

Citizen financing for energy efficiency



Scaling up investments through Citizen Financing Schemes

Covenant of Mayors Investment Forum – Energy Efficiency Finance Market Place
Brussels 18-19 February 2020
Pablo Alonso // WIP Renewable Energies

WHO

- CitizEE is a 3 years coordination support action funded under H2020 programme and implemented by 8 organisation across 5 EU members states:



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WHY

- Good examples in EU for citizen financing for renewable energy projects



- Citizen Financing Schemes for Energy Efficiency projects is still far from having reached its full potential

1

UNFAVOURABLE BOUNDARY CONDITIONS

Financial and technical barriers for developers and investors

2

SCALE

Lack of large-scale programs to attract investors

3

COOPERATION BETWEEN ACTORS

Citizens should be maximised

STARTING POINT

SUPPORT EUROPEAN PUBLIC AUTHORITIES TO SCALE UP INVESTMENTS FOR ENERGY EFFICIENCY IN THE BUILDING SECTOR BY ATTRACTING CITIZEN PRIVATE INVESTMENTS

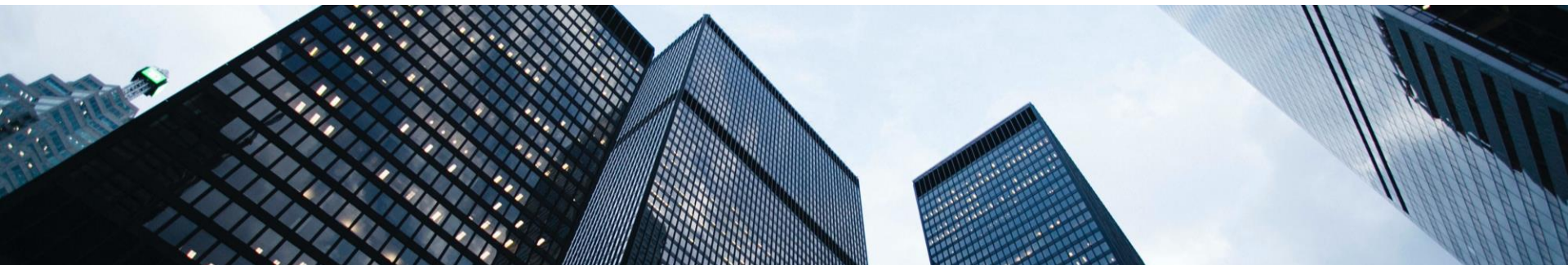
Creating national or regional Investment Platforms backed by European Fund for Strategic Investments.



Supporting the integration of tailored and widely adopted citizen financing schemes, crowdfunding and cooperative models, with adequate available or to be developed Public Financing Instruments (PFIs).



Enabling the set-up of large-scale community energy efficiency programs that attract private investments while strengthening know-how of regional/national key stakeholders.



METHODOLOGY

COMPETITIVENESS EVALUATION

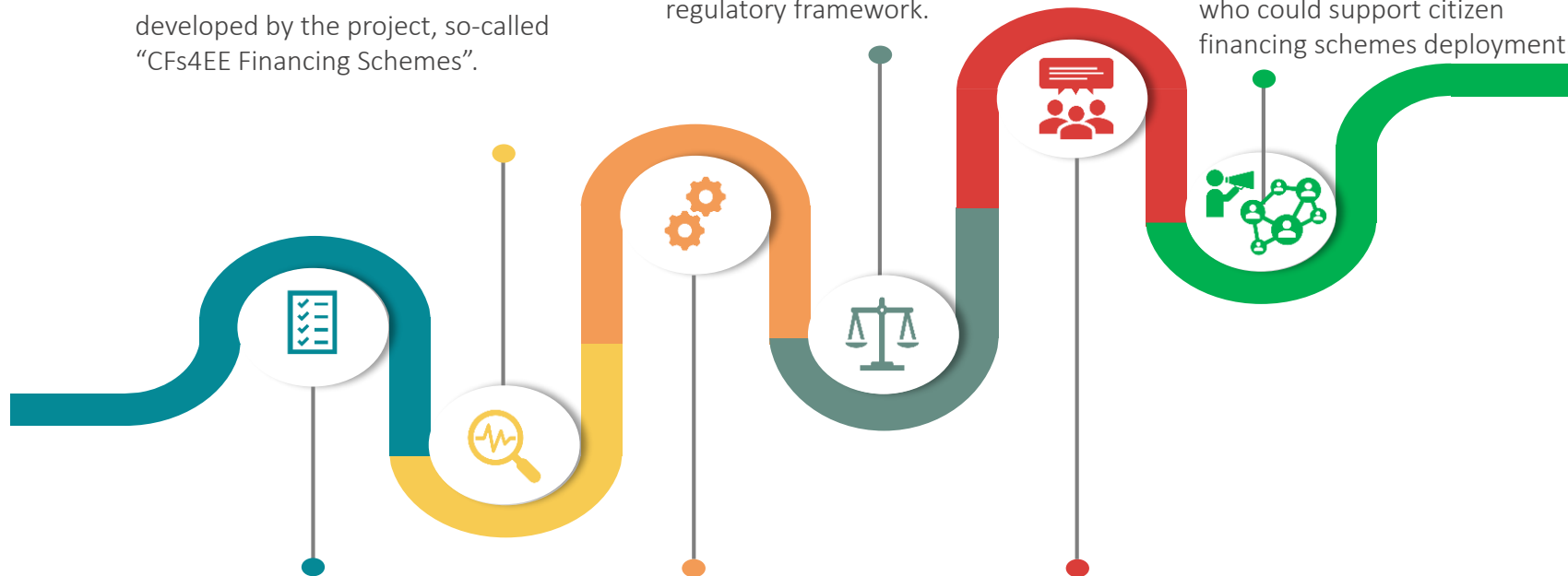
- Analysis of financing products
- Definition of schemes to be developed by the project, so-called "CFs4EE Financing Schemes".

