



Business Model Report

CFs4EE Financing Schemes Development and Implementation

CFs4EE Financing Scheme Design and Validation

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CitizEE

Scaling up Public Energy Efficiency Investments via Standardising Citizen Financing Schemes

www.citizee.eu



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TABLE OF CONTENTS

TABLE OF CONTENTS	2
TECHNICAL REFERENCES	3
ACKNOWLEDGEMENTS	4
DISCLAIMER	4
1 BUSINESS MODEL GUIDANCE & METHODOLOGY	5
1.1 INTRODUCTION AND GUIDANCE	5
1.1.1 Objective and structure of the guidance	5
1.2 STEP 1 - MARKET TO ADDRESS	7
1.2.1 Define eligible building categories	7
1.2.2 Determine eligible projects	8
1.2.3 Determine project implementation model	10
1.2.4 Define beneficiaries and eligible Final Recipients	10
1.3 STEP 2 – INVESTMENT STRATEGY	11
1.3.1 Identify the financing gaps to address	12
1.3.2 Determine the suitable financing products to be offered to the final recipients	14
1.3.3 Define the proposed funding and financing structure	15
1.4 STEP 3 – INSTITUTIONAL ARRANGEMENTS AND OPERATIONAL STRUCTURE	26
1.4.1 Determine the legal arrangement and the fund manager	26
1.4.2 Determine the governance and operational structure	28
1.5 STEP 4 - PROJECT DELIVERY PROCESS AND PARTNERSHIPS	33
1.5.1 Assess the project business cycle and define the operational delivery services package	33
1.5.2 Define the intervention model for the operational delivery services package	35
2 BUSINESS MODEL – VEB (BELGIUM)	40
2.1 STEP 1 – MARKET TO ADDRESS	40
2.2 STEP 2 – INVESTMENT STRATEGY	48
2.3 STEP 3 – INSTITUTIONAL ARRANGEMENTS AND OPERATIONAL STRUCTURE	51
2.4 STEP 4 – PROJECT DELIVERY PROCESS AND PARTNERSHIPS	53
2.5 STEP 5 – INPUTS FOR FINANCIAL FORECASTS	55
3 BUSINESS MODEL – VIPA (LITHUANIA)	56
3.1 STEP 1 – MARKET TO ADDRESS	56
3.2 STEP 2 – INVESTMENT STRATEGY	57
3.3 STEP 3 – INSTITUTIONAL ARRANGEMENTS AND OPERATIONAL STRUCTURE	59
3.4 STEP 4 – PROJECT DELIVERY PROCESS AND PARTNERSHIPS	61
3.5 STEP 5 – INPUTS FOR FINANCIAL FORECASTS	62
4 BUSINESS MODEL – REGEA (CROATIA)	64
4.1 STEP 1 – MARKET TO ADDRESS	64
4.2 STEP 2 – INVESTMENT STRATEGY	68
4.3 STEP 3 – INSTITUTIONAL ARRANGEMENTS AND OPERATIONAL STRUCTURE	70
4.4 STEP 4 – PROJECT DELIVERY PROCESS AND PARTNERSHIPS	72
4.5 STEP 5 – INPUTS FOR FINANCIAL FORECASTS	75
5 BUSINESS MODEL – GOPARITY (PORTUGAL)	77
5.1 STEP 1 – MARKET TO ADDRESS	77
5.2 STEP 2 – INVESTMENT STRATEGY	80
5.3 STEP 3 – INSTITUTIONAL ARRANGEMENTS AND OPERATIONAL STRUCTURE	81
5.4 STEP 4 – PROJECT DELIVERY PROCESS AND PARTNERSHIPS	82
5.5 STEP 5 – INPUTS FOR FINANCIAL FORECASTS	84



TECHNICAL REFERENCES

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1 BUSINESS MODEL GUIDANCE & METHODOLOGY

1.1 Introduction and Guidance

1.1.1 Objective and structure of the guidance

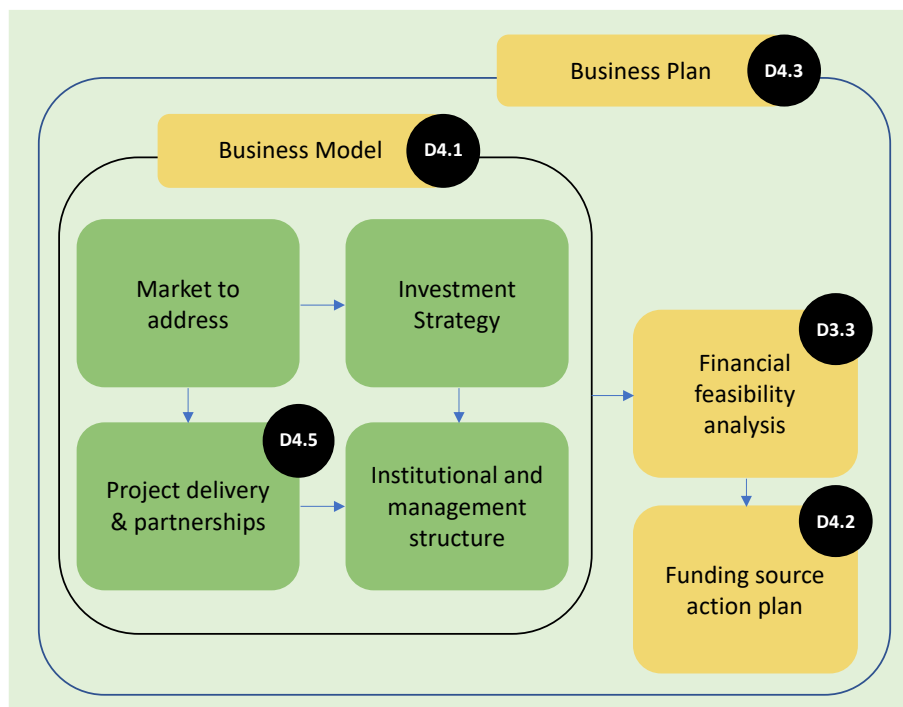
The CitizEE project focus on increasing investment into energy efficiency and renewable energy for buildings in pilot regions by developing a CFs4EE Financing Scheme and as part of the project is investigating the creation of an Investment Platform using public finance to crowd in public and private co-investors, amongst which citizens, to provide affordable investment finance for public and/or private sector organizations to implement projects.

The rationale behind establishing a public-private investment platform to support the Citizen Funding Financing Scheme is based upon:

- the recognition that there are many potential, economic projects that may not receive funding from conventional, private sector equity providers and debt providers
- there is insufficient public financing to invest in all economic projects
- bringing project opportunities through to funding requires a catalyst of development assistance and low-cost capital which a public-private scheme can provide.

The purpose of this guidance document is to support Pilot Regions in the design of their CFs4EE Financing Scheme. The figure below details the architecture of this guidance document and related ones. The final Business Plan (D4.3) is made up of three documents: the Business Model report (D4.1) - itself incorporating the Project Delivery report (D4.5) – the Financial feasibility analysis report (D3.3) and the Funding Source Action Plan (D4.2). The scope of this document relates to the development of Business model report (including the Project Delivery Report) that will serve as an input for the elaboration of the Business Plan.

Figure 1. Architecture of this guidance document and related ones.



The four level of the business model

There are four levels to consider when designing the business model of your CFs4EE Financing Scheme:

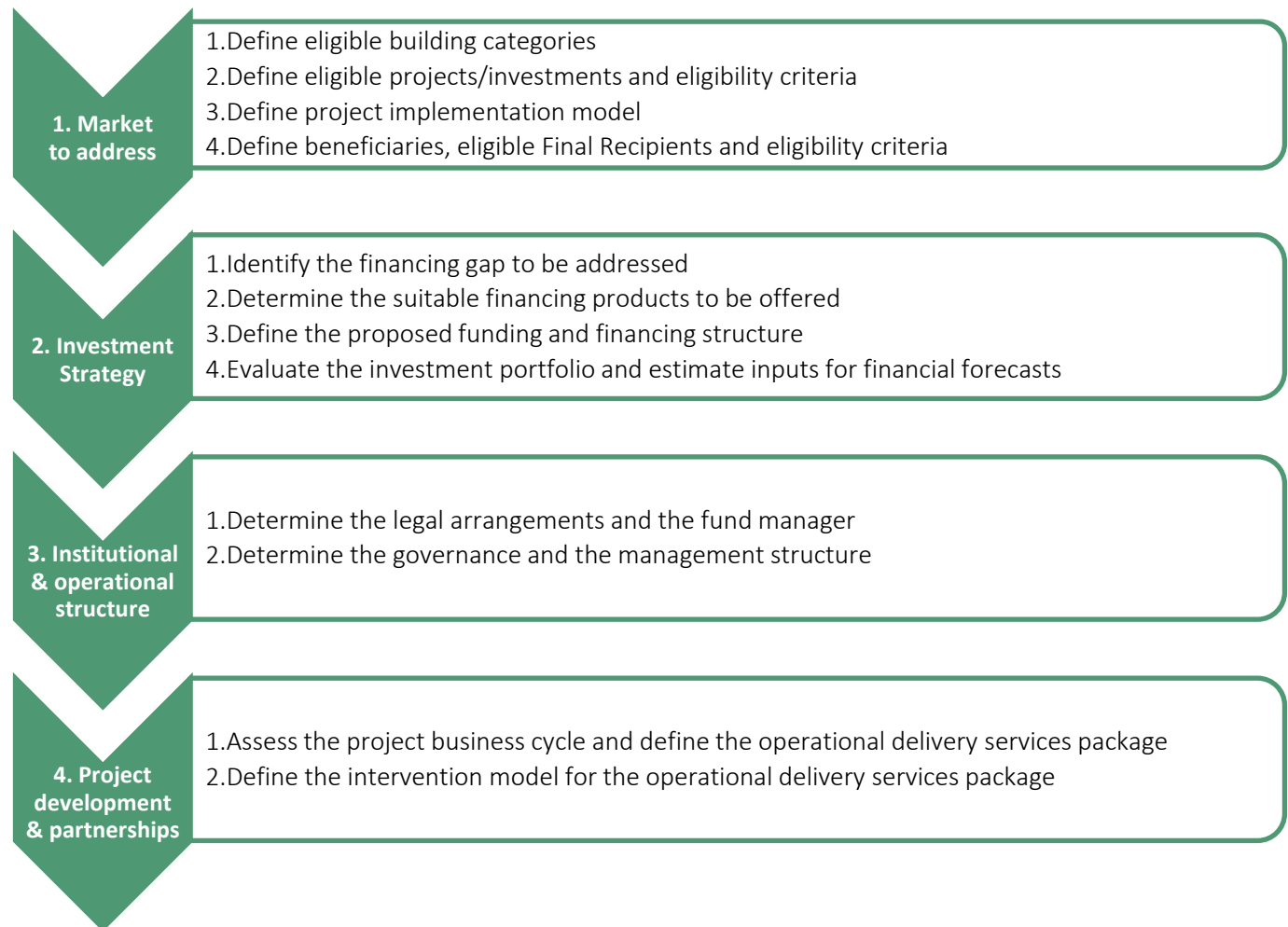
- **Market to address:** Firstly, the question of the beneficiaries and the final recipients of your scheme and the type of projects eligible to funding, their characteristics and their eligibility criteria.
- **Investment strategy and proposed financial products:** Secondly, the market failure and the related financing gaps to be addressed by the scheme and particularly the pathway to address it using public financing. This question is immediately related to the type of financial products to be offered to the final recipients and the structuration of the investment platform to deliver them. Part of the scope is also to determine the investment strategy for the investment platform, to define the investment targets and criteria to be used and to evaluate the potential portfolio of the scheme in order to estimate the inputs for the financial forecasts.
- **Institutional arrangements:** Thirdly, the question of the legal structure of the investment platform to support the financing scheme that will determine which entity will be entrusted to manage the allocated funds by the co-investors (hereby referred to as the “Fund Manager”). The legal structure will also determine the required governance and operational structure to be putted in place.
- **Project delivery and partnerships.** And finally, the question of the project delivery organization you need to put in place for your scheme and to what extent you need to offer project development assistance (PDA) to the beneficiaries and/or the final recipients and whether it should be integrated to the Fund Manager or operated under a separate organization such as a Project Delivery Unit (PDU).

The key steps addressed by the guide

The guidance document has been conceived as a roadmap/process to support the development of the business model of the pilot regions CFs4EE Financing Scheme. The following figure presents the key steps CitizEE Pilot Regions should follow when designing the business model of their CFs4EE Financing Scheme.



Figure 2: Roadmap/process to design the business model



1.2 Step 1 - Market to address

The first step is to define the beneficiaries and the final recipients of the CFs4EE Financing Scheme, the type of projects eligible to funding, their characteristics and their eligibility criteria.

1.2.1 Define eligible building categories

Identifying the building types that will be eligible for receiving funding is the first step in the decision-making process for evaluating the CFs4EE Financing Scheme. For the purpose of this guidance document, and following the scope of the Pilot Regions, buildings can be classified into 3 main groups:

- Commercial buildings (leased or owner-occupied)
- Public buildings (leased or owner-occupied)
- Residential buildings (leased or owner-occupied)

Within each building category, Pilot Regions can then select specific building types, as this will condition the type of intervention that can be applied. For instance, for public buildings, Energy Conservation Measures and financing mechanisms that can be implemented will vary depending on whether the program targets administrative or educational buildings or leased or owner-occupied buildings. Similarly, for the housing sector, it might be appropriate to distinguish between single-family houses and multi-residential dwellings. After deciding what type of buildings



should be targeted by the CFs4EE Financing Scheme, the Pilot Regions can further specify the specific target group of buildings in terms of age band or energy performance rating for instance.

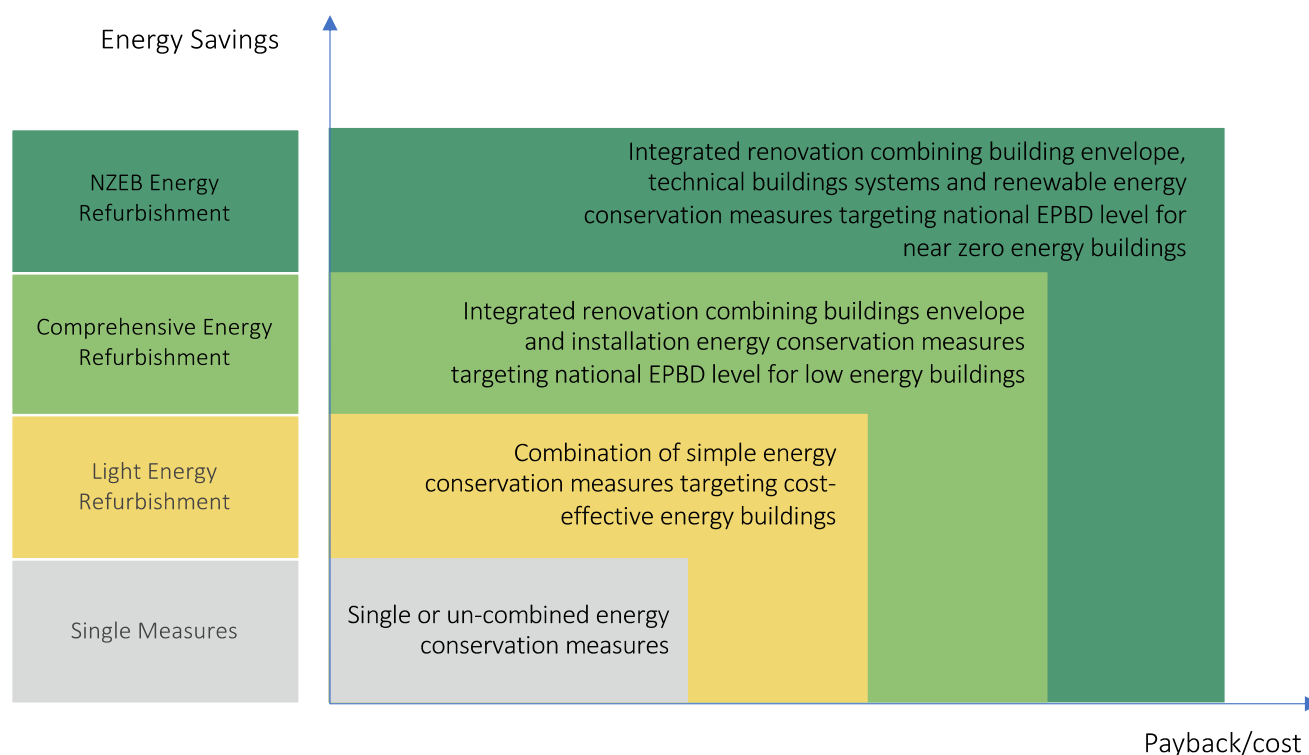
1.2.2 Determine eligible projects

The second key element that might condition the type of intervention depending the cost and the Key Performance Indicators of the projects is the level of ambition of the envisaged renovation and energy savings. Pilot Regions will have to decide which target level of renovation and energy savings they intend to support with the CFs4EE Financing Scheme. The level of ambition will determine the performance thresholds and/or eligibility criteria for packages of measures that need to be established and that will determine the type of eligible projects. For the purpose of this guidance document, and following the scope of the Pilot Regions project, the categorization of level of renovation and energy savings have been classified into 4 packages of measures and performance thresholds: Single Measures, Light Energy Refurbishment, Comprehensive Energy Refurbishment, NEZB Energy Refurbishment.

- **Implementation of single or non-combined energy conservation measures**, such as improving the building envelope and thermal insulation (windows replacement, roof insulation, etc.), replacing or improving technical buildings systems for heating, domestic hot water, ventilation or cooling and lighting upgrades. This package may include measures relating to the deployment of renewable energies such as solar photovoltaic, solar heating and geothermal, biomass heating or cogeneration.
- **Light Energy Refurbishment** involves the simultaneous and combined implementation of a certain number of individual energy conservation measures. Typically, this level of renovation aims to reach energy savings ranging from 20 to 40%, depending on the climate conditions and the energy performance of the building prior to renovation. This package may also be combined with measures relating to the deployment of renewable energies such as solar photovoltaic, solar heating and geothermal, biomass heating or cogeneration.
- **Comprehensive Energy Refurbishment** or deep energy renovation refers to renovations that include integrated energy conservation measures on the building envelope and the technical building systems in order to achieve very high energy performance levels. Typically, this level of renovation aims to reach the national EPBD level for low energy buildings and/or energy savings up to 60% depending on the climate conditions and the energy performance of the building prior to renovation. This package often also includes measures relating to the deployment of renewable energies such as solar photovoltaic, solar heating and geothermal, biomass heating or cogeneration.
- **NZEB energy refurbishment** refers to renovations that includes integrated energy conservation measures on the building envelope and the technical building systems in order to achieve the highest levels of energy performance with the remaining levels of energy needs required to be covered by energy from renewable sources (Near Zero Energy Buildings). Typically, this level of renovation aims to reach the national EPBD level for Near Zero Energy Buildings and/or energy savings up to 80% depending on the climate conditions and the energy performance of the building prior to renovation.



Figure 3: Categorization of the level of renovation and energy savings packages



Specific criteria for likely eligible energy efficiency projects and/or measures

Pilot regions should also determine specific eligibility criteria for selection and approval of projects that are appropriate to the objectives of their scheme. Criteria should relate to the nature of the projects and / or measures which are benefiting of the financial support and not the financial terms of the projects (financial eligibility criteria will be taken into account later in the document when defining the characteristics of the financial products). For instance, the EIB set as eligible criteria for energy efficiency measures for the renovation of buildings¹ that these must achieve at minimum cost-optimal refurbishment levels defined by Directive (EU) 2018/844 amending Directive 2010/31/EU on the energy performance of buildings.

The following list could be a starting point to set-up appropriate criteria depending the situation of the Pilot Region:

- Energy Performance Certificates (EPCs) with a specific grade to achieve;
- National building codes and/or National EPBD obligations;
- National or international building labels and certifications with a specific grade to achieve;
- Energy bills reductions with a specific amount to achieve per month/trimester/year/lifecycle;
- Energy savings with a specific % to achieve in kWh/m²/year;
- Energy demand or consumption capped at a certain level in kWh/m²/year
- Carbon emission savings with a specific tCO₂ per unit or kgCO₂/year/€ invested
- A renovation roadmap or certified list of eligible works to be performed²;
- Retrofit costs and Net Present Value

¹ https://www.eib.org/attachments/strategies/climate_action_lending_eligibility_list_2020_en.pdf

² Some financing schemes such as EcoPTZ in France or KfW energy renovation program and Effizienzhaus label in Germany rely on a renovation roadmap, that is a certified list of eligible work to ensure the energy efficiency of property upgrades.



- Etc.

1.2.3 Determine project implementation model

The implementation model is the method by which the projects are technically and operationally implemented in the field, most often by using engineering consultants, contractors or subcontractors. The implementation model is the key element in determining the potential Final Recipient of funding and therefore has a significant impact on the design of the funding scheme. Typical implementation models in the Energy Efficient Buildings sector are Energy Performance Contracting (EPC), Energy Supply Contracting (ESC) and Separate Based Contracting (SBC).

- **Energy Performance Contracting (EPC) model:** Energy Performance Contracting is a global service contract by which an ESCO (Energy Services Company) or an ESCoop (Energy Services Cooperative) acts as an integrated renovation works contractor to deliver energy savings and assures all the technical and performance risks of the contract. The ESCO/ESCoop offers to the contracting beneficiary a defined performance guarantee on the energy savings (EPC). This guaranteed performance secures the stream of savings allowing to reimburse or partially reimburse the investment. The EPC model is the key condition to access to ESCO/ESCoop financing and/or Third-Party Financing (TPF), in which the private sector provides financing for the works in opposition to “owner financing” in which financing is provided by the project owner, usually through his own equity and/or by external loans. Under certain conditions, ESCO/ESCoop financing EPCs might be accounted for off-balance sheet, thus not increasing the debt ratio of the project owner, but this depends on the details of the contract and, for the public sector, on national accounting rules.
- **Energy Supply Contracting (ESC) model:** Energy Supply Contracting (ESC) is a global service contract in which an ESCO (Energy Services Company), an ESCoop (Energy Services Cooperative) or an Energy Supplier acts as an integrated contractor for the design, construction, operation and maintenance of on-site energy production facilities in order to supply “useful” energy such as heat, chilling, compressed air or electricity for a contractually agreed price per kWh delivered. The focus of the ESC service model is on the efficiency of the energy supply only and is by definition an ESCO/ESCoop financing and/or Third-Party Financing (TPF) contract, in which the private sector provides financing for the works. CHP plants and renewable energy solutions are frequently included in energy supply contracts.
- **Separate Based Contractor (SBC) model:** Separate contracting is a method to implement multi-technique Energy Efficiency or Renewable Energy projects, by which each step of the process is dealt with by a separate party (engineering, design, planning, constructing, operation and maintenance) and by which individual measures (e.g. boiler replacement, relighting, isolation, etc.) are executed by separate contractors for each technique or by a general contractor. In the Separate contracting model, the beneficiary takes on the technical risks of the project. In this model, there is also little room to access ESCO/ESCoop financing and/or Third-Party Financing (TPF) meaning that the project owner provides financing for the works, usually through his own equity and/or by external loans.

1.2.4 Define beneficiaries and eligible Final Recipients

Pilot Regions can set conditions as to which type of Final Recipients or beneficiaries should be eligible to receive funding and to what level, although, once eligible building types and implementation models are defined, the beneficiaries and Final Recipients will be to a large extent determined (e.g. whether funding should go to the project holders or the project developers, such as the ESCOs/ESCoops). However, this may not always be straightforward, and it will be important, depending on Pilot Regions local situation, to consider the following identification approaches in order to allow, later on, a robust scheme design process depending on the market failures analysis and suboptimal investment situation to be addressed with the CFs4EE Financing Scheme.



- **Identify and select public and/or private beneficiaries:** beneficiaries refer to natural or legal persons or entities defined as the project holders that are eligible to access the or benefit from the CFs4EE Financing Scheme.
- **Identify and select public and/or private Final Recipients:** Final Recipients are natural or legal persons or entities that are eligible to receive financial support under the CFs4EE Financing Scheme, either to finance or co-finance the projects on behalf of the beneficiaries, to overcome market failures leading to specific suboptimal investment situations.
- **Identify and select specific Final Recipients** that can or should be eligible to receive financial support under the CFs4EE Financing Scheme not to directly finance or co-finance the projects but to overcome market failures leading to specific suboptimal situations (e.g. offering equity finance to under-capitalized small and medium size project developers such as ESCOs/ESCOops with the objective to support their project development capacity).

Depending the implementation model used, a distinction could be done between the beneficiary and the final recipient of the scheme such as figured out in the table below.

Table 1: Beneficiaries and final recipients depending the implementation model

Implementation model	Beneficiary & Final recipient
Separate Based Contractor (SBC) model	Final recipient is the beneficiary
Energy Supply Contracting (ESC) model	Final recipient is the contractor of the beneficiary
Energy Performance Contracting (EPC) model	Final recipient could be either the beneficiary or the contractor of the beneficiary

Specific criteria for likely eligible beneficiaries and final recipients

Pilot regions should also determine specific eligibility criteria for selection and approval of beneficiaries and final recipients that are appropriate to the objectives of their scheme. Criteria should relate to the nature of the beneficiaries and/or final recipients which are benefiting of the financial support and not the financial terms of the projects (financial eligibility criteria will be taken into account later in the document when defining the characteristics of the financial products).

The following list could be a starting point to set-up appropriate criteria depending the situation of the Pilot Region:

- Natural or legal persons;
- Sectors inclusion/exclusion;
- Geographical inclusion/exclusion;
- Etc.

1.3 Step 2 – Investment strategy

The investment strategy forms a key link between the assessment of a market gap and the financial instruments put in place to address that gap. Pilot Regions will have first to identify the financing gaps to address, evaluate which financing products are suitable to address the gap and determine the funding and financing structure to channel the products to the final recipients. Part of the scope is also to determine the investment strategy for the investment platform, to define the investment targets and criteria to be used and to evaluate the potential portfolio of the scheme in order to estimate the inputs for the financial forecasts.



