- and medium-size projects. Fund and holding structures can be set-up for capital provision ranging from debt to pure equity provision or a mix of the two, increasing there again flexibility.

In the case of debt funds, they can be used to provide risk-sharing loans or concessional loans to Final Recipients through financial intermediaries, creating additional leverage in the market. They could also grant direct loans to Final Recipients on preferential terms.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement № 847147

In the case of equity funds, there are two possible investment strategies. Either the equity fund takes a refinancing approach, i.e. freeing up capital of project developers for them to invest in other projects, once the risk of the construction phase is behind them. This approach consists of attracting private investors to invest in near completed and operational projects. Or at the contrary, the equity fund takes over some early construction risks to make sure commercial banks will lend as well. In this case, the equity fund focuses on the injection of capital in small- and medium-sized companies or special purpose vehicles (SPVs) to foster the development of market actors as well as to provide the financial base for these companies or SPVs to move projects forward and access other forms of financing (debt, etc.).

Multipurpose investment funds can also be set-up to deliver various financial products such as guarantees, loans, equity and quasi-equity to various type of Final Recipients such as project beneficiaries, project developers or financial intermediaries.

#### Advantages

- Enables to aggregate projects and private investors with various risk return profiles.
- Flexibility of deployment
- Potential to achieve higher results, but limited leverage effect.
- Revolving effect, ability to recycle reimbursed and recovered funds (except equity funds)

#### Best practice/references examples

- ESIF « off-the-shelf » Financial Instrument: the Urban Development Fund, a debt fund to finance loans for urban development projects, the Co-Investment Facility, an equity fund to invest in the equity of SMEs. Equity Investment fund for SMEs - https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R1157&from=EN
- EFSI backed Investment Platforms: CAP TRI Nord-Pas-de-Calais (equity and quasi-equity layered fund), Limburgs Energie Fonds (equity and quasi equity layered fund), Inven Capital (equity fund), Marguerite Fund II (equity fund), Pearl Environmental Infrastructure Fund (equity fund)
- Other references: European Energy Efficiency Fund (multipurpose Energy Efficiency fund), Bulgarian Energy Efficiency and Renewable Fund (multipurpose Energy Efficiency fund for ESCOs) - http://econoler.com/wp-content/uploads/2017/10/EconolerBulgarie2017FINALentier.pdf

### 2.2.3. Forfaiting facilities

Refinancing is a key public financing mechanism to leverage additional private finance and regularly used by International Financing Institutions to provide liquidity to the financial market. It allows a financial operator to sell the claim it holds on to a client or on a project to another entity against a discounted cash payment representing the future cash flows of the claim, in order to free up its balance sheet and be able to finance new clients or projects. Recent development in the Energy Efficiency sector has seen the emergence of forfaiting facilities, whereby an ESCO/ESCoop refinances its debt by selling the future receivables from its EPC assets. Forfaiting is seen today as a key mechanism for developing off-balance sheet Financing Instruments to leverage private investments in Energy Efficiency, particularly for the public sector.

#### Description

Under a forfaiting arrangement, an ESCO/ESCoop enters into energy performance contracts (EPCs) with its clients, both public and private. When the projects are implemented and savings cash flows are secured by the ESCO/ESCoop, the forfeiter buys the receivables against a discount rate from the ESCO/ESCoop, at an agreed rate for the full credit period covered by the receivables, thereby refinancing its portfolio and allowing the ESCO/ESCoop to finance more projects. The forfeiter replaces the ESCO/ESCoop in collecting payments from its clients for the duration of the contracts and uses the payments to amortize the ESCO/ESCoop debt. This innovative financing option is developing along with the growth of the EPC/ESC market in Europe.

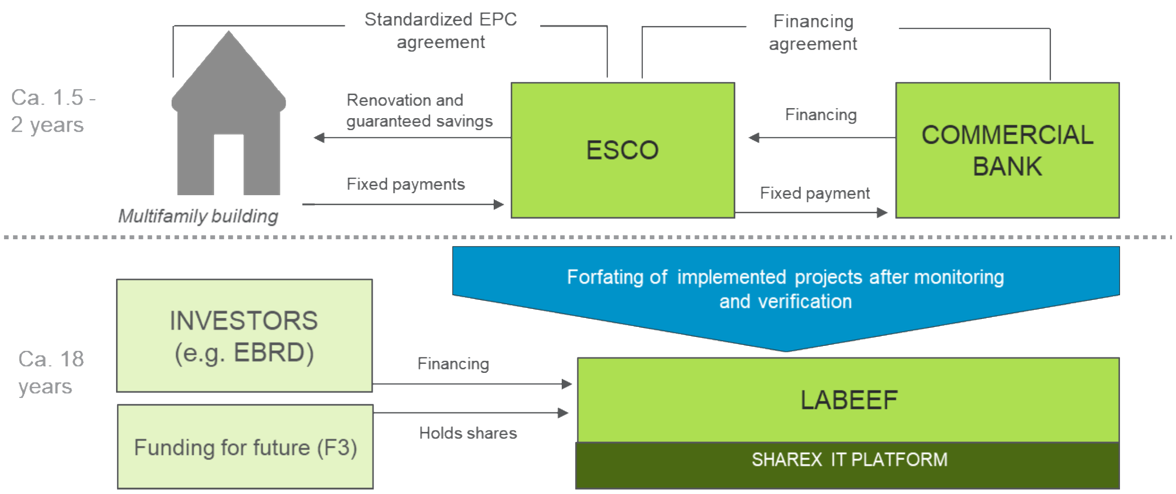
There are different ways to develop a forfaiting facility:



This project has received funding from the European Union's Horizon 2020
research and innovation programme under grant agreement Nº 847147

- The public funds could be used to leverage a portfolio of EPC/ESC assets receivables to be acquired by a private financial institution, where financial institutions are experienced with ESCO/ESCoop financing and EPCs and are willing to develop forfaiting products. Two options can be implemented, either offering a guarantee to the financial intermediary in order to secure the forfaiting portfolio, either to enter in a risk-sharing loan arrangement with additional on-lending capacity for the financial intermediary. A few commercial banks in Europe are already offering forfaiting products to ESCOs/ESCoops, notably through the Private Finance for Energy Efficiency (PF4EE), an EIB/EC co-funded fund offering funding to commercial banks with the objective to support the growth of Energy Efficiency financing for private project beneficiaries and/or project developers.
- Another solution consists in the creation of a forfaiting fund combining private and public equity, with a public guarantee on the first losses or a public intervention with lower return on equity requirements for instance. The fund would then act as a financial intermediary to buy future receivables from ESCOs/ESCoops and, when reaching the critical size, refinance its aggregate portfolio of receivables through the emission of long-term bonds on the debt capital markets. Bond emission would enable to raise funds at lower cost than through a usual loan, and thus offer ESCOs/ESCoops better refinancing conditions. However, the critical size to issue bond of aggregate portfolio of EPC/ESC assets receivables is estimated at 150 million €. A few funds are already offering forfaiting products to ESCOs/ESCoops, such as the European Energy Efficiency Fund (EEEF) and the Bulgarian Energy Efficiency and Renewable Energy Fund (EERSF) or the Labeef forfaiting facility in Latvia (figure 12) which target to reach a first portfolio of EPC receivables of 160m € to issue bonds on the institutional market.