RECOMMENDATIONS

- Develop recommendations for improving the market and regulatory framework.

DISSEMINATION

- Promote the project concepts and its advantages among those who could support citizen financing schemes deployment.



IP PLATFORM SETUP GROUNDWORK

- Establishment of SWG
- Legal, regulatory and market framework characterization

PILOT DEMONSTRATOR

- Implementation of the schemes
- Demonstrate the viability and market potential
- Performance analysis

CAPACITY BUILDING

- Organisation of events
- Webinars
- Toolkit
- Creation of network of experts

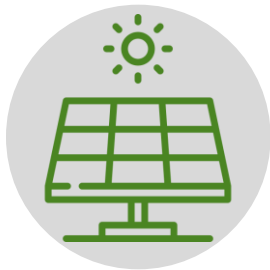
TYPES OF PROJECTS



BUILDING RENOVATION



SCHOOLS RENOVATION



SOLAR PV



LED LIGHTING



VALUE PROPOSITION



PUBLIC AUTHORITIES

- Local, regional and national governments
- Decision makers



PROJECT DEVELOPERS

- ESCO's
- BUILDING OWNERS



FINANCIAL INSTITUTIONS

- National promotional Banks
- Public institutions
- Private



CITIZENS FUNDING COMMUNITY

- Crowdfunding platforms & experts
- Energy cooperatives
- Citizens organizations

CITIZEE INVESTMENT PLATFORM

Investment facility channelling public and private financing from several co-investors to provide financial products to designated final beneficiaries and/or projects.

- Identifying market gaps and providing financing or support to sectors and/or projects that are not currently sufficiently serviced by traditional financial intermediaries
- Facilitating the inclusion of investors towards the financing of projects
- Focus on blending/crowding-in public and private funds
- Contributing to aggregation and pooling of projects
- Focus on geographic and/or sectoral/thematic scope (e.g. building renovation)



CITIZEE CFS4EE FINANCING SCHEME

CITIZEN FINANCING SCHEME FOR ENERGY EFFICIENCY

FINANCING MECHANISM CONSTITUTED BY CITIZEN FINANCING, CROWDFUNDING OR COOPERATIVE FUNDING, AND INTEGRATED WITH PUBLIC FINANCING INSTRUMENTS



CREATE A SOUND
FINANCIAL AND
OPERATIONAL
ENVIRONMENT



MORE EFFICIENT
USE OF PUBLIC
FUNDS



ATTRACT
INVESTORS



ENHANCE
CAPACITY AND
AWARENESS
TOWARDS CITIZEN
FINANCING



ENABLE HIGHER
RENOVATION RATES

WHERE WE ARE



- Stakeholders working groups
- Legal and regulatory framework
- EFSI and IP framework
- Action Plan for the establishment of IP
- Market characterization

LEGAL FRAMEWORK

The Clean Energy Package // The Crowdfunding Service Providers Regulation // The upcoming InvestEU Programme

Energy related

- Lack of development and completion of national legislation.
- The rules for public procurement of energy efficiency projects
- The energy price and the energy of self-consumption for prosumers is too low so new business models are not stimulated.

Investment related

- Investment limitations for individuals that want to become investors as well as for the upscaling of campaigns
- The law on Energy performance contracting (EPC)
- There is a lack of business cases for in depth renovations (with payback times that are 30 years or higher)
- Lack of development of the Law on Consumer Financing and the creation of a basic legal framework for crowdfunding
- High bank and card processing transaction fees and the high price of the loans in some pilot regions

EFSI AND IP FRAMEWORK

INSTITUTIONAL, ORGANISATIONAL AND PROCEDURAL REPORT:

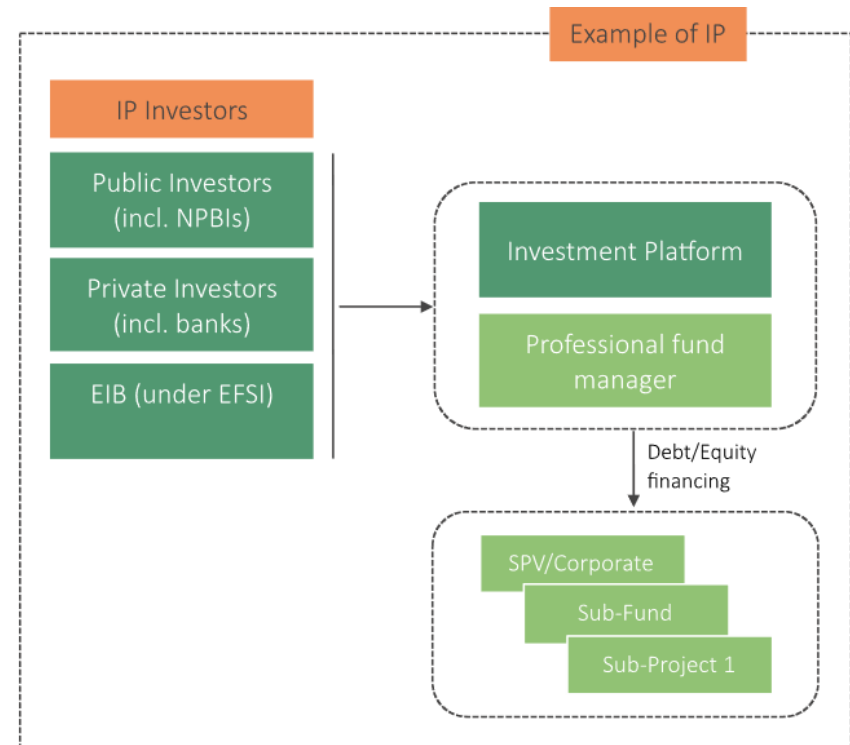
1. EFSI functioning

- Initiative of EC and EIB Based on EU guarantee
- Overcome lack of funding hampering the EU
- Market failures and suboptimal investment situations
- Unlock financing for smaller and /or riskier projects mobilising EUR 500 billion
- Emphasis on **Investment Platforms**
 - Cooperation with National Promotional Banks as promoters of the IP
 - Flexible structures (Special purpose vehicle, managed account, Contract-based co-financing, risk-sharing agreement)
 - Provides Financing products

