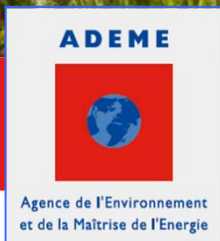




Financing energy refurbishment in the housing sector



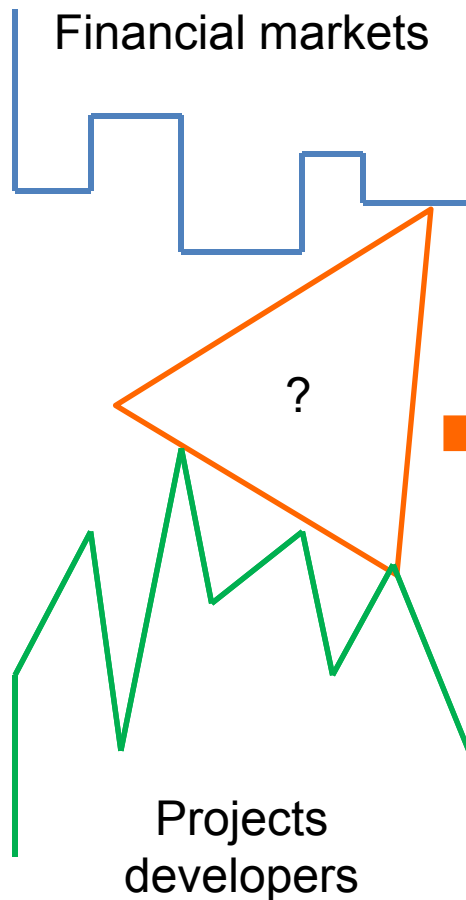
Christophe MILIN
ADEME - 04/03/2014



Looking for the right tool...

- To achieve the EU's 2050 objectives (Factor 4) we need (among others):
 - *Deep renovation of buildings (50%-80% savings)*
 - *A higher renovation rate*
- No technical breakthrough required
 - *Energy savings technically achievable in the French housing sector \approx -84%*
 - *Key obstacles are organizational and financial*
- Tens of billions € need to be invested each year
 - *Direct and indirect subsidies are not scalable and/or generate lower savings*
 - *Maximize the leverage of public intervention*
- Switch from a “stock refurbishment” perspective to a logic of projects’ support
 - *Intervention not limited to the sole financial support*
 - *Take the homeowner project into consideration*
 - ***Simplify and unify processes within an integrated refurbishment service***
- **There is already a lot happening across Europe...**

Fill the gap between ■ “projects” and “finance”



“ Project ” for a financier

- *Black boxes / standardized products*
 - *Investment requirements and associated cash-flows*
 - *Predictable profitability and risks*
 - *Minimum size to cover transaction costs*
-
- Which intermediaries ?
(ESCOs? Public operators? ...)
 - Which contractual relationships?
(Energy Performance Contract? Public Service delegation? other? ...)