1.3.1 Identify the financing gaps to address

The analysis for the existence of markets failures and sub-optimal investment situations within the targeted market allows to determine the financing gaps to be filled by the Financing Instrument and later on the type of appropriate financing mechanism to be put in place to cover the gap. This can result from the following:

- **Viability gap:** in the case where a project or group of projects shows returns below market requirements necessary to attract funding although these projects are economically justified and necessary. These are projects that may not be commercially viable due to the long development period and/or low-income flows in the future. An example of a viability gap can be found in the renewable energy sector where public funding mechanisms such as the feed-in tariff or the green certificate have been put in place to fill the gap resulting from the high production cost of renewable technologies compared to fossil and nuclear production. Looking into the categorization of projects referred to above, a viability gap will probably be of existence in the NZEB Refurbishment category where payback times of projects are particularly long (over 20 years and more) and investment potentially not fully refundable through energy savings.
- **A financing gap:** in the case where a certain type of projects or a sector as a whole shows evidence of unmet financing demand due to a limited access to capital. This is typically the case in the Energy Efficiency sector as a whole and in buildings particularly.
- **A combination of viability and financing gaps.**

The table here below synthetizes the potential financing gaps that could exist within the Energy Efficient Buildings sector.

Table 2: Classification of the potential financing gaps

	Main issue		Potential cause	Financing gaps
FINANCING GAPS	The profitability of the projects is not in line with the market requirements despite a positive ERR (Economical Rate of Return)	Form low to high impact	High upfront costs affecting the profitability	Despite a good economic return, the high upfront (over-) costs of the projects make the IRR unattractive for the private sector financing.
			Tenor not suited to long payback periods of projects	The market tenors are too short to make the projects affordable for the Final Recipients.
			High financing costs affecting the profitability	The market interest rates are too high to make the projects affordable for the Final Recipients.
	The projects are bankable but local financing options are limited or unsuited	Form low to high impact	Lack of commercial finance/liquidity	The amount of finance available in the market is not enough to cover the demand for reaching the targets in the long term.
			Limited balance sheet/borrowing capacity	The Final Recipients have no access to off-balance sheet financing options (with “Maastricht neutrality” in case of public sector).
			Limited access to commercial finance	The Final Recipients have difficulties to access to appropriate financing due to:



				<ul style="list-style-type: none"> • a lack of appropriate commercial debt financing products for EE projects; • and/or high interest rates for commercial debt financing of EE projects; • and/or short loan tenors for commercial debt financing of EE projects.
			High transaction costs	The transaction costs supported by the market players limit their capacities to increase the number of projects. This (could) affect either the project holders, the project developers and/or the lenders.
	The private sector avoids investments due to high real or perceived risks of project failures	Form low to high impact	Performance & technical risks of the projects	The lenders are reluctant to finance Energy Efficiency projects where they are exposed to performance risks. This will be particularly the case for EPC/ESC projects and more particularly for “Maastricht Neutral” EPCs.
			Low creditworthiness of the Final Recipients	The Final Recipients have difficulties to access appropriate financing due to low creditworthiness.
			Lack of financing offering	There is no offer of financing available on the market for Energy Efficiency projects due to the risk perception or the available offering of financing is rather limited and subject to high interest rates and high collateral requirements.

Key questions to address for pilot regions

- Does the initial investment of the projects make the profitability negative or too low to attract lenders?
- Are the market interest rates too high to make the projects affordable?
- Are market loan tenors too short to make the projects affordable?
- To what extent Final Recipients with bankable projects have easily access to commercial finance?
 - Is there a lack of liquidity on the commercial debt financing market, among private lenders such as commercial banks limiting their offer of financing for Energy Efficiency projects?
 - Is there a lack of suitable financing products for Energy Efficiency projects on the commercial debt financing market?
 - Are there (well-developed) existing off-balance sheet financing options on the market?
 - Do transaction costs (to prepare, to finance, to execute) limit market development or growth? For which market player?
- Is there a lack of financing offering for Energy Efficiency projects due to high risks perception on the lender's side?
- Do Final Recipients have difficulties accessing appropriate funding due to their poor creditworthiness?



- Does exposure to performance and technical risks limit the access to financing and particularly to ESCO/ESCOop financing?

1.3.2 Determine the suitable financing products to be offered to the final recipients

Once the financing gaps are identified, the Pilot Regions have to choose which type of Financing products can be used to enable investments in Energy Efficient Buildings and close the gaps how to channel the financial instrument to the final recipients.

The choice of financing products to be offered to Final Recipients is briefly presented below:

- **Loans to projects.** By far the most common option in Energy Efficiency projects is the use of loans that can support a large range of applications such as on-balance sheet financing to project beneficiaries, working capital loans to project developers or refinancing loans through the forfeiting of EPC/ESC assets receivables from completed projects. Loans could be offered at market terms, below market terms (preferential loans with lower interest rates and flexible terms such as flexible repayment schedule, interest-only or grace period) or subsidized (concessional loans with additional interest rate subsidies or grant element) depending on the market barrier to address and the size of the gap to overcome. Loans are best suited for bankable projects in markets where commercial financing options are limited or unsuited or for projects facing a viability gap (at concessional terms).
- **Guarantees to projects.** Where sufficient liquidity in the market exists, leveraging existing commercial financing for Energy Efficiency projects, including EPC/ESC assets, using partial credit or risk guarantees remains a first option. Such an approach is suited where the perceived risks related to Energy Efficiency projects and EPC/ESC projects are high, the target market includes greater credit risks (e.g., small and medium enterprises or SMEs, housing cooperatives), or the credit market terms (loan tenors, collateral requirements) make Energy Efficiency projects unattractive. Guarantees are usually administered by commercial banks as final recipients, but they could also be offered directly to the project beneficiaries or project developers through a fund structure, in order to enhance their creditworthiness.
- **Quasi equity and equity to projects:** The use of equity and quasi-equity as direct financing products for Energy Efficiency projects is less common besides for larger projects which requires a structural financing through the company's capital structure or a very long-term financing. Most of the time, equity and quasi-equity will be used to invest alongside other private sector investors in existing or newly to create aggregation structures or project development structures of Energy Efficiency assets such as SPVs, ESCOs/ESCOops or Real Estate Companies in order to allow them to raise additional financing and expand their projects portfolio.
- **Grants to projects:** Additionally to those refundable financing products, the Pilot Regions can also assess the combination of them with a grant component and to evaluate which type of grant support is appropriate.
 - A capital grant instrument to lower the cost of assets for the final recipients
 - A Technical Assistance instrument to support the project development of bankable projects
 - An Interest Rate Subsidy instrument to lower the cost of funding for the final recipients

The table below provides a logical model of suitable financing products depending on the gaps to address and the structuring of the Financial Instrument.

Table 3: Logical model of suitable financing products for lenders, project developers and project beneficiaries depending gaps to address

Gaps to address	Through a fund structure	Through a Financial Intermediary
Viability gaps (the profitability of the projects is not in line with the market requirements)		



High upfront costs affecting the profitability	<ul style="list-style-type: none"> Capital grants Interest rate subsidies Loans Subordinated loans 	<ul style="list-style-type: none"> On-lending loans Risk-sharing loans Interest rate subsidies
Tenor not suited to long payback periods of projects	<ul style="list-style-type: none"> Subordinated loans Loans 	<ul style="list-style-type: none"> On-lending loans Risk-sharing loans
High financing costs affecting the profitability	<ul style="list-style-type: none"> Loans Interest rate subsidies 	<ul style="list-style-type: none"> On-lending loans Risk-sharing loans Interest rate subsidies
Financing gaps (the projects are bankable but local financing options are limited or unsuited)		
Lack of commercial finance/Liquidity	<ul style="list-style-type: none"> Loans 	<ul style="list-style-type: none"> On-lending loans Risk-sharing loans
Limited balance sheet/borrowing capacity	<ul style="list-style-type: none"> Loans Forfeiting 	<ul style="list-style-type: none"> On-lending loans Risk-sharing loans Forfeiting
Limited access to commercial finance	<ul style="list-style-type: none"> Loans Guarantee 	<ul style="list-style-type: none"> On-lending loans Risk-sharing loans Credit risk guarantee
High transaction costs	<ul style="list-style-type: none"> Grants for TA 	<ul style="list-style-type: none"> Grants for TA
Risk gaps (the private sector avoids investments due to high real or perceived risks of project failures)		
Performance & associated risks of the projects	1. Performance risk guarantee	2. Performance risk guarantee
Low creditworthiness of the Final Recipients	3. Credit risk guarantee	4. Credit risk guarantee
Lack of financing offering	5. Credit risk guarantee	6. Credit risk guarantee

1.3.3 Define the proposed funding and financing structure

Once the financing gaps are identified and the suitable financing products assessed, the Pilot Regions have to assess which type of funding and financing structure is best appropriate for setting up the Investment Platform. The proposed funding and financing structure will depend on:

- the type of co-investors Pilot Regions could crowd in and/or leverage alongside the Investment Platform, the nature of their potential contribution and their requirements;
- the suitable financing products and the pathway used to channel them to the final recipients;
- the objectives of the financing scheme and the role and integration of the citizen funding component.

Identify co-investors, their position in the funding and financing structure and the role of public funds

The following table details the various sources of funding that could be crowd in and/or leverage through an Investment Platform and the nature of their potential contribution.



Table 4: Assessment of the potential co-investors and their potential contribution (at IP level and project level)

Sources of funding	Equity or junior equity	Mezzanine or junior debt	Senior debt	Guarantee	Grants
Public funds (concessional finance and first-loss position)					
International Financing Institutions (e.g. EIB or EBRD)	✓	✓	✓	✓	✓
European Structural Funds (via Member State Managing Authority)	✓	✓	✓	✓	✓
National, regional and local public funds	✓	✓	✓	✓	✓
National Promotional Banks & public institutional investors	✓	✓	✓	✓	
Public institutional investors	✓	✓	✓	✓	
Private funds (preferred equity and debt, with market terms and senior position)					
Private institutional investors (pensions funds, etc.)	✓	✓	✓		
Private investors	✓ (*)		✓ (*)		
Financial institutions & commercial banks			✓ (**)		
Debt and/or equity crowdfunding platforms	✓ (**)		✓ (**)		
ESCOs	✓ (*)		✓ (*)		
Citizen cooperatives (ESCOOPs & FINCOOPs)	✓ (*)		✓ (*)		

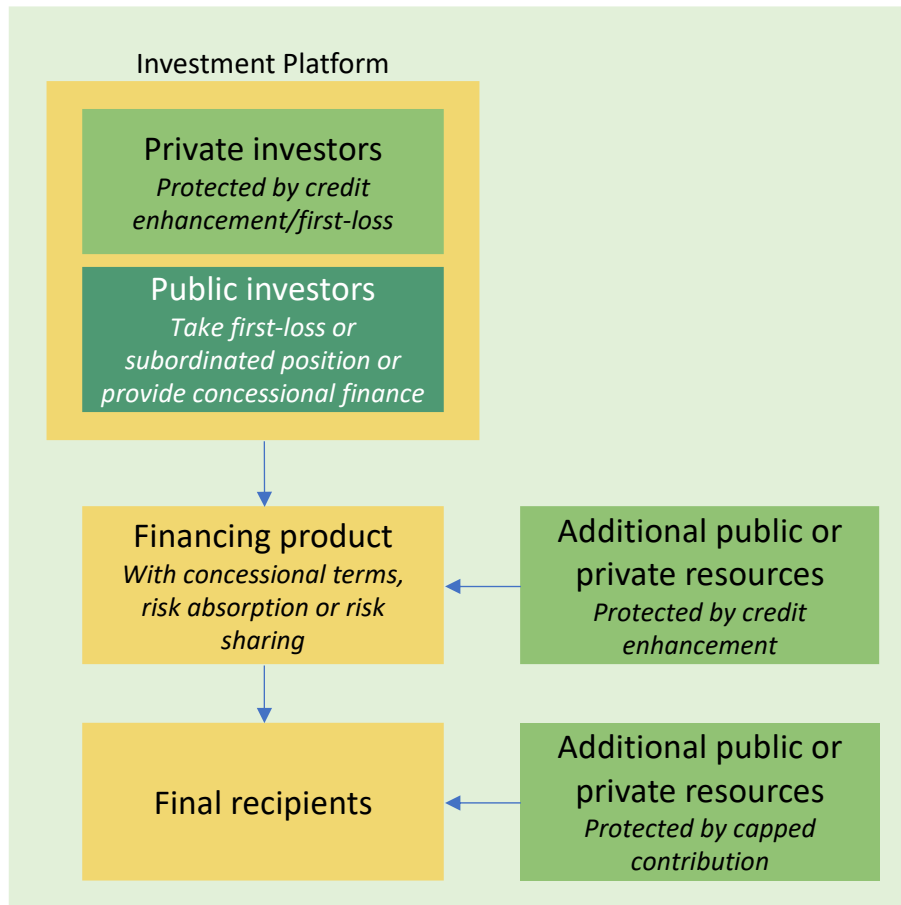
(*) At the Investment Platform level or alongside the Investment Platform at the project level

(**) As financial intermediary at the Investment Platform level or alongside the Investment Platform at the project level

As illustrated in the figure 4, the key objective of an Investment Platform is to crowd in private investment, notably thanks to risk-sharing provisions from public funds.



Figure 4: The leverage effect & the leverage role of public funds



When designing their funding and financing structure and addressing the role of public and private funds, Pilot Regions should consider the following elements.

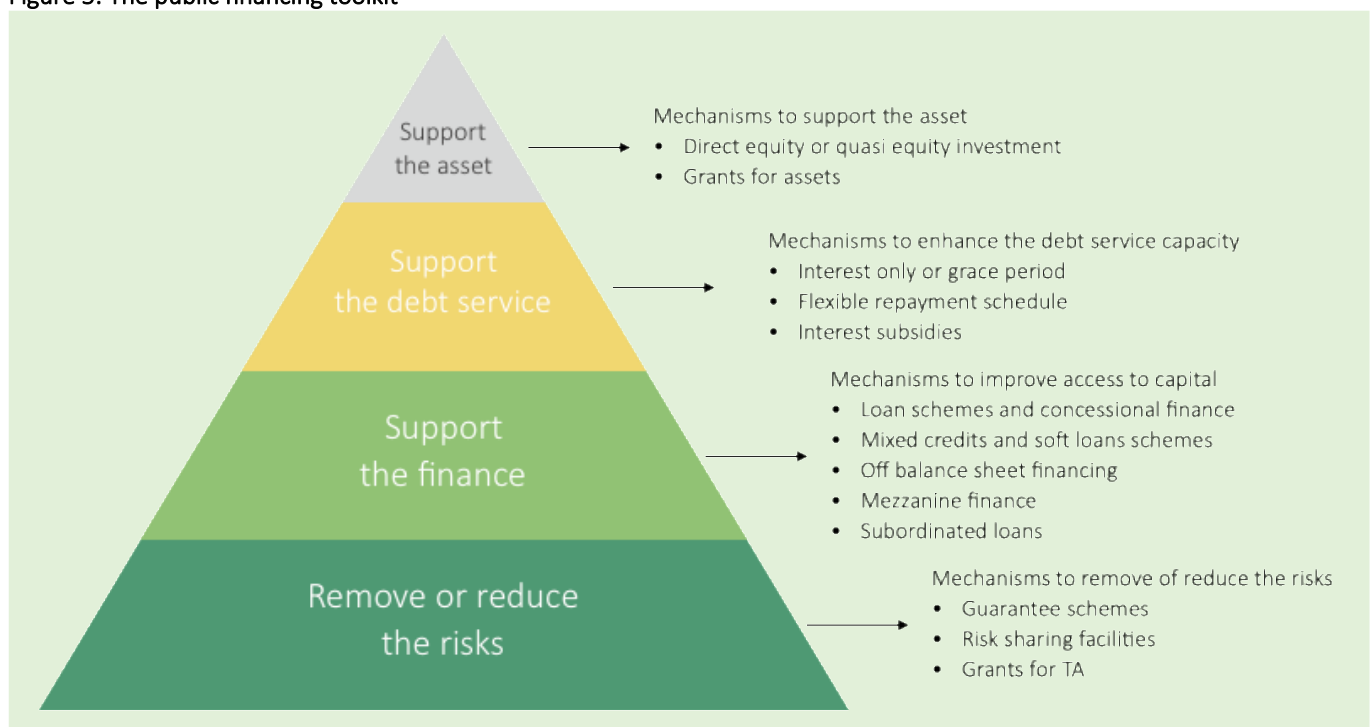
1. The funding and financing resources that could be potentially raised by the Investment Platform can come from various providers and can be raised at all levels of the financing ladder down to the final recipients, as figured out in the figure 4.
2. The public funds should play the role of leveraging capital to cover the risks of the private investors, as much as possible all along the financing ladder. This is done firstly at the Investment Platform level, generally with public funds taking the first-loss or subordinated position in the funding structure in order to provide credit enhancement and/or first loss protection to the co-investors in the platform. Public investors could also provide concessional finance which includes a subsidy element either in lending or subordination in investing that raise the investors expected risk adjusted returns, lower project costs and/or enhance potential returns. Additional public and private resources could also be leveraged at the financing product level with the product being designed with concessional terms, risk absorption or risk sharing elements in order to crowd in additional public and/or private resources at that level. Additional public and private resources may eventually be raised at the level of the final recipient, with co-investors limiting their risks by making a capped and limited contribution to the funding.
3. Finally the desired impact of public funds should be balanced between the risk-adjusted returns required by the co-investors to participate in the funding and the characteristics of the financing gaps to cover at the final recipient level. Key consideration will be therefore to use public funds to apply more than one type of financing support in order to take advantage of their combined leverage capacity within a complete financial



package. As illustrated in the figure 5, the public finance toolkit offers four possible stacked support levels : the risks, the finance, the debt service and the asset.

- a. Reduce risks : provision of guarantees or risk-sharing mechanisms as a first step help to reduce or remove the risks and improve access to financing while it may help reducing the cost of financing. Provision of guarantees or risk-sharing mechanisms will generally apply at the Investment Platform level or the Financing product level.
- b. Support the finance : provision of concessional finance with low-cost loans (mixed/blended loans, softs loans or concessional loans), quasi-equity or equity further improves access to capital and reduce the cost of financing while improving the debt-service capacity.
- c. Support the debt service : alternative grants approach such as interest rate subsidies further reduce the financing costs which ultimately enhance returns of the projects and improve the debt-to-equity ratios.
- d. Support the asset : traditional grants approach where the initial costs of the projects are borne by public funds naturally improve the bankability of the projects while they lessen the burden of debt service because the debt is smaller.

Figure 5: The public financing toolkit



The figure 6 gives the broad types of funding structures utilizing either concessional finance and/or first loss capital to mobilize private investment. They could be classified as following:

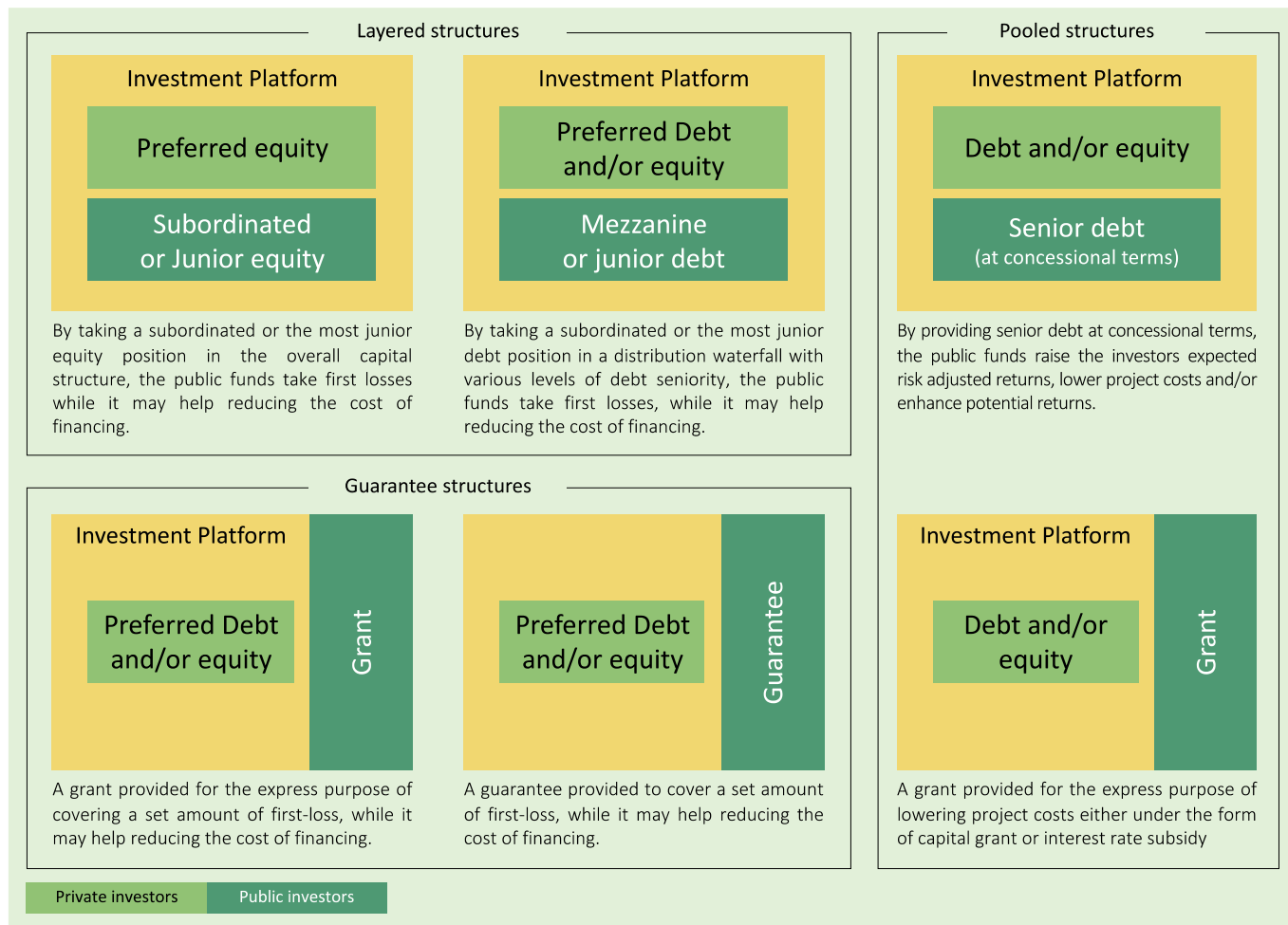
- Pooled structures: public and private funds are pooled together enabling investors to share the risk and reduce transaction costs with public funds generally offered at concessional terms.
- Layered structures: public and private funds are distributed in a 'waterfall' structure offering opportunities for investors with different risk/return profiles. The overall risk is divided into tranches, each with different degrees of 'seniority' (e.g. order of repayment or return allocation in the event of losses, bankruptcy or sale), with public funds taking a lower position.



- Guarantee structures: private funds are covered by a public guarantee or a grant commitment that, if a negative event occurs, the guarantor will take action if the guaranteed party is unable or unwilling to do so.

It should be mentioned that the funding structures illustrated represent simplified versions of public-private blended finance structures. Many other structures exist in the market. Some even include multiple financing tools in a single investment structure.

Figure 6: Typical funding structures using first loss capital and/or concessional finance



Choose for the Investment Platforms implementation pathway

Investment platforms can take a variety of forms, but they are ostensibly sources of blended finance and deploying a range of types of financing instruments including commercial or soft loans and grants. They can be structured as:

- Fully public funding structures that are managed and administered by public bodies and/or public financing institutions that disburse funds either directly to final recipients or through private sector banks. This option is generally based on dedicated credit line established by a government agency, using a combination of government budget allocations and debt funds raised on the capital markets or from International Public Financing Institutions. Funds are made available directly to final recipients or to local banks and financial institutions to provide debt financing of EE projects either in the public or private sector. The major purpose of such a dedicated credit line is to increase the funding available for debt financing. The funds provided by the public sector credit line are generally leveraged by additional funds provided by the participating banks and/or financial institutions to increase the total amounts available for debt financing.

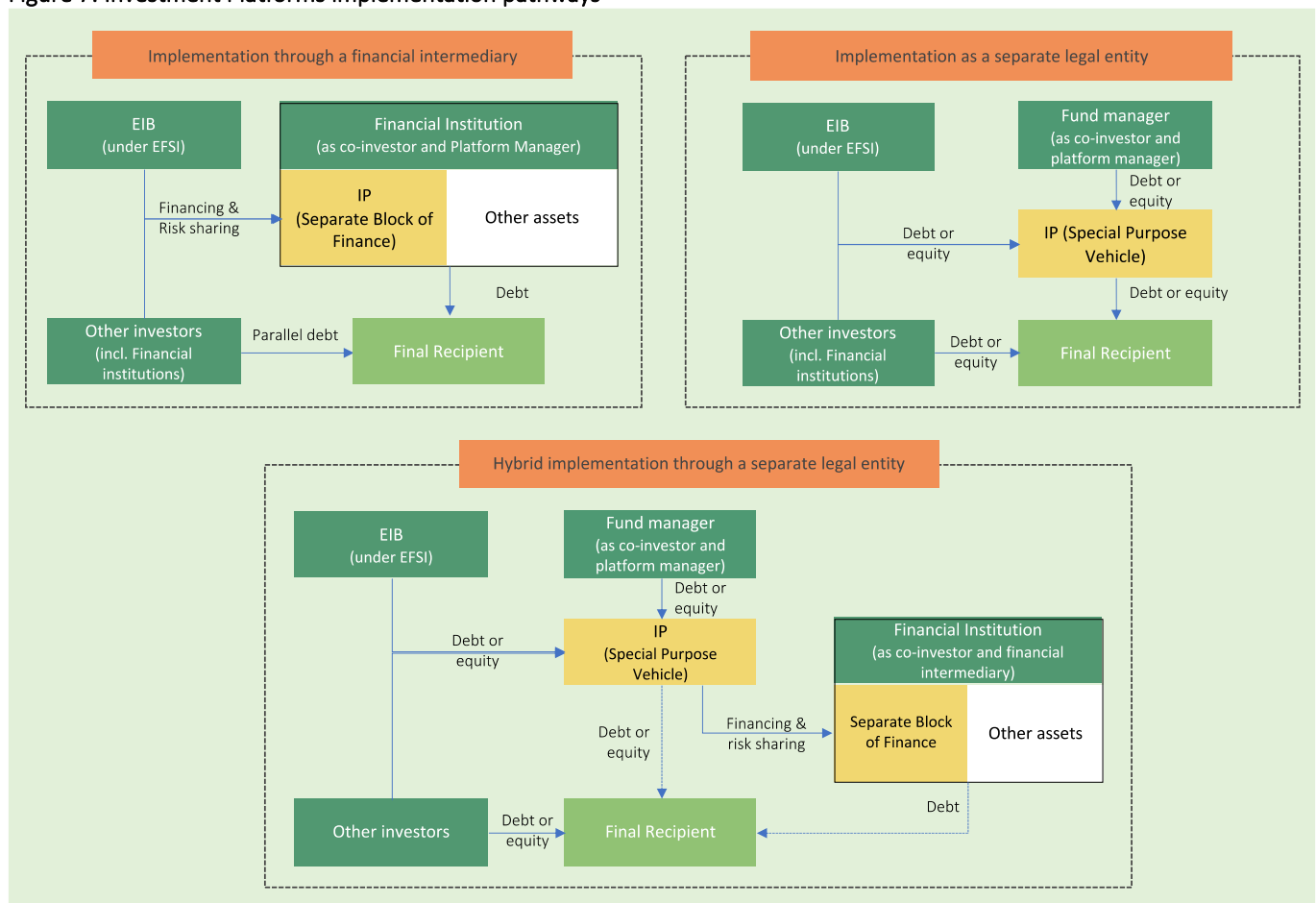


- Public-private funding structures or arrangements that disburse funds either directly to final recipients or through a financial intermediary. In this option, public funds are combined with private funds directly at the IP level and are used to enable the crowd in of private funds within the IP structure.