2. Analysis Investment platforms under EFSI

3. Provide guidelines on how to set-up an EFSI-backed platform

4. Outlook to InvestEU



MARKET CHARACTERIZATION



- Energy efficiency is gaining dramatic focus of importance
- Both Cooperative and Crowdfunding are highly functional mechanisms
- Crowdfunding model is scaling



veb

- Crowdfunding business model in Belgium is still evolving (9 platforms recognized with 2 in EE or RES).
- Cooperative: Well developed in the domain of RES, new model in EE
- Higher focus on the potential impact of citizen financing because of the increased number of cooperatives

VIPA

- The Crowdfunding initiative has started in Lithuania in 2016. Number of platforms are increasing but still market size is low
- Market is supported at the highest political level. However, an amendment of the Law on Consumer Financing is needed
- Cooperative model is not existent

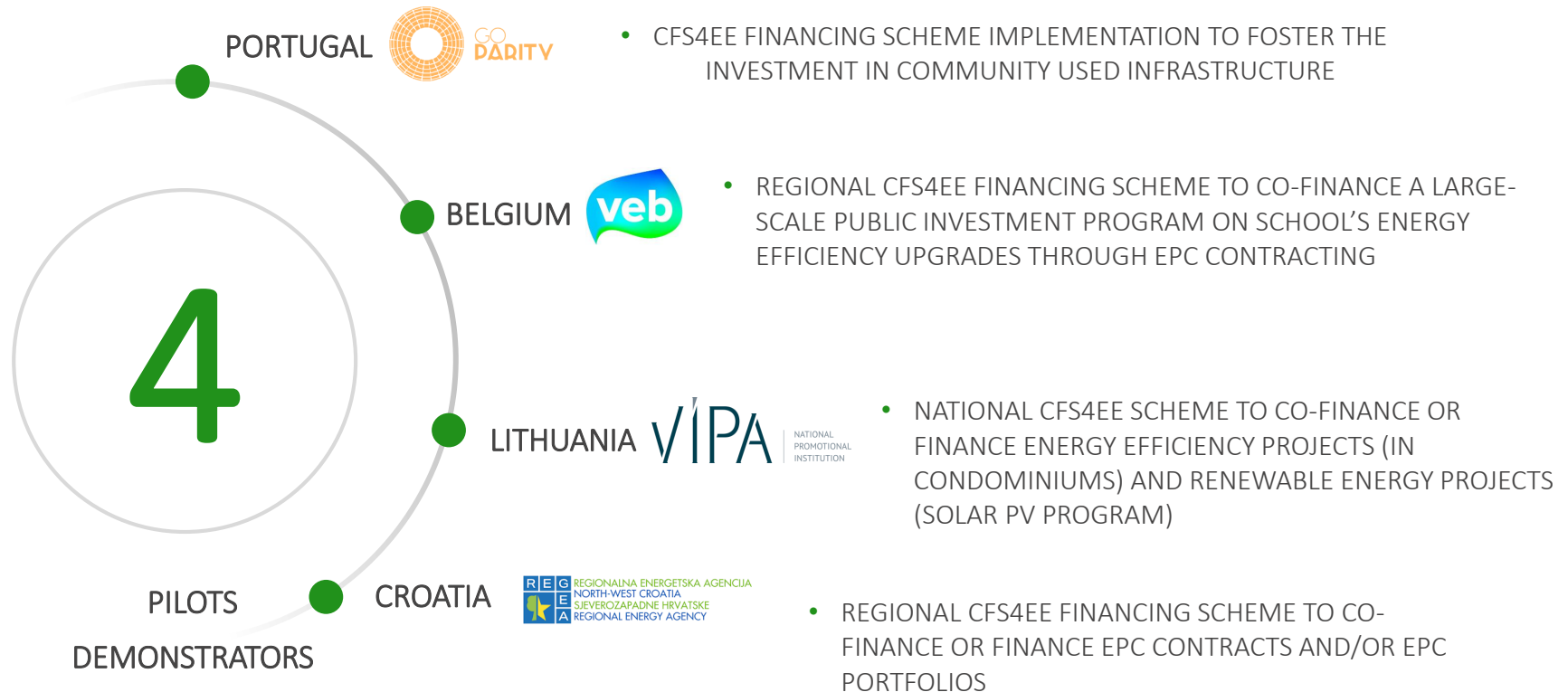


- Crowdfunding is still in its early stages with 2 platforms operating via lending /equity model
- Lack of legal framework, high bank and card processing transaction fees and low levels of know-how and general awareness

GEARING TOWARDS THE IMPLEMENTATION



- Market opportunities for the citizen financing solutions for energy efficiency
- Map of structured financial solutions for CFs4EE Financing Schemes
- SWG meetings



