



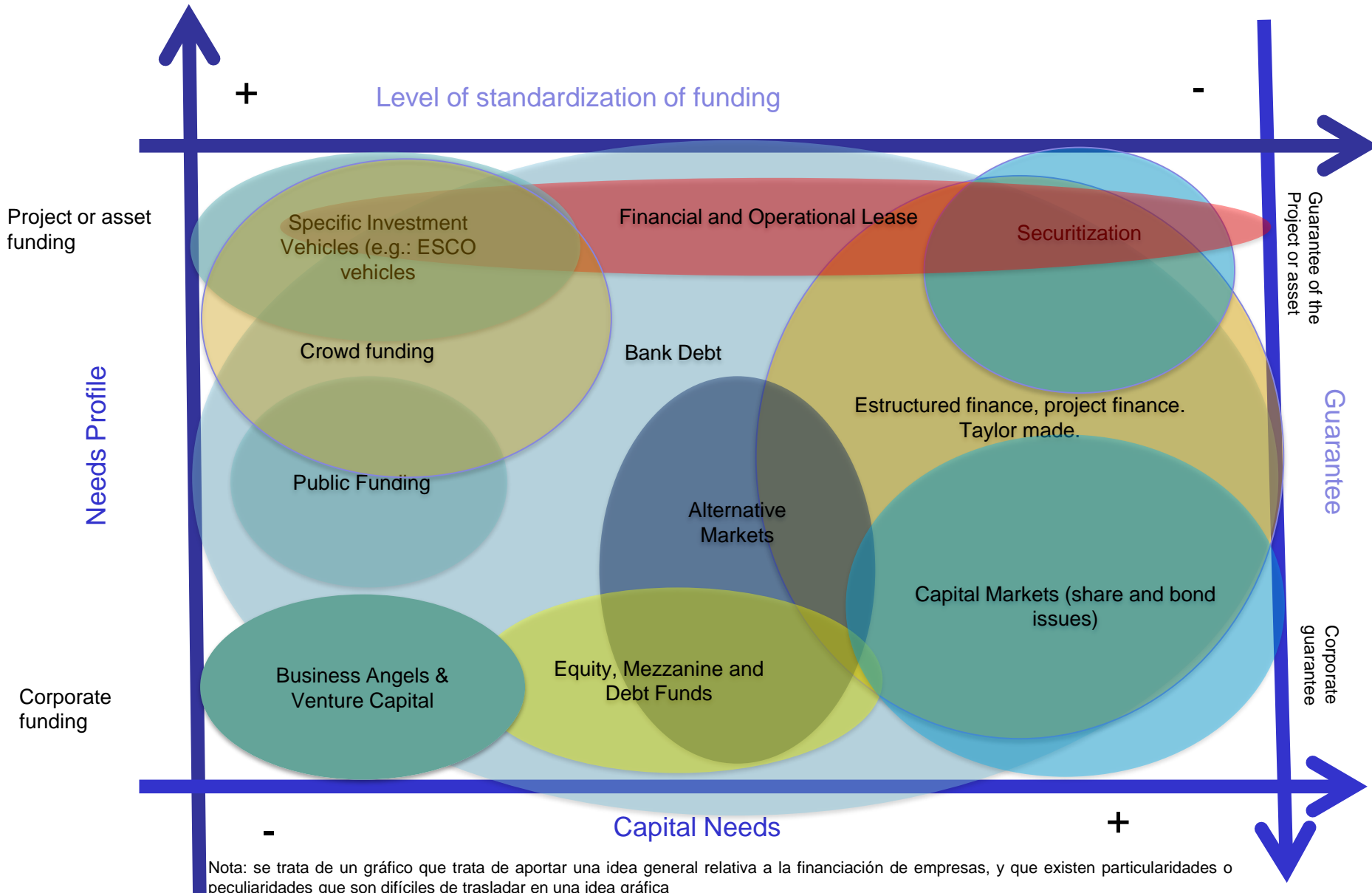
Financial alternatives for  
Energy Efficiency