IP platforms can also be structured depending the pathways to channel the funds to the final recipients. There are basically three ways to implement an investment platform, as showed in the figure 7:

- Through a financial intermediary that will disburse funds directly to final recipients and depending the nature of the agreement will co-invest and share the risks.
- Through a separate legal entity, generally a fund structure that disburse funds directly to final recipients. In this case, the co-investors will have to appoint a fund manager. Generally, the fund manager will co-invest and share the risks.
- Through a separate legal entity, generally a fund structure that disburse funds directly to final recipients and/or through a financial intermediary.

Figure 7: Investment Platforms implementation pathways



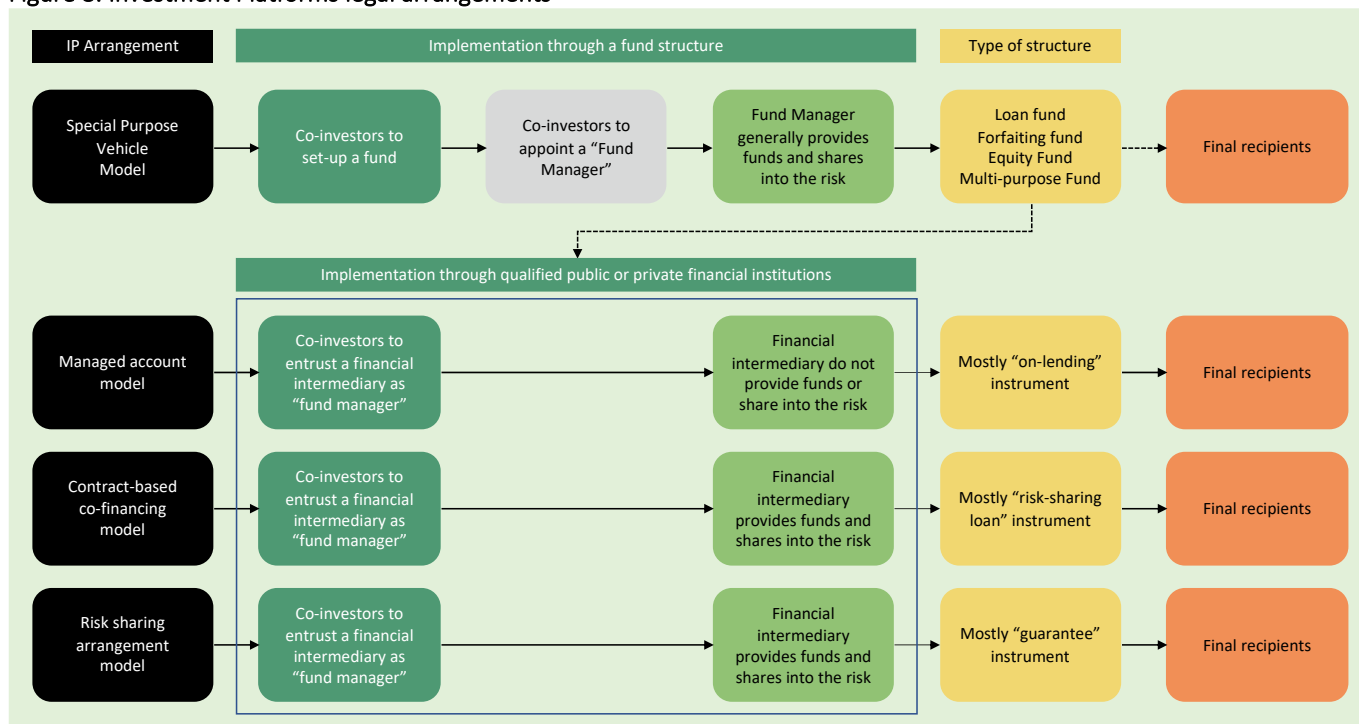
Furthermore, the EFSI regulation distinguishes four possible legal arrangements for Investment Platforms as described in the figure below.

- The Managed account model takes generally the form of a dedicated credit line from the co-investors to a financial intermediary which provides on-lending loans to the final recipients without sharing the risks. This is typically the case of a fully public investment platform that will invest alongside other investors at project level. In this case, public funds are used to offer concessional loans that are fully passed to the final recipients.



- The Contract-based co-financing model take generally the form of a risk-sharing loan from the co-investors to the financial intermediary enabling him to originate a new portfolio of loans with longer terms and below the market interest rates to projects by blending interest rates and sharing risks. In this case the public funds are used to extend the loan maturity or reduce the interest rates that are fully passed to the final recipients.
- The risk sharing arrangement model take generally the form of guarantee from the co-investors to the financial intermediary enabling him to originate a new portfolio of loans with potentially longer terms and below the market interest rates to projects by covering the risk.
- When considering the creation of a Special Purpose Vehicle, we mainly address under CitizEE the setting up of an Energy Efficiency fund structure as investment Platform. The fund could be structure as an equity fund, a loan fund, a forfeiting fund or a multi-purpose fund.

Figure 8: Investment Platforms legal arrangements



Possible strategies for the structuring of the Pilot Regions Investment Platforms

Up in the first assessment performed in WP2 and the pipeline of projects suggesting the needs for debt finance, all of the Pilot Regions have focused on a loan instrument. In particular, among the eight possible Structured Financial Solutions proposed in WP3, it is considered that structuring the Investment Platforms based on a risk-sharing loan model and/or an Energy Efficiency fund model are the most viable options for the Pilot Regions considering the following factors:

- the possibility of entrusting financial intermediaries or fund managers with strong sectoral expertise;
- the possibility to create funds of substantial size, allowing the financial intermediary or the fund manager to pursue a proper diversification of projects, reducing the overall risk of the invested portfolio;
- the possibility for a loan fund to also offer mezzanine type instruments (equity or subordinated loans) and guarantee type instruments, depending the needs of each of the pilot regions.

Basically, the pilot regions will have therefore to decide which of the following financial instruments is best suited to overcome the identified financing gaps depending the pathway to channel the financial instrument to the final recipients:



Business Model Report

- A risk-sharing loan arrangement with a financial intermediary to provide soft loans to the final recipients.
- An Energy Efficiency fund providing soft loans directly to the Final Recipients.
- A mix of, as an Energy Efficiency fund providing soft loans either directly to the Final Recipients and/or through a risk-sharing loan arrangement with a financial intermediary.

Additionally, they will have to assess the needs to complete the structuring of the Investment Platform with the following non-refundable instruments and whether it should be integrated at the Investment Platform level or operated alongside the Investment Platform at the project level:

- A grant instrument to lower the cost of assets for the final recipients.
- A grant instrument to offer technical assistance to the final recipients.
- An interest rates reduction instrument to lower the cost of funding for the final recipients.

The two main options are described here below.

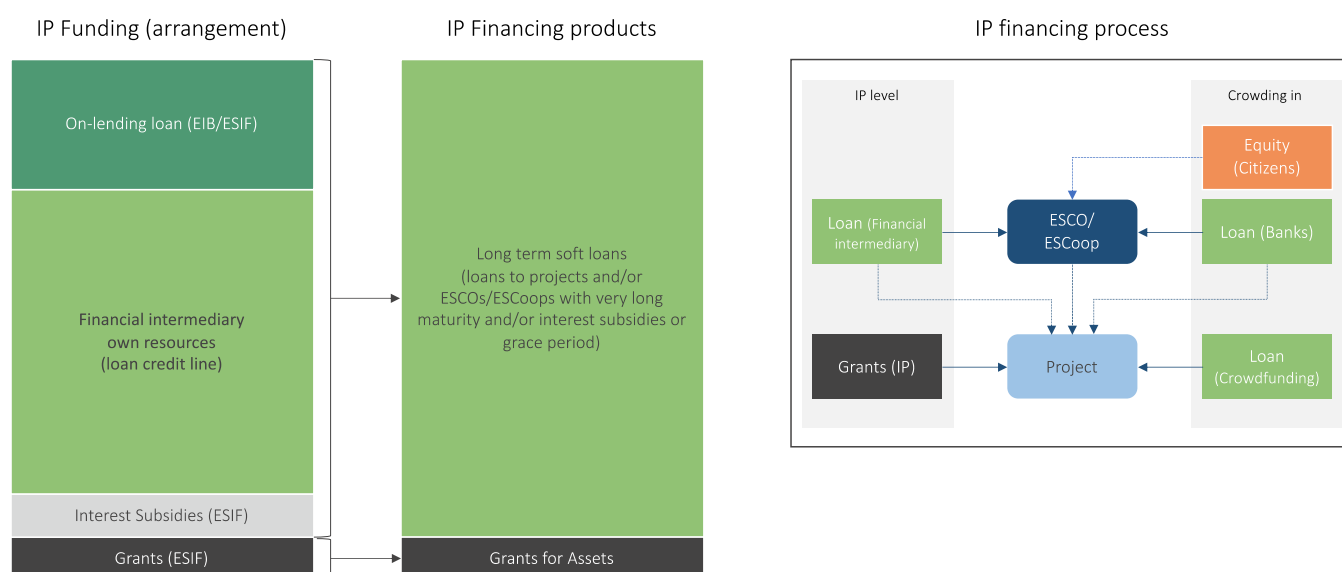
Risk-Sharing loan arrangement for soft loans or concessional loans

A Risk-sharing loan arrangement is an appropriate financial instrument to support financial institutions such as commercial banks to increase their loan portfolio for Energy Efficiency projects. By blending public and private fund into a loan portfolio, the Risk-sharing loan arrangement should develop the local commercial debt market and help to attract additional debt or equity investments in ESCOs/ESCOops or additional debt at the project level.

Figure 9: Risk-sharing loan arrangement

Funded Risk-sharing loan arrangement for LT loans

To fund ESCOs/ESCOops and/or projects



Description of the Financial Instrument

Structure of the FI

- The Risk-sharing loan shall take the form of a loan fund to be set up by a financial intermediary with contributions of the EFSI/ESI Funds and the financial intermediary to finance a portfolio of newly originated loans for Energy Efficiency projects, ESCOs/ESCOops. Loans provided by the Financial Institution shall be soft loans (loans below market terms, with reduced interest rates, reduced collaterals and/or extended



	<p>loan terms). The overall interest rate, to be charged to the eligible Final Recipients included in the portfolio shall be reduced proportionally to the allocation provided by the public contribution. A grant component with a contribution of the ESI Funds can be included as a blended product alongside the loan credit line and could serve as interest rate subsidies (to move from soft loans to concessional loans), grants to assets and/or grants for Technical Assistance.</p> <ul style="list-style-type: none"> • The loan portfolio is set-up and managed by the financial intermediaries bringing their own loan credit line contribution. • Blended loans provided by the financial intermediary shall leverage additional financing through commercial loans with other private banks and/or crowdfunding, either at the ESCO/ESCOop level or at the project level.
Aims of the instrument	<ul style="list-style-type: none"> • Provide project beneficiaries and/or ESCOs/ESCOops with easier access to finance by providing soft loans at preferential conditions in terms of interest rate reduction, loan terms extension and/or collateral reduction. • Provide project beneficiaries and/or ESCOs/ESCOops with long term finance by providing concessional loans with additional Interest Rate Subsidies.
Final Recipients	<ul style="list-style-type: none"> • Project beneficiaries and/or Project Developers (ESCOs and/or ESCOops). ESCOops shall be either full operational Energy Services Cooperatives or Financial Cooperatives (FINCoop) engaged into an agreement with operational ESCOs.
Projects Beneficiaries	<ul style="list-style-type: none"> • Shall be defined in accordance with the Investment Program of the Pilot Regions.
Eligible projects	<ul style="list-style-type: none"> • SBC/EPC/ESC projects which shall be defined in accordance with the Investment Program of the Pilot Regions.
Citizen Funding leverage	<ul style="list-style-type: none"> • ESCOops shall leverage Citizen Funding through member share capital and/or alternatives long-term funding such as one-time membership fees, individual member contributions with no individual ownership attached or individual member deposits which may be used for business. • Projects shall leverage additional Citizen Funding through crowdfunding at the project level.
Addressable financing gaps	<ul style="list-style-type: none"> • Lack of commercial finance/liquidity • Limited access to commercial finance • High transaction costs (if blending loans with grants) • High financing costs affecting the profitability • Tenor not suited to long payback periods • High upfront costs affecting the profitability (with additional interest rate subsidies)

Energy Efficiency Fund for multipurpose objectives

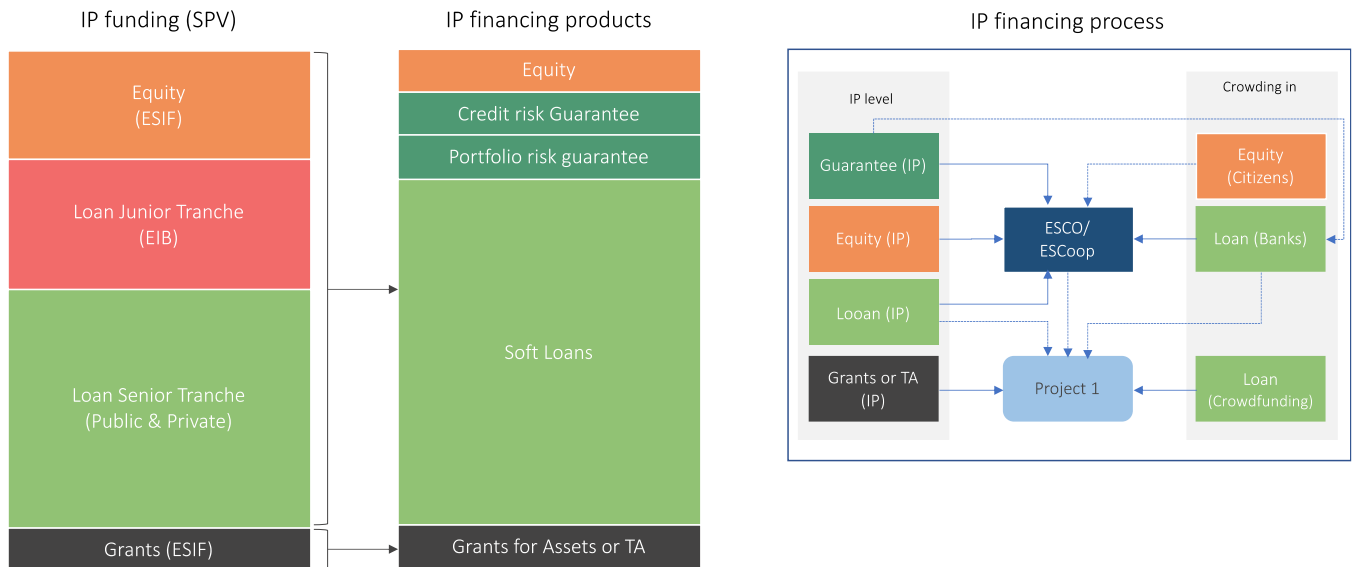
An Energy Efficiency fund is an appropriate financial instrument for supporting investments in an Energy Efficiency program requiring more than one type of financing products or facing multiple financing gaps. An Energy Efficiency Fund should develop the local market capacity to increase the number of projects by offering a global financial package, including loans at preferential or concessional terms to Final Recipients, partial credit guarantees to cover the credit risks of projects or portfolio of projects or, if relevant, equity to strengthen the financial structure of project developers.



Figure 10: Energy Efficiency Fund for multipurpose objectives

Energy Efficiency Fund for multipurpose objectives

To fund ESCOs/ESCOops and/or projects



Description of the Financial Instrument	
Structure of the FI	<ul style="list-style-type: none"> The Energy Efficiency Fund shall be set-up by a Fund Manager with contributions of the EFSI/ESI Funds, the Fund Manager and additional public and private investors to finance a portfolio of Energy Efficiency financing products. Portfolio of products can include loans at below market terms, soft loans or concessional loans, partial credit guarantees and/or performance guarantees, mezzanine/subordinated loans and/or equity. A grant component with a contribution of the ESI Funds can be included as a blended product alongside the financing products and could serve as Interest Rate Subsidies (to move from soft terms to concessional terms), Guarantee Fee Subsidies, grants to assets and/or grants for Technical Assistance. The fund shall take the form of a layered fund with ESI Funds contribution taking the first-loss-piece/equity tranche (high risk-taking), the EFSI contribution taking the mezzanine tranche and additional public or private investors taking the senior debt tranche (low risk-taking). Financing products provided by the Energy Efficiency Fund shall leverage additional financing through equity investment in ESCOs/ESCOops as well as commercial loans with private banks and/or crowdfunding, either at the ESCO/ESCOop level or at the project level.
Aims of the instrument	<ul style="list-style-type: none"> Provide Final Recipients with easier access to finance by providing tailored financing products.
Final Recipients	<ul style="list-style-type: none"> Project beneficiaries and/or Project Developers (ESCOs and/or ESCoops). ESCoops shall be either full operational Energy Services Cooperatives or Financial Cooperatives (FINCoop) engaged into an agreement with operational ESCOs.
Projects Beneficiaries	<ul style="list-style-type: none"> Shall be defined in accordance with the Investment Program of the Pilot Regions.



Eligible projects	<ul style="list-style-type: none"> • SBC/EPC/ESC projects which shall be defined in accordance with the Investment Program of the Pilot Regions.
Citizen Funding leverage	<ul style="list-style-type: none"> • ESCoops shall leverage Citizen Funding through member share capital and/or alternatives long-term funding such as one-time membership fees, individual member contributions with no individual ownership attached or individual member deposits which may be used for business. • Projects shall leverage additional Citizen Funding through crowdfunding at the project level.
Addressable financing gaps	<ul style="list-style-type: none"> • Potentially all of the gaps

Define the role and contribution of citizen funding

The scope of the following analysis is limited to the Crowdfunding sector as most of the Pilot Regions are targeting integration of crowdfunding to their CFs4EE Financing Scheme.

Equity and lending crowdfunding are significant and rapidly growing markets at the European level. Actually existing platforms are increasingly hosting energy projects and new emerging platforms have a strong focus on energy efficiency and renewable energies. The new European regulation “European Crowdfunding Service Providers for business” (ESCP) released in October 2020 open new opportunities for integrating crowdfunding to an investment platform:

- Firstly, the regulation fixed a single set of rules applying to crowdfunding services in the EU, with an enlarged threshold of 5 million euros per project and per year.
- Secondly, the regulation set also strict rules to protect investors from financial losses, notably by introducing the distinction between sophisticated and non-sophisticated investors with differentiated information process and authorized investment thresholds per investor categories.

Crowdfunding Platforms could therefore be integrated into the scheme at three levels:

- At the Investment Platform level as a co-investor. In this option, the crowdfunding services provider collect money from the crowd to co-invest in the Investment Platform under an equity or debt contribution up to a define threshold.
- At the financial product level as a financial intermediary and co-investor. In this option, the Investment Platform on-lend to the final recipients through the crowdfunding service provider alongside the crowdlending investors in a single operation. The on-lend loans are disbursed and managed by the crowdfunding services provider in line with the investment strategy defined by the fund manager of the Investment Platform. In this scenario, the fund manager selects the partnering crowdfunding service provider and sets the financial conditions under which it will match resources raised by projects through the crowdfunding campaign when it reaches a defined percentage of its crowdfunding objective. It also defines the eligibility criteria projects will have to comply with in order to benefit from the investment platform co-financing. The approach is quite similar to a risk-sharing loan agreement with a traditional financial intermediary where the conditions of loan disbursement are set ex ante by the parties and the co-financing resources from the Investment Platform are committed for the whole investment program. In this way, the fund manager maintains its decision-making power in defining the eligibility criteria but shares it with the crowdfunding services provider in the allocation phase, by enabling citizens to fund and rank projects according to their perceived priorities and preferences. This scenario requires that the crowdfunding services provider is a legally authorized financial intermediary. In Lithuania, the Aviété loan scheme is a pilot project launched by INVEGA, the Lithuanian National Promotional Institution (NPI), in cooperation with FinBee, a



lending-based crowdfunding platform. Under the Avietè scheme, crowd investors choose independently the projects they want to fund among those available in the FinBee platform. A number of advanced payments are disbursed by INVEGA to FinBee, which in turn on-lends to businesses that are raising money on the platform. Avietè funding to each project cannot exceed an amount of EUR 10 000 and a share of 40% of the total amount of each loan.

- At the project level as a co-investor alongside the Investment Platform. In this option, the parties use a combination of a loan from the Investment Platform and a crowdlending operation presented in a single package. The loans are disbursed and managed by the fund manager of the investment platform while the crowdlending funds are disbursed and managed by the crowdfunding services provider. In this scenario, the fund manager selects the partnering crowdfunding service provider and sets the eligibility criteria which projects will have to comply with in order to benefit from the investment platform co-financing. The crowdfunding services provider introduce the loan and crowdlending package to a number of selected project holders who are willing to run a crowdfunding campaign and who might be eligible for a loan from the Investment Platform if the crowdfunding campaign ends successfully. The crowdfunding campaign and the loan assessment are run in parallel by the crowdfunding services provider and the fund manager. When the crowdfunding campaign reaches its threshold and the project holder is eligible for the loan, the funds are disbursed by the parties. In Germany, Investitionsbank Berlin (IBB), the Berlin's Public Regional Development Bank has developed with the crowdfunding platform Startnext such an "integrated" package called the MikroCrowd initiative, where a loan fund managed by IBB provides loans up to 25.000 € (or soft loans up to 50.000 €) alongside a crowdfunding contribution of min. 5.000 € to local SMEs and start-ups.

Additionally to the integration of the crowdfunding to the scheme, the Pilot Regions should also assess where and how public funds could further be used to secure and improve the leveraging of crowdfunding. Two instruments could be used in this purpose:

- A guarantee mechanism to cover the crowdfunding portfolio with a first losses provision assumed by the Investment Platform.
- A risk-sharing loan mechanism (rather than an on-lending loan mechanism) with a first losses provision assumed by the Investment Platform.

1.4 Step 3 – Institutional arrangements and operational structure

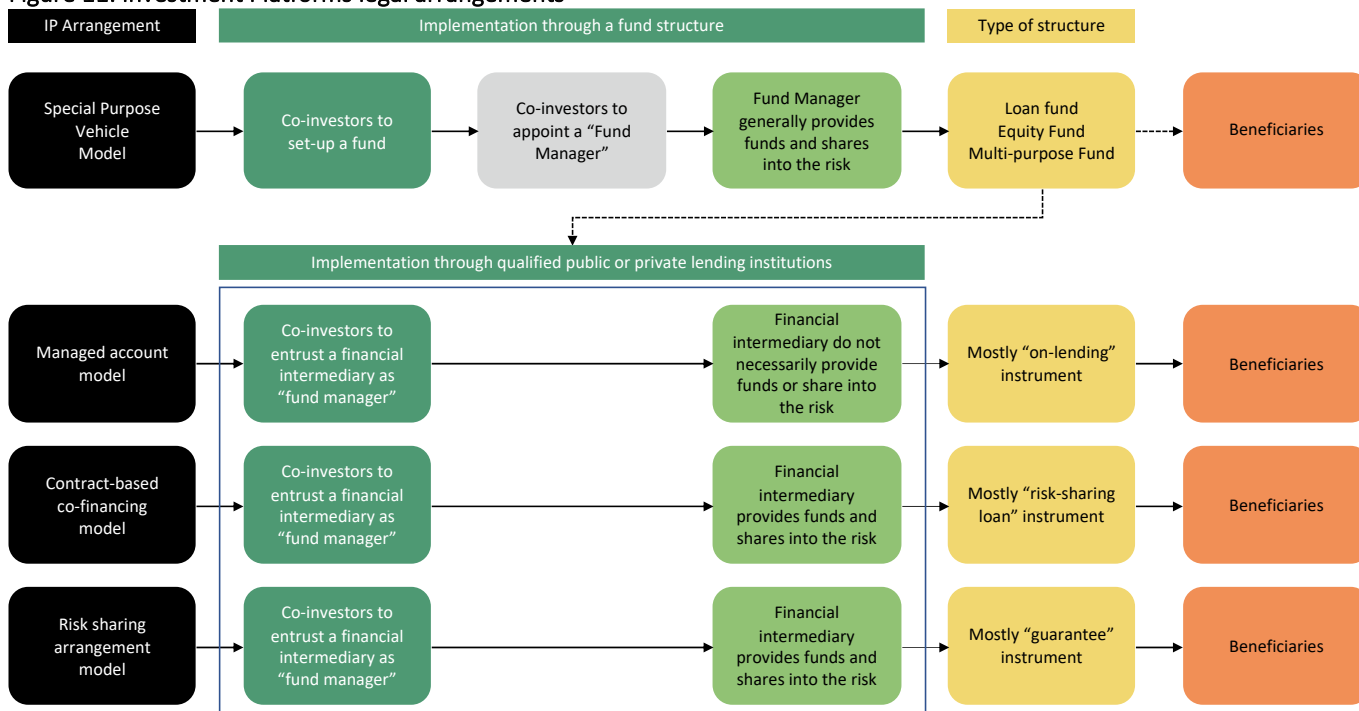
The key elements of the institutional arrangement and management structure of the CFs4EE Financing Scheme include the following:

- What will be the legal structure of the Investment Platform supporting the scheme ?
- Which entity will be entitled as fund manager for the Investment Platform ?
- What should be the governance and operational structure for the whole scheme ?