WHAT ELSE

- Get involved and subscribe
- Visit www.citizee.eu
- Follow us on social media



@CitizEE_project



Citizen Financing for
Sustainable Projects
group

Linked Projects



Foster energy democracy through social innovation and the active collaboration between cooperatives, aggregators of renewable energy and crowdfunding platforms

www.socialres.eu



SMARTSPEND

More and better designed public support for energy technology research & innovation

www.smartspend.eu

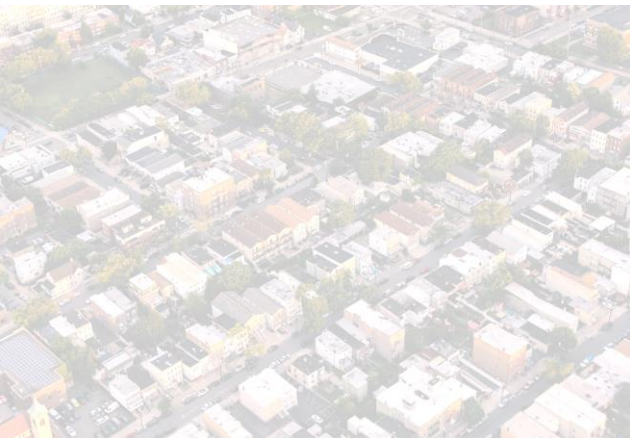


<https://www.bundleup.eu>

THANK YOU

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WIP RENEWABLE ENERGIES



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VIPA

Public Investment Development Agency



Development

Finance

Innovation

Covenant of Mayors Investment Forum

Energy efficiency finance market Place

Gytis Žakevičius

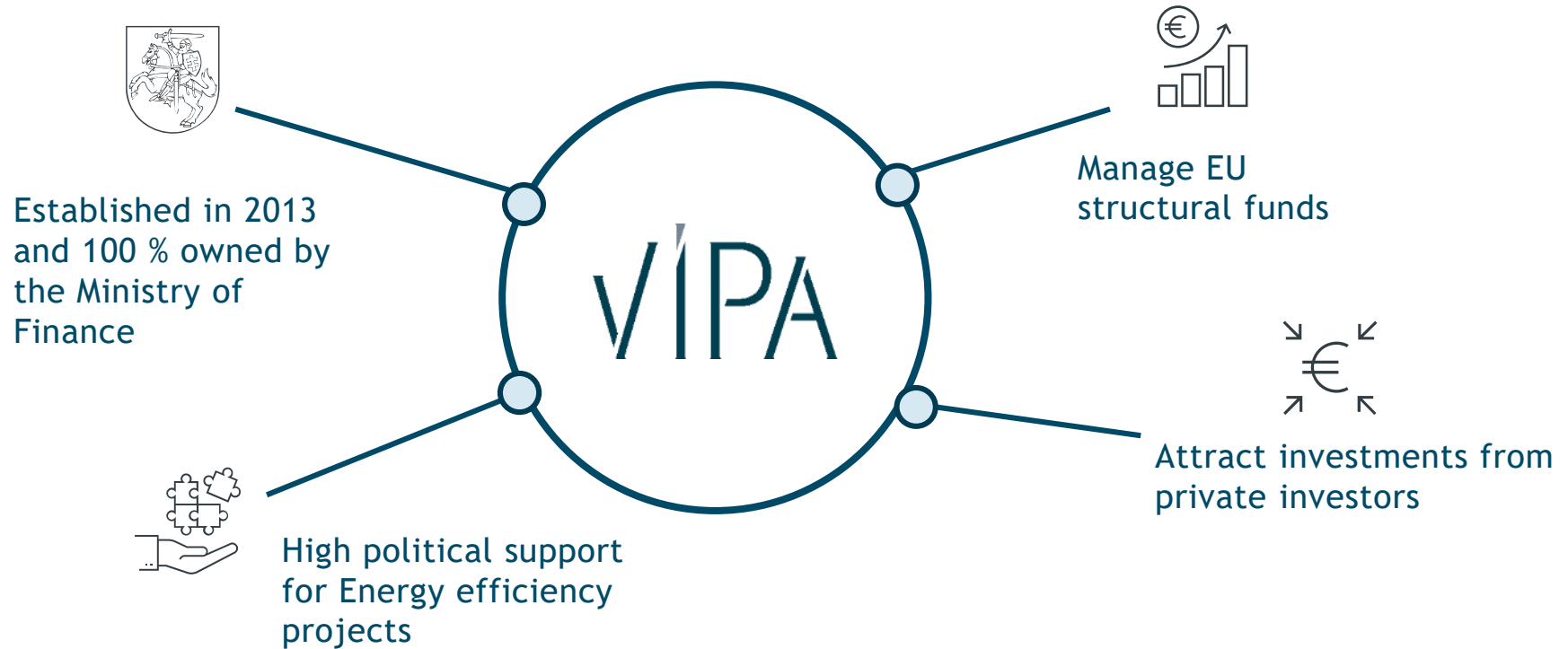
Project manager of Investment and development division

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2020-02-19

VIPA

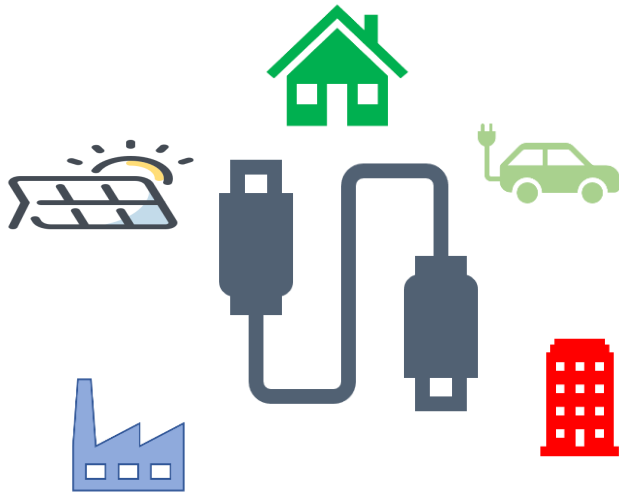
Who we are



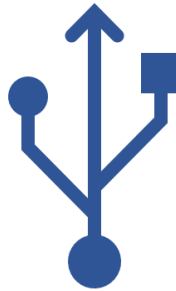
Mission - induce the development of public infrastructure by improving conditions with the help of financial instruments.