Figure 6. Illustration of how a forfaiting facility works (Labeef case)




Source: Labeef in Latvia, Fact sheet. Ecofys 2018.

This type of solutions could help to overcome multiple financing gaps on the Energy Efficiency market:

- The lack of equity by allowing ESCOs/ESCoops to enter the market without huge up-front capital and thus contributes to lowering the cost of capital.
- The limited balance sheet/borrowing capacity by providing an off-balance sheet financing solution for project developers as well as project beneficiaries, including a “Maastricht neutral” EPC option for the public sector.
- The viability gaps by providing affordable long-term financing through securitization of EPC/ESC receivables

### Advantages

- Enables to offer full off-balance sheet financing (for the project beneficiary as well as the project developer)
- Risks for the forfeiter can be significantly reduced as they purchase verified and secured assets
- Potential to achieve leverage effect



This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement Nº 847147

- Revolving effect, ability to recycle reimbursed and recovered funds.

**Best practice/references examples**

- Labeef: https://www.euki.de/wp-content/uploads/2018/12/Fact-Sheet-LABEEF-Latvian-Energy-Efficiency-Facility-LV.pdf
- Bulgarian Energy Efficiency and Renewable Energy Fund (EERSF): http://citynvest.eu/sites/default/files/library-documents/Model%2019_Energy%20Efficiency%20and%20Renewable%20Sources%20Fund%20-EERSF_final.pdf

## 2.3. Grants instruments

Grants address the barrier of limited financial viability of projects by supporting part of the investments and/or cash flows. In the context of Financial Instruments, they are mainly used as « hybrid capital » in blended instruments whereby grants are combined with loans, soft loans, guarantees or equity, including convertible loans to grants, convertible grants to loans (if certain conditions are not met) or partially repayable loans. Blending instruments are used for projects that have a positive economic rate of return, but that are not attractive to financiers without a grant element.

There are a number of different grant instruments that can potentially be used in blended instruments. They are briefly discussed below:

- **Direct investments grants**: Investment grants can be used to cover specific parts of a project, which can be highlighted as items needing grant support. Grants helps to reduce the overall cost of a project in a transparent manner. Investments grants can be used particularly for specific social (e.g. low-income households) or environmental (e.g. deep retrofit) aspects of projects. Investment grants can be used upfront to accelerate projects giving them a kick-start, or at closure as a kind of incentive to the Final Recipient. The format of a grant should depend on the project.
- **Conditionality/performance-based grants**: those are grants linked to conditionalities, such as thermal performance levels in Energy Efficient Buildings. Grant conditions are defined which the beneficiary must fulfill in order to obtain the subsidy or the elements of the subsidy according to the level of service or performance objectives. This enhances the efficiency of project implementation and increases the alignment of the interests of the beneficiaries with the development objectives pursued by the public funder.
- **Interest rate subsidies**: by relieving the burden of debt service they help bringing down the cost of financing, making projects more bankable and less onerous. They can also increase the borrowing base, helping projects to take more debt. Interest rate subsidies can therefore play an important role to make ambitious sustainable projects (e.g. deep renovation) more attractive than lower-cost alternatives, which might be more advantageous on commercial loan terms.
- **Guarantee fee subsidies**: they have the same function and effect as interest rate subsidies but attached to the cost of guarantees.

Blended instruments with a grant component can also include the following:

- **Convertible grants**: they make it possible to shift funding from a grant to a loan, or from a loan to a grant, depending on the objectives pursued. In a convertible grant operation, the financing consists of a loan which can turn into a grant on predefined conditions, the switch being based either on the fulfillment of the conditions (the loan turns into a grant in case of success) or not (the grant turns into a loan in case of failure).
- **Technical Assistance (TA)**: TA grants are one of the main instruments in the facilities. They are considered successful to improve project preparation and planning, accelerate the start of projects, project implementation and management as well as the sustainability of the investment. Technical Assistance can also help to further speed up the start of projects by supporting the preparation of the appropriate financial package.



This project has received funding from the European Union's Horizon 2020
research and innovation programme under grant agreement Nº 847147