# Barriers on Energy Efficiency

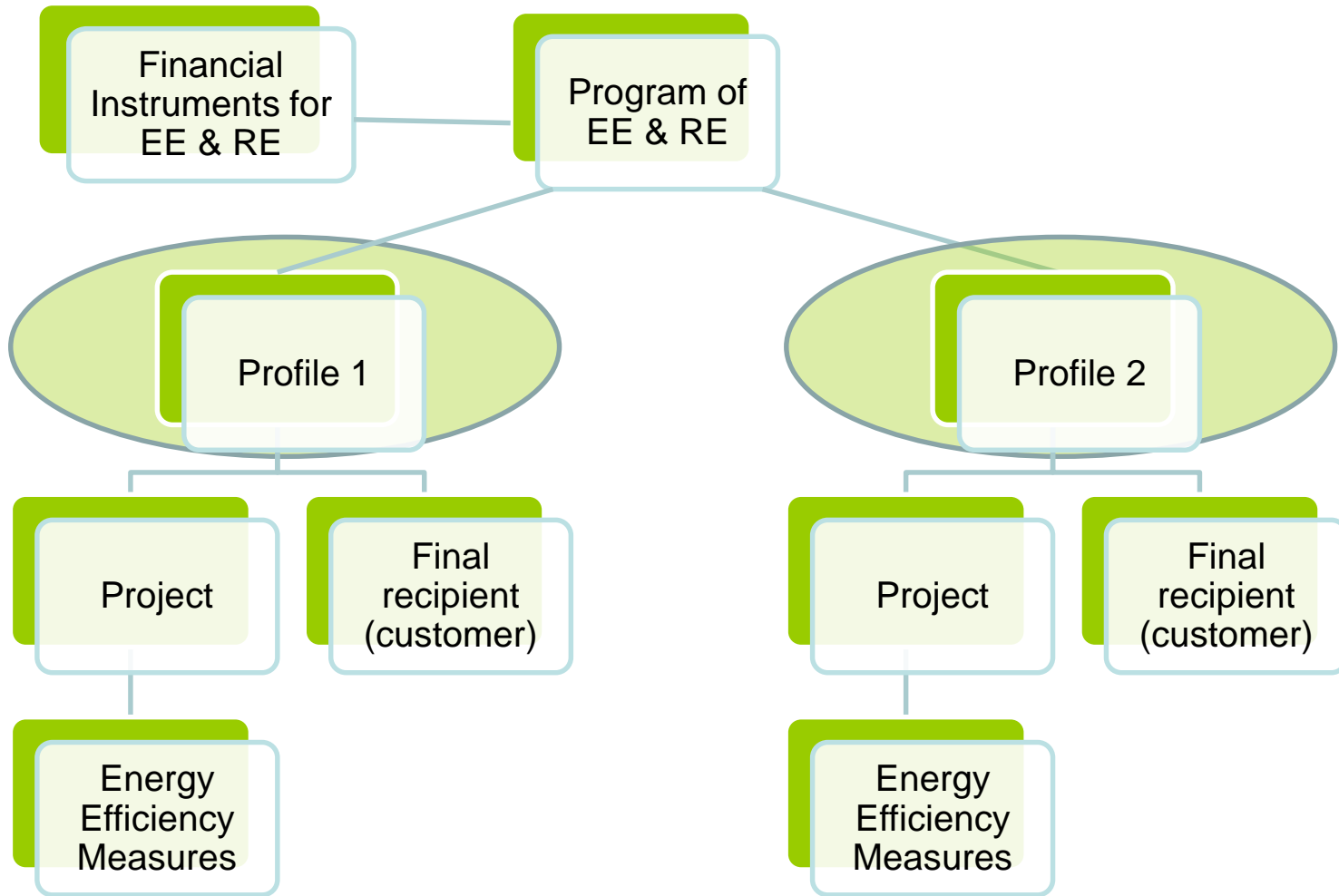
1. • Energy Efficiency is not a main concern for owners. There are other priorities for using own resources and debt capacity
2. • Many projects require small investments.
3. • High Transaction costs. Both (i) to make it attractive to customers and (ii) to generate comfort in private capital. Energy audit, due diligence and structuring finance are the main.
4. • EE projects do not generate new cash, they just generate savings.
5. • No individual provider will finance 100% of financing requirements.
6. • Equity gap. There are current market limitations to get all the equity needed by these projects
7. • Financial risks are the main risks around EE Project to be considered by private investors
8. • Energy Efficiency projects involve technical aspects unknown for Private Investor and financial institutions.
9. • The owners do not even feel comfortable and confident with the potential results of energy efficiency projects, even less with any financial commitments linked to financial instruments
10. • Lack of leaderships, references and Business Cases

- + Having financing alternatives facilitates overcome barriers
- + The financial solutions will depend on the profiles of the projects and the financial situation and needs of the final recipients.
- + **Need a set of solutions! Different solutions for different profiles**
- + An energy efficiency profile is based on a Project and a final recipient of savings (or customer).
  - + A Project involve a set of energy efficiency measures.
  - + A public program of energy efficiency may involve several profiles; measures and targeted final recipient.

# Financing Alternatives



# Profiles of EE & RE



## Attractive of a profile to private capital

- + An EE & RE profile is attractive to private capital when:
  - + The Project is viable, involving financial and technical aspects.
    - + Discounted Pay Back  $\leq 10$  years in companies, and  $\leq 15$  individuals and public institutions.
  - + The final recipient is fully solvent. Easier to analyze in large projects.
- + A non attractive profile for private investor may have public interest. Then, it needs to involve public aids!

## Profiles + & -

+ profiles can be differentiated according to the size of projects :

+ Large projects based on large customers. Sometimes there are large projects for small customers (Packaged projects, generation and retail sales of renewables energy like District Heating or District Cooling, etc). This projects are qualified as “+”.

+ Small projects aimed at small customers. This projects are qualified as “-”.