Vision - act as a leader National Promotional Institution in the public infrastructure financing.

There are three major challenges in the energy sector



Electrification and
Renewables expansion

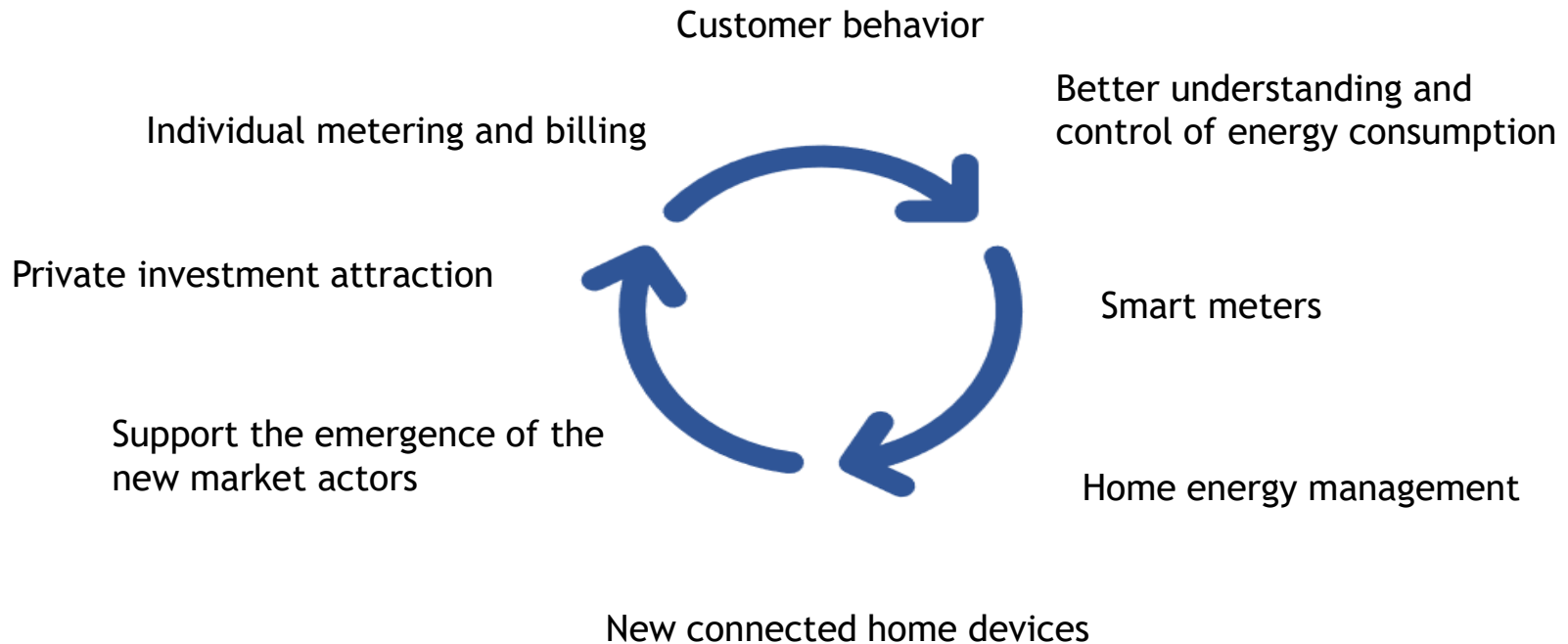


Digitalization



Citizens involvement
and decentralization

Principles in energy efficiency in the next 2021 - 2030 and beyond



Investment platform

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.

Goals of investment platform:



Achieve energy savings



Reduction of CO2 emissions



Financing viable projects (pay back period less than 10 years)



Attracting additional financing sources (EIB/ EBRD) in order to leverage investor's contribution



Support of innovative EE schemes and implementing various projects



Launching new investment strategies

Investment platform

Template

Established in 2018

VIPA is a platform manager

Attracted 10 Million EUR private capital from energy company (Electricity distributor)

Attracting a global loan (12.5 M approved from EIB and 12.5 M under negotiation process with EBRD)