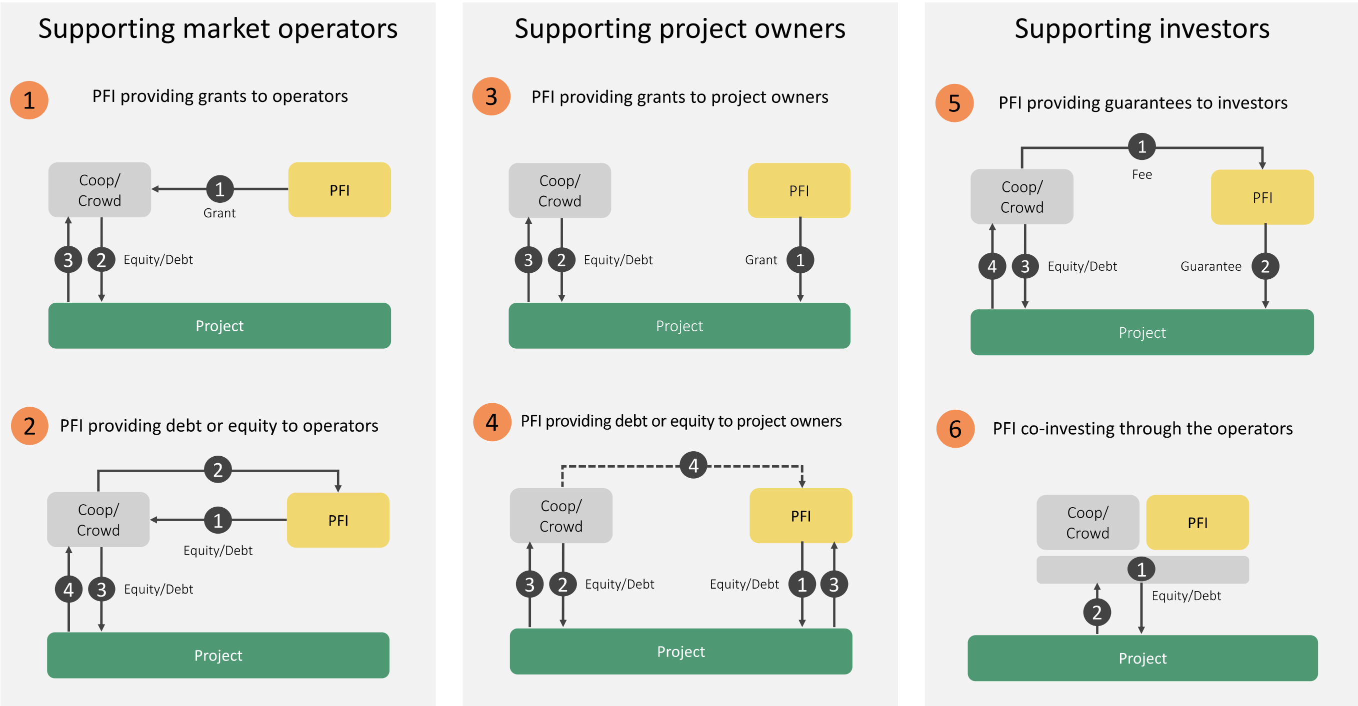
**Maximize the grant effect**

The combination of grants and repayable financial products can be modulated according to different types of projects and/or Final Recipients, with variable aid intensities depending on the objectives of the public authority. For instance, grants could be used to improve the financial viability of deep renovation projects or to stimulate Final Recipients to achieve higher energy savings (by linking the grant to the level of energy savings or thermal performance achieved). This could also be modulated with different levels of grants linked to different levels of performance. Another possibility is also to direct aid towards Final Recipients who have more difficulty accessing traditional financing, such as low-income households or small municipalities.

# 3. PUBLIC FINANCING SCHEMES TO SUPPORT CITIZEN FUNDING OPERATORS – CURRENT EXPERIENCE

Public authorities willing to support the citizen funding market can provide grants, financing or guarantee instruments to citizen funding participants independently of the citizen funding process. Depending on the final recipient of the public funds (i.e. cooperatives/crowdfunding platforms, investors or project owners) as well as the type of support (grants, financing or guarantee instruments), six different intervention models have been identified as potential support to market operators. These models are presented in the figure 7.

**Figure 7. Intervention models for the support of Public Financing Instruments to citizen funding operators**




It should be noted that all models can be applied to cooperatives of crowdfunding platforms with the exception of model six which requires the citizen funding operator to intermediate the funds provided by the Public Financing Instrument and for which only crowdfunding platform operators that intermediate the provision of loan-based or equity-based financial instruments and that are supervised by the national financial regulator may qualify as financial intermediaries.

## 3.1. Schemes to support market operators

The provision of grant or equity directly to citizen funding operators is one of the first options for public authorities to support citizen crowdfunding and cooperative projects and investors. By lowering the operational costs of the citizen funding operators, grants or equity would allow them to offer better or more extensive services to investors such as due diligence of project owners in case of crowdfunding platforms or to better cover the risky first stages of project development such as impact studies, feasibility studies in case of cooperatives. Another option is to provide loans at favorable terms in view to increase the liquidity of the citizen funding operators.

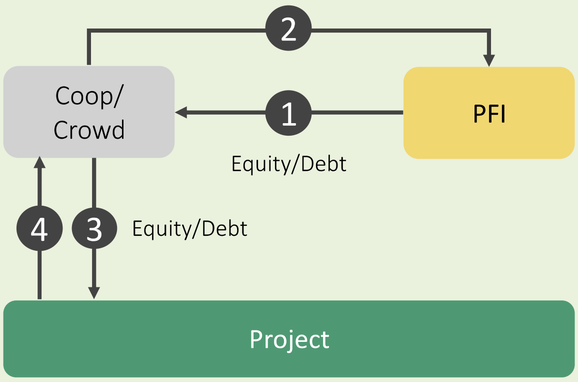


This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement Nº 847147

Under this scheme, the public authority provides public funds to set-up a financing instrument to provide direct grant, equity or debt to citizen funding operators. To set up this scheme, the public authority should select through open call the citizen funding operators complying with eligible criteria set by the public authority. Typically, loans or equity would be provided at concessional terms (e.g. lower interest rate, terms of repayment, etc.) while grants would be provided for technical assistance or capacity development.

Illustration of the intervention

PFI providing debt or equity to operators




1. In this scheme, the Public Financing Instrument provides debt or equity directly to cooperatives and/or crowdfunding platforms. The operation strengthens the capital structure or the liquidity of the cooperatives and/or crowdfunding platforms allowing them to increase their activities and leverage more projects on the market.
2. The cooperatives and/or crowdfunding platforms and potential other investors provide equity or debt to newly leverage energy efficiency or renewable energy projects.
3. Investors get dividends or revenues (from operations of the project) and/or repayments (from the loan), including for the cooperatives and/or the crowdfunding platforms.
4. The cooperatives and/or crowdfunding platforms can reimburse the loan or buy out the public equity shares in the company, generating cashflow for the instrument to be reinvested in other operators.

The objective of this intervention would aim to:

- Provide technical assistance funding to improve procedures and quality, comply with regulatory requirements, develop new products and services, expand sales and marketing or to reduce the burden of the first stage of project development (impact studies, feasibility studies, etc.).
- Increase the liquidity of the operators.

The grant-based scheme is similar to the previous one, with the exception of non-repayable funds.

Example

<u>Netherlands – Oneplanetcrowd – EaSI Programme</u>

One example is the Dutch lending crowdfunding platform Oneplanetcrowd that raises EUR 1 million growth finance from the European Investment Fund (EIF) via the EU’s Employment and Social Innovation Programme (EaSI) capacity building investments window. The financing comes in the form of a favorable loan with a term of eight years. As a result of this financing, further investments will be made in the coming years in the quality of the services provided by, among others: the improvement of front-end and back-end IT systems, expanding sales and marketing capacity, offering new products such as bonds, equities and limited tradability and meeting strict regulatory requirements as Oneplanetcrowd is one of the few platforms operating under MiFID II. In this example, Oneplanetcrowd is a crowdfunding platform established by a regulated investment fund manager (Startgreen Capital) that has implemented regulations that require a high level of professionalism. This has facilitated the engagement of EIF.

*The full description of the initiative can be found in the following document: Scaling up Partnerships: A blueprint for the implementation of match-funding schemes between public authorities and crowdfunding platforms,*


This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement № 847147

*EUROCROWD, 2021. Other cases studies can be found in the following document: Unlocking the crowdfunding potential for the European Structural and Investment Funds, European Commission DG REGIO, 2021.*

## 3.2. Schemes to support project owners

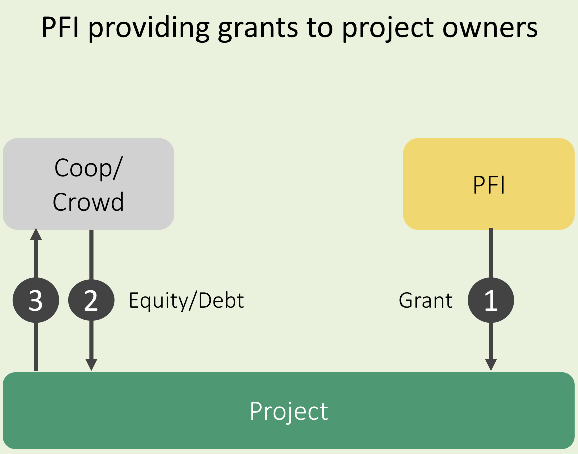
### 3.2.1. Public Financing Instrument providing grants to project owners

The provision of grants directly to project owners remains the most accessible ways for the public authority to collaborate with citizen funding operators. Grants provided on top of citizen funding, especially capital grants, lower the risk/return ratio of investment projects making the investment more competitive and thus helping to attract citizen and private funds.