1.4.1 Determine the legal arrangement and the fund manager

Answering the question which entity will manage the funds allocated under the Investment Platform and will be responsible for the implementation of the financing products to be offered to the final recipients depends on its legal arrangement. The EFSI regulation distinguish four possible legal arrangements for Investment Platforms as described in the figure below.



Figure 11: Investment Platforms legal arrangements**Implementation through a financial intermediary**

The managed account, contract-based co-financing and risk sharing arrangement are legal agreements between the co-investors and a financial intermediary being active in the financing market, by which the financial intermediary is entrusted to manage the allocated funds. The financial intermediary is generally a qualified partner lending institution such as a commercial bank or an existing fund structure. The entrusted entity has the expertise and the capacity to manage the allocated funds, to develop and deploy the financing products (guarantees, loans, quasi-equity, equity) to be offered to the final recipients and, depending the investment strategy, to attract additional investors into the investment platforms and/or projects. Depending the agreement between the co-investors and the investment strategy, the entrusted entity can have a full delegation or partial one, with or without discretionary power over the investment decisions.

Implementation through a fund structure

When considering the creation of a Special Purpose Vehicle, mostly a fund structure, the co-investors will have to decide on the legal structure for the fund and to appoint a fund manager. There are three basic options for selecting the fund manager :

- The co-investors entrust one of them as the fund manager, having the required expertise and capacity to set up and manage the fund, develop and deploy the financing products and potentially attract additional investors either into projects or the fund. In this case, the co-investors have to decide if the entrusted entity has a full delegation or partial one, with or without discretionary power over the investment decisions. Depending the arrangement opted by the co-investors, the scope of responsibilities of the entrusted entity will refer to one of the following cases.
- The co-investors appoint an independent investment manager who provides administrative services of the fund but has no discretion on investment decisions, decisions being taking by the co-investors individually, or through a Management board or an Investment Committee if foreseen. In this case, the investment manager does not provide financing to the fund and does not share into the risk and each investor has to be actively involved in and agree to each individual investment decision.



- The co-investors appoint an independent Fund Manager who provides services covering the entire investment process including actively sourcing and originating projects and who has investment decision, possibly subject to oversight by a Management Board or an Investment Committee (or possibly both). In this scenario, the Fund Manager generally provides financing to the fund as co-investor and does share into the risk. The fund manager draws down on committed funds, once approval is received from the Investment Committee if foreseen. Co-investors are not involved in the decision unless they have negotiated entire a seat on the Investment Committee if foreseen or a seat in the Management Board.

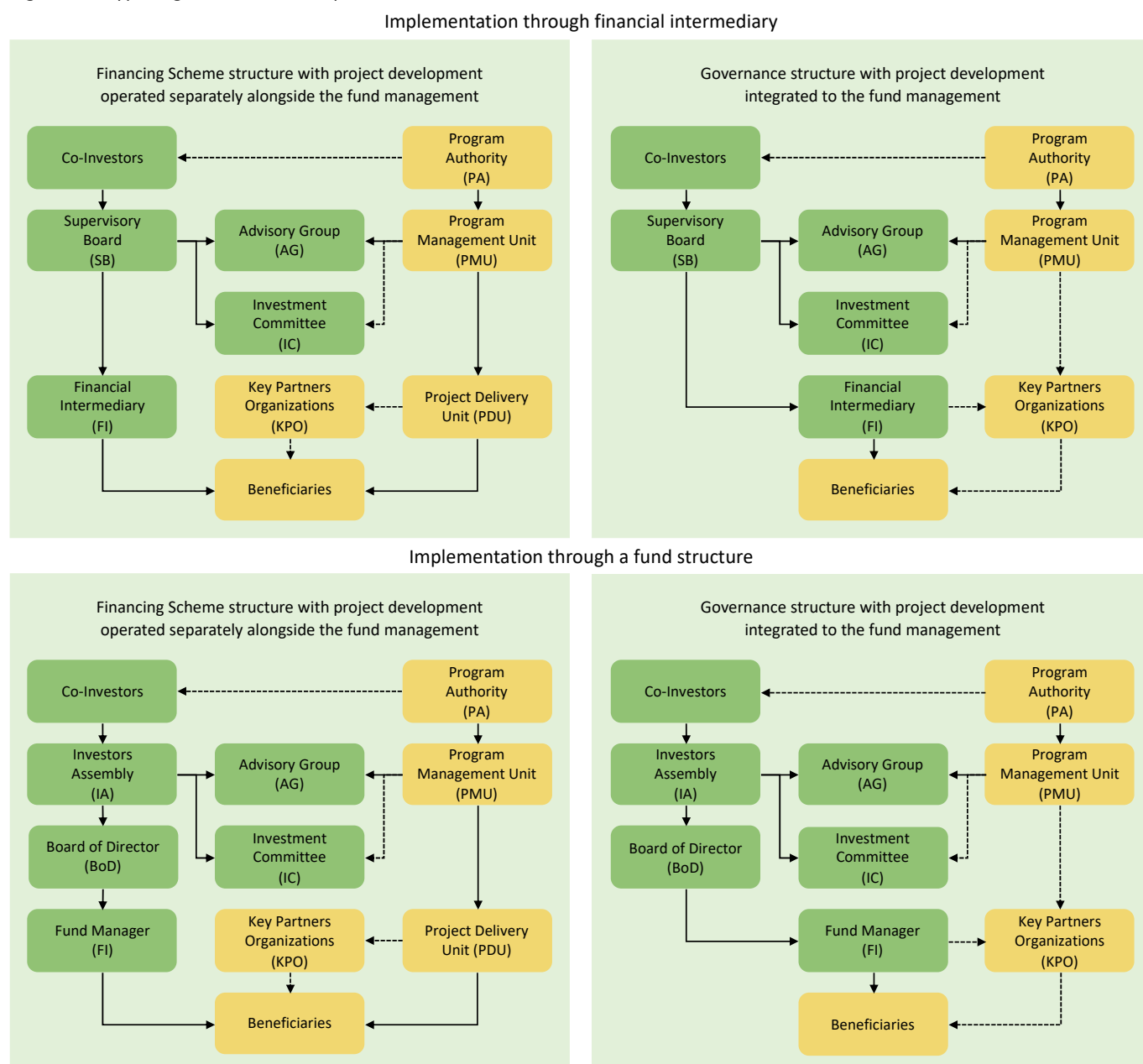
1.4.2 Determine the governance and operational structure

Once the legal structure of the Investment Platform is fixed, the Pilot Regions will have to determine the governance and operational structure of their CFs4EE Financing Scheme. Two levels have to be considered:

- The governance structure which will determine the oversight arrangements for the scheme as well as for the Investment Platform.
- The Operational structure which will determine how the scheme will be operated and how the relationships will be organized between the parties.



Figure 12: Typical governance and operational structure



The type of governance and operational structure that would be implemented would highly depend upon the legal form of the Investment Platform that would be used for the scheme and on the number and nature of partners that would be involved in the scheme development and operation. The figure 12 detail a typical governance and operational structure to be applied for financing schemes led by public authorities and backed by a financing instruments such as an Investment Platform.

The governance structure

Among the key points to be addressed when considering the governance structure, mention could be made of the following aspects:

- the role of the various bodies in the governance process – and especially in the examination and selection processes;



- the way to maintain majority representing the interests of each partners of the scheme.

The main functions of the governing bodies include setting the investment strategy and policy of the investment platform, hiring the Fund Manager or the Financial Intermediary, establishing the overall criteria for selecting projects, approving the annual business plans and budgets formulated by the management team, preparing and submitting an annual financial report to the co-investors, and assuring that the funds of the Investment Platform are operated in compliance with the Public Authority objectives. The key bodies and potential respective responsibilities are described in the table below.

Table 5: Governance bodies and responsibilities

Bodies	Responsibilities
Co-Investors & Platform sponsor	
The private or public entities or organizations that are providing funds to the Investment Platform. They will generally delegates part of their responsibilities to one or several Platform Sponsor(s) chosen amongst them to set-up the Investment Platform.	<ul style="list-style-type: none"> • Establish in cooperation with the Program Authority the investment needs, the sectorial and geographical focus, the business case, the sources of funding, the co-financing or risk-sharing agreements, decision-making rules, etc. • Decide on the risk/return profile, the remuneration criteria for the investors, and the eligible entities which can propose projects to the Platform (designated as "Final Beneficiaries/Recipients") and the Investment Platform's internal project selection process. • Provide part of the initial funding for the Investment Platform's activities. • In case of implementation through a financial intermediary, delegate representatives and appoint independent experts to the Monitoring Committee through an adequate selection process and decide on its remuneration (*).
Program Authority (PA)	
The private or public entity or organization that is in charge of the "Investment program" to be financed by the Investment Platform. In case of public bodies, this is typically a national or regional government, a provincial or local authority or council or a city or municipal council. The Program Authority controls the Program Management Unit (PMU). It could also assume the role of the Platform Sponsor as well as acting as a co-investor, either at the IP level or project level.	<ul style="list-style-type: none"> • Develops the CFs4EE Financing Scheme Investment Program as part of the Investment Platform scope and financing target. • Decides in cooperation with the Platform Sponsor(s) on the eligible entities which can propose projects to the Platform (designated as "project promoters") and the Platform's internal project selection process. • When appropriate and depending the management structure, appoints: <ul style="list-style-type: none"> ○ The Program Management Unit through an adequate selection process and decide on its funding and/or remuneration. ○ The Project Delivery Unit through an adequate selection process and decide on its funding and/or remuneration.
Program Management Unit (PMU)	
The team within the Program Authority (PA) responsible for the Investment Program Management, monitoring,	<ul style="list-style-type: none"> • Provides advisory services to the Program Authority (PA) regarding the CFs4EE Financing Scheme Investment Program.



coordination and control. It is often a separate legal entity but can also be a department or project team within an existing organization.	<ul style="list-style-type: none"> • Manages the monitoring and reporting of the Investment Program progress to the Program Authority. • If operated alongside of the funds management, appoint the Project Delivery Unit through an adequate selection process, and decide on its remuneration.
Supervisory Board (SB) or Board of Director (BoD) (*)	
The team within the co-investors responsible for the supervision of the Investment Platform. Membership of the Supervisory Board (SB) or the Board of Director (BoD) generally includes representatives from the co-investors and external experts members that are procured by the co-investors.	<ul style="list-style-type: none"> • Provides advisory services to the co-investors regarding the Investment Platform financial performance and its objectives including non-financial returns; commitment and deployment milestones. • Manages the financial monitoring and reporting of the Investment Platform operations to the co-investors. • Appoints the Financial Intermediary or the Fund Manager through an adequate selection process, and decide on its remuneration, which should be performance- based and ensure alignment of interests.
Advisory Committee (AC)	
Independent team that provides an advisory function on strategic level. In addition to the Supervisory Committee, it is common practice to establish an Advisory Committee that which allows co-investors and the Program Authority to represent their views, approve key strategic decisions, and have visibility of ongoing Investment Platform issues and performance. It may also allow access to specialist independent advice and secure stakeholder buy-in. Membership of the Advisory Committee generally includes representatives from the Program Authority, co-investors and external members that are procured by the parties.	<ul style="list-style-type: none"> • Provides strategic guidance to the co-investors and the Program Authority. • Advises on the Financial Intermediary or the Fund Manager investment opportunities. • Takes only decisions regarding the conflict of interest.
Investment Committee (IC)	
Independent team that provides an advisory function on investment decisions or is responsible for the final approval of investments. In addition to the bodies mentioned above, an independently managed investment committee may be provided for in the governance structure. Separating the management of the funds from the investment decision-making	<ul style="list-style-type: none"> • Advises the Financial Intermediary or the Fund Manager on investment decisions or takes investment decisions based on the Investment Platform's internal project selection process.



gives the co-investors greater oversight and relieves the financial intermediary of the fund manager of potential conflicts of interest. Membership of the Investment Committee generally includes representatives from the co-investors, the Program Authority, the Financial Intermediary or the Fund Manager and external members that are procured by the parties.

(*) In case of implementation through a fund structure, the Supervisory Board (SB) will be generally replaced by a Board of Director (BoD) with decision making authority while the co-investors will be represented in an Investor Assembly (IA) or a General Assembly of Shareholders.

The operational structure

Among the key points to be addressed when considering the operational structure, mention could be made of the following aspect:

- to what extent you need to offer project development assistance (PDA) to the beneficiaries and/or the final recipients,
- and whether it should be internal to the Fund Manager or under a separate organization such as a Project Delivery Unit (PDU).

Table 6: Operational bodies and responsibilities

Bodies	Responsibilities
Project Delivery Unit (PDU)	
The team assigned to carry out preparation and delivery of project on support or on behalf of the Final Beneficiaries/Recipients. Depending the business model, the Project Delivery Unit (PDU) is operated separately alongside the financing activities or can be integrated under the responsibility of the Financial Intermediary (FI) or the Fund Manager (FM). It is often a separate legal entity but can also be a department or project team within an existing organization.	<ul style="list-style-type: none"> • Develops the operational services framework to be offered to the Final Beneficiaries/Recipients benefiting from the Investment Program as part of the Project Delivery Process. • Takes care of the Project Delivery Unit's day-to-day management and the business of delivering projects for assessment by the Financial Intermediary or the Fund Manager. • Coordinates the program delivery planning with the Financial Intermediary or the Fund Manager. • Manages the monitoring and reporting of the Investment Program progress to the Program Management Unit or the Monitoring Committee if integrated to the Financial Intermediary or the Fund Manager.
Financial Intermediary (FI) or Fund Manager (FM)	
The organization assigned to manage the funds allocated under the Investment Platform and deploy the financing products. Generally, an independent and professional body to the Public Authority (PA) or the co-investors.	<ul style="list-style-type: none"> • Manages the Investment Platforms financing operations and if appropriate attracts additional public and private sector capital to the Investment platform. • Takes care of the day-to-day management and the business of analyzing financing requests from Final Beneficiaries/Recipients, assessing their eligibility, the economic rationale, the financial



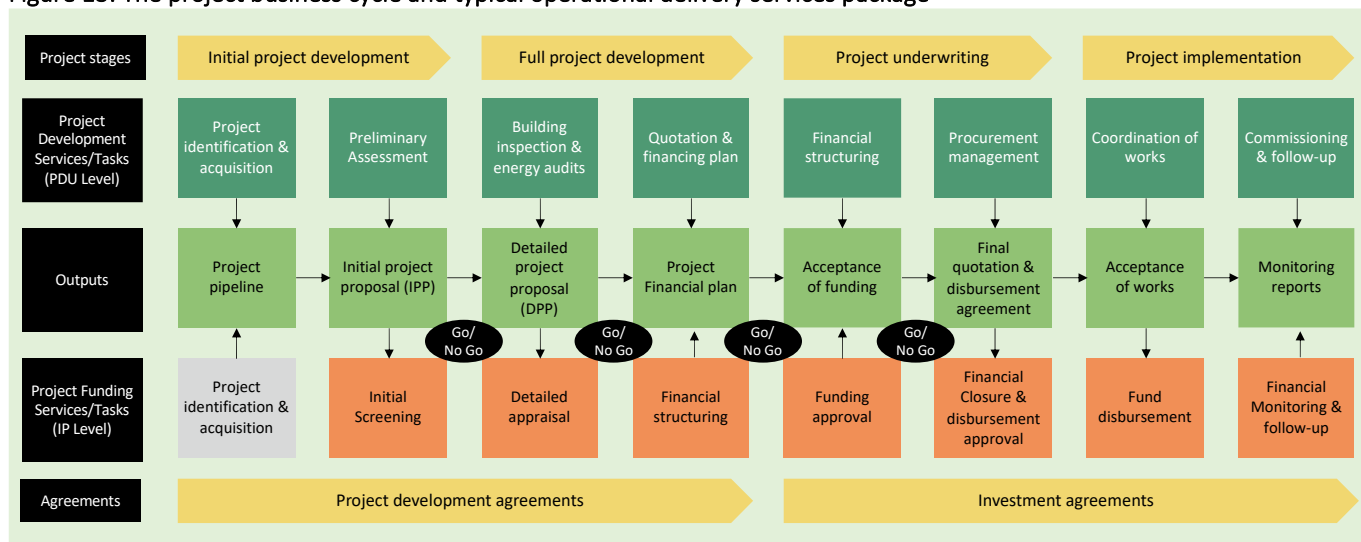
	<p>robustness and viability, etc., depending on the investment strategy of the Investment Platform.</p> <ul style="list-style-type: none"> Coordinates the program delivery planning with the Program Delivery Unit. Manages the financial monitoring and reporting of the financing operations to the Monitoring Committee or the Bord of Director.
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1.5 Step 4 - Project delivery process and partnerships

1.5.1 Assess the project business cycle and define the operational delivery services package

As figured out in the figure below, the operational services package addresses the type of services that can be offered by the Program Delivery Unit (PDU) and the Fund Manager to the final beneficiaries and/or recipients of the investment program. Pilot regions have to choose which level of services they intend to offer to the final beneficiaries/recipients.

Figure 13: The project business cycle and typical operational delivery services package



The table 7 give a short description of the operational delivery services package that can be offered to the beneficiaries.

Table 7: Operational delivery services package

Service/phase	Description
Project identification & acquisition	The project identification & acquisition covers the commercialization of the financing scheme services to the beneficiaries. This covers the whole range of communication and commercial development services that are necessary to inform the beneficiaries of the types of offerings that are available to them. This could be done either by the Project Delivery Unit (PDU) or by the Fund Manager.
Preliminary assessment	Assessment is the role by which the technical and financial viability of the projects are evaluated as well as the compliance with the eligibility criteria and whether or not the projects get implemented and/or financed. This could be done either by the Project Delivery Unit or by the Fund Manager. The work can also be split between the technical assessment (PDU) and the



	financial assessment (Fund Manager). The output of this phase/service is an initial project proposal (IPP form).
Technical assistance	Technical assistance is the role by which guidance and consultancy is provided to the beneficiary related to the detailed project development. This can include building inspection and energy audits as well as quotation services for the works. This is typically a first entry service for a Project Delivery Unit that can supply additional confidence to the Fund Manager on the technical and financial feasibility of the project. The output of this phase/service is a detailed project proposal (DPP form).
Financial advice & closing	Financial advice & closing is the role by which guidance and consultancy is provided to the beneficiary on available funding for his project, including the funding of the Investment Platform. This may include financial engineering and assistance in the negotiation of the best available financing or even arrange for the financing to be put in place. This can also include help in obtaining grants or technical assistance subsidies if not foreseen by the Investment Platform. This could be done either by the Project Delivery Unit (PDU) or by the Fund Manager. The outputs of this phases are the Project Financial Plan and the funding agreements.
Procurement management	Procurement management is the role by which guidance and assistance is provided to the beneficiary for the procurement of the works. This is typically a second entry service for a Project Delivery Unit that can supply additional confidence to the Fund Manager on the technical and financial feasibility of the project. The outputs of this phase are the final quotation & the disbursement agreements.
Coordination of works	Coordination of works is the role by which guidance and assistance is provided to the beneficiary for the implementation of the works. This is typically a third entry service for a Project Delivery Unit that can supply additional confidence to the Fund Manager on the technical and financial feasibility of the project. The output of this phase is the acceptance of works.
Commissioning & follow-up	The most advance project delivery services include guidance and assistance for the Measure & Verification of the savings. This can also include additional services such as independent post-renovation inspection and/or commissioning of the building, ongoing monitoring of the energy consumption, intermediation with the contractors in case of deviation. This is typically a fourth entry service for a Project Delivery Unit that can supply additional confidence to the Fund Manager on the technical and financial feasibility of the project. The output of this phase is the monitoring reports.

The table below details the options pilot regions should consider when deciding the organization of their operational delivery services package and the distribution of roles between the Fund Manager and an independent Program Delivery Unit (PDU).

Table 8: Distribution of roles between the fund manager and the PDU

Option	Distribution of roles	Potential range of services
1	Fund Manager takes the role of the Program Delivery Unit (PDU) and offer technical assistance & financial services only.	<ul style="list-style-type: none"> • Project identification & acquisition • Preliminary assessment & initial screening • Financial advice & closing
2	Fund Manager takes the role of the Program Delivery Unit (PDU) and offer assessment, technical and financial services.	<ul style="list-style-type: none"> • Project identification & acquisition • Preliminary assessment • Technical assistance & detailed appraisal • Financial advice & closing



3	Fund Manager takes the role of the Program Delivery Unit (PDU) and offer integrated assessment, technical and financial services.	<ul style="list-style-type: none"> • Project identification & acquisition • Preliminary assessment • Technical assistance • Financial advice & closing • Procurement management • Coordination of works • Commissioning & follow-up
4	Independent Program Delivery Unit (PDU) offering assessment services only and Fund Manager offering financial services.	<ul style="list-style-type: none"> • Project identification & acquisition • Preliminary assessment • Financial advice & closing
5	Independent Program Delivery Unit (PDU) offering assessment and technical services and Fund Manager offering financial services.	<ul style="list-style-type: none"> • Project identification & acquisition • Preliminary assessment • Technical assistance • Financial advice & closing
6	Independent Program Delivery Unit (PDU) offering integrated assessment and technical services and Fund Manager offering financial services.	<ul style="list-style-type: none"> • Project identification & acquisition • Preliminary assessment • Technical assistance • Financial advice & closing • Procurement management • Coordination of works • Commissioning & follow-up

1.5.2 Define the intervention model for the operational delivery services package

Additionally to the range of services to include or not in the scope of the operational services package, the Pilot Regions will also have to choose which intervention model they intend to apply with their package. There are basically three intervention models for Project Delivery services packages as following:

- The facilitation model.
- The integration model.
- The aggregation model.

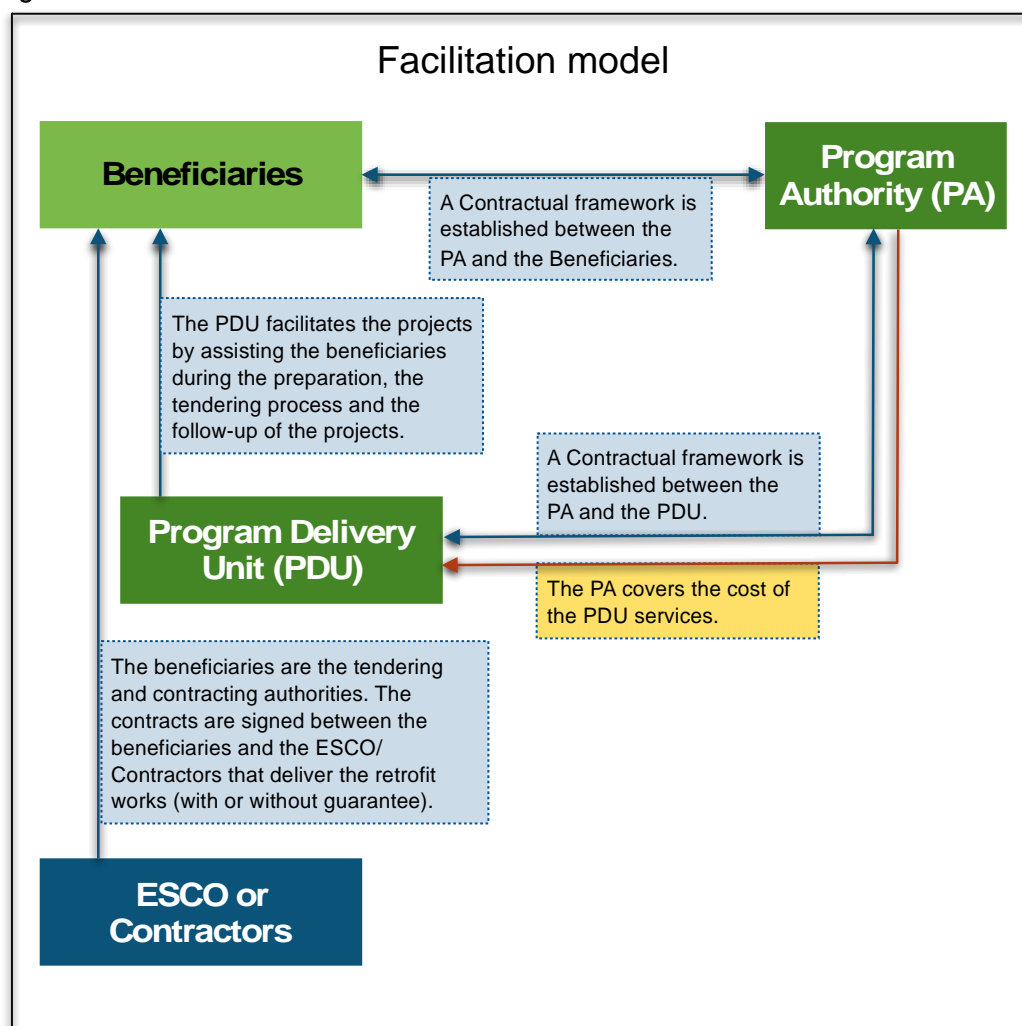
The Facilitation Model

Facilitation means that the Program Delivery Unit (PDU) acts as assistant to the project owner but is not involved in the contractual level with the contractors. The Program Delivery Unit (PDU) coordinates or “facilitates” part of the whole process of project delivery on behalf of the beneficiary while the contracts are signed directly between the beneficiary and the contractors. This model is often applied in case of the EPC/ESC implementation model, where the contract is signed directly between the beneficiary and the ESCO. Managing the tendering process is typically part of facilitation services offered in case of EPC or ESC projects.

In the Facilitation model (see fig 14), the Program Delivery Unit (PDU) does not take on the technical and performance risks of the project; those remain on the beneficiary’s shoulders or on the ESCO/Contractor (in case of the EPC/ESC implementation model). The facilitation model could include all or part of the operational services package, depending the scope of the pilot regions and the maturity of the project holders. The advantages and disadvantages of the model are described in the following table.



Figure 14: The Facilitation model



Source: Citynvest H2020 project.