Expanding the investment strategy and attracting more private capital

Stakeholders

VIPA

Investors/
private
capital

Debt capital/
International
financial
Institution

Functions/ Interest

Active management fund

Attracting private and debt capital

Setting up investment strategy and looking for new investment opportunities

Implementing financial instruments

For energy companies

Financial return

Energy savings

Avoiding administrative costs

Leverage effect

Avoiding state aid and direct investment restriction

For others investors

Stable financial return

Low risk profile

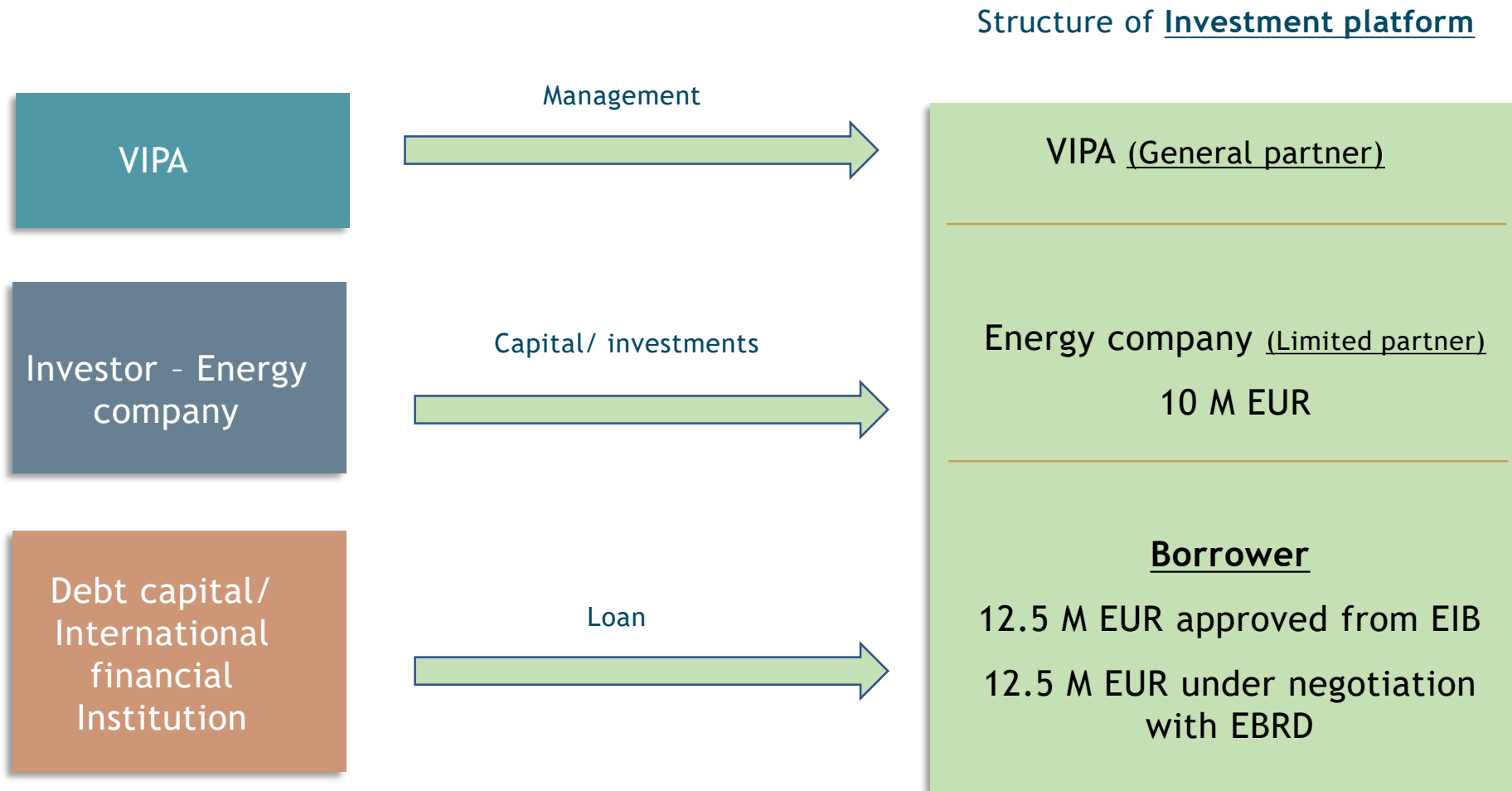
Reaching energy efficiency goals set by EC

Supporting energy efficiency initiative at EU level

Ensuring leverage effect

Generating profit

Investment platform



Investment strategies

Investment platform provides long term loans according to 3 different investment strategies