## Profile 1

+ Clearly viable projects aimed at fully solvent beneficiaries. **¡Need to build trust!, that´s all, with:**

+ Reliable due technique.

+ Reliable savings.


+ Legal certainty.




+ Qualified technologists.

+ Easier financial instruments in profile 1 and exclusively based on private investors.

+ However, profile 1- will require prior work on the standardization of measures and processes.



 Viable projects aimed at final recipients of doubtful solvency. **Not only trust is needed:**

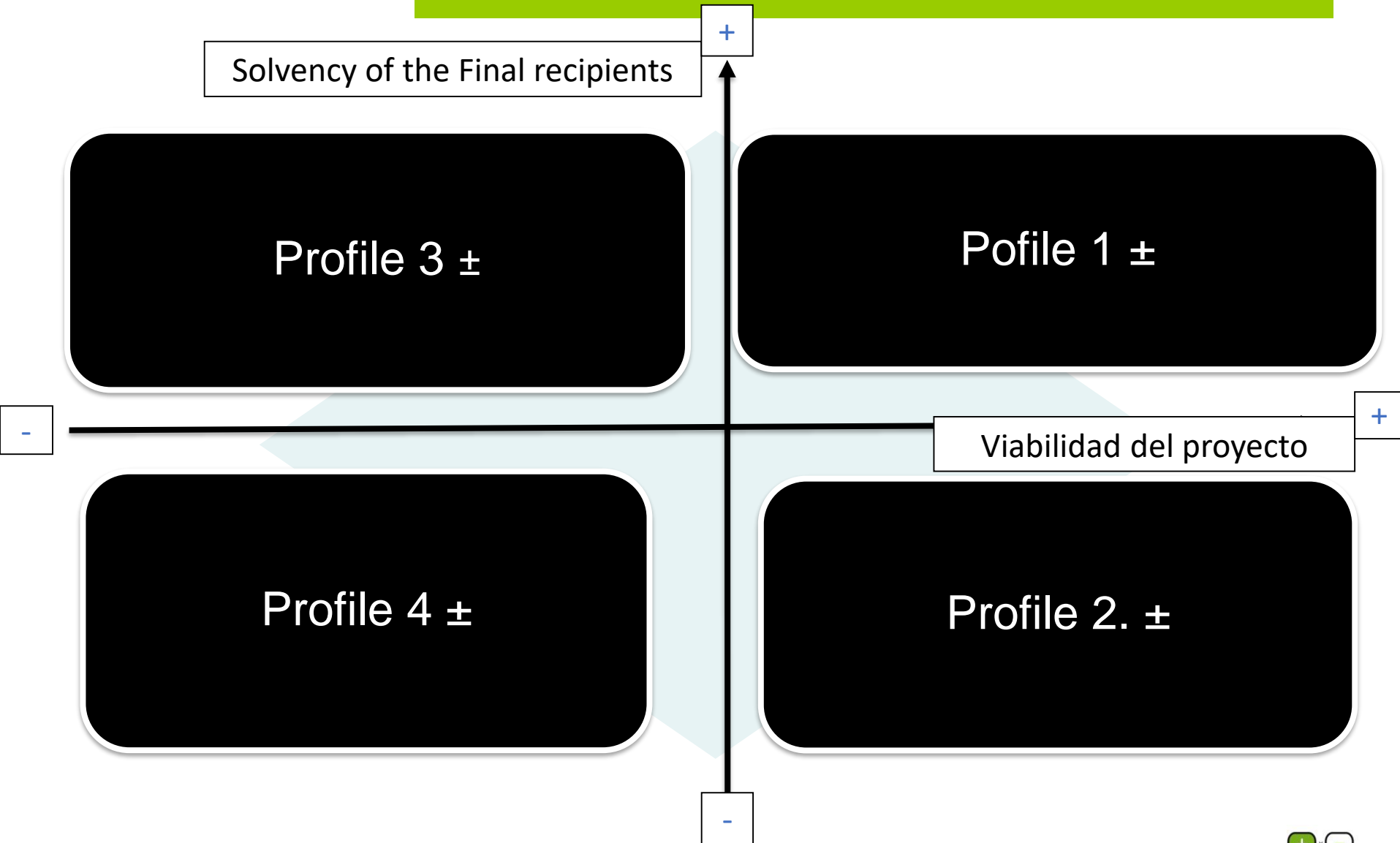
-  With small projects and customers (profile -), need an easy but effective mechanism to approve credit risk, like a model of scoring with good results of screening.
-  Carry out a financial instrument with public aids in order to mobilize private capital. Subordinated debt and, specially, mechanism of First Loss Pieces should be enough.
-  Establish an investment and services payment mechanism through bills considered of low default level, such as On Tax Financing and On Bill Financing,

- + Non-viable projects aimed at solvent customers. It should:
  - + guide of standardize measures.
  - + Public incentives to some measures. Those with less attractive to private capital but of public interest.