Table 9: Advantages & disadvantages of the facilitation model

Advantages	Disadvantages
For the Investment Platform/Project Delivery Unit	
<ul style="list-style-type: none"> Easier to set-up, less costly, more flexible and less risky than the integration model. Can improve the leverage effect on actors, economies of scale, access to more attractive funding conditions for the Investment Platform thanks to bigger investment volumes and project pooling. 	<ul style="list-style-type: none"> Time consuming coordination of stakeholders. Less control over the process if not fully developed. The service package directly competes with other market players; thus the EU state aid regulation applies. The PDU has to charge fees for its services, they cannot be offered for free.
For the project holders	
<ul style="list-style-type: none"> Interesting for project holders who seek limited technical and financial support for their renovation project. 	<ul style="list-style-type: none"> Project holders have to sign and manage contracts with different suppliers who are individually responsible for works and services.

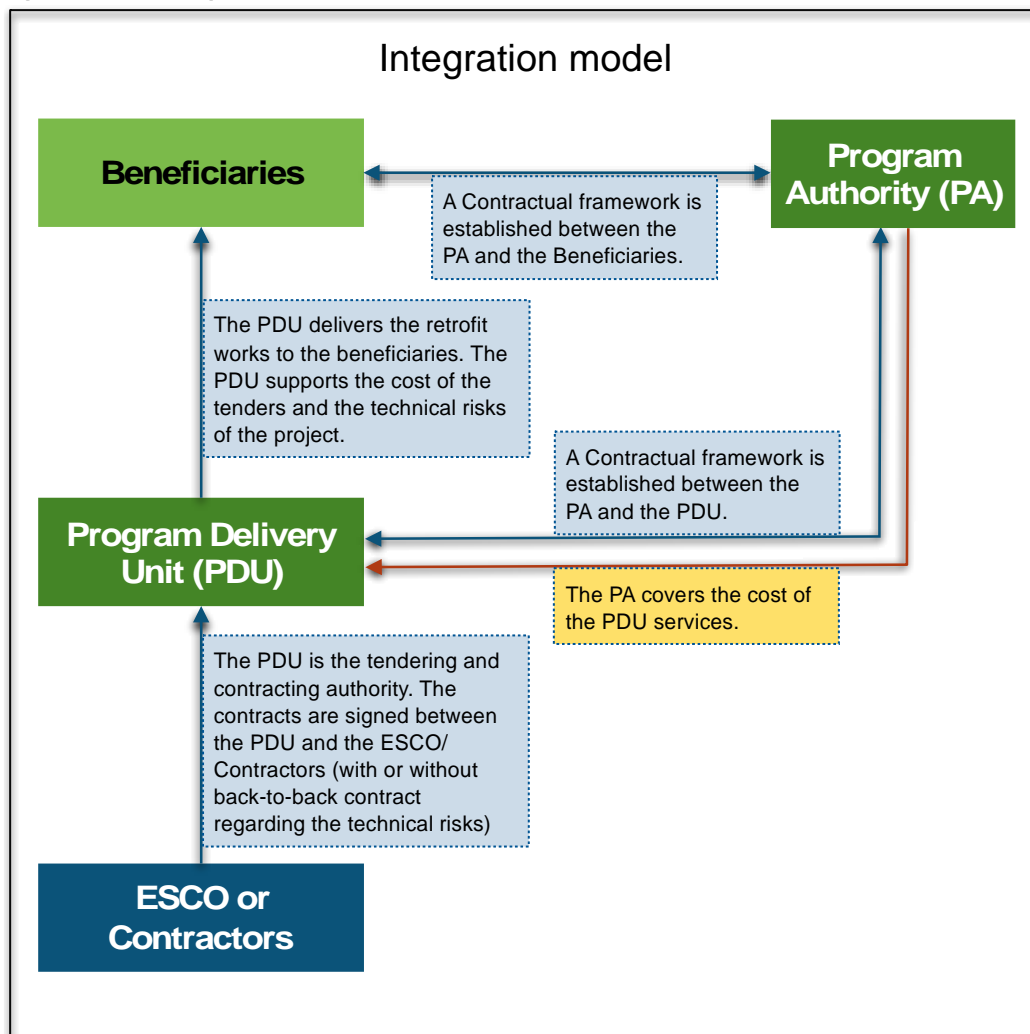


<ul style="list-style-type: none"> • Higher guarantee of a good quality service. • Assistance with the coordination of works and Measure & Verification (if provided). 	<ul style="list-style-type: none"> • Project holders might not have a guarantee of quality and energy savings; they deal with the follow-up of the works.
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The Integration Model

Integration means that the Program Delivery Unit (PDU) acts as an intermediary between the beneficiary on one hand and the contractors or subcontractors on the other hand. This means that the contract for the delivery of the energy efficiency is signed between the integrator and the beneficiary and that the integrator signs contracts with the (sub)contractors. In the Integration model (see fig X), the Program Delivery Unit (PDU) takes on the technical and performance risks of the project, unless it has back-to-back agreements with the beneficiary on one hand and the ESCO on the other hand (in the case of the EPC/ESC model).

Figure 15: The Integration model



Source: Citynvest H2020 project.

The integration model is often associated with the Separate Contractor Based implementation model, although it can also be applied to EPC or ESC. The two cases are described below:

- The SCB Integration model: In the SCB integration model, the Program Delivery Unit (PDU) truly plays the role of integrator of a large number of stakeholders or subcontractors, for carrying out audits, studies, works or services, to offer a "packaged" solution to the beneficiaries. Its role is first to select these subcontractors,



possibly putting them into competition; then make them execute their tasks. The job is essentially projects management and coordination, but nevertheless it requires a good knowledge of the different techniques used. Taking into account the complexity of energy efficiency projects, the adequate command of all techniques is not easy. This will require from the PDU strong quality control procedures and tools.

- The EPC/ESC Integration model: In the ESC/EPC Integration model, the Program Delivery Unit (PDU) acts on behalf of the beneficiaries and manages the project process from the tendering to the implementation and follow-up of the project. In this case, this is one project, structured around a "back-to-back" contract between the Program Delivery Unit and the ESCO/Contractor.

By definition, the integration model includes the full operational services package. The advantages and disadvantages of the model are described in the following table.

Table 10: Advantages & disadvantages of the Integration model

Advantages	Disadvantages
For the Investment Platform/Project Delivery Unit	
<ul style="list-style-type: none"> • Unique and clear mission of PDU. • Complete control over the process and thereby over the project holder experience. • Better leverage effect on actors, economies of scale, access to more attractive funding conditions for the Investment Platform thanks to bigger investment volumes and project pooling. • Quality and energy savings guarantees provided by the PDU will reassure other co-investors at the project level and increase the leverage effect. 	<ul style="list-style-type: none"> • Cost and human resources intensive. • Riskier than the facilitation model due to its contractual position with the beneficiary. • Time-consuming creation of a full services structure. • The service package directly competes with other market players; thus the EU state aid regulation applies. The PDU has to charge fees for its services, they cannot be offered for free.
For the project holders	
<ul style="list-style-type: none"> • The PDU is a unique interface and the responsible body vis-à-vis the project holder. • Interesting for project holder who seek a project manager (coordinator) for the whole project. • Project holders sign a contract with one single legal person (PDU) – although in some cases they also sign contracts directly with suppliers. • PDU deals with suppliers and contractors. • PDU guarantees the quality of renovation works and eventually energy savings. • PDU ensures the monitoring and follow-up in case the suppliers do not carry out works properly. 	<ul style="list-style-type: none"> • The service is not free of charge for the Project Holder but in some circumstances can be covered by a technical assistance grant.

The Aggregation Model

The aggregation model is a variation of the two previous models where the projects and/or the beneficiaries are bundled/pooled and/or aggregated in one or more larger project units:

- Bundling/pooling: Bundling/pooling means that the beneficiary or the Program Delivery Unit (PDU) bundles/pools the projects in one or more single projects to increase the size of the projects in order to make



these feasible and/or to create economies of scale both operationally and financially. This approach could be applied either to the EPC/ESC methodology as well as to the Separate contracting methodology.

- Aggregation: Aggregation means that the Program Delivery Unit (PDU) bundles the projects or buildings of multiple beneficiaries into a single larger project. Aggregation is done to create economies of scale both operationally and financially. The aggregation service can include bundling/pooling of projects. This approach requires that the Program Delivery Unit (PDU) is entitled to act on behalf of the beneficiaries.



2 BUSINESS MODEL – VEB (BELGIUM)

2.1 STEP 1 – MARKET TO ADDRESS

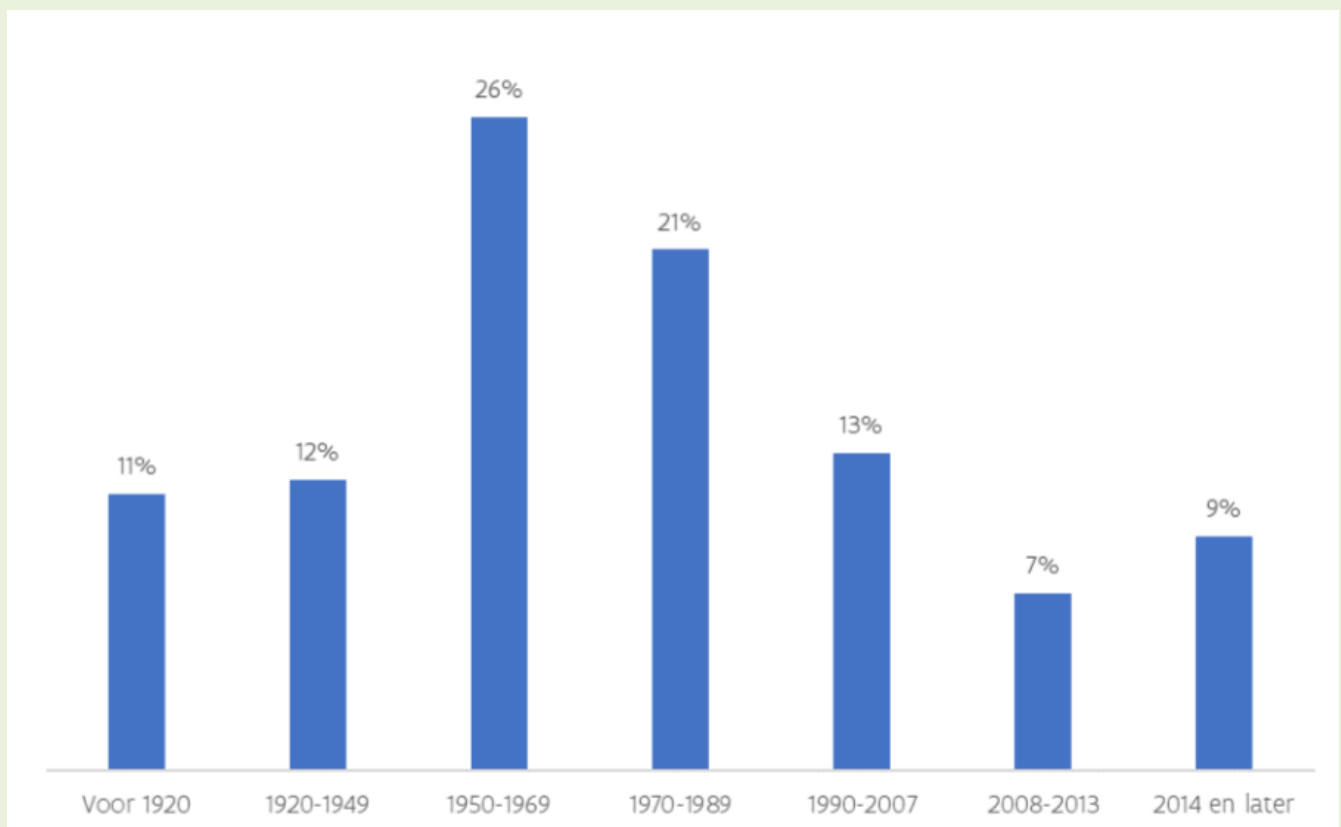
Eligible building categories

Detail here the eligible building categories that will be covered by your investment program. Give an estimate of the total market volume that could be addressed by your investment program (e.g. number of buildings, number of square meters).

The investment scheme will focus on school buildings. In total there are approximately 17.995 school buildings in Flanders. There is no exclusion regarding type of school buildings (in grades, education type, funding,...). Regarding ownership, there are different situations (but all are included in the scope):

- 100% subsidized school buildings Flemish level (Financed by GO!) 'Gemeenschapsonderwijs' (25.34% of students)
- <100% subsidized school buildings local authorities' level (co-financing AGION) 'Officieel Gesubsidieerd Onderwijs' (15.26% of students)
- <100% subsidized school buildings (co-financing AGION) 'Vrij Gesubsidieerd Onderwijs' (59.40% of students)

Half of the educational buildings in Flanders are 50 years or older:



During the pilot phase, in order to remove the existing thresholds and get more insight in the barriers in order to structure the financial instruments, we work together with the school network GO!

- 100% subsidized school buildings Flemish level (Financed by GO!) 'Gemeenschapsonderwijs' (25.34% of students), with a building portfolio of 4000 buildings

For the pilot case we do focus on the réalisation of deep retrofit in 65 buildings, which can be expressed in the next figures

The size of our CitizEE pilot-case in terms of buildings can be summarized as follows:

	2022	2023	2024	2025	Total m ²
Amount of buildings	65				65
Amount of Tenders	10				10
Size / site to renovate (in 1000 m ²)	1100				71.500

Eligible projects, measures & packages of measures

Detail here the eligible projects that will be covered by your investment program. Description should include the type of eligible measures included in the projects and if applying the eligible packages of measures. Give an estimate of the volume of projects you want to cover in your investment program (e.g. number of projects, number of buildings, number of square meters and volume of investment per project/buildings/square meters) and provide details by measures and/or packages of measures.

The scheme will primarily focus on 'Comprehensive Energy Refurbishment' and NZEB Energy Refurbishment in line with the Flemish long-term renovation and climate strategy. It includes integrated energy conservation measures on the building envelope and the technical building systems in order to achieve very high energy performance levels. However, depending on the real estate strategy of the building stock, various levels of 'intensity' in renovations can occur. In some cases, when the building is labelled to be demolished after e.g. 10 years, only limited measures of energy refurbishment will be implemented. The aim is to define the right level of ambition and a right level of clustering in order to deploy cost-effective investments. Within a cluster to be procured, different levels of ambition can occur.

The following scheme gives an estimate of the possible investment. The scheme will start with several pilots during 2021 - 2025 to scale up in the following years. However the estimations are strongly dependent on political approval, in line with the on balance investment budgetting.

Duration	2021-2025
number of projects	10
number of buildings	65
number of square meters	71.500
investment per square meters	400



Total investment	28,6 million €	
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Eligibility criteria & performance thresholds

Detail the set of eligibility criteria you intend to apply for selecting projects for funding, including the methodology of selection/identification and document your choice of eligibility criteria. These criteria can be based on five main categories:

- cost effectiveness such as Net Present Value, Energy Saved in relation to funding, Payback Period, project size, etc.;
- level of energy performance of the building such as building energy performance expressed in kWh/m2 and compared to a threshold, Energy Performance Certificates with a specific grade to achieve, etc.;
- level of energy performance of technical systems (additional or not criteria used to define specific performance levels of technical systems such as heating systems, air conditioning systems, renewable energy systems, as well as specific building fabric components such as insulation and glazing);
- co-benefits such as economic impacts (e.g. jobs created), social impacts (e.g. energy poverty mitigation) and environmental impacts (e.g. use of environmental friendly buildings material);
- other requirements such as obligation to conduct an energy audit or to comply with specific local legal requirements.

- 'Comprehensive Energy Refurbishment' and NZEB Energy Refurbishment in line with the Flemish long-term renovation and Climate Strategy to become Climate Neutral by 2045
- K-level 40 (EPC-label A)
- At least -45% CO₂ reduction in comparison with the current status of the building energy usage
- Capital grants are maximum 35% of the CAPEX
- Citizen co-financing for renewable energy (ESC) (equity) realized by local RESCOOPS (local economy)

Project implementation model

Define here the implementation model (EPC, ESC, SBC) you intend to use under your investment program. If more than one implementation model is to be used, detail for which type of buildings categories and/or eligible beneficiaries/final recipients you intend to use them.

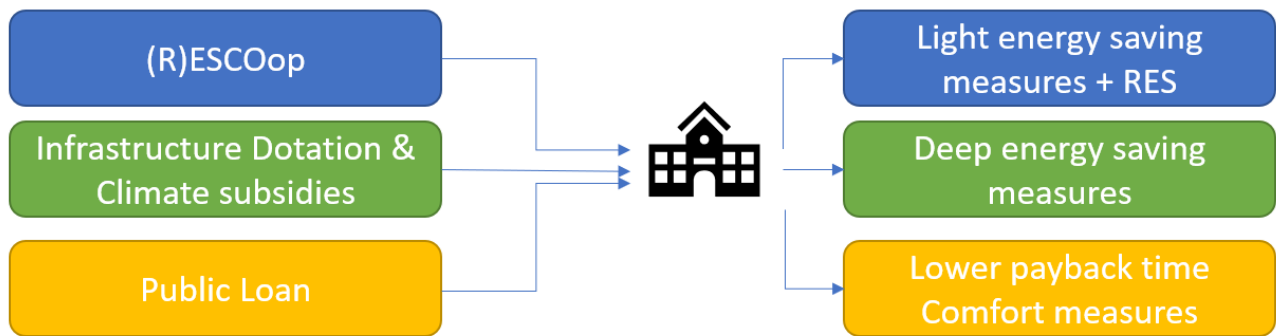
The implementation model will be primarily the Energy Performance Contracting model. However, due to the objective to deconsolidate a part of the investment, we will distinguish 'pure EPC assets' from other energetic and non-energetic measures. Depending on each individual case, the latter will have the lion's share in terms of CAPEX.

Within a single EPC contract, the investment will be divided in the following categories:

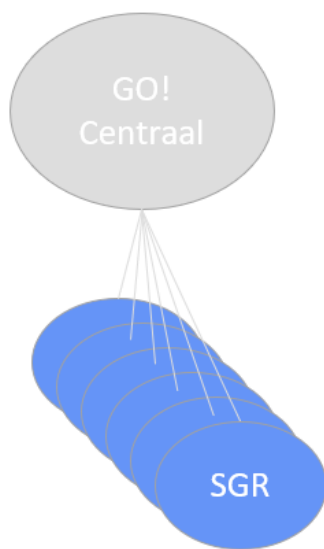
- EPC, financed by the ESCO / RESCOOP, e.g. relighting, PV and heating optimisation (mainly re-commissioning).
- EPC, financed by the school(group), e.g. ventilation, building envelope and insulation
- Non-energy efficiency measures, financed by the school central body

Schools can choose for an additional maintenance contract for the second and third category.





The financial structuring of the projects is rather complex, as the real estate management cost structure is divided into three levels.



- Central administration: Real Estate Strategy
- Deep retrofit investments (Masterplanning)
- Building owner
- 28 Schoolgroups (clusters of schools, regional)
- Technical infrastructure and maintenance
- Building user
- Energy cost (on local level, as operating budget of a school)

Eligible Beneficiaries and Final Recipients

Detail here the eligible beneficiaries (who can benefit from the scheme) of the CFs4EE Financing Scheme and identify the eligible final recipients (who can be financed by the scheme). Give an estimate of the volume of beneficiaries and final recipients you intend to cover in your investment program. Precise if you intend to work with ESCOs and if your scheme is to support ESCO financing, EPC financing or ESC financing.

- PMV (national promotional bank) support scheme for ESCO/(R)ESCOOP's via equity
- Forfeiting scheme via private banks to refinance ESCO/(R)ESCOOP through the purchase of EPC contract receivables (EPC-financing and ESC financing combined)
- Citizens can invest in rescoops with equity
- Grants for capital (Flemish Government) to pay the deep energy saving measures financed

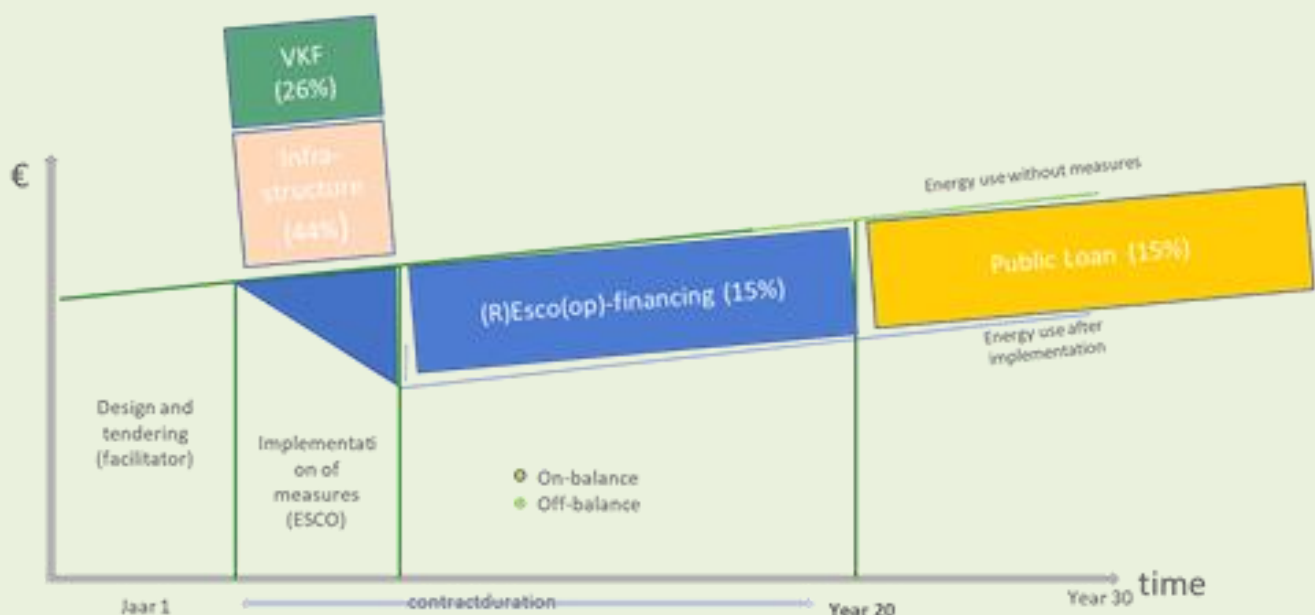
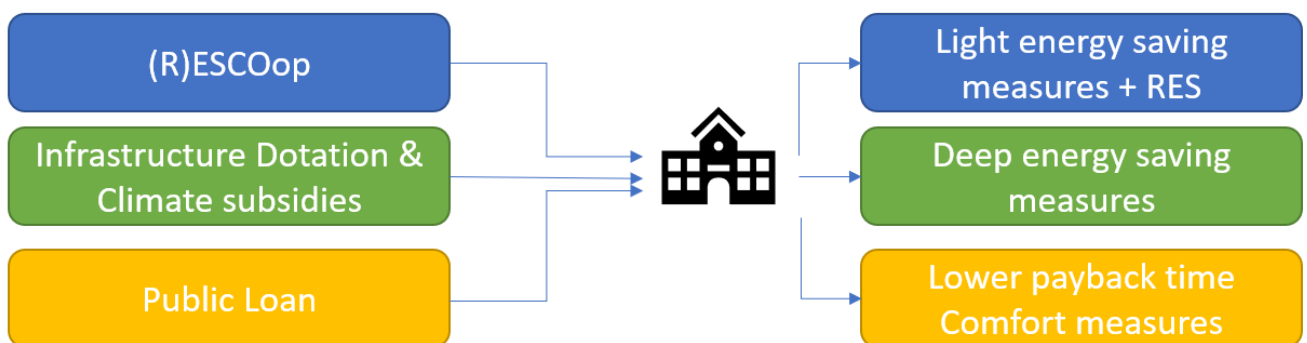


Description of standard projects/indicative pipeline

Detail here the typical standard project(s) that will be covered by your CFs4EE Financing Scheme. For each type of project, detail the investment measures foreseen and provide the financial characteristics of the project such as the level of investment required, the annual financial savings, the simple payback period, the energy savings over project life and the GHG emission reduction.

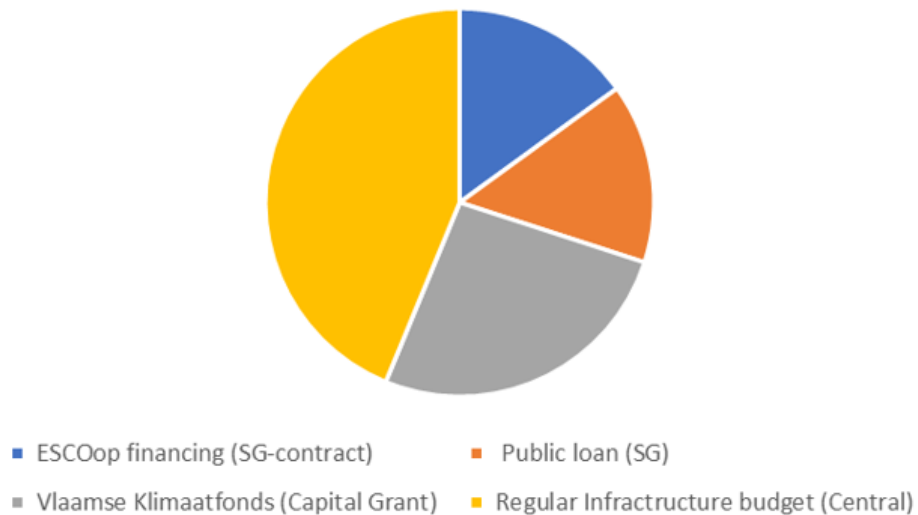
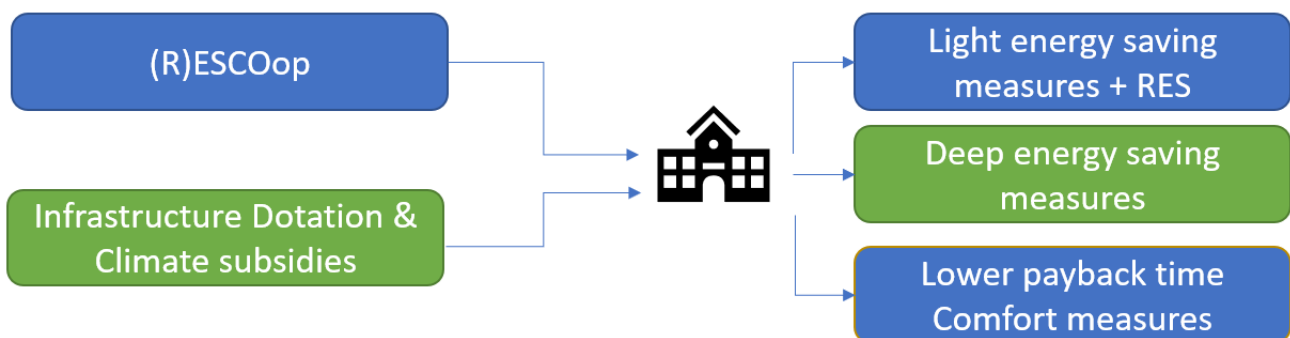
- The energy savings over project life and the GHG emission reduction: 45% on annual basis, contracted and guaranteed during a 30-years period
- Payback period: the combined payback period to the ESCO/ESCOOP and/or public loan will be 20 to 40 years (30 year)
- Financing schemes: two options are identified depending on the possibility (political commitment) to use a public loan with grace period (on balance) and / or the market readiness to accept and finance long term EPC-contract (> 25 years) with ESCO's.