I. EE for
Industry

Loan for energy savings
measures direct to Industry
company or to ESCO's



II. Shallow
renovation

Loan for shallow renovation
focusing on heating systems

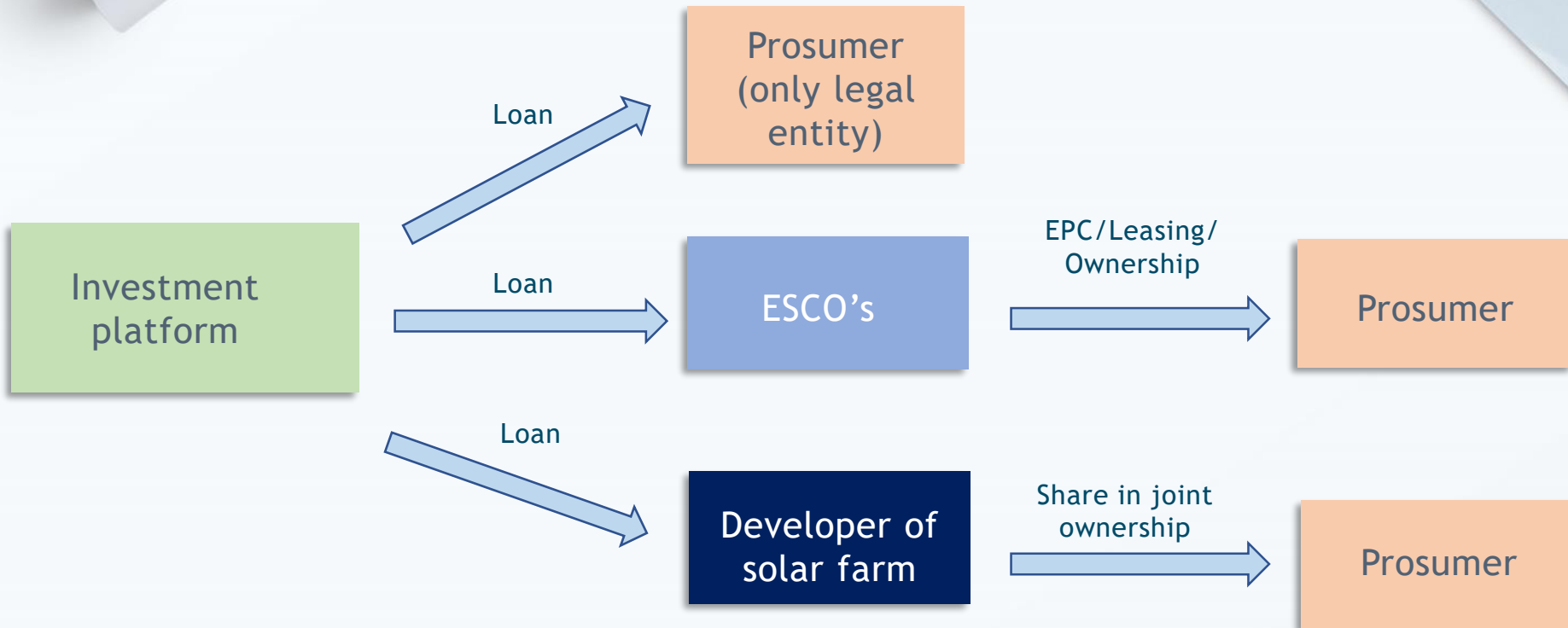


III. Prosumer
market

Loan for Prosumers and RES
project Developers

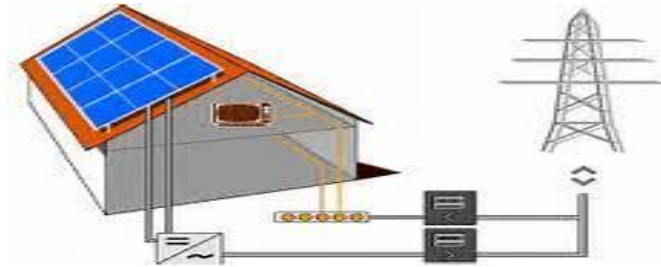
Prosumer market

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



Prosumer market

Prosumers are persons or legal entities (companies) as well as public sector, who generate electricity from renewable energy sources only for their own energy needs.



Prosumers stay connected to the grid. Approximately 20 proc. of generated green energy is consumed immediately, while the rest of the energy is supplied to the grid and recaptured, when electricity is needed. For this transaction prosumers pay „Net metering payments“, which are flexible:



Per kilowatt- hour



Reduced kilowatt- hour
plus
reduced kilowatt



Per kilowatt



Payment with
electricity

Prosumer market

Remote prosumers - producing electricity in one place and using it elsewhere. Energy prosumers will be able to produce and use electricity for their own needs at different location, using net metering principle.

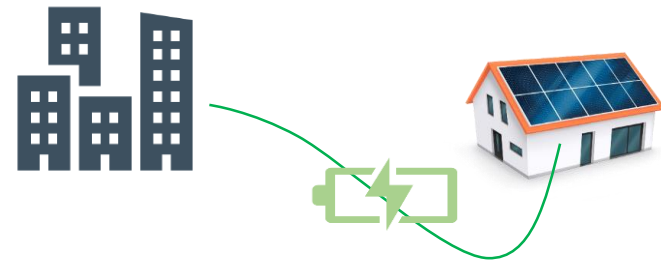
1

LOCAL: Electricity produced at the renewable power plant, that is installed on the prosumer property, also is consumed at the same location



2

REMOTE: Electricity is produced at the renewable plant, that is installed on the prosumer property in one location and consumed elsewhere



3

REMOTE renewable farm: Power plant can be developed by third party, while the prosumer acquires or leases some part of it