Under this scheme, the public authority provides public funds to set-up a grant instrument to provide direct grants to project owners engaged in a citizen funding operation. To set up this scheme, the public authority should select a crowdfunding platform or a cooperative that will be responsible for identifying project opportunities and attract investors. The selected platform or cooperative will be responsible for the due diligence of both investors and projects. The financing scheme would complete, in the form of a grant, the investment made by all crowd-investors or coop-investors in a project that satisfies the eligibility criteria set by the public authority. This could be large projects developed by cooperatives or small loans or equity investment collected by crowdfunding platforms. Grants could be provided on a project-to-project or on a portfolio basis. Depending on the objectives of the scheme, the type of projects to finance and the chosen citizen funding operator (cooperative or crowdfunding platform), the publics funds can be provided under the form of:

- A technical assistance grant to facilitate the initial project development and preparation of the fundraising. In this case, the grant is awarded before the fundraising operation start or is fully closed.
- A capital grant to complete the financing of the project. In this case, the grant is awarded when the fundraising operation has successfully closed.

Illustration of the intervention




1. In this scheme, the Public Financing Instrument provides a grant directly to investment projects promoted by the cooperative or the crowdfunding platform. The operation is done alongside the fundraising operation as a separate contribution. It could be a capital grant conditioned to the success of the fundraising operation or a grant for technical assistance to make the project ready for the fundraising operation.
2. The cooperative or crowdfunding platform and potential other investors provide equity or debt to the underlying project to secure the financial closing.
3. Investors get dividends or revenues (from operations of the project) and/or repayments (from the loan).

The objective of this intervention would aim to:

- Provide technical assistance from project developers or consultancies to facilitate the development of the projects and for riskier or larger projects to reduce the burden of the first stage of their development (impact studies, feasibility studies, etc.).
- Increase the overall capital available to finance riskier operations



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement Nº 847147

- Increase the bankability of the project as the overall cost of funding is reduced by the grant (in case of capital grant)

Examples

Italy – Eppela - City of Milano

In 2016 and 2017, the Italian reward-based crowdfunding platform Eppela partnered with the City of Milano to support the financing of local projects of public interest with social impact. The City of Milano allocated 400.000 EUR to provide a capital grant as co-founding up to 50% and 50.000 EUR for selected projects that successfully complete a civic crowdfunding process (i.e. reaching the required threshold set out in the campaign). The City of Milano contracted Eppela via a public procurement tender to organize the crowdfunding campaigns and manage the fundraising process while the projects were selected through a public call for innovative projects. Eighteen projects went into the crowdfunding platform and sixteen of them collected 50% of their budget from donors that were completed at equal level by a grant from the City of Milano.

*https://www.eppela.com/it/mentors/comunemilano*

*https://www.eppela.com/it/news/61-crowdfunding-civico-del-comune-di-milano-ci-siamo*

*The full description of the initiative can be found in the following document: Unlocking the crowdfunding potential for the European Structural and Investment Funds, European Commission DG REGIO, 2021. Other cases studies can be found in the following document: Scaling up Partnerships: A blueprint for the implementation of match-funding schemes between public authorities and crowdfunding platforms, EUROCROWD, 2021.*

### 3.2.2. Public Financing Instrument providing debt or equity to project owners

The provision of debt or equity directly to project owners is one of the options for public authorities to support citizen crowdfunding loans or investment in crowdfunding or cooperative projects. Public debt or equity provided on top of citizen funding offers a better access to finance to the targeted projects. This helps to attract citizens and other investors. If public funds are provided on concessional terms, this can further improve the business case by helping to decrease the financing costs for the project owners or by improving the credit risk rating of the projects.

Under this scheme, the public authority provides public funds to set-up a debt or equity instrument to provide loans or equity to selected project owners engaged in a citizen funding operation. To set up this scheme, the public authority should select a crowdfunding platform or a cooperative that will be responsible for identifying project opportunities and attract investors. The selected platform or cooperative will be responsible for the due diligence of both investors and projects. The financing scheme would complete, in the form of loan or equity, the investment made by all crowd-investors or coop-investors in a project that satisfies the eligibility criteria set by the public authority. This could be large projects developed by cooperatives or small loans or equity investment collected by crowdfunding platforms. Typically, loans or equity would be provided at a concessional terms (e.g. lower interest rate, terms of repayment, etc.) and could be provided on a project-to-project or on a portfolio basis. Depending on the objectives of the scheme, the type of projects to finance and the chosen citizen funding operator (cooperative or crowdfunding platform), the publics funds can be provided at different stages of the fundraising process:

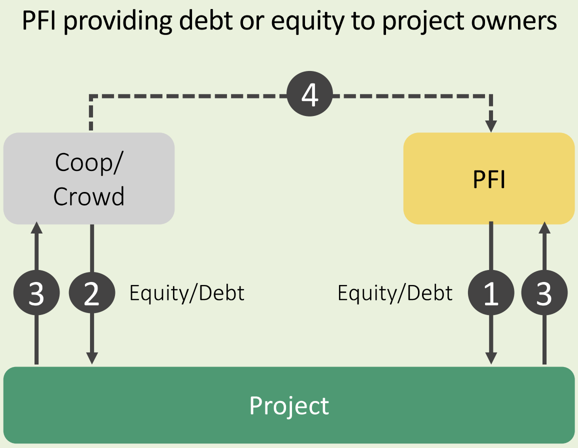
- At the start of the fundraising process as first-in finance. In the crowdfunding sector, first-in finance could help to increase the credibility of the projects amongst investors. In the cooperative business model, first-in finance could serve to finance the early stage of project development such as impact studies, feasibility studies, etc.
- During the fundraising process as bridge or transition finance. In the crowdfunding sector, bridging the funding of the early investors could help close the fundraising deal by increasing the attractiveness of the



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement № 847147

project to other citizen investors. In the cooperative business model, bridge financing could be used to fund the project development phase before final financial close.
- At the end of the fundraising operation as top-up finance. In this case, the public funds are granted to the project owners only when the fundraising process has successfully closed.