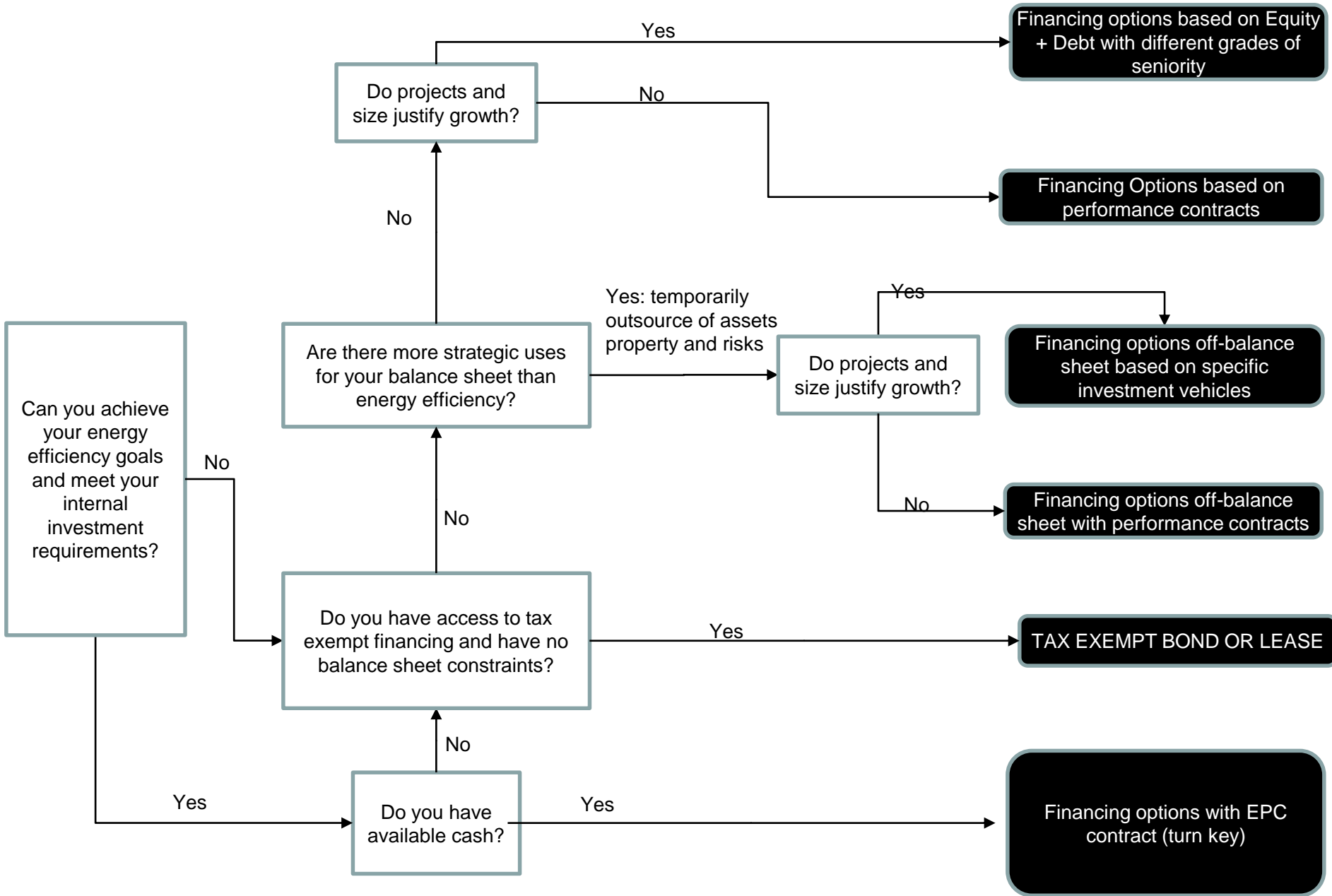
## Profile 4

 Non-viable projects aimed at non-solvent customers. All the initiatives in profiles 1, 2 and 3 are applicable to this profile.