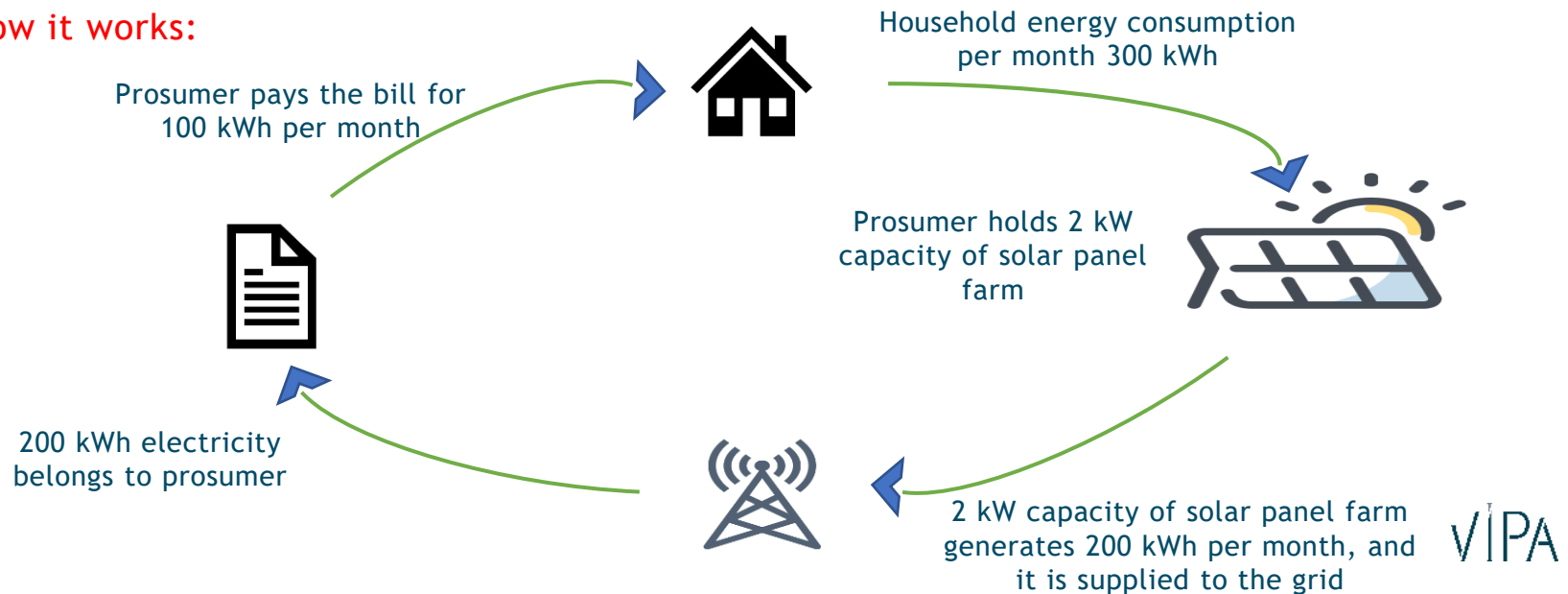


Prosumer market (remote prosumer)

Remote prosumers - can buy or lease a part of the power plant, which is built by third part (project developer).



This is how it works:



Any renewable is a source of generation for prosumer



Wind energy



Hydro energy



Biogas energy



Solar energy



Geothermal energy



Biomass energy

Example of wind power plant distributed generation

2.000 kW



4.000 MWh

500 kW



1.000 MWh

500 kW



1.000 MWh

100 kW



200 MWh

3 kW



6 MWh

897 kW
(3x299)

1.794 MWh



VIPA

CitizEE project Lithuania

Goal is to develop a regional CF4EE scheme to co-finance or finance energy efficiency and renewable energy projects



Raising additional funding from private financing



Launching new energy projects and sectors



Supporting EE and implementing RES projects



Achieving energy savings, reduction of CO2 emissions and financial profit



Increasing and leveraging investors' contribution to existing scheme



Enabling citizens to invest in energy sector

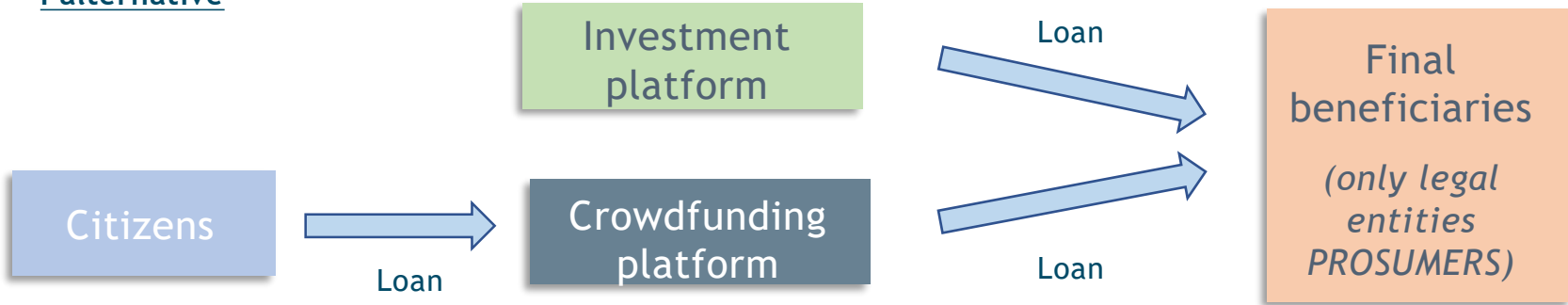


Financing higher risk projects

Possible financing scheme for CitizEE

There are III possible alternatives relevant for CitizEE. However these are still under consideration.

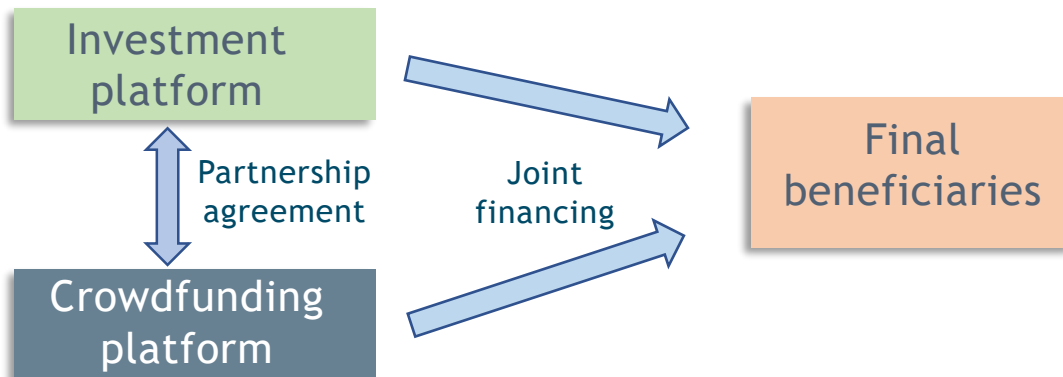
I alternative



II alternative



III alternative



Joint financing:

- a) At the project level (partial funding)
- b) At the financial measure level

And finally...

1

This financial concept opens new opportunities for investors, electricity consumers, project developers and project financiers

2

Small size projects will be pooling and contributing to aggregation

3

Demonstrate energy efficiency projects' viability and market potential of crowdfunding financing scheme

4

Customers may use more green energy in their business and save energy

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LinkedIn / National promotional institution (VIPA)

The logo for VIPA, consisting of the letters 'VIPA' in a stylized, serif font. The 'V' is the largest and most prominent, with a small vertical line above it. The 'I' is a simple vertical bar, and the 'P' and 'A' are also in a serif style. The logo is positioned in the bottom right corner of the page.