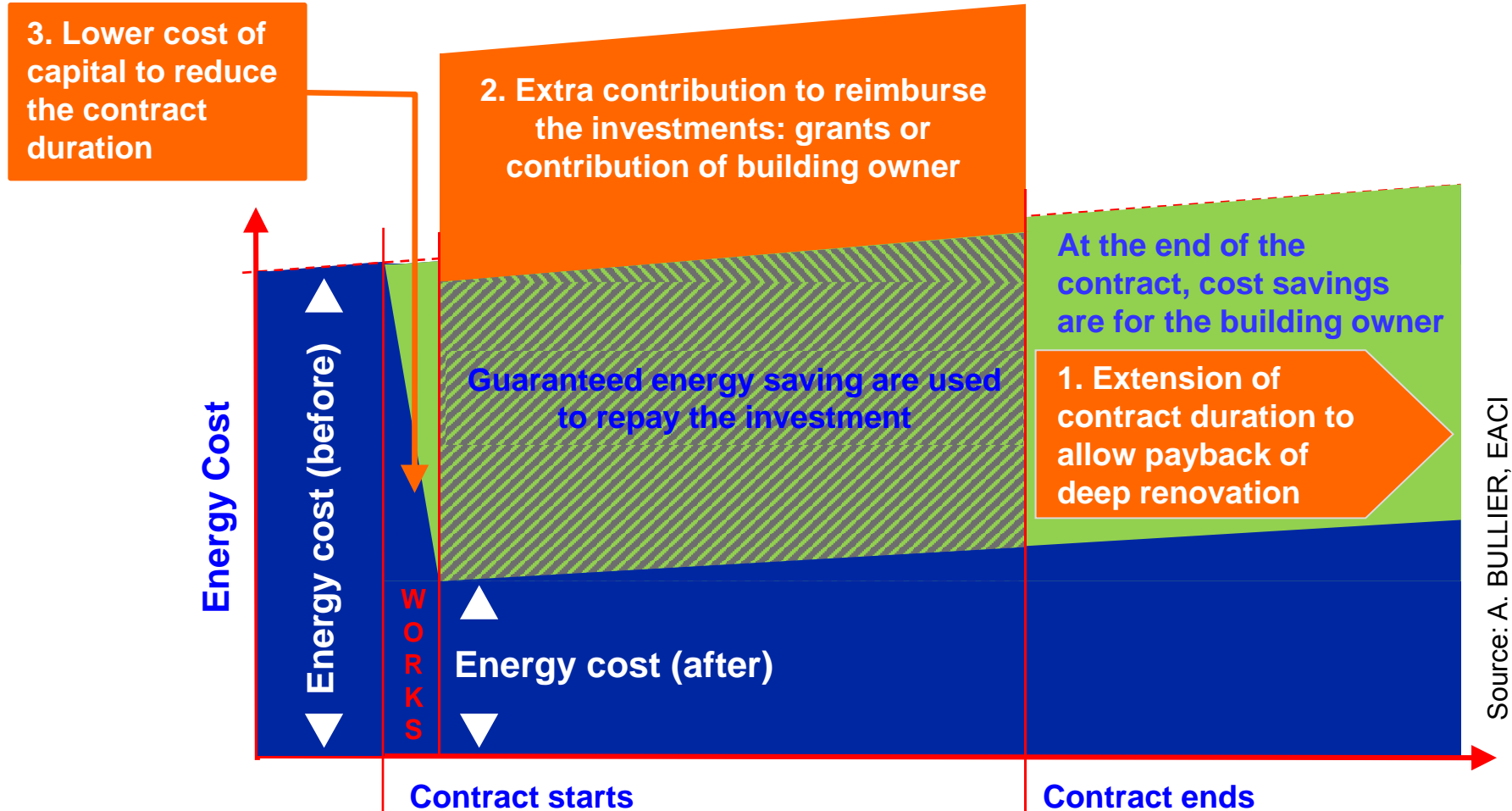
“ Project ” for a project developer:

- *Answer to a need*
- *Specifically tailored to fit physical constraints*
- *Best use of available technologies*
- *“no financing” or “no subsidy” ?*

Issue for financial engineering

- Propose a scheme compatible with usual practices of capital providers
 - *A private investor will intend to reach a level of “profitability / risk / liquidity” at least equivalent or higher compared to its other investment opportunities*
 - Particularly not in favor of comprehensive energy refurbishment in the housing sector (very long term commitments, low profitability and still high risks, with no real guarantees)
 - *A public investor can accept higher risks and even invest with no direct return (subsidy)*
 - Within the limits of its institutional competences, by justifying of a public interest and without distorting free competition
 - With the possibility of improved fiscal resources
 - *A public / private partnership will be the result of a negotiation*
 - Terms defined in the partnership contractual documents (bank partnership convention, energy performance contract, shareholders' agreement, ...)
- No great or poor scheme as such
 - *Necessary comparative analysis cost / effectiveness of the scheme resulting of the negotiation*

Energy Performance Contract



- Examples:
- High schools in the regions Alsace and Centre
 - Schools in Paris
 - Social Housing: Immobilière des chemins de Fer in Schiltigheim (Alsace)