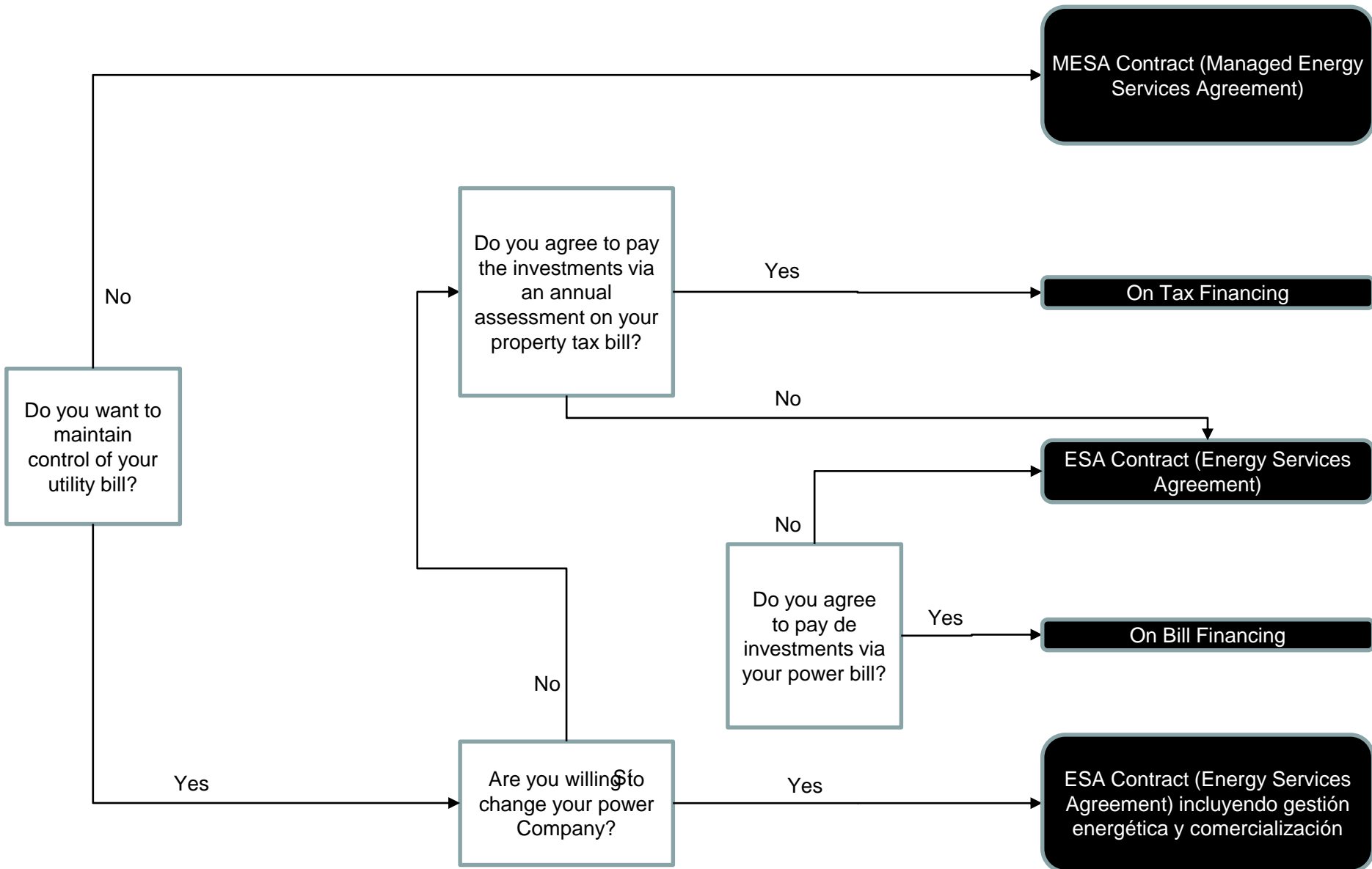
# Profiles charts



# Selection process of financial alternatives for final recipient



# Credit enhancement and credit risk valuation on energy performance contract



## Profile 1 +

Financing options based on Equity + Debt with different grades of seniority

- Private Equity
- Direct lending (public or private)
- Bank debt
- Mezzanine
- Subordinated Debt

- **CAP TRI SAS du Nord**  
Pas de Calais et Picardie

## Profile 1 & 2

Financing Options with performance contracts

- Public Direct Lending
- Financial Lease
- Crowd funding
- Bank debt

- Picardie Pass Renovation

## Profile 1 +

Financing options off-balance sheet based on specific investment vehicles

- Project Finance based on SPV
- Securitization

- **CAP TRI SAS du Nord**  
Pas de Calais et Picardie
- Harvard Green Revolving Fund
- VIA

## Profile 1 & 2

Financing options off-balance sheet with performance contracts

- Financing by Energy Services Company (ESCO)
- Operational lease

- Incentives on Sustainable construction + operational lease. Andalusian Energy Agency

Profile 3 & 4 needs public aid and (or) payment mechanism through bills considered of low default level

## Best practices in Profile 1

+ Investment Vehicles off-balance sheet.