Illustration of the intervention




1. In this scheme, the Public Financing Instrument provides equity or debt directly to investment projects promoted by the cooperative or the crowdfunding platform. The operation takes place in parallel with the fundraising operation, as a separate investment.
2. The cooperative or crowdfunding platform and potential other investors provide equity or debt to the underlying project to secure the financial closing.
3. Investors get dividends or revenues (from operations of the project) and/or repayments (from the loan), including the Public Financing Instrument.
4. In the case of equity investment in a project developed by a cooperative, the later can possibly buy out the public equity share in the project, generating cashflow for the instrument to be reinvested in other projects.

The objective of this intervention would aim to:

- Allow the financing of projects for which citizen financing operators (cooperatives or crowdfunding platforms) do not have the financial capacity to finance the project alone. This could also help the citizen financing operators to better seize the opportunities on the market and increase their funding operations.
- Increase the overall capital available to finance riskier operations
- Increase the bankability of the project in case of public funds provided at concessional terms

Such financing instrument – whether they are loan or equity-based – are intermediated via a financial intermediary, typically a commercial bank or an investment fund. The public authority will therefore have to select a financial intermediary or to set-up a Special Purpose Vehicle to manage the financing instrument. It should be noted that operators of crowdfunding platforms, which intermediate the provision of loan-based or equity-based financial instruments, and which are supervised by the national financial regulator, are likely to fulfil criteria as appropriate financial intermediary for financial instrument to project owners.

Examples

Germany – Starnext – Mikrocrowd and Crowd Buddy public-private schemes

In Germany, the reward crowdfunding platform Startnext specialized in the reward funding of start-ups, ideas and social businesses developed in association with public institutions the Mikrocrowd initiative, a micro-credit public scheme with the focus on start-ups and social businesses. Firstly, implemented in 2018 with the Investitionbank Berlin (IBB), the business development bank of the Federal Länder of Berlin, the scheme provides directly to the project holders public microloans between 10.000 EUR to 25.000 EUR that come on top-up to a successful crowdfunding campaign on the Startnext platform. The resources for the Mikrocrowd scheme are allocated by IBB to a debt fund (KMU-Fonds programme) sourced by the structural funds (ERDF). The public loans are provided with concessional terms, i.e., very low interest rates, grace period, and without having to provide any equity into the project, as IBB consider the amount raised via the reward campaign as an acceptable equity. The scheme was



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement № 847147

replicated and extended to other German landers, with L-Bank, the State Bank of Baden-Württemberg, WIBank, the economic and infrastructure bank of Hessen, IKH, the Bremen Chamber of Commerce. Next to the Mikrocrowd initiative, Startnext developed another scheme named Crowd Buddy in partnership with three regional economic development institutions (Mittelständische Beteiligungsgesellschaften - MBGen), the MBGs of Baden-Württemberg, Hamburg, and Lower Saxony. The Crowd Buddy scheme combines crowdfunding with micro mezzanine participations in start-ups. As soon as projects submitted and approved on Startnext generated at least 5,000 euros via their campaign, the regional MBG increase the amount by a minimum of 10,000 euros and a maximum of 50,000 euros through a so-called silent participation via the "Mikromezzaninfonds Deutschland". This fund is made possible by the Federal Ministry of Economics with funds from the special ERP fund (European Recovery Program) and the European Social Fund (ESF). Mezzanine capital is a mixed form of company equity and foreign capital to improve the equity ratio. Start-ups do not have to provide the usual bank guarantees for such participation.

*https://www.startnext.com/pages/ibbmikrocrowd*

*https://www.startnext.com/pages/crowdbuddy-bw*

**Italy – equity crowdfunding platforms - Lazio Innova Venture Capital fund**

The Lazio Region, as part of its strategy aimed to support investments in the venture capital of innovative startups and companies with a high growth potential in Lazio, launched the INNOVA Venture Capital fund in July 2018. The fund, which is managed by Lazio Innova, an in-house entity of Lazio Region, co-invests in these companies alongside other private investors through equity and quasi-equity instruments. The fund provides from a minimum of EUR 250.000 to a maximum of EUR 2 million for the initial investment, with co-investment from private investors accounting for 30% to 60% of the overall amount. The fund also provides a EUR 4 million for follow-on, with a maximum investment amount of EUR 6 million for each entrepreneur, of which Innova Venture invests a maximum of EUR 2.5 million. In this particular scheme, Lazio Innova is in charge of identifying and performing the due diligence of the projects proposed by entrepreneurs, which have to submit an application, including a 5-year business plan. Upon approval of the application, INNOVA Venture provides the entrepreneur with a first tranche, in the form of equity. Additionally, to this, Lazio Innova implemented partnership agreements with equity crowdfunding platforms, who can then host on demand campaigns launched by the selected projects to raise top-up funds. Once the campaign is successfully funded and following due diligence, Innova Venture matches the investments of the co-investors, including the crowd-investors for a maximum of EUR 2,5 million. Any equity crowdfunding platform able to carry out operations on the Italian territory could apply to become a partner in the initiative, as long as it had received an authorization from Italian national regulator CONSOB. At date, agreement have been signed with 5 Italian equity crowdfunding platforms: MamaCrowd, 200Crowd, WeAreStarting, Backtowork24, Starsup and Doorway.

*http://www.lazioinnova.it/innova-venture/equity-crowdfunding/*

*The full description of these initiatives can be found in the following documents:*

- *Unlocking the crowdfunding potential for the European Structural and Investment Funds, European Commission DG REGIO, 2021.*
- *Scaling up Partnerships: A blueprint for the implementation of match-funding schemes between public authorities and crowdfunding platforms, EUROCROWD, 2021.*
- *Crowdfunding and ESF opportunities: future perspectives for managing authorities, Manual, FI-Compass, European Investment Bank, 2020*

## 3.3. Schemes to support investors

### 3.3.1. Public Financing Instrument providing guarantees to investors

The provision of guarantees to investors is one of the options for public authorities to support citizen crowdfunding loans or investment in crowdfunding or cooperative projects, without having to provide any direct investment in

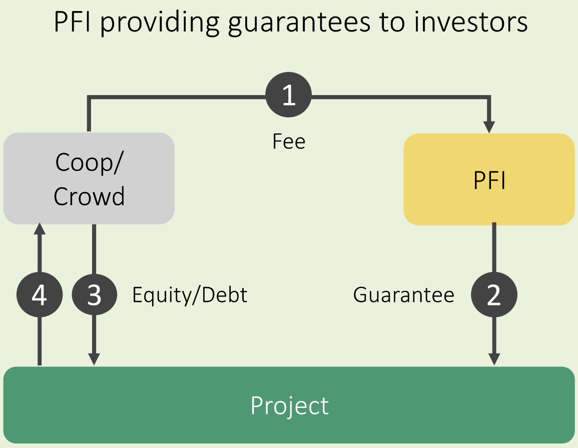


This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement № 847147

projects or a cooperative/crowdfunding platform. The guarantees lower the financial risk for individual investors, hence increasing their appetite to invest through the cooperative of the crowdfunding platform.