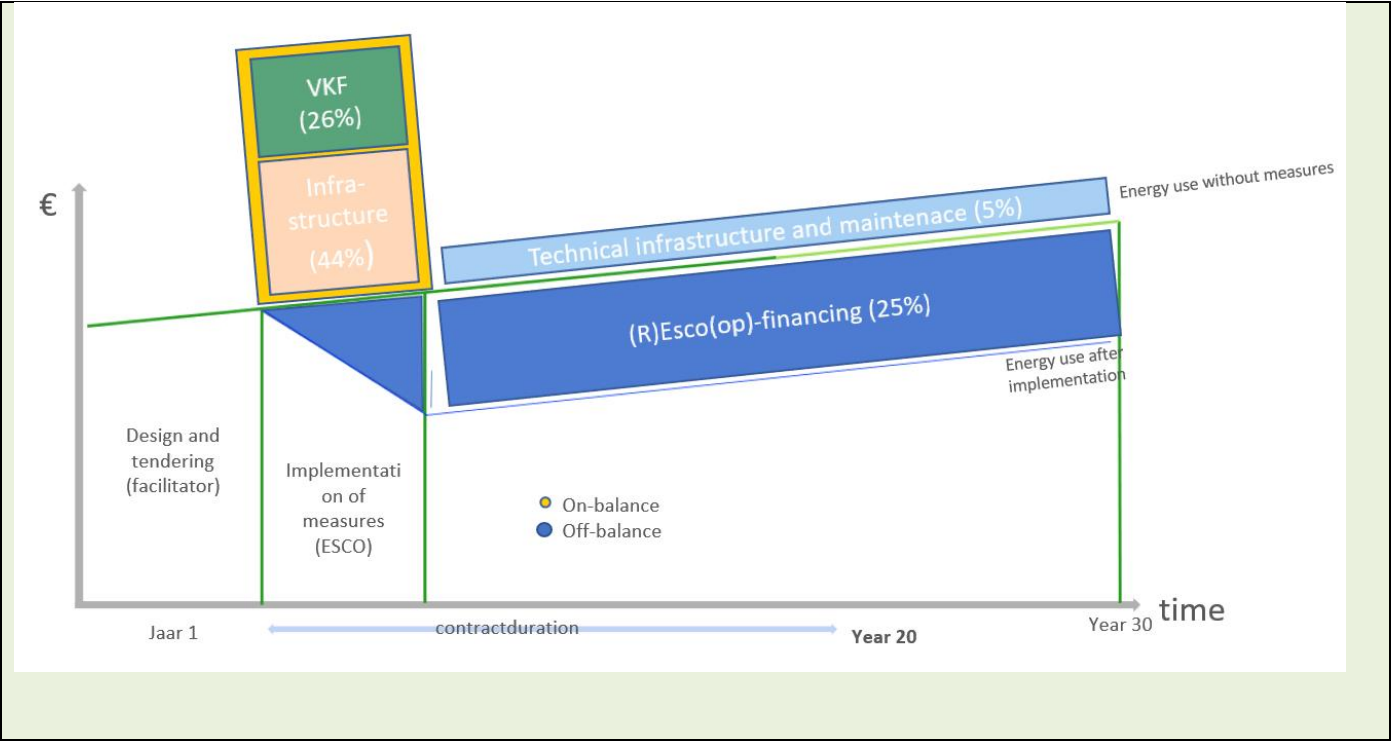
Financing scheme Option 1:



CitizEE Pilot case		
number of buildings		65
number of tenders		6
# m ² per building		1100
investment cost /m ²		400
Total investment (Mio €)	€ 28.600.000,00	100%
(R)ESCOop financing (SG-contract)	€ 4.290.000,00	15%
Public loan (SG) with grace period	€ 4.290.000,00	15%
Vlaamse Klimaatfonds (Capital Grant)	€ 7.500.000,00	26%
Regular Infrastructure budget (Central)	€ 12.520.000,00	44%

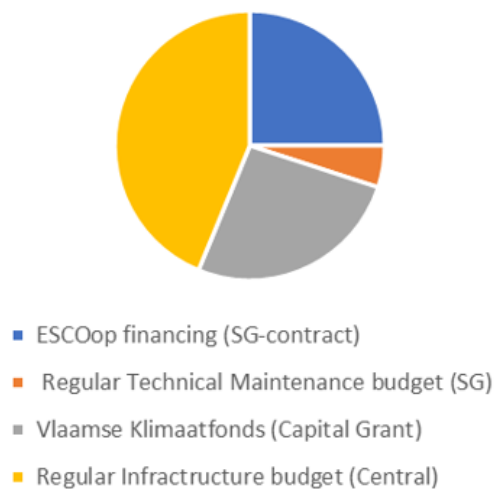
Investment scheme Pilot Case

Financing Scheme option 2:



CitizEE Pilot case		
number of buildings		65
number of tenders		6
# m ² per building		1100
investment cost /m ²		400
Total investment (Mio €)	€ 28.600.000,00	100%
ESCOOp financing (SG-contract)	€ 7.150.000,00	25%
Regular Technical Maintenance budget (SG)	€ 1.430.000,00	5%
Vlaamse Klimaatfonds (Capital Grant)	€ 7.500.000,00	26%
Regular Infrastructure budget (Central)	€ 12.520.000,00	44%

Investment scheme Pilot Case - long term EPC



2.2 STEP 2 – INVESTMENT STRATEGY

Financing gap(s)

Describe the financing gap you intend to overcome with your CFs4EE Financing Scheme. Detail to what extent it is the main issue preventing the realization of your investment program. Detail the key objective and the strategic rationale for the proposed CFs4EE Financing Scheme. Please, illustrate the gap for each standard project described in section 2.1 with an example with detailed figures.

Financing gap to overcome by using the proposed CFs4EE Financing Scheme = 30 % of the investment needed to realise the energy retrofit will be covered by the ESCO | RESCOOP and if needed by a public loan with grace period. The other budget needed is the the dotation (regular infrastructure budget) and the Capital grant (26%). For detailed figures, see table above.

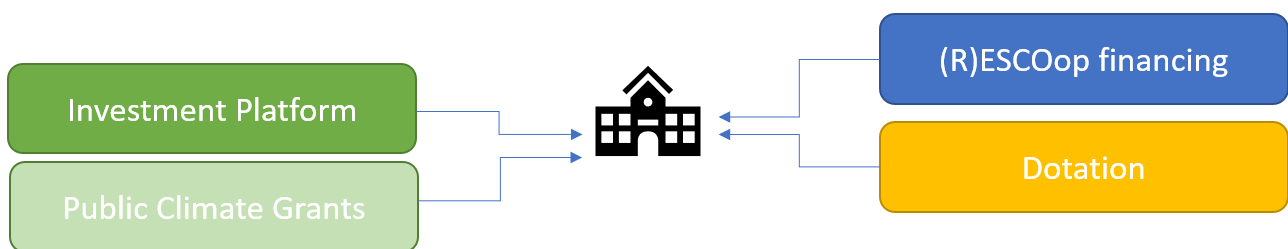
Proposed financial products



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 847147

Describe the financing product(s) you intend to offer to the final recipients (guarantees, loans, quasi-equity, equity) through your CFs4EE Financing Scheme. Detail the assumptions for such defined financing product(s), in relation with the financing gap(s) they cover (e.g. payback time too long, lack of subsidy, etc.). If you have several financing windows (by window, we mean a financing product targeting specific type of projects and/or final recipients), provide details for each window. Detail if you intend to apply flexible combinations between the proposed windows. Give a first indication of the required or target level of investment for each financing window and explain why you considered that allocation split in the future investment portfolio.

Financing Scheme Investment Platform (scaling up after pilot)



- IP platform under the form of a public dedicated credit line from the Flemish government
- Investment capacity: overall objective of +/- 30 million € (pilot case as a start, to be upscaled)
- Investment horizon: 20 to 40 years
- Potential IP/Fund Manager: Flemish Government OR PMV
- Public Climate grant : as a capital grant (pilot case)
- Potential co-investors: Capital Markets / PMV



Financing products

IP financing product

(in development, upscaling after pilot)

- Soft loans (30 to 40 years) to the public entities via the IP (deferred payment, grace period during EPC-contract)

CFs4EE Financing products

(mobilized within the CFs4EE Financing Scheme)

- PMV (national promotional bank) support scheme for ESCO/(R)ESCOOP's via equity
- Forfeiting scheme via private banks to refinance ESCO/(R)ESCOOP through the purchase of EPC contract receivables
- Citizens can invest in rescops with equity
- Grants for capital

Grants & technical assistance

Describe if you intend to provide grants for capital, grants for technical assistance or grants for interest subsidies to the final beneficiaries through your CFs4EE Financing Scheme. Will these grants be integrated into the financing structure of your CFs4EE Financing Scheme or mobilized separately by the final recipients?

Grants for capital and technical assistance will be mobilized separately by the final recipients

Proposed funding and financing structure

Describe the funding and financing structure of your CFs4EE Financing Scheme. Detail the structure (e.g. risk-sharing loan arrangement, EE Fund, etc.) and its implementation pathway. Provide details about the co-investors that you intend to crowd-in at the level of the structure (potentially an IP structure). Give a first estimate of the level of funds you intend to leverage at the level of the structure. Provide details about the additional co-investors that you intend to crowd-in at the level of the projects. Give a first estimate of the level of funds you intend to leverage at the level of the structure. Explain and detail how citizen funding will be integrated to the funding and financing structure.

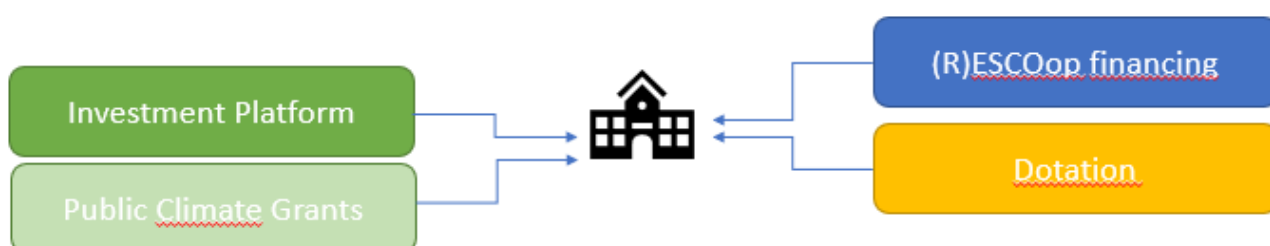
Not relevant in the pilot project phase yet, this will be (re)arranged with the lessons learned in the pilot projects by upscaling the pilot project in an IP.



2.3 STEP 3 – INSTITUTIONAL ARRANGEMENTS AND OPERATIONAL STRUCTURE

Legal and ownership structure of the CFs4EE Financing Scheme

Describe the proposed legal structure of the CFs4EE Financing Scheme and provide details on the body that will manage the fund allocated under the scheme and will be responsible for the implementation of the financing products.



- IP platform under the form of a public dedicated credit line from the Flemish government
- Investment capacity: overall objective of +/- 30 million € (pilot case as a start, to be upscaled)
- Investment horizon: 20 to 40 years
- Potential IP/Fund Manager: Flemish Government OR PMV
- Public Climate grant : as a capital grant (pilot case)
- Potential co-investors: Capital Markets / PMV

Governance structure

Describe the governance structure you intend to set-up for your CFs4EE Financing Scheme. Provide details on the governing bodies, their roles and responsibilities. Provide as much as details on the governance provisions or principles of the CFs4EE Financing Scheme, including monitoring and risk management procedures that will be applied to the operations of the scheme. Explain how it will ensure fiduciary and management standards. Provide a diagram illustrating the governance structure.

Partner	Role in the CFs4EE Financing Scheme	Present situation	Expected within 1-2 years	Expected up to 5 years	Evidence
EPC-facilitators	Project developer and procurement	(0-3) 2	(0-3) 2	(0-3) 2	Framework contracts
ESCO's RESCOOP's	Contractor Project implementator	(0-3) 2	(0-3) 2	(0-3) 2	Framework contracts Member of Steering Committee Belgian ESCO's (BELESCO)
Regional authority	Investor and political support	(0-3) 1	(0-3) 2	(0-3) 2	Capacity Grants



Fund Manager	Structuring and manage investment platform	1	1	2	
Installers	Implementation of construction and technical measures	(0-3) 1	(0-3) 1	(0-3) 1	Attending sector meetings (building sector)

Operational structure

Describe the operational structure you intend to set-up for your CFs4EE Financing Scheme. Provide details on the operational bodies, their roles and responsibilities and explain how the teams will work. Provide as much as details on the operational provisions of the CFs4EE Financing Scheme, including operational guidelines that will be applied to the operations of the scheme.

Phases	Key activities	Execution	Approval	Output
1. Project identification & acquisition	Identification and acquisition of suitable school buildings for EPC deep retrofit	PDU Beneficiaries	PDU Beneficiaries	Identification of potential EPC investment projects
2. Preliminary/ initial project screening	Identification of suitable buildings by screening information (masterplanning renovation works) and the collection of data for preliminary feasibility, performing preliminary feasibility	PDU Beneficiaries	PDU Beneficiaries	Preparation of initial project pipeline
3. Detailed project development/appraisal	Technical analysis and financial structuring	PDU	PDU and/or EPC facilitator (service provider) and project beneficiary	Decisions on further investment for each analysed building
4. Project Financial development/structuring	Assistance regarding financial development and structuring of investment projects, including providing advice on existing financing options, preparing a financing/investment plan, support in negotiation of terms	PDU, Fund manager (to be after upscaling)	PDU Flemish Government Project beneficiary	Technical and Financial preparation of each investment project



	with financial institutions and others and procurement of EPC-facilitator			
5. Project funding closing/approval	Final detailed analysis of each investment project necessary for ESCO / RESCOOP assignment and funding and financing approval	PDU, EPC-facilitator, Fund manager (to be after upscaling)	ESCO RESCOOP Project beneficiary Investor	Signature of formal decision to invest (or contract)
6. Project procurement/disbursement approval	Preparation and signature of financing and/or procurement contract	PDU ESCO / RESCOOP project beneficiary	PDU Project beneficiary EPC Facilitator	Signature of procurement contract
7. Project implementation/fund disbursement	Implementation of works, installation of EE measures	ESCO / RESCOOP	PDU Project beneficiary Investor	Installment of equipment and ongoing performance in operation
8. Project monitoring & follow up	Project monitoring and book-keeping	ESCO / RESCOOP Project beneficiary	PDU, EPC-facilitator (M&V), project beneficiary	Reports

2.4 STEP 4 – PROJECT DELIVERY PROCESS AND PARTNERSHIPS

Program Delivery Organization
Describe your Project Delivery Organization (Fund Manager or Financial Intermediary, Program Delivery Unit, Key Partners Organizations) and detail the operational procedures (tasks and responsibilities) between the involved bodies, including legal, financial, and operational relationships between the parties. Provide a diagram with the tasks, responsibilities, and relationships between the parties.
<ul style="list-style-type: none"> • PDU – Project Beneficiaries (facilitating model) • PDU – EPC Facilitator and ESCO RESCOOPS (Framework contract) • Project Beneficiaries – EPC Facilitator and ESCO RESCOOPS (contract) • PDU – Regional Government (assignment of Capacity Grants)



- ESCO – Financial institution (private banks) (equity, forfeiting)
- RECOOP – Citizens (equity)
- PDU – fund manager (to be, after upscaling) : project pipeline for investment

Operating delivery services

Describe and detail the operating services that will be offered by the Program Delivery Organization.

- Assistance to project identification & acquisition (PDU , project beneficiaries)
- Assistance to project assessment & development (PDU, EPC facilitator, project beneficiaries)
- Assistance to project financing development (PDU, EPC facilitator, fund manager (to be))
- Assistance to project procurement (PDU – EPC – facilitator, ESCO | RESCOOP)
- Assistance to project implementation (ESCO | RESCOOP)
- Assistance to Monitoring and Verification (PDU, ESCO – RESCOOP)

Key activities

Describe and detail the key activities for each of the bodies of your Project Delivery Organization (Fund Manager or Financial Intermediary, Program Delivery Unit, Key Partners Organizations).

- Assistance to project identification & acquisition
- Assistance to project assessment & development
- Assistance to project financing development
- Assistance to project procurement
- Assistance to project implementation
- Assistance to Monitoring and Verification

Key resources & operating costs

Describe and quantify the key resources requirements for each of the components of your Project Delivery Organization (Fund Manager or Financial Intermediary, Program Delivery Unit, Key Partners Organizations).

PDU

- Part of the cost of activities could be partly covered through CitizEE .
- In the further roll-out, also this part should be market based and paid by the beneficiary as a cost -covering remuneration towards VEB as PDU

EPC-facilitator, ESCO, RESCOOP

- Normal service fee to the EPC- facilitator, ESCO, RESCOOP for service and operations



- Upfront Capacity investment fee for deep retrofit EPC

Private investor, fund manager

- Interest, management fee, risk assurance

2.5 STEP 5 – INPUTS FOR FINANCIAL FORECASTS

Not applicable in this stage of the project



3 BUSINESS MODEL – VIPA (LITHUANIA)

3.1 STEP 1 – MARKET TO ADDRESS

Eligible building categories

Detail here the eligible building categories that will be covered by your investment program. Give an estimate of the total market volume that could be addressed by your investment program (e.g. number of buildings, number of square meters).

No building categories will be covered.

VIPA through CFs4EE investment program will finance solar power plants installment for the residential buildings.

Eligible projects, measures & packages of measures

Detail here the eligible projects that will be covered by your investment program. Description should include the type of eligible measures included in the projects and if applying the eligible packages of measures. Give an estimate of the volume of projects you want to cover in your investment program (e.g. number of projects, number of buildings, number of square meters and volume of investment per project/buildings/square meters) and provide details by measures and/or packages of measures.

Eligible project measures are solar power plants installment for the residential buildings and purchasing the part of solar power plant from the remote solar power park. Produced energy must be consumed for consumer needs.

It is estimated to finance 1 200 consumers.

Eligibility criteria & performance thresholds

Detail the set of eligibility criteria you intend to apply for selecting projects for funding, including the methodology of selection/identification and document your choice of eligibility criteria. These criteria can be based on five main categories:

- cost effectiveness such as Net Present Value, Energy Saved in relation to funding, Payback Period, project size, etc.;
- level of energy performance of the building such as building energy performance expressed in kWh/m² and compared to a threshold, Energy Performance Certificates with a specific grade to achieve, etc.;
- level of energy performance of technical systems (additional or not criteria used to define specific performance levels of technical systems such as heating systems, air conditioning systems, renewable energy systems, as well as specific building fabric components such as insulation and glazing);
- co-benefits such as economic impacts (e.g. jobs created), social impacts (e.g. energy poverty mitigation) and environmental impacts (e.g. use of environmental friendly buildings material);
- other requirements such as obligation to conduct an energy audit or to comply with specific local legal requirements.

Produced energy must be consumed for consumer needs.



Project implementation model

Define here the implementation model (EPC, ESC, SBC) you intend to use under your investment program. If more than one implementation model is to be used, detail for which type of buildings categories and/or eligible beneficiaries/final recipients you intend to use them.

N/A

Eligible Beneficiaries and Final Recipients

Detail here the eligible beneficiaries (who can benefit from the scheme) of the CFs4EE Financing Scheme and identify the eligible final recipients (who can be financed by the scheme). Give an estimate of the volume of beneficiaries and final recipients you intend to cover in your investment program. Precise if you intend to work with ESCOs and if your scheme is to support ESCO financing, EPC financing or ESC financing.

Consumers who want to build PV solar on the roof of their houses or to purchase required kw from the remote PV solar parks.

It is estimated to finance 1 200 consumers.

Description of standard projects/indicative pipeline

Detail here the typical standard project(s) that will be covered by your CFs4EE Financing Scheme. For each type of project, detail the investment measures foreseen and provide the financial characteristics of the project such as the level of investment required, the annual financial savings, the simple payback period, the energy savings over project life and the GHG emission reduction.

In accordance with statistical information, the average household consume 2 500 kwh per year. Assessing that 1 kw solar power plant produce 1 000 kwh per year, to satisfy such consumption needs 2,5 kw solar power plant should be installed.

The average price for one kw depends on the solar powerplant type. In remote solar power plant park you can by 1 kw for around 920-1 200 Eur, depending on the solar modal type (bifacial modals are more expensive but they can produce more energy), for installation on the roof 1 kw price may vary from 750-900 Eur.

Average payback period is about 6-7 years calculating with the state subsidy. Payback period without state subsidy increases to up to 8-10 years.

3.2 STEP 2 – INVESTMENT STRATEGY**Financing gap(s)**

Describe the financing gap you intend to overcome with your CFs4EE Financing Scheme. Detail to what extent it is the main issue preventing the realization of your investment program. Detail the key objective and the strategic rationale for the proposed CFs4EE Financing Scheme. Please, illustrate the gap for each standard project described in section 2.1 with an example with detailed figures.



The National Energy Independence Strategy provides that Lithuania aims to actively develop renewable energy sector and consistently increase the number of consumers using environmentally friendly technologies to account for 45% of the country's total consumption of final energy from renewable energy sources by 2030 and 80% in 2050.

According to the incentive funding demand assessment “Improving energy efficiency for economic operators and development of renewable energy sources”, in order to finance about 500,000 electricity consumers in Lithuania by 2030 who produce the necessary amount of energy for their self-consumption, it is necessary to invest over EUR 1,187 million euros.

Proposed financial products

Describe the financing product(s) you intend to offer to the final recipients (guarantees, loans, quasi-equity, equity) through your CFs4EE Financing Scheme. Detail the assumptions for such defined financing product(s), in relation with the financing gap(s) they cover (e.g. payback time too long, lack of subsidy, etc.). If you have several financing windows (by window, we mean a financing product targeting specific type of projects and/or final recipients), provide details for each window. Detail if you intend to apply flexible combinations between the proposed windows. Give a first indication of the required or target level of investment for each financing window and explain why you considered that allocation split in the future investment portfolio.

Loans through P2P platform operators for the solar power plants installment for the residential buildings and purchasing the part of solar power plant from the remote solar power park.

It should be noted that at the moment state provides subsidy for each installed Kw for around 323 Eur. This subsidy helps to reduce payback period for such investment.

Grants & technical assistance

Describe if you intend to provide grants for capital, grants for technical assistance or grants for interest subsidies to the final beneficiaries through your CFs4EE Financing Scheme. Will these grants be integrated into the financing structure of your CFs4EE Financing Scheme or mobilized separately by the final recipients?

There is a state subsidy in place for consumers who obtain solar power plant for their own needs. The state provides subsidy for each installed Kw for around 323 Eur/kw. This subsidy helps to reduce payback period for such investment.

Proposed funding and financing structure

Describe the funding and financing structure of your CFs4EE Financing Scheme. Detail the structure (e.g. risk-sharing loan arrangement, EE Fund, etc.) and its implementation pathway. Provide details about the co-investors that you intend to crowd-in at the level of the structure (potentially an IP structure). Give a first estimate of the level of funds you intend to leverage at the level of the structure. Provide details about the additional co-investors that you intend to crowd-in at the level of the projects. Give a first estimate of the level of funds you intend to leverage at the level of the structure. Explain and detail how citizen funding will be integrated to the funding and financing structure.



CFs4EE financing scheme will be funded through the Investment platform, which is established as limited partnership and managed by VIPA as general partner. Investment platform will issue a loan to P2P platform operators or invest directly into P2P platform. Investment or the loan will be channeled to consumers by the P2P platform operators to cover the cost of purchasing or installation of solar power plant.

Investment platform has equity investor and the loan from EIB, whereas at the level of CFs4EE financing scheme citizens funds will be attracted and P2P platform operators may co-invest at the level of final beneficiaries as well.

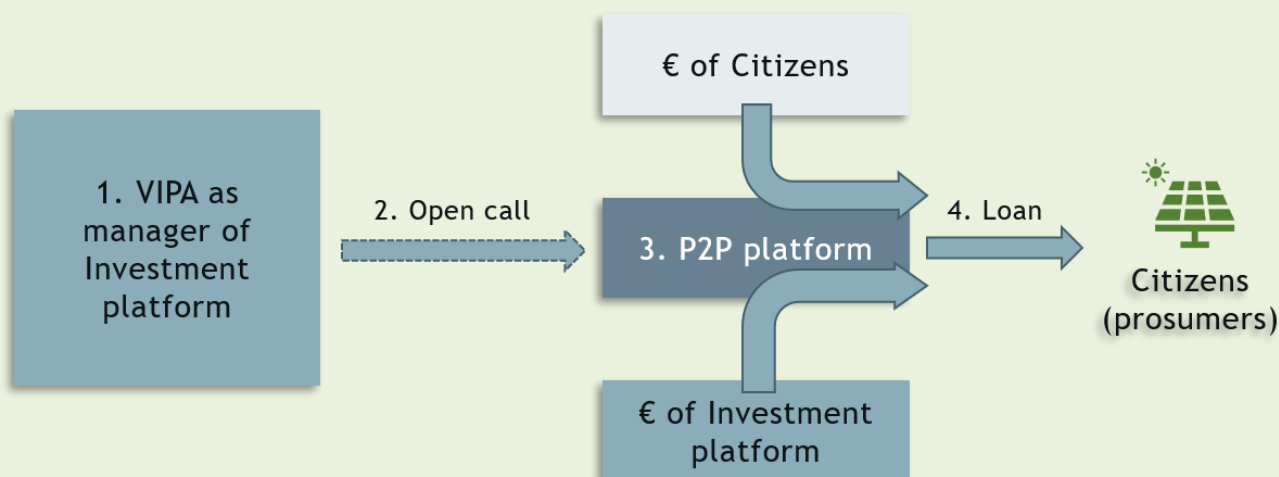
3.3 STEP 3 – INSTITUTIONAL ARRANGEMENTS AND OPERATIONAL STRUCTURE

Legal and ownership structure of the CFs4EE Financing Scheme

Describe the proposed legal structure of the CFs4EE Financing Scheme and provide details on the body that will manage the fund allocated under the scheme and will be responsible for the implementation of the financing products.