+ VIA

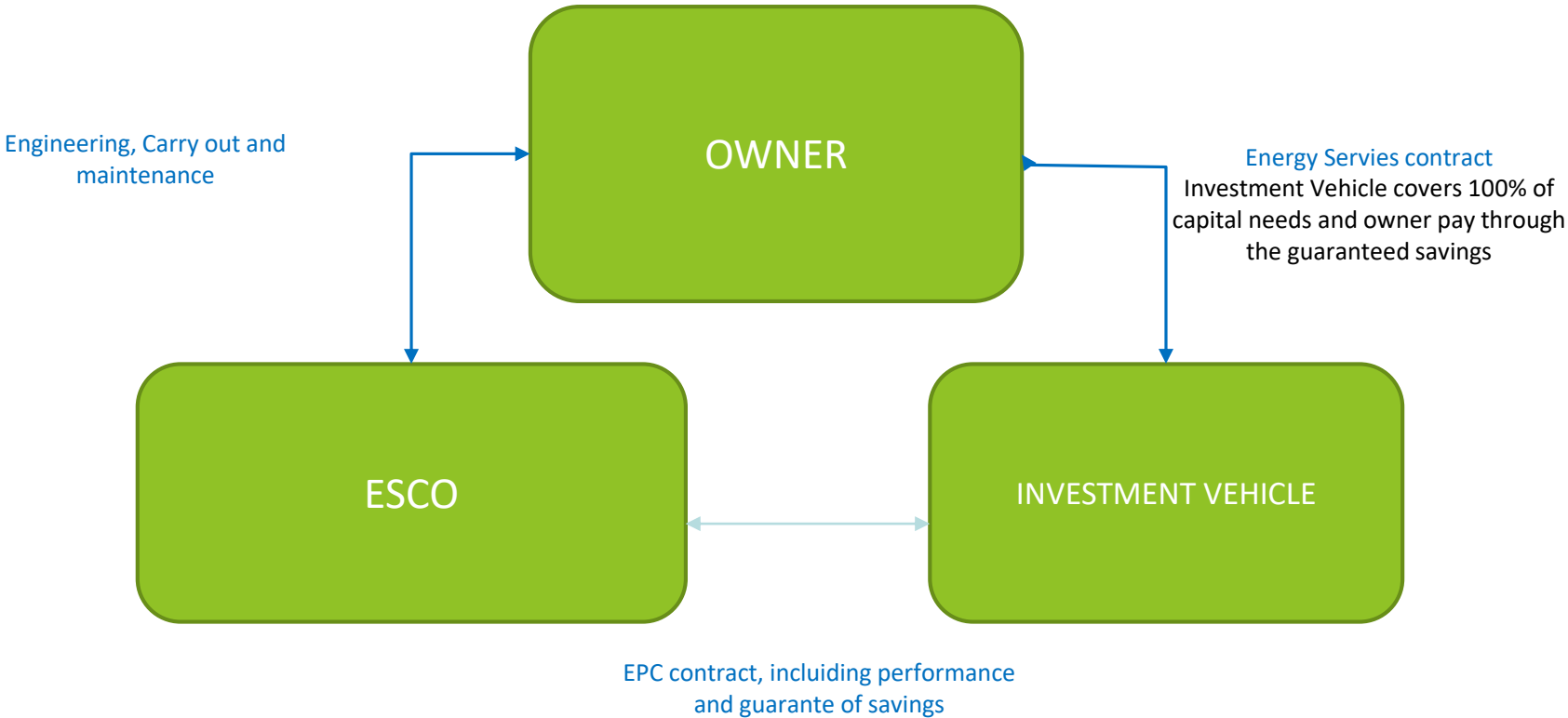
+ Green Revolving Fund. See examples at:

+ Harvard Green Revolving Fund: <https://green.harvard.edu/programs/green-revolving-fund>

+ UCLA Energy and Sustainability Revolving Fund: <https://www.sustain.ucla.edu/our-initiatives/climate-and-energy/ucla-energy-and-sustainability-revolving-fund/>



# Best practices in Profile 1



### + CAP 3ème Révolution Industrielle

#### + Step by Step:

##### + Partnership with EIB Advisory Service:

+ Structuring assistance for the design and implementation of the Fund,

+ Funding agreement under EFSI for up to EUR 20m in the Fund.

##### + Regional approval in October 2015:

+ Creation of CAP 3ème Révolution Industrielle,

+ Fund manager selection and private co-investor,

+ ERDF for EUR 15m.

##### + Regional approval in November 2015:

+ Final authorisation for EUR 15m ERDF: 12,5m as financial instrument and 2,5m as technical assistance grant

+ Becomes share holder of CAPTRI

# Combination of ESIF and EFSI support on the example of Région Les Hauts de France

## CAP 3ème Révolution Industrielle

CAP TRI has been developed on a State aid compliant basis



Mezzanine loan under EFSI « Prêt participatif » up to EUR 20 m

Equity Quasi-equity EUR 37.5 m

Minority participation

**CAP TRI SAS**  
EUR 40 m\*\*

Mandate

Capital EUR 12.5 m

Grant for EUR 2.5 m

Capital EUR 5 m

ERDF EUR 15 m



RÉGION NORD-PAS DE CALAIS



NORD DE FRANCE

Other public or private investors

*Pari passu* investors

Co-investors

Equity / Quasi-equity

**Total : EUR 200 m\***  
\* Total cost of projects, including co-financing

Project  
Project  
Project

Project  
Project  
Project

Banks

Senior debt

Grant for EUR 2.5 m

Technical support

The technical support grant element is an aid which falls within the de minimis limits.