Under this scheme, the public authority provides public funds to set-up a guarantee instrument to cover investors in a selected crowdfunding campaign of a cooperative project. To set up this scheme, the public authority should select a crowdfunding platform or a cooperative that will be responsible for identifying project opportunities and attract investors. The selected platform or cooperative will be responsible for the due diligence of both investors and projects. The guarantee scheme would cover the investment made by all crowd-investors or coop-investors in a project that satisfies the eligibility criteria set by the public authority. This could be large projects developed by cooperatives or small loans collected by crowdfunding platforms. Typically, this guarantee would be provided at a cost (e.g. guarantee fee) and could be provided on a loan-to-loan basis per project, or on a portfolio basis, capped (i.e. covering the exposure of the lender up to a pre-defined percentage or amount of the loan and for the portfolio in default), or uncapped. In case of default, the guarantee will be channeled through the selected platform or cooperative to refund the investors.

Illustration of the intervention




1. In this scheme, a selected cooperative or crowdfunding platform pays a fixed fee to the Public Financing Instrument to benefit from a guarantee mechanism.
2. The Public Financing Instrument provides guarantee either on the revenue generated by the projects financed or the loans provided by the crowdfunding platform, closing the gap with potential losses.
3. The cooperative of crowdfunding platform provide equity or debt to the underlying project to secure the financial closing.
4. Investors get dividends or revenues (from operations of the project) or repayments (from the loan). Should the project default, the investors would be covered until the agreed cap by the guarantee, and recover part of their initial investment. In case the project does not default, the amount covered by the guarantee is freed up.

The objective of this intervention would aim to:

- Address specific capital constraints of investors in the crowdfunding or cooperative industry
- Increase the overall capital available to finance riskier operations
- Maximise the leverage effect to attract private investments in alternative finance

Such guarantee schemes – whether they are loan-to-loan or portfolio guarantees – are intermediated via a financial intermediary, typically a commercial bank or a fund manager. The pubic authority will therefore have to select a financial intermediary or to set-up a Special Purpose Vehicle to manage the guarantee instrument. It should be noted that operators of crowdfunding platforms, which intermediate the provision of loan-based or equity-based financial instruments, and which are supervised by the national financial regulator, are likely to fulfil criteria as financial intermediary for guarantee to investors. Depending the source of public funds, the guarantee may be provided to the financial intermediary for free, with the benefit passed on to the project owners/final recipients in the form of no guarantee fee, reduced collateral and/or interests.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement № 847147

**Examples**

**Sweden - Trine – Swedish Development Agency Sida**

The Swedish crowdfunding platform Trine partnered with the Swedish Development Agency (SIDA) to increase the amount of investment into renewable energy projects in Africa. Through a guarantee agreement, SIDA covered the risk of investors willing to lend to renewable energy companies. The Trine Platform arranges debt funding from private individuals to borrowers who are small and medium-sized energy service companies in Africa that offer renewable energy solutions, often in the form of rent-to-own. The guarantee agreement will run during the period 2018-2023 and will cover 60% of an expected portfolio of 10 MEUR mobilized private capital from the "crowd". A similar guarantee agreement has been closed by SIDA with the Lendahand crowdfunding platform operating the same off-grid renewable energy investments in Africa for a portfolio of 12 MEUR mobilized private capital that will be covered at 50%. The guarantee is structured with a rate of 50% and a cap rate of 60% of the loans provided by the platforms, meaning that crowd investors only lose a maximum for 40% of their investment in case of default. A limited fee corresponding to 3.3% of the total exposure under the guarantee is paid by the platforms to use the guarantee.

*https://medium.com/trine-blog/making-it-safer-easier-and-more-impactful-to-invest-sustainably-411335321e97*

*https://www.sida.se/en/for-partners/private-sector/sidas-guarantee-instrument*

**Netherlands: OnePlanetCrowd/Startgreen Capital – Netherlands Entreprise Agency (RV0)**

Startgreen Capital launched at the end of 2020 a new investment fund for sustainable small and medium size business looking for funding between EUR 200k-2million. The fund can finance them directly through a loan covering a minimum of 60% of the financing amount requested. Companies can additionally raise up the 40% remaining through the Startgreen crowdfunding platform OnePlanetCrowd. The complete loan (including the part from the crowd) benefits of a state guarantee of a minimum of 67,5% on losses provided by the Netherlands Enterprise Agency (RVO) as part of the COVID-19 recovery program from the Dutch government. RVO provides a state guarantee with a rate of 90% and a cap rate of 75% for loans with a maximum of EUR 2m for a term of two to four years. The SME pays a one-time commission of 2% of the principal amount of the loan for a term of 2 years to use the guarantee. With a term of 4 years, this commission is 3%. It is to note that the scheme is completed by a contribution of 5 million EUR from the Dutch national promotional bank (Invest NL) to the StartGreen Fund for Sustainable SMEs to be allocated to projects benefiting from the guarantee. In this example, Oneplanetcrowd is a crowdfunding platform established by a regulated investment fund manager (Startgreen Capital) that has implemented regulations that require a high level of professionalism. This has facilitated the engagement of RVO and Invest NL to support the scheme.

*https://www.startgreen.nl/fondsen/startgreen-fonds-duurzaam-mkb/*

*https://www.oneplanetcrowd.com/nl/s/financiering*

*The full description of the initiative can be found in the following document: Unlocking the crowdfunding potential for the European Structural and Investment Funds, European Commission DG REGIO, 2021. Other cases studies can be found in the following document: Scaling up Partnerships: A blueprint for the implementation of match-funding schemes between public authorities and crowdfunding platforms, EUROCROWD, 2021.*

### 3.3.2. Public Financing Instrument co-investing through the operators

The most integrated way of cooperation between a public authority and citizen funding operators is the one where the public authority co-invests under the form of debt or equity alongside the citizen funding operator in targeted portfolio of projects. In this role, the public authority channels public funds via a citizen funding operator acting as a financial intermediary for the public financing instrument which could be debt- or equity-based. More specifically, the public authority contributes resources to the citizen funding operator, which are then invested in individual projects managed by the operator. In this case, the public authority delegates the full decision-making process to the citizen funding operator. The public financial support to projects would generally be linked to a private financing threshold, with negotiated terms and conditions (e.g. terms of repayment, governance process, reporting) aligning



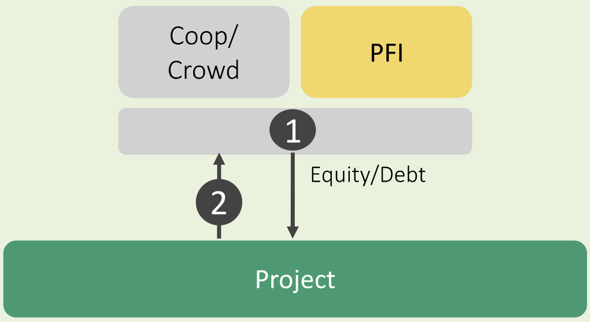
This project has received funding from the European Union's Horizon 2020
research and innovation programme under grant agreement № 847147

with the ones of private investors. It should be noted that this type of cooperation is only accessible to citizen funding operators eligible as financial intermediary, which is mostly the case in the crowdfunding sector and more specifically lending-based crowdfunding platforms which intermediate the provision of loan-based financing instruments or investment-based crowdfunding platforms having a MiFID or AIFM license.