VIPA established an investment platform for financing the energy efficiency projects. The legal status of investment platform is under Law on limited partnership. VIPA runs the entity as general partner with unlimited liability. Investors can participate as limited partners whereas liability is limited up to investment amount.

Producing companies can receive loan from Investment platform in order to implement energy savings measures. Or ESCO's can receive a long-term loan to install their energy efficiency measures.



Governance structure

Describe the governance structure you intend to set-up for your CFs4EE Financing Scheme. Provide details on the governing bodies, their roles and responsibilities. Provide as much as details on the governance provisions or principles of the CFs4EE Financing Scheme, including monitoring and risk management procedures that will be applied to the operations of the scheme. Explain how it will ensure fiduciary and management standards. Provide a diagram illustrating the governance structure.

Investment platform is established as LPA. VIPA acts as general partner and equity investor – as limited partner. All the activities of Investment platform are carried out by VIPA employees.

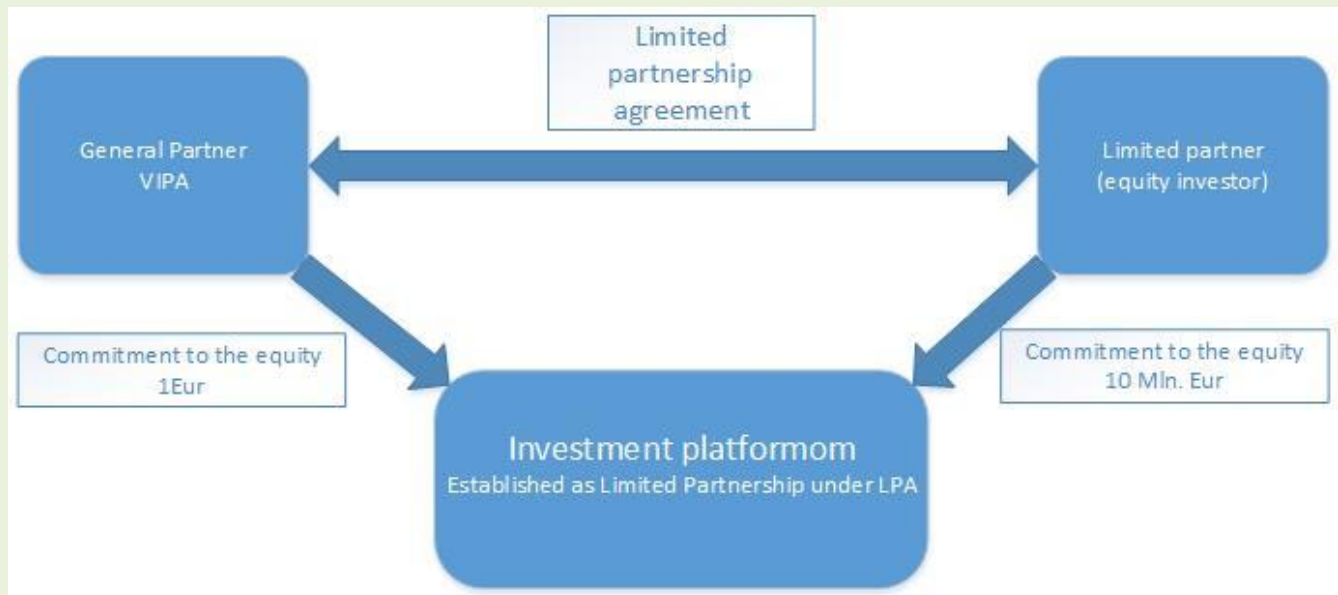


Risk management procedures will be performed by VIPA at the IP level and by the P2P platform operators at the level of CFs4EE as they will be responsible for the selection of eligible final beneficiaries and their credit risk assessment.

VIPA will launch the open call for the selection of P2P platform operators to implement CFs4EE financing scheme.

Project monitoring at the IP level is carried out by the fund manager (VIPA).

P2P platform operators provide reports to fund manager (VIPA) about issued loans



Operational structure

Describe the operational structure you intend to set-up for your CFs4EE Financing Scheme. Provide details on the operational bodies, their roles and responsibilities and explain how the teams will work. Provide as much as details on the operational provisions of the CFs4EE Financing Scheme, including operational guidelines that will be applied to the operations of the scheme.

CFs4EE financing scheme will be operated by P2P platform operators and managed by VIPA. P2P platform operators will work on their daily basis meaning that operation of CFs4EE financing scheme won't change their day-to-day business. **VIPA** (financial institution and NPI) acts **as a General Partner** of IP and is responsible for:

- performing risk management
- ensuring compliance
- providing staff, IT infrastructure and other resources
- attracting co-investors and leveraging funds
- promoting IP's activities



3.4 STEP 4 – PROJECT DELIVERY PROCESS AND PARTNERSHIPS

Program Delivery Organization

Describe your Project Delivery Organization (Fund Manager or Financial Intermediary, Program Delivery Unit, Key Partners Organizations) and detail the operational procedures (tasks and responsibilities) between the involved bodies, including legal, financial, and operational relationships between the parties. Provide a diagram with the tasks, responsibilities, and relationships between the parties.

Goal is to develop a regional CF4EE scheme to co-finance or finance energy efficiency and renewable energy projects. VIPA will select P2P platforms operators and perform their due diligence (risk assessment, financial capacities, etc.) and will assure control of the CFs4EE scheme management and implementation.

Operating delivery services

Describe and detail the operating services that will be offered by the Program Delivery Organization.

N/A

There is no need for the operating services in our case

Key activities

Describe and detail the key activities for each of the bodies of your Project Delivery Organization (Fund Manager or Financial Intermediary, Program Delivery Unit, Key Partners Organizations).

VIPA

Is in charge for project development and has full capacity to:

- launch open call to select P2P platform operators
- select P2P platforms operators and perform their due diligence (risk assessment, financial capacities, etc.)
- assure control of the CFs4EE scheme management and implementation

P2P platform operators

- provide consumer loans for prosumers
- perform financial assessments of prosumers
- enter into loan contracts with prosumers
- co-invest together with VIPA and citizens
- ensure loan eligibility
- perform monitoring of contracts
- manage loan repayments
- perform recovery process



- promote financing product
- report to VIPA

Key resources & operating costs

Describe and quantify the key resources requirements for each of the components of your Project Delivery Organization (Fund Manager or Financial Intermediary, Program Delivery Unit, Key Partners Organizations).

At the level of Investment platform operating cost are covered by the equity investors.

At the level of CFs4EE all the operating cost will be covered by the consumers who will pay contract fee for the P2P platform operator and monthly operational fee.

3.5 STEP 5 – INPUTS FOR FINANCIAL FORECASTS

Indicative investments and loans portfolio per loan term and funding rate (over the investment period)

Loan term		Avg. Project Investment Value	Estimated # of loans	Funding Rate
#	# years	euros	#	%
Term 1	2	2500€	300	20%
Term 2	3	2500€	400	20%
Term 3	5	2500€	400	20%
Term 4	7	2500€	100	20%

Indicative loan interest rates per loan term and risk category (over the investment period)

Risk cat./loan terms	Term 1	Term 2	Term 3	Term 4	Term 5
Loan portfolio					
Strong	3,50%	3,75%	4,00%	4,25%	0,00%
Good	4,50%	4,75%	5,00%	5,25%	0,00%
Satisfactory	5,50%	5,75%	6,00%	6,25%	0,00%
Weak	6,25%	6,50%	6,75%	7,00%	0,00%
Subordinated loan portfolio					
Strong	0,00%	0,00%	0,00%	0,00%	0,00%
Good	0,00%	0,00%	0,00%	0,00%	0,00%
Satisfactory	0,00%	0,00%	0,00%	0,00%	0,00%
Weak	0,00%	0,00%	0,00%	0,00%	0,00%

Indicative loan counts (# of loans) per loan term and risk category (over the investment period)

Risk cat./loan terms	Term 1	Term 2	Term 3	Term 4	Term 5
Loan portfolio					
Strong	50	50	50	30	0
Good	150	200	200	40	0
Satisfactory	100	100	100	20	0
Weak	0	50	50	10	0
Subordinated loan portfolio					
Strong	0	0	0	0	0
Good	0	0	0	0	0



Satisfactory	0	0	0	0	0
Weak	0	0	0	0	0

Indicative loans schedule per year and risk category (over the investment period)

Investment period	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Term 1						
Strong	5	15	10	10	10	0
Good	15	30	50	40	15	0
Satisfactory	0	15	25	20	40	0
Weak	0	0	0	0	0	0
Term 2						
Strong	5	15	10	10	10	0
Good	30	50	60	40	20	0
Satisfactory	0	15	25	20	40	0
Weak	0	15	25	10	0	0
Term 3						
Strong	5	15	10	10	10	0
Good	30	50	60	40	20	0
Satisfactory	0	15	25	20	40	0
Weak	0	15	25	10	0	0
Term 4						
Strong	5	5	10	5	5	0
Good	5	10	10	10	5	0
Satisfactory	0	5	5	5	5	0
Weak	0	3	3	4	0	0
Term 5						
Strong	0	0	0	0	0	0
Good	0	0	0	0	0	0
Satisfactory	0	0	0	0	0	0
Weak	0	0	0	0	0	0

Indicative subordinated loans schedule per year and risk category (over the investment period)

Investment period	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Term 1						
Strong	0	0	0	0	0	0
Good	0	0	0	0	0	0
Satisfactory	0	0	0	0	0	0
Weak	0	0	0	0	0	0
Term 2						
Strong	0	0	0	0	0	0
Good	0	0	0	0	0	0
Satisfactory	0	0	0	0	0	0
Weak	0	0	0	0	0	0
Term 3						
Strong	0	0	0	0	0	0
Good	0	0	0	0	0	0
Satisfactory	0	0	0	0	0	0



Weak	0	0	0	0	0	0
Term 4						
Strong	0	0	0	0	0	0
Good	0	0	0	0	0	0
Satisfactory	0	0	0	0	0	0
Weak	0	0	0	0	0	0
Term 5						
Strong	0	0	0	0	0	0
Good	0	0	0	0	0	0
Satisfactory	0	0	0	0	0	0
Weak	0	0	0	0	0	0

Indicative equity investments portfolio (over the investment period)

Project #	Holding period in years	Exit multiple on investment	Year 1	Year 2	Year 3	Year4	Year 5	Year 6
Project 1	0#	0x	0€	0€	0€	0€	0€	0€
Project 2	0#	0x	0€	0€	0€	0€	0€	0€
Project 3	0#	0x	0€	0€	0€	0€	0€	0€
Project 4	0#	0x	0€	0€	0€	0€	0€	0€

4 BUSINESS MODEL – REGEA (CROATIA)

4.1 STEP 1 – MARKET TO ADDRESS

Eligible building categories
Detail here the eligible building categories that will be covered by your investment program. Give an estimate of the total market volume that could be addressed by your investment program (e.g. number of buildings, number of square meters).
<p>The investment program will be focused on photovoltaic installations on buildings, with possible option to invest in electricity related energy efficiency measures in order to optimize the PV capacity. The following building categories will be covered by the investment program:</p> <ol style="list-style-type: none"> 1. Family houses integrated PV installation, Own investment by home owners or alternatively investment by private companies 2. PV installation integrated on public and commercial buildings, investment made by building owners or alternatively by private companies and sold directly to building. 3. Community owned electricity suppliers as PVs integrated on buildings 4. Energy efficiency measures related to electricity consumers in targeted buildings, in order to optimize the PV capacity <p>The estimated installed capacity and investment are shown in the table below:</p> <p>Table 1. Eligible building categories and investment volumes</p>



Building type	Number of buildings	Average PV capacity (kW)	Total PV capacity (MW)	Cost of investment (EUR/kW) with VAT	Investment volume (EUR) (VAT included)
Households	3000	5	15	800	12.000.000
Public, small	150	30	4,5	750	3.375.000
Public, medium	200	100	20	700	14.000.000
Public, large	30	500	15	650	9.750.000
Commercial, medium	100	250	25	700	17.500.000
Commercial, large	25	1000	25	650	16.250.000
Energy Efficiency, cumulative for all buildings					15.000.000
Total			104,5	697	87.875.000

Please note: REGEA is in the final phase of the contract signature for the ELENA/EIB project entitled PVMax, the main aim of the project (the focus of the ELENA technical assistance) is to prepare the necessary documentation (technical, legal, permits, other), analysis and overall framework and initiate the mentioned investments. At least part of the investments would be covered through an investment platform with citizen financing options, at this point the investment through the platform has been estimated at app. 20 mil eur.

Eligible projects, measures & packages of measures

Detail here the eligible projects that will be covered by your investment program. Description should include the type of eligible measures included in the projects and if applying the eligible packages of measures. Give an estimate of the volume of projects you want to cover in your investment program (e.g. number of projects, number of buildings, number of square meters and volume of investment per project/buildings/square meters) and provide details by measures and/or packages of measures.

The eligible projects will include photovoltaic installations on buildings, with possible option to invest in electricity related energy efficiency measures in order to optimize the PV capacity.

The table below presents additional details regarding the Investment Programme.

Table 2. Building area, roof area, average and total PV capacity per building category

Building type	Building average area (m ²)	Roof average area (m ²)	Total roof area (m ²)	Number of buildings	Average PV capacity (kW)	Total PV capacity (MW)	Total building area (m ²)
Households	150	25	75.000	3.000	5	15	450.000
Public, small	1.500	150	22.500	150	30	4,5	225.000
Public, medium	5.000	500	100.000	200	100	20	1.000.000



Public, large	1.5000	2.500	75.000	30	500	15	450.000
Commercial, medium	5.000	1.250	125.000	100	250	25	500.000
Commercial, large	20.000	5.000	125.000	25	1.000	25	500.000
TOTAL			522.500	3.505		104,5	3.125.000

Eligibility criteria & performance thresholds

Detail the set of eligibility criteria you intend to apply for selecting projects for funding, including the methodology of selection/identification and document your choice of eligibility criteria. These criteria can be based on five main categories:

- cost effectiveness such as Net Present Value, Energy Saved in relation to funding, Payback Period, project size, etc.;
- level of energy performance of the building such as building energy performance expressed in kWh/m2 and compared to a threshold, Energy Performance Certificates with a specific grade to achieve, etc.;
- level of energy performance of technical systems (additional or not criteria used to define specific performance levels of technical systems such as heating systems, air conditioning systems, renewable energy systems, as well as specific building fabric components such as insulation and glazing);
- co-benefits such as economic impacts (e.g. jobs created), social impacts (e.g. energy poverty mitigation) and environmental impacts (e.g. use of environmental friendly buildings material);
- other requirements such as obligation to conduct an energy audit or to comply with specific local legal requirements.

The main eligibility criteria will be the cost effectiveness of each PV project. A preliminary estimation of average feasibility (in terms of simple payback periods) for different building categories and PV capacity is shown in the table below.

Table 3. Main financial indicators per building category

Building type	Number of buildings	Average PV capacity (kW)	Total PV capacity (MW)	Cost of investment (EUR/kW) with VAT	Investment volume (EUR) VAT included (VAT excluded)	Existing average costs of electricity (EUR/kWh with VAT)	Average year production (kWh) per instalation	Average simple payback time (yrs)
Households	3000	5	15	800	12.000.000 (9.600.000)	0,15	5.500	4,96
Public, small	150	30	4,5	750	3.375.000 (2.700.000)	0,13	33.000	5,11
Public, medium	200	100	20	700	14.000.000 (11.200.000)	0,13	110.000	5,02
Public, large	30	500	15	650	9.750.000 (7.800.000)	0,12	550.000	4,92
Commercial, medium	100	250	25	700	17.500.000 (14.000.000)	0,12	275.000	5,42



Commercial, large	25	1000	25	650	16.250.000 (13.000.000)	0,11	1.100.000	5,54
Total PV			104,5	697	72.825.000 (58.300.000)			5,21

The threshold for PV project selection will be a payback period of at most 7 years.

Project implementation model

Define here the implementation model (EPC, ESC, SBC) you intend to use under your investment program. If more than one implementation model is to be used, detail for which type of buildings categories and/or eligible beneficiaries/final recipients you intend to use them.

The preliminary implementation models for the types of investment is provided below (investment source indicated in bold):

- Family houses integrated PV installation, own **investment by house owners** (assumed 50% equity, 50% debt), or alternatively developed and implemented as a package by private companies, **investment costs fully covered by private companies** (ESCO/ESC, utilities);
- Building integrated PV on public and commercial buildings, **investment made by building owners or alternatively by private companies** (ESCO/ESC), option to use of ESIF grants (if available) and bank loans (either building owner or ESCO), and electricity sold directly to building and/or network;
- Community owned electricity suppliers as PVs integrated on buildings – **investment in the form of energy cooperative (crowdinvesting)** (100% equity)
- Energy efficiency measures related to electricity consumers in targeted buildings, in order to optimize the PV capacity. **Investment made by building owners or by private companies within component 2. i.e. ESC/EPC type project.** (ESCO/EPC)

Eligible Beneficiaries and Final Recipients

Detail here the eligible beneficiaries (who can benefit from the scheme) of the CFs4EE Financing Scheme and identify the eligible final recipients (who can be financed by the scheme). Give an estimate of the volume of beneficiaries and final recipients you intend to cover in your investment program. Precise if you intend to work with ESCOs and if your scheme is to support ESCO financing, EPC financing or ESC financing.

The eligible beneficiaries are building owners for various building categories. After the establishment and operation of the investment platform, in the second phase it could be possible to include ESCOs as beneficiaries/recipients. The overall financial scheme should thus be flexible enough to cover both categories.

The citizen financing part will be included through two main mechanisms: crowdfunding and/or energy cooperatives/communities.

The estimated investment volume per building category is provided in the tables above.

Description of standard projects/indicative pipeline



Detail here the typical standard project(s) that will be covered by your CFs4EE Financing Scheme. For each type of project, detail the investment measures foreseen and provide the financial characteristics of the project such as the level of investment required, the annual financial savings, the simple payback period, the energy savings over project life and the GHG emission reduction.

The typical standard project to be covered is PV installation on various building categories, as described above. In addition, optional investment in electricity energy efficiency measures (HVAC, energy management systems, indoor lighting) will be targeted in order to optimize the PV capacity.

The level of investment depends on the building category and is provided in tables 1. and 2. above.

The simple payback period and energy production over project life is provided in table 3. above. Based on data from the EU Observer Photovoltaic Barometer 2019, the total installed PV capacity in Croatia at the end of 2018 was 61 MW, or app. 15 W per capita. Compared to other EU countries (for example, Germany 546 W per capita, Belgium 373 W per capita, Italy 332 W per capita, Slovenia 130 W per capita) Croatia ranks among the lowest per capita installation, despite having considerable solar potential due to geographical location. Data from the JRC PV Status Report 2019 indicate that app. 2 MW of additional PV capacity was added in 2018, and in 2019 the national electric utility (HEP) announced its plan to build four PV plants with total capacity of 11.3 MW and to increase its solar PV capacity to 350 MW by 2030.

Even though economic and financial calculations indicate that PV installations can be feasible even without any subsidies (but with the removal of existing legal and organisational barriers), the progress of PV capacity installation in Croatia is very slow compared to other EU countries. This has been identified as a market failure.

The identified barriers which contribute to the described situation include legal, organizational and financial issues, while the planned financing scheme will address only a part of the barriers (related to the financing gap).

4.2 STEP 2 – INVESTMENT STRATEGY

Financing gap(s)

Describe the financing gap you intend to overcome with your CFs4EE Financing Scheme. Detail to what extent it is the main issue preventing the realization of your investment program. Detail the key objective and the strategic rationale for the proposed CFs4EE Financing Scheme. Please, illustrate the gap for each standard project described in section 2.1 with an example with detailed figures.

Based on data from the *EU Observer Photovoltaic Barometer 2019*, the total installed PV capacity in Croatia at the end of 2018 was 61 MW, or app. 15 W per capita. Compared to other EU countries (for example, Germany 546 W per capita, Belgium 373 W per capita, Italy 332 W per capita, Slovenia 130 W per capita) Croatia ranks among the lowest per capita installation, despite having considerable solar potential due to geographical location. Data from the *JRC PV Status Report 2019* indicate that app. 2 MW of additional PV capacity was added in 2018, and in 2019 the national electric utility (HEP) announced its plan to build four PV plants with total capacity of 11.3 MW and to increase its solar PV capacity to 350 MW by 2030.

Even though economic and financial calculations indicate that PV installations can be feasible even without any subsidies (but with the removal of existing legal and organisational barriers), the progress of PV capacity installation in Croatia is very slow compared to other EU countries. This has been identified as a market failure.

The identified barriers which contribute to the described situation include legal, organizational and financial issues, while the planned financing scheme will address only a part of the barriers (related to the financing gap).



Proposed financial products

Describe the financing product(s) you intend to offer to the final recipients (guarantees, loans, quasi-equity, equity) through your CFs4EE Financing Scheme. Detail the assumptions for such defined financing product(s), in relation with the financing gap(s) they cover (e.g. payback time too long, lack of subsidy, etc.). If you have several financing windows (by window, we mean a financing product targeting specific type of projects and/or final recipients), provide details for each window. Detail if you intend to apply flexible combinations between the proposed windows. Give a first indication of the required or target level of investment for each financing window and explain why you considered that allocation split in the future investment portfolio.

The financial product planned to be initially offered includes loans of different maturities, where the collateral for the loans will be the PV installation itself. In the Croatian market there currently are no such loans, where all available loans require an additional collateral. The selection of the financial product is based on the needs of the beneficiaries/recipients (i.e. building owners) and thus it covers the identified financing gap (lack of specific loans for PV installations with collateral being the installation itself).

After the establishment of the investment platform, it might be possible to extend the financing products to include guarantees targeting ESCOs as beneficiaries/recipients. However, at this time this has not been identified as the primary financing gap.

Grants & technical assistance

Describe if you intend to provide grants for capital, grants for technical assistance or grants for interest subsidies to the final beneficiaries through your CFs4EE Financing Scheme. Will these grants be integrated into the financing structure of your CFs4EE Financing Scheme or mobilized separately by the final recipients?

Based on preliminary calculations of financial feasibility, there is no need to provide grants for investments for PV installations. However, the main barrier to a widespread achievement of PV installations on buildings is the prescribed purchase price for all building integrated PV electricity sold to the grid, which is considerably lower than the standard electricity price for consumers (bought from the grid). There is a different price for households (which is 90% of the electricity price from the grid for any surplus electricity) and for industry (basically all building integrated PV installations except households, electricity price is prescribed by a formula and in practice it can get as low as 50% or even lower than the electricity price from the grid). In practice this means that the only option in order for building integrated PV systems to be feasible is to consume all produced electricity at the point of production (i.e. by the building). The other legal barrier is that even if all electricity produced by the building integrated PV systems is consumed by the building, it still needs approval from electricity supplier company and this takes time.

In that regard there is a need for grants for technical assistance which would support the identification, preparation and development of building integrated PV investment projects. However, providing such grants from the investment platform would very probably be too inefficient in terms of financial feasibility of the platform itself. As already mentioned, due to these reasons REGEA has applied to the ELENA/EIB fund specifically for this technical assistance and the project (PVMax) has been approved, the contract signature is expected in June 2021.

Proposed funding and financing structure

Describe the funding and financing structure of your CFs4EE Financing Scheme. Detail the structure (e.g. risk-sharing loan arrangement, EE Fund, etc.) and its implementation pathway. Provide details about the co-investors



that you intend to crowd-in at the level of the structure (potentially an IP structure). Give a first estimate of the level of funds you intend to leverage at the level of the structure. Provide details about the additional co-investors that you intend to crowd-in at the level of the projects. Give a first estimate of the level of funds you intend to leverage at the level of the structure. Explain and detail how citizen funding will be integrated to the funding and financing structure.

The funding and financing structure of the financing scheme is based on two contributions:

- Bank contribution, this could be either HBOR (Croatian Bank for Reconstruction and Development) or a commercial bank;
- Own capital from citizens, either in the form of crowdfunding (crowdinvesting) or through an energy cooperative/community

A first estimate of the level of funds is provided below:

- Bank contribution: 15 million eur
- Citizen contribution: 10 million eur

The citizen contribution could be crowded-in either at the level of each individual project (which is more applicable in the case of an energy cooperative/community) or at the level of structure (more applicable for crowdinvesting). The estimate of the distribution of the citizen contribution per each level (project vs structure) will be possible only after establishing a solid project pipeline, for which technical assistance is needed (and which is planned within the mentioned ELENA project).

4.3 STEP 3 – INSTITUTIONAL ARRANGEMENTS AND OPERATIONAL STRUCTURE

Legal and ownership structure of the CFs4EE Financing Scheme

Describe the proposed legal structure of the CFs4EE Financing Scheme and provide details on the body that will manage the fund allocated under the scheme and will be responsible for the implementation of the financing products.

The investment platform could be established either by a commercial bank operating in Croatia or by HBOR (Croatian Bank for Reconstruction and Development). The management of the platform will be performed by a body appointed by the entity which established the platform and will include a professional fund manager.

For a period of over a year, REGEA has been carrying out consultations and facilitation activities regarding the establishment of the investment platform with representatives of several banks in Croatia, including Zagrebačka banka (the largest commercial bank operating in Croatia) and HBOR. However, up to this point it was not possible to obtain a commitment on establishing a separate investment platform. For example, Zagrebačka banka is more interested in developing specific investment products targeting building integrated PV investments as part of their portfolio of investment products, and not as a separate investment platform.

Governance structure

Describe the governance structure you intend to set-up for your CFs4EE Financing Scheme. Provide details on the governing bodies, their roles and responsibilities. Provide as much as details on the governance provisions or principles of the CFs4EE Financing Scheme, including monitoring and risk management procedures that will be



applied to the operations of the scheme. Explain how it will ensure fiduciary and management standards. Provide a diagram illustrating the governance structure.