\*\*The objective is to reach a total of EUR 100 million thanks to new public and/or private investors

# Combination of ESIF and EFSI support on the example of Région Les Hauts de France

## CAP 3ème Révolution Industrielle

- + According to EIB's Credit Risk Policy Guidelines, the provision of a mezzanine loan in the CAP TRI Investment Platform would not have occurred, or not to the same extent, without the EU guarantee under EFSI, because:
  - + It is both a financial instrument and an Investment Platform aiming to finance energy efficiency **projects with a high risk profile**.
  - + **The investments made by the Investment Platform are expected to be in the form of equity or mezzanine debt products**, which are inherently riskier than standard senior loans and the final counterparts are expected to be sub-investment grade.
  - + **The equity or mezzanine invested by the platform Facilitates the entry of private co-investors and bank debt.**
  - + **The type of financing provided by the EIB is a mezzanine loan with very advantageous characteristics for the financial instrument. These advantages are then passed on to the final recipients in terms of increased access to finance and better conditions.**

# Combination of ESIF and EFSI support on the example of Région Les Hauts de France

## CAP 3ème Révolution Industrielle

### + Main Characteristics:

- + Funding through Ordinary shares, Preference shares or Convertible bonds with the goal to Growth Capital, positioning with minority interest
- + 7 years horizon
- + Investment Tickets > 1 M € y < 5 M €. and up to 10 M € in co-investment with other existing funds of manager.
- + Technical assistance of 2,5 M. € (Technical, environmental or economic studies)

# Combination of ESIF and EFSI support on the example of Région Les Hauts de France

## CAP 3ème Révolution Industrielle

### + Main sectors of interest:

+ Renewables energies

+ Intelligent and alternative mobility (éco-transport, multimodal transport, logistics car-pooling platform...)

+ Energy management (Connected buildings, passive buildings, energy storage, meters for consumption control...)

+ Energy efficiency (Charging stations for electric vehicles, energy retrofitting of buildings, 3D printing...)

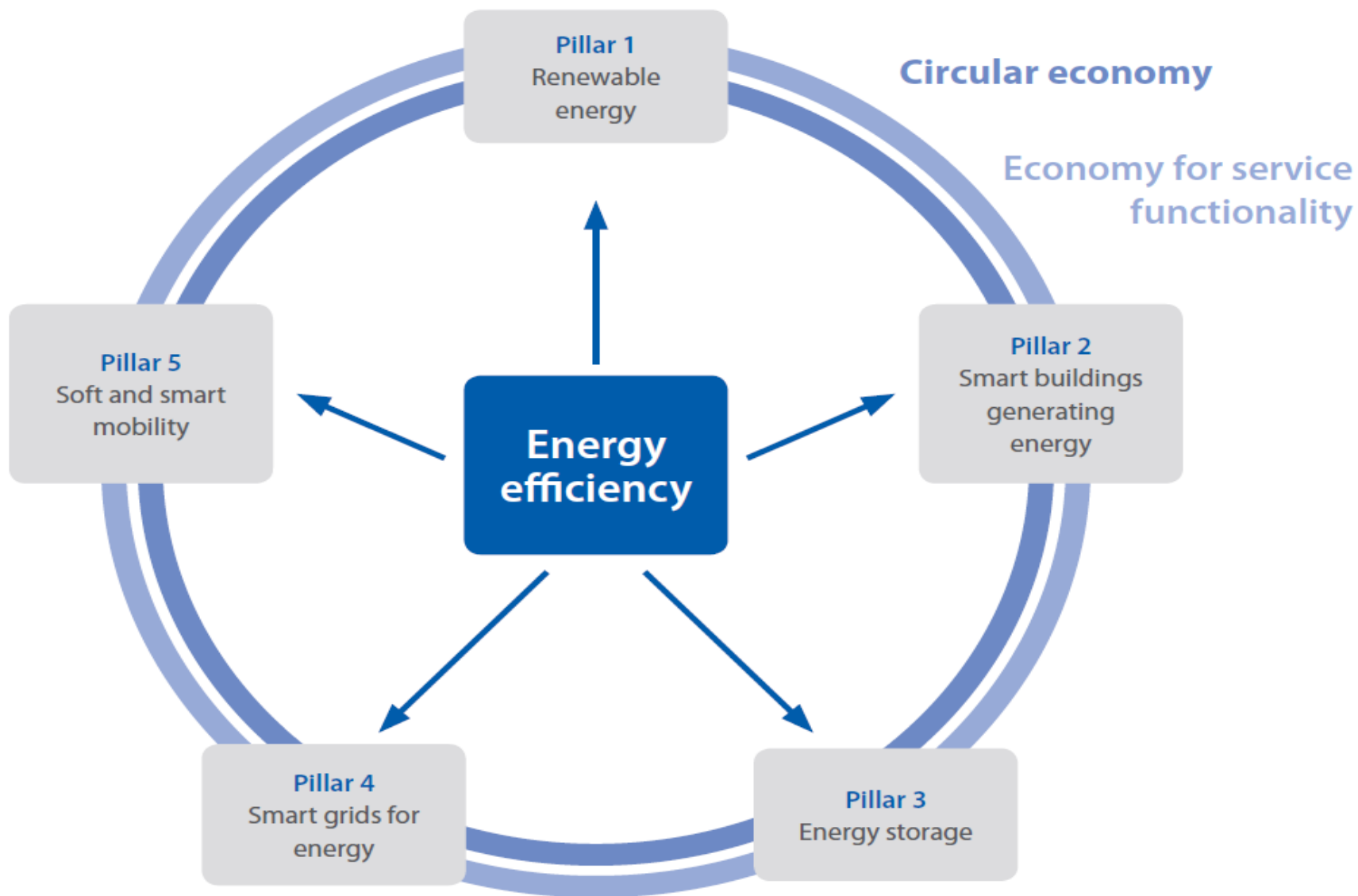
+ The circular economy (valorization of recycled materials and waste, eco-construction ...)