Under this scheme, the public authority provides public funds to set up a financing instrument to provide loans or equity alongside the crowdfunding operator to selected projects in a single operation. To set up this scheme, the public authority should select a crowdfunding platform that will be responsible for identifying project opportunities and attract investors. The selected platform will be responsible for the due diligence of projects as well as the provision and management of loans of equity investments to the underlying projects. In most cases, the financing instrument is set up directly by the platform operator, under the form of a public-private debt or equity fund, with public funds used to crowd in institutional private investors. The public-private fund would complete the investment made by all crowd-investors in projects that satisfy the eligibility criteria as well as the terms and conditions set by the co-investors. Typically, the public funds would be provided with concessional terms helping to improve the blended terms of the loans or equity investments.

Illustration of the intervention

PFI co-investing through the operators




1. In this scheme, a selected crowdfunding platform acts as a financial intermediary for the public funding instrument to provide loans or equity together with citizens' contributions in a single transaction to projects meeting the eligibility criteria, terms and conditions set by the co-investors. The public funding instrument is usually set up as a debt or equity fund combining public and private funds. The crowdfunding platform is responsible for identifying and conducting due diligence on the projects, the crowdfunding process and the intermediation of loans or equity investments.
2. Investors get dividends or revenues (from operations of the project) or repayments (from the loan).

The objective of this intervention would aim to:

- Address specific capital constraints of investors in the crowdfunding industry
- Increase the overall capital available to finance riskier operations

Examples

Lithuania – FinBee – Invega Avieté loan fund

In 2018, Invega, the Lithuanian National Promotion Institution (NPI), established a EUR 4.6 million lending instrument called Avietė as a pilot scheme to support local SMEs through crowdfunding platforms, aiming to attract private funds for Lithuanian companies, while at the same time contributing to the strengthening of the Fintech sector in the country. As part of this scheme, the crowdlending platform FinBee, a platform supervised by the Bank of Lithuania, was selected to intermediate Avieté loans to SMEs in a single transaction with contributions from crowd investors. The platform was responsible for selecting projects that would be co-financed with an Aviété loan of up to EUR 10,000 per business and a maximum of 40% of the total amount of each loan. These loans were granted for investments or for working capital to SMEs with a maximum maturity of 36 months. Following the impact of the Covid epidemic and the pressing need to increase liquidity in the local SME market, Invega used



This project has received funding from the European Union's Horizon 2020
research and innovation programme under grant agreement № 847147

the crowdfunding platform as a full financial intermediary to provide 100% state-funded loans to SMEs seeking a loan on the platform between December 2020 and July 2021, at the same time increasing the maximum loan amount up to EUR 25,000.

*http://turizmas.kaisiadorys.lt/en/business-support/*

*https://invega.lt/en/businesses-affected-covid-19-offered-liquidity-loans/*

### Pan-European – October – European Fund for Strategic Investment (EFSI) and other public investors

To support European SME businesses, the French digital lending platform October, active in France, Spain, Italy, Germany and the Netherlands, offers a hybrid investment model. As a crowdlending platform, the pan-European fintech has a community of 20,000 retail and citizen investors who lend to European SMEs from as little as €20 via its online platform. Since 2017, in addition to individual investors, October brings also together public and private institutional investors in funds set-up and managed by October Factory, a regulated asset management company wholly owned by the lending platform and who automatically participate in all projects presented on the platform. After receiving a first support of Bpifrance, a French public investor, which subscribed early in 2017 to the first public-private co-financing fund associated with the lending platform, October became also the first platform in Europe to receive on-lending support from the European Investment Bank, via the European Investment Fund (EIF). The EIF joined forces with Bpifrance and other private institutional investors in the joint debt fund of EUR 90 million, backed to the tune of EUR 18,5 million by EIF under the European Fund for Strategic Investment (EFSI). In this particular case, the EIF support aimed to attract other public and private institutional investors in the fund to allow October to expand its geographic commercial development and the range of financing offered on its crowdlending platform, particularly the size of the loans. The debt fund was to supplement loans in a proportion of 50% to 70% advanced by citizen investors on the crowdlending platform to SMEs. This operation was followed by two additional fundraisings, in 2018 (EUR 200 million) and 2019 (EUR 100 million), in which the EIF renewed its commitment in the joint fund (via the EFSI Private Credit Tailored for SME programme) alongside other top tier public and private institutional investors including CNP Assurances, Bpifrance and Zencap. More recently, the platform attracted three new public investors in joint funds, bringing the platform's overall lending capacity to €600 million: the Italian national promotional bank Cassa Depositi e Prestiti SpA (CDP), with a commitment of €20 million, the Spanish national promotional bank Instituto de Credito (ICO), with a commitment of €15 million, and the Italian financial institution of the Lombardy region Finlombarda Spa, with a €15 million commitment. It is worth mentioning that another EUR 30 million institutional co-financing fund set-up by October Factory with 5 confidi entities (belonging to Federconfidi and Rete Fidi Italia) also received support from the EIF under the form of a guarantee through the InnovFin SME Guarantee Facility, an initiative launched by the European Commission and the EIB Group backed by the EU's research and innovation program Horizon 2020 programme, for which October has become an approved intermediary. Thanks to the impact of the guarantee facility provided by InnovFin, eligible Italian companies benefit from a reduced cost of funding.

*https://october.eu/eib-group-lendix-join-forces-step-financing-french-european-businesses/*

*https://www.eif.org/what_we_do/guarantees/news/2019/efsi-eif-october.htm*

*https://october.eu/the-new-october-italy-fund-for-italian-smes/*

### Finland – Vauraus – EFSI Private Credit Tailored for SME programme

In December 2020, the Nordic loan-based crowdfunding company Vauraus Suomi became the second European crowdfunding platform to be supported by the European Investment Fund under EFSI Private Credit Tailored for SME programme, with a 27,5 million cornerstone investment in Vauraus' new SME Loan Fund I Ky. The fund is expected to attract further private investments, helping it to reach a target size of at least EUR 60 million. Vauraus AIFM Oy (the fund manager) is a fully owned subsidiary of Vauraus Suomi Oyj, a Finnish crowdlending platform focused on SMEs. So far, the platform has intermediated a total of €193m in financing between c. 1,000 borrowers and c. 6,000 investors. Thanks to the backing of the EIF and additional funds available for investment via the Fund, Vauraus will be able to scale up its activities by awarding slightly larger loans, compared to current average financing size on the Finnish crowdlending market.