At this point only a general description of the governance structure can be provided.

The selection of the appropriate governance structure depends on the main functions of the governing bodies, including:

- setting the investment strategy and policy of the investment platform,
- hiring the Fund Manager or the Financial Intermediary,
- establishing the overall criteria for selecting projects,
- approving the annual business plans and budgets formulated by the management team,
- preparing and submitting an annual financial report to the co-investors,
- assuring that the funds of the Investment Platform are operated in compliance with the Public Authority objectives.

In that regard, the governance structure should include the following bodies, with indicated main responsibilities:

- Co-investors and platform sponsors
 - Establish the investment needs, the sectorial and geographical focus, the business case, the sources of funding, the co-financing or risk-sharing agreements, decision-making rules.
 - Decide on the risk/return profile, the remuneration criteria for the investors, and the eligible entities which can propose projects to the Platform and the Investment Platform's internal project selection process.
 - Provide part of the initial funding for the Investment Platform's activities.
- Program Management Unit (PMU)
 - Provides advisory services regarding the financing scheme investment program.
 - Manages the monitoring and reporting of the investment program progress to the program authority.
- Supervisory Board (SB)
 - Provides advisory services to the co-investors regarding the Investment Platform financial performance and its objectives including non-financial returns; commitment and deployment milestones.
 - Manages the financial monitoring and reporting of the Investment Platform operations to the co-investors.
 - Appoints the Financial Intermediary or the Fund Manager through an adequate selection process, and decide on its remuneration, which should be performance- based and ensure alignment of interests.
- Investment Committee (IC)
 - Advises the Financial Intermediary or the Fund Manager on investment decisions or takes investment decisions based on the Investment Platform's internal project selection process.



Operational structure

Describe the operational structure you intend to set-up for your CFs4EE Financing Scheme. Provide details on the operational bodies, their roles and responsibilities and explain how the teams will work. Provide as much as details on the operational provisions of the CFs4EE Financing Scheme, including operational guidelines that will be applied to the operations of the scheme.

At this point only a general description of the operational structure can be provided.

The following key points need to be addressed when considering the operational structure:

- to what extent there is a need to offer project development assistance (PDA) to the beneficiaries and/or the final recipients,
- whether it should be internal to the Fund Manager or under a separate organization such as a Project Delivery Unit (PDU).

As already mentioned, REGEA has successfully applied to ELENA funding to ensure technical and project development assistance for building integrated PV projects, and this should cover a large part of the PV investment projects to be financed through the investment platform. However, the ELENA project is not focused exclusively on investment in PV through and investment platform with citizen financing option but encompasses all possible means of achieving the targeted investment. In that regard the operational structure should include a project development unit (PDU) flexible enough to integrate investment projects prepared within the ELENA facility as well as those prepared outside it.

4.4 STEP 4 – PROJECT DELIVERY PROCESS AND PARTNERSHIPS

Program Delivery Organization

Describe your Project Delivery Organization (Fund Manager or Financial Intermediary, Program Delivery Unit, Key Partners Organizations) and detail the operational procedures (tasks and responsibilities) between the involved bodies, including legal, financial, and operational relationships between the parties. Provide a diagram with the tasks, responsibilities, and relationships between the parties.

The project delivery organization includes the following entities with indicated responsibilities:

- Project Delivery Unit (PDU)
 - Project pipeline development
 - Project assessment
 - Project technical development
 - Project financial development and structuring
- Fund manager
 - Project procurement management
 - Project coordination of works
 - Project monitoring and follow-up



Key partners organizations with indicate roles include:

- Financial institutions,
 - Provider of equity/capital for investment;
 - Potential establishment of investment platform
- Private investors,
 - Investors in PV projects (including energy cooperatives and similar entities) with citizen financing option
- Energy auditors/project designers,
 - Providers of technical expertise and project technical development
- Energy service providers,
 - Provision and installation of PV equipment
- Local, regional and national authorities.
 - Political and administrative support

Operating delivery services

Describe and detail the operating services that will be offered by the Program Delivery Organization.

The operating services which will be offered by the Program Delivery Organization include the following, with indicated objective and intervention model:

- Development of project pipeline
 - The objectives are to identify potential PV investment projects and prepare a project pipeline
 - The intervention model with the beneficiaries/final recipients for this service should be a facilitation model where the PDU/Fund Manager provide assistance only. Part of the cost of activities could be covered through CitizEE or other EU funded projects, part should be market based.
- Assessment of pipeline of projects
 - The objectives are to assess identified potential PV investment projects (project pipeline) in order to facilitate decision on investment
 - The intervention model with the beneficiaries/final recipients for this service should be a facilitation model where the PDU/Fund Manager provide assistance only. Part of the cost of activities could be covered through CitizEE or other EU funded projects, part should be market based
- Technical development of projects
 - The objectives are to technically prepare identified potential PV investment projects identified as promising in previous phases
 - The intervention model with the beneficiaries/final recipients for this service should be a facilitation model where the PDU/Fund Manager provide assistance only. Part of the cost of



activities could be covered through CitizEE or other EU funded projects, part should be market based

- Financial development & structuring of projects
 - The objectives are to financially prepare identified potential PV investment projects identified as promising in previous phases.
 - The intervention model with the beneficiaries/final recipients for this service should be a facilitation model where the PDU/Fund Manager provide assistance only. Part of the cost of activities could be covered through CitizEE or other EU funded projects, part should be market based

Key activities

Describe and detail the key activities for each of the bodies of your Project Delivery Organization (Fund Manager or Financial Intermediary, Program Delivery Unit, Key Partners Organizations).

The key activities for the Project Delivery Organization are the following, grouped per each delivery service:

- Development of project pipeline
 - Activities include screening of buildings (public, commercial, residential) from available building databases, identification of suitable buildings (based on roof area and current electricity consumption), collection of data for preliminary feasibility, performing preliminary feasibility
- Assessment of pipeline of projects
 - Activities include technical analysis (estimation/calculation of roof statics, estimation/calculation of PV capacity and productivity, analysis of storage options) and financial analysis (estimation of costs, revenues, cash-flow).
- Technical development of projects
 - Activities include technical expertise and consultancy related to detailed project development, which can include building inspection, energy audits and quotation services for the works
- Financial development & structuring of projects
 - Activities include providing assistance regarding financial development and structuring of investment projects, including providing advice on existing financing options, preparing a financing/investment plan, support in negotiation of terms with financial institutions and others.

Key resources & operating costs

Describe and quantify the key resources requirements for each of the components of your Project Delivery Organization (Fund Manager or Financial Intermediary, Program Delivery Unit, Key Partners Organizations).

The key resources and operating costs for the Project Delivery Organization are the following, grouped per each delivery service:

- Development of project pipeline



- Cost estimation is between 250 and 750 eur per building (depending on building area and complexity)
- Assessment of pipeline of projects
 - Cost estimation is between 500 and 1.500 eur per building (depending on building area and complexity).
- Technical development of projects
 - Cost estimation is between 2.000 and 4.000 eur per building (depending on building area and complexity)
- Financial development & structuring of projects
 - Cost estimation is between 1.000 and 2.000 eur per building (depending on building area and complexity)

4.5 STEP 5 – INPUTS FOR FINANCIAL FORECASTS

Indicative investments and loans portfolio per loan term and funding rate (over the investment period)

Loan term		Avg. Project Investment Value	Estimated # of loans	Funding Rate
#	# years	euros	#	%
Term 1	10	5.000 €	1.840	100 %
Term 2	15	5.000 €	2.000	100 %
Term 3	#	€	#	%
Term 4	#	€	#	%
Term 5	#	€	#	%

Indicative loan interest rates per loan term and risk category (over the investment period)

Risk cat./loan terms	Term 1	Term 2	Term 3	Term 4	Term 5
Loan portfolio					
Strong	3 %	3 %	%	%	%
Good	4 %	4 %	%	%	%
Satisfactory	5 %	5 %	%	%	%
Weak	N/A	N/A	%	%	%
Subordinated loan portfolio					
Strong	%	%	%	%	%
Good	%	%	%	%	%
Satisfactory	%	%	%	%	%
Weak	%	%	%	%	%

Indicative loan counts (# of loans) per loan term and risk category (over the investment period)

Risk cat./loan terms	Term 1	Term 2	Term 3	Term 4	Term 5
Loan portfolio					
Strong	500	420	#	#	#
Good	1000	1000	#	#	#
Satisfactory	500	500	#	#	#
Weak	#	#	#	#	#
Subordinated loan portfolio					
Strong	#	#	#	#	#



Good	#	#	#	#	#
Satisfactory	#	#	#	#	#
Weak	#	#	#	#	#

Indicative loans schedule per year and risk category (over the investment period)

Investment period	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Term 1						
Strong	100	100	150	150		0
Good	100	150	150	200	200	200
Satisfactory	50	100	100	100	100	50
Weak	#	#	#	#	#	#
Term 2						
Strong	75	75	100	100	70	
Good	100	150	150	200	200	200
Satisfactory	50	100	100	100	100	50
Weak	#	#	#	#	#	#
Term 3						
Strong	#	#	#	#	#	#
Good	#	#	#	#	#	#
Satisfactory	#	#	#	#	#	#
Weak	#	#	#	#	#	#
Term 4						
Strong	#	#	#	#	#	#
Good	#	#	#	#	#	#
Satisfactory	#	#	#	#	#	#
Weak	#	#	#	#	#	#
Term 5						
Strong	#	#	#	#	#	#
Good	#	#	#	#	#	#
Satisfactory	#	#	#	#	#	#
Weak	#	#	#	#	#	#

Indicative subordinated loans schedule per year and risk category (over the investment period)

Investment period	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Term 1						
Strong	#	#	#	#	#	#
Good	#	#	#	#	#	#
Satisfactory	#	#	#	#	#	#
Weak	#	#	#	#	#	#
Term 2						
Strong	#	#	#	#	#	#
Good	#	#	#	#	#	#
Satisfactory	#	#	#	#	#	#
Weak	#	#	#	#	#	#
Term 3						
Strong	#	#	#	#	#	#
Good	#	#	#	#	#	#



Satisfactory	#	#	#	#	#	#
Weak	#	#	#	#	#	#
Term 4						
Strong	#	#	#	#	#	#
Good	#	#	#	#	#	#
Satisfactory	#	#	#	#	#	#
Weak	#	#	#	#	#	#
Term 5						
Strong	#	#	#	#	#	#
Good	#	#	#	#	#	#
Satisfactory	#	#	#	#	#	#
Weak	#	#	#	#	#	#

Indicative equity investments portfolio (over the investment period)

Project #	Holding period in years	Exit multiple on investment	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Project 1	#	#, #x	€	€	€	€	€	€
Project 2	#	#, #x	€	€	€	€	€	€
Project 3	#	#, #x	€	€	€	€	€	€
Project 4	#	#, #x	€	€	€	€	€	€
...	#	#, #x	€	€	€	€	€	€

5 BUSINESS MODEL – GOPARITY (PORTUGAL)

5.1 STEP 1 – MARKET TO ADDRESS

Eligible building categories											
<p>Detail here the eligible building categories that will be covered by your investment program. Give an estimate of the total market volume that could be addressed by your investment program (e.g. number of buildings, number of square meters).</p>											
<p>Main target category will focus on non-residential buildings.</p> <ul style="list-style-type: none"> Public buildings Social buildings (IPSS) Commercial buildings (SMEs). <p>Available data is scarce and with poor quality. The market proxy we have been using is based on BundleNext and GoParity pipeline projects. An estimate in terms of potential market is given below.</p> <table border="1"> <thead> <tr> <th>Entity</th> <th>Buildings (#)</th> <th>Total surface (m2)</th> </tr> </thead> <tbody> <tr> <td>Public entities</td> <td>392</td> <td>338 631</td> </tr> <tr> <td>Social entities</td> <td>303</td> <td>75 651</td> </tr> </tbody> </table>			Entity	Buildings (#)	Total surface (m2)	Public entities	392	338 631	Social entities	303	75 651
Entity	Buildings (#)	Total surface (m2)									
Public entities	392	338 631									
Social entities	303	75 651									



SMEs	609	259 488	
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Eligible projects, measures & packages of measures

Detail here the eligible projects that will be covered by your investment program. Description should include the type of eligible measures included in the projects and if applying the eligible packages of measures. Give an estimate of the volume of projects you want to cover in your investment program (e.g. number of projects, number of buildings, number of square meters and volume of investment per project/buildings/square meters) and provide details by measures and/or packages of measures.

Examples, not exhaustive:

- RES power and thermal energy generation
- Indoor Lighting LED
- Public lighting system optimization
- AVAC
- Improvements to heat sources and distribution systems
- Thermal insulation
- Other energy end-use applications including energy management control systems, power factor correction measures, air compressors and fuel switching.

Eligibility criteria & performance thresholds

Detail the set of eligibility criteria you intend to apply for selecting projects for funding, including the methodology of selection/identification and document your choice of eligibility criteria. These criteria can be based on five main categories:

- cost effectiveness such as Net Present Value, Energy Saved in relation to funding, Payback Period, project size, etc.;
- level of energy performance of the building such as building energy performance expressed in kWh/m² and compared to a threshold, Energy Performance Certificates with a specific grade to achieve, etc.;
- level of energy performance of technical systems (additional or not criteria used to define specific performance levels of technical systems such as heating systems, air conditioning systems, renewable energy systems, as well as specific building fabric components such as insulation and glazing);
- co-benefits such as economic impacts (e.g. jobs created), social impacts (e.g. energy poverty mitigation) and environmental impacts (e.g. use of environmental friendly buildings material);
- other requirements such as obligation to conduct an energy audit or to comply with specific local legal requirements.

Indicative eligible projects targeting at least a 20% reduction in energy consumption and focused on Single Energy measures.



Project implementation model

Define here the implementation model (EPC, ESC, SBC) you intend to use under your investment program. If more than one implementation model is to be used, detail for which type of buildings categories and/or eligible beneficiaries/final recipients you intend to use them.

To use different implementation models according to the type of projects and final beneficiaries/recipients. Focused on SBC but complementing with EPC and ESC models when applicable. Depending on the type of intervention, different mix of project implementation models might apply to the same beneficiary (ex. ESC/EPC model for the PV/lightning part; SBC for thermal insulation)

SBC – Public and private entities, namely municipalities, hospitals, universities, social institutions, SMEs, condominiums and others.

EPC and ESC – mainly through ESCO with final beneficiaries being public and private entities, namely municipalities, hospitals, universities, social institutions, SMEs, condominiums and others. PV and lightning systems are more probable to be implemented on this model.

Eligible Beneficiaries and Final Recipients

Detail here the eligible beneficiaries (who can benefit from the scheme) of the CFs4EE Financing Scheme and identify the eligible final recipients (who can be financed by the scheme). Give an estimate of the volume of beneficiaries and final recipients you intend to cover in your investment program. Precise if you intend to work with ESCOs and if your scheme is to support ESCO financing, EPC financing or ESC financing.

Eligible beneficiaries: Public and private entities, namely municipalities, hospitals, universities, social institutions, SMEs, condominiums and residents.

Eligible recipients: Public and private entities, namely municipalities, hospitals, universities, social institutions, SMEs, condominiums. The concept is that the mechanism will be only accessible to legal entities, notwithstanding a direct impact on residents as beneficiaries when referring to public entities as final recipients for social housing or condominiums for residential housing.

We intend to work with ESCOs and support ESCO financing in the form of loans or equity. We also intend to work with EPC/ESC financing when directly funding the final beneficiary (to clarify, ESCO financing when ESCO assumes the investment on EPC/ESC projects; EPC/ESC financing when the final beneficiary assumes the investment).

Description of standard projects/indicative pipeline

Detail here the typical standard project(s) that will be covered by your CFs4EE Financing Scheme. For each type of project, detail the investment measures foreseen and provide the financial characteristics of the project such as the level of investment required, the annual financial savings, the simple payback period, the energy savings over project life and the GHG emission reduction.

Below examples of typical standard projects.



<i>Type of investment</i>	<i>Total surface (m2)</i>	<i>Energy savings [%]</i>	<i>Renewable energy production [MWh/year]</i>	<i>Renewable energy production [MWh/year]</i>	<i>Payback time</i>	<i>Energy investment costs [k€]</i>
Lighting, Photovoltaic system, Envelope, Energy Management System	1 837,74	63,1%	397,575	993,938	6,2	454,380
Acclimatization system, lighting and PV System	1 144,00	25,8%	250,284	625,709	6,2	563,317
Photovoltaic Solar Power Plant	451,76	13,5%	330,000	825,000	6,1	250,000
Lighting system, Heating systems and self-consumption photovoltaic systems	664,80	47,7%	167,178	417,944	6,0	277,894

5.2 STEP 2 – INVESTMENT STRATEGY

Financing gap(s)

Describe the financing gap you intend to overcome with your CFs4EE Financing Scheme. Detail to what extent it is the main issue preventing the realization of your investment program. Detail the key objective and the strategic rationale for the proposed CFs4EE Financing Scheme. Please, illustrate the gap for each standard project described in section 2.1 with an example with detailed figures.

Limited access to commercial finance - banking system with a risk aversion in general and more focused on the analysis of the business of the promoter and not of the project. Limited technical expertise for these kind of projects and limited financial solution for longer tenures.

Limited balance sheet/borrowing capacity – a relevant segment of public and private entities still present high levels of indebtedness, so they are more receptive to off-balance sheet solutions in the ESCO model.

The typical social institution has limited access to commercial finance because of the focus on for profit from the major banking players.

The typical SME has limited access to commercial finance because they typically present high levels of indebtedness and low levels of profitability.

The typical public entity has the majority of its investments pending on the availability of public grants complemented with other sources of funding.

Proposed financial products

Describe the financing product(s) you intend to offer to the final recipients (guarantees, loans, quasi-equity, equity) through your CFs4EE Financing Scheme. Detail the assumptions for such defined financing product(s), in relation with the financing gap(s) they cover (e.g. payback time too long, lack of subsidy, etc.). If you have several financing windows (by window, we mean a financing product targeting specific type of projects and/or final recipients), provide details for each window. Detail if you intend to apply flexible combinations between the proposed



windows. Give a first indication of the required or target level of investment for each financing window and explain why you considered that allocation split in the future investment portfolio.

Loans with longer maturities on a project/bundle base (project holders as final beneficiaries).

Equity for ESCOs, in order to increase their project development capacity, especially for the public administration projects. Support of the off-balance sheet investment need in a relevant segment of the final beneficiaries (high debt levels)

Grants & technical assistance

Describe if you intend to provide grants for capital, grants for technical assistance or grants for interest subsidies to the final beneficiaries through your CFs4EE Financing Scheme. Will these grants be integrated into the financing structure of your CFs4EE Financing Scheme or mobilized separately by the final recipients?

n.a.

Proposed funding and financing structure

Describe the funding and financing structure of your CFs4EE Financing Scheme. Detail the structure (e.g. risk-sharing loan arrangement, EE Fund, etc.) and its implementation pathway. Provide details about the co-investors that you intend to crowd-in at the level of the structure (potentially an IP structure). Give a first estimate of the level of funds you intend to leverage at the level of the structure. Provide details about the additional co-investors that you intend to crowd-in at the level of the projects. Give a first estimate of the level of funds you intend to leverage at the level of the structure. Explain and detail how citizen funding will be integrated to the funding and financing structure.

We have been negotiating with a local fund manager (Grosvenor) the creation of a funding structure inside a broader investment fund being set up for the energy transition. At the same time we initiated conversations with another investment fund (BlueCrow) to co-invest at the project level. We have investment intentions from both and the final structure might evolve from the initial one of a subfund with Grosvenor as a sponsor.

In the end our approach for the CFs4EE Financing Scheme would be for a energy efficiency funding structure with partnering between Grosvenor, BlueCrow and GoParity as co-investors and with the potential to mobilize a total of 20M€ in funds.

5.3 STEP 3 – INSTITUTIONAL ARRANGEMENTS AND OPERATIONAL STRUCTURE

Legal and ownership structure of the CFs4EE Financing Scheme

Describe the proposed legal structure of the CFs4EE Financing Scheme and provide details on the body that will manage the fund allocated under the scheme and will be responsible for the implementation of the financing products.

The approach has been to negotiate a subfund for energy efficiency inside a broader energy transition fund that Grosvenor is setting up. We are still negotiating the legal structure on how to set up the scheme. The implementation of the financial products will be the responsibility of Grosvenor and GoParity.



Governance structure

Describe the governance structure you intend to set-up for your CFs4EE Financing Scheme. Provide details on the governing bodies, their roles and responsibilities. Provide as much as details on the governance provisions or principles of the CFs4EE Financing Scheme, including monitoring and risk management procedures that will be applied to the operations of the scheme. Explain how it will ensure fiduciary and management standards. Provide a diagram illustrating the governance structure.

We don't have a detailed description at this stage, considering we have yet so stabilize the final legal structure.

Operational structure

Describe the operational structure you intend to set-up for your CFs4EE Financing Scheme. Provide details on the operational bodies, their roles and responsibilities and explain how the teams will work. Provide as much as details on the operational provisions of the CFs4EE Financing Scheme, including operational guidelines that will be applied to the operations of the scheme.

We don't have a detailed description at this stage, considering we have yet so stabilize the final legal structure.

5.4 STEP 4 – PROJECT DELIVERY PROCESS AND PARTNERSHIPS

Program Delivery Organization

Describe your Project Delivery Organization (Fund Manager or Financial Intermediary, Program Delivery Unit, Key Partners Organizations) and detail the operational procedures (tasks and responsibilities) between the involved bodies, including legal, financial, and operational relationships between the parties. Provide a diagram with the tasks, responsibilities, and relationships between the parties.

- The Project Delivery Organization should include the following (indicated tasks and responsibilities):
- Project Delivery Unit (preparation of project pipeline, project assessment, project technical development, project financial development & structuring) – BundleNext, Grosvenor and GoParity;
- Fund Manager (project funding approval, project procurement/disbursing approval) – Grosvenor and GoParity;
- Key Partners Organization
 - Institutional investors (Banco do Fomento and others)
 - Financial institutions (underwriting and distribution)
 - Technical experts (RdA and others)
 - Service providers (ESCOs)
 - National authorities (ADENE, RNAE)

Operating delivery services



Describe and detail the operating services that will be offered by the Program Delivery Organization.

The operating services offered by the Program Delivery Organization are the following:

- Project delivery unit:
 - Development of project pipeline includes identification of potential projects and preliminary feasibility assessment
 - Assessment of pipeline of projects
 - Technical expertise
- Fund manager:
 - Financial development & structuring of projects
 - Project funding approval
- Key Partners (ESCOs, Institutional Investors, Financial Institutions):
 - Project pipeline (ADENE, RNAE)
 - Project implementation (ESCOS)
 - Retail investors (Financial Institutions as distribution channel)
 - Institutional investors (Banco de Fomento and others)

Key activities

Describe and detail the key activities for each of the bodies of your Project Delivery Organization (Fund Manager or Financial Intermediary, Program Delivery Unit, Key Partners Organizations).

The key activities for each of the bodies of the Project Delivery Organization are the following:

- Project delivery unit:
 - Screening of EE projects from available ADENE, ESCOs and GoParity pipeline, performing preliminary feasibility;
 - Technical analysis and financial analysis.
 - Technical expertise and consultancy related to detailed project development, which can include building inspection, energy audits and quotation services for the works
- Fund manager:
 - Financial development and structuring of investment projects, including providing advice on existing financing options, preparing a financing/investment plan, support in negotiation of terms with financial institutions and others

Key resources & operating costs

Describe and quantify the key resources requirements for each of the components of your Project Delivery Organization (Fund Manager or Financial Intermediary, Program Delivery Unit, Key Partners Organizations).



A first estimation of the key resources requirements for each of the components of the Project Delivery Organization is provided below:

- Project delivery unit:
 - Development of project pipeline: 60€/project
 - Assessment of pipeline of projects: 180€/project
- Fund manager:
 - Financial development & structuring of projects: 5.000€/project
- Key Partners:
 - Technical development of projects: 5.000 €/project (ESCOs)

5.5 STEP 5 – INPUTS FOR FINANCIAL FORECASTS

Indicative investments and loans portfolio per loan term and funding rate (over the investment period)

Loan term		Avg. Project Investment Value	Estimated # of loans	Funding Rate
#	# years	euros	#	%
Term 1	15 Years	350 000	40	40%
Term 2	10 Years	350 000	100	40%
Term 3				
Term 4				
Term 5				

Indicative loan interest rates per loan term and risk category (over the investment period)

Risk cat./loan terms	Term 1	Term 2	Term 3	Term 4	Term 5
Loan portfolio					
Strong	2,50%	2,25%			
Good	2,75%	2,50%			
Satisfactory	3,95%	3,70%			
Weak	5,75%	5,50%			
Subordinated loan portfolio					
Strong	5,50%	5,25%			
Good	5,75%	5,50%			
Satisfactory	6,95%	6,70%			
Weak	8,75%	8,50%			

Indicative loan counts (# of loans) per loan term and risk category (over the investment period)

Risk cat./loan terms	Term 1	Term 2	Term 3	Term 4	Term 5
Loan portfolio					
Strong	16	50			
Good	10	30			
Satisfactory	10	15			
Weak					
Subordinated loan portfolio					
Strong	1	2			
Good	2	2			



Satisfactory	1	1			
Weak					

Indicative loans schedule per year and risk category (over the investment period)

Investment period	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Term 1						
Strong	2	3	3	3	3	2
Good	1	2	2	2	2	1
Satisfactory		2	2	2	2	2
Weak						
Term 2						
Strong	8	10	10	10	10	2
Good	5	5	5	5	5	5
Satisfactory	2	2	3	3	3	2
Weak						

Indicative subordinated loans schedule per year and risk category (over the investment period)

Investment period	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Term 1						
Strong			1			
Good		1		1		
Satisfactory			1			
Weak						
Term 2						
Strong		1	1			
Good			1	1		
Satisfactory						1
Weak						

Indicative equity investments portfolio (over the investment period)

Project #	Holding period in years	Exit multiple on investment	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Project 1	5	4,0x	1 000 000					
Project 2	5	4,0x		1 000 000				
Project 3	7	4,0x		2 000 000				
Project 4	7	4,0x			1 000 000			