+ Sharing economy and the economy of functionality (self-service bike, rental car sharing...)

# Combination of ESIF and EFSI support on the example of Région Les Hauts de France

## CAP 3ème Révolution Industrielle

Figure 5: Pillars and horizontal axes driving CAP TRI



+ Investment Incentives on Sustainable construction + operational lease. Andalusian Energy Agency

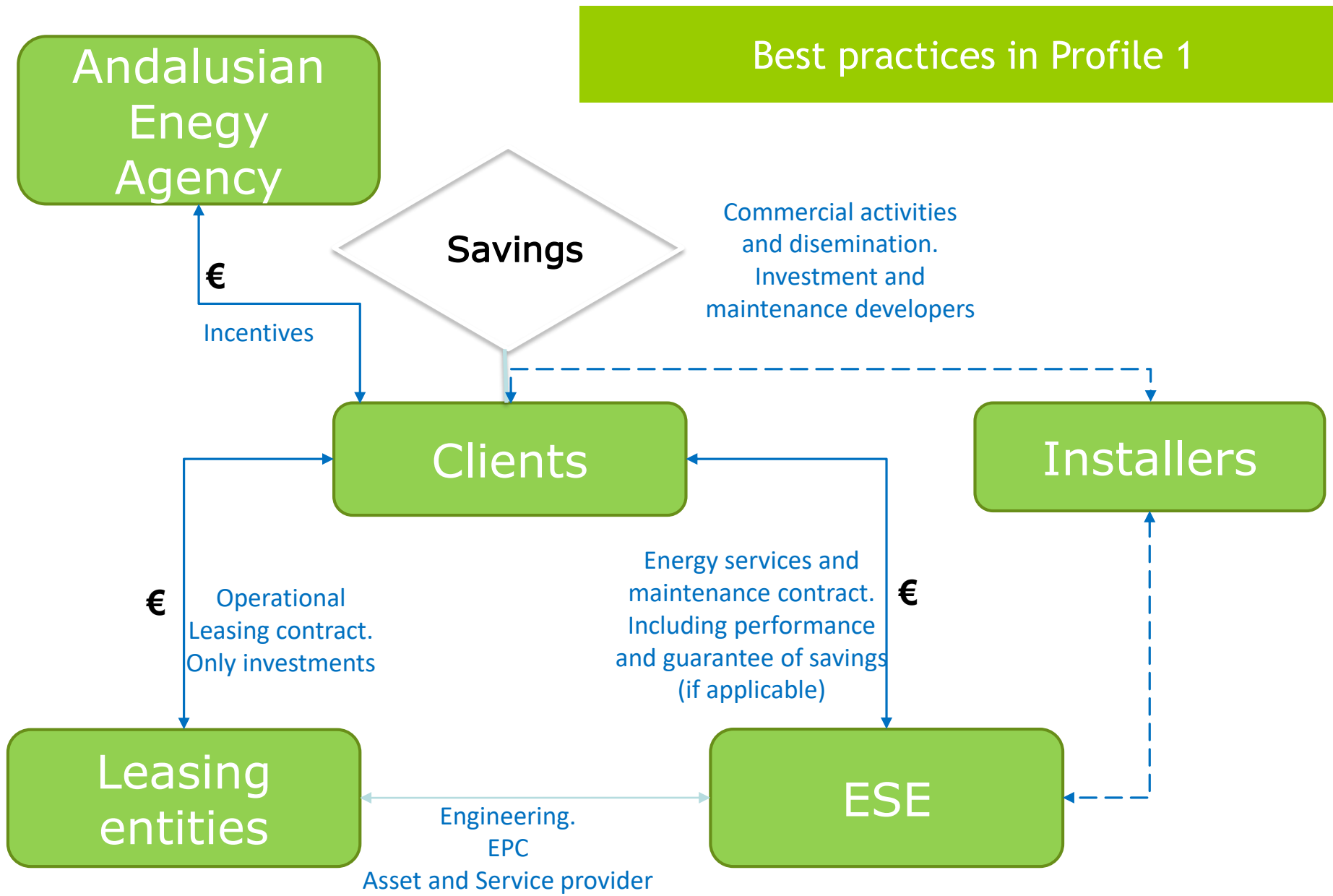
+ Based On:

+ Incentives of Andalusian Energy Agency (ERDF)

+ Lease from various private institutions



# Best practices in Profile 1





Gracias por su atención