This project has received funding from the European Union's Horizon 2020
research and innovation programme under grant agreement № 847147

*https://ec.europa.eu/commission/presscorner/detail/en/ip_20_2371*

*The full description of the FinBee/Invega and the EFSI/October schemes as well as other cases studies can be found in the following documents:*

- *Unlocking the crowdfunding potential for the European Structural and Investment Funds, European Commission DG REGIO, 2021.*
- *Scaling up Partnerships: A blueprint for the implementation of match-funding schemes between public authorities and crowdfunding platforms, EUROCROWD, 2021.*
- *Crowdfunding and ESF opportunities: future perspectives for managing authorities, Manual, FI-Compass, European Investment Bank, 2020*

# 4. SOURCES


- Boyle TM (2016) the city and the crowd: an exploration of civic crowdfunding disruption to local government led city planning and the quest to co-create liveability. https://doi.org/10.13140/RG.2.2.13661.61921
- Citizenergy (2015) Your power - take part in the energy revolution. https://citizenergy.eu/
- CoopStarter consortium - Europe Cooperatives (2015) Ready, steady, coop!: A practical guide on how to support the start-up of new cooperatives
- Crowdfunding for Renewable and Sustainable Energy Projects: An exploratory case study approach. Renewable and Sustainable Lam, P. T. I. & Law, A. O. K. Energy Reviews, 60, pp. 11-20, 2016.
- CrowdfundPort (2017) Civic crowdfunding - matching with European Union Funds. Crowd-Fund-Port
- CrowdfundPort, Interreg Central Europe (2016) List of barriers for internationalization of crowd-funding platforms.
- CrowdFundRES (2018) Crowdfunding Renewable Energy: A practical guide for Crowdfunding Platforms, Project Developers, Investors and Policy Makers
- CrowdHO (2019) Crowdfunding for housing transition: Feasibility study with guidelines for implementation of a crowdfunding scheme for buildings retrofit, Ex-ante assessment
- Desmoulins G, Charbit C (2017) Civic crowdfunding: a collective option for local public. OECD regional development working papers 2017/02.
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH (2016)Crowdfunding for Energy Efficiency: Can Debt or Equity Crowdfunding contribute to scaling up Energy Efficiency in Developing Countries?, von Ritter, K. & Bley, J.
- Energy Cities (2019) How Cities Can Back Renewable Energy Communities. Guidelines for Local and Regional Policy Makers. Bolle, A.,
- EUROCROWD (2021) Scaling up Partnerships: A blueprint for the implementation of match-funding schemes between public authorities and crowdfunding platforms
- European Commission (2018a) Impact Assessment. Commission Staff Working Document.
- European Commission (2018b) Proposal for a Regulation of the European Parliament and of the Council on European Crowdfunding Service Providers (ECSP) for Business. COM/2018/0113.
- European Commission DG REGIO (2021) Unlocking the crowdfunding potential for the European Structural and Investment Funds
- European Commission, European Investment Bank, and fiCompass (2019) New financial instruments for ESF - crowdfunding. Fi-Compass 18 December 2019.
- European Committee of the Regions, Commission for the Environment, Climate Change and Energy (2018) Models of Local Energy Ownership and the Role of Local Energy Communities in Energy Transition in Europe,
- European Crowdfunding Network (2018) Triggering Participation: A Collection of Civic Crowdfunding and Match-funding Experiences in the EU




This project has received funding from the European Union's Horizon 2020
research and innovation programme under grant agreement № 847147

- European Crowdfunding Network (2019) European Structural & Investment Funds. European Crowdfunding Network
- European Investment Bank (2020) Crowdfunding and ESF opportunities: future perspectives for managing authorities, Manual
- Future Cities Catapult, and Hannah Griffiths (2017) Civic crowdfunding a guidebook for local authorities. Future Cities Catapult, UK.
- Gajda O, Marom D, Kleverlaan R, De Buysere K (2012) A framework for European crowdfunding.
- International Journal of Sustainable Energy Planning and Management Vol. 15 (2018) Crowdfunding platforms for renewable energy investments: an overview of best practices in the EU, Wouter De Broeck
- Interreg Central Europe - Firece (2020) Pilot Action 1: Summary Report, Fraunhofer Center for International Management and Knowledge Economy
- Interreg Central Europe, Firece (2020) Finalisation of the ex-ante assessment Analysis and implementation of the FI in Germany, Deliverable D.T2.4.1, Fraunhofer Center for International Management and Knowledge Economy
- Kleverlaan R (2016) Expanding the Crowdfunding Market in SE Europe.
- Kleverlaan R, Wright T (2017) Current state of crowdfunding in Europe. CrowdfundHub, Amsterdam.
- Müllerleile T, Joenssen D, Müllerleile A (2014) Crisis, co-financing, and crowdfunding: igniting regional development, pp 277–285
- Municipality of Milano (2018) Civic Crowdfunding : the experience of the Municipality of Milano
- Old R, Boyle D, Baeck P, Bone J (2019) Taking ownership: community empowerment through crowdfunded investment. Nesta
- Pacchi C, Pais I (2020) Civic crowdfunding in Milan: between grass-roots actors and policy opportunities. In: Gajda O, Marom D, Wright T (eds) CrowdAsset. World Scientific, New York, pp 257–273.
- Passeri F (2017) The European dimension of civic crowdfunding. European Crowdfunding Network
- Procedia CIRP - Volume 64, pp. 199-204 (2017) The citizen funding: an alternative to finance renewable energy projects. Tyl, B. & Lizarralde, I
- Prospect (2018) Learning handbook citizen finance module
- REScoop (2013) Report on financial barriers and existing solutions
- REScoop (2014) Handbook on Investment schemes for REScoop projects
- REScoop Mecise (2017) Feasibility study for a European Investment Vehicle, Final report
- Rescoop.eu (2014) Handbook on Investment schemes for REScoop projects
- Van Montfort, Kees VS, De Graaf FJ (2020) Civic crowdfunding in local governments: variables for success in the Netherlands? J Risk Financ Manag 14(1):8.
- Ziegler T, Shneor R, Wenzlaff K, Odorović A, Johanson D, Hao R, Ryll L (2019) Shifting paradigms - the fourth European alternative finance benchmarking report. 4. Cambridge Centre for Alternative Finance.
- Ziegler T, Shneor R, Wenzlaff K, Wang BW, Kim J, Odorović A, Ferri de Camargo Paes F, et al (2020a) The global alternative finance market benchmarking report. University of Cambridge Alternative Finance Center.




This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement № 847147