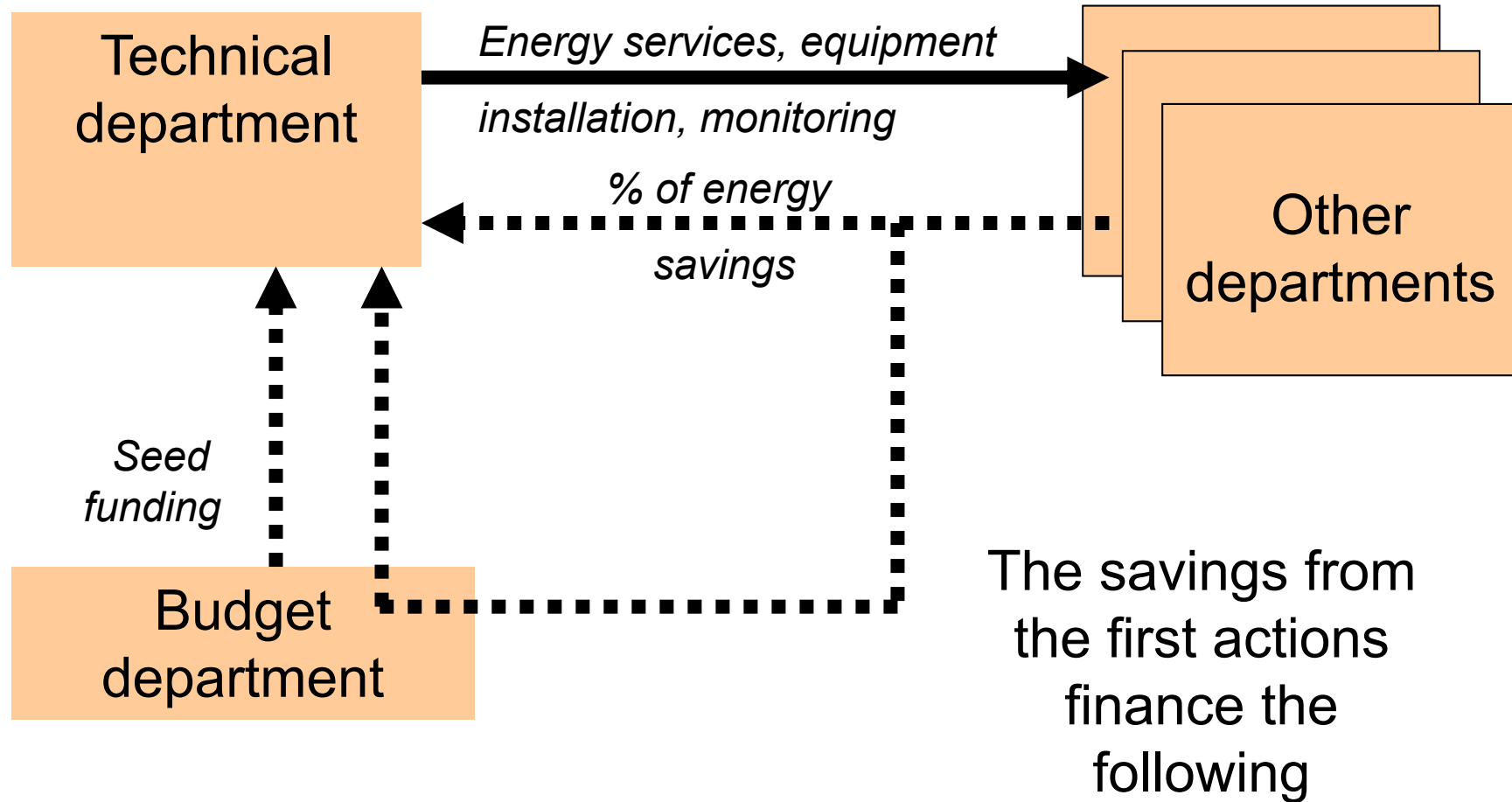


Limits of Energy Performance Contract

- Possibility to externalize the debt (off balance sheet)?
 - *Possible in regards to Maastricht accounting rules*
 - *But impossible according to new accounting rules for PPP in France*
- Do energy refurbishment projects exist?
 - *Most project will integrate a part of comfort improvement / respect of norms: should they be reimbursed by energy savings?*
 - *Switch from a “stock refurbishment” perspective to a logic of projects’ support*
- A balanced negotiation ?
 - *Capacity of building owners to negotiate with ESCOs?*
 - *Focus on the most profitable and secured measures*
 - *Overcosts and underperformances linked to the guarantee*
 - *Critical size to justify contracting with consultants*
- Towards tripartite contracts ?
 - *ESCO / Owner / User ?*
- Towards a guarantee of the guarantee ?
 - *Capacity of the contractor to assume the financial consequences of the energy performance guarantee?*



Public Internal Performance Commitment (PICO)





Société Publique Locale ■ (SPL OSER in Rhône-Alpes region)

- **Particularities**

- *Substitute the technical department in a PICO scheme*
- *Is authorized to intervene only on the building stock of its shareholders*
- *Do not necessarily have to go through public tender to intervene*

- **Services**

- *Support in defining and structuring EE projects*
- *Support in the refurbishment and follow-up*
- *Possibility of third party financing*

Advantages	Disadvantages
Skills pooling / stabilization of a dedicated team	Difficult governance
Rationalization / optimization of processes	Control over the SPL required
Possibility of financial engineering <i>(access to complex financial resources,...)</i>	(a little) more expensive per operation than a direct investment by the building owner?



Main market failures identified in the housing sector (justifying public intervention)

Market failures	Private housing Individual houses	Private housing Condominiums	Social housing
Financial resources to be adapted	Current Loans : duration too short, difficulties w/Eco PTZ	Collective loans not developed	Very competitive existing loan
Awareness rising / support to homeowners to develop	Insufficient information & very limited recourse to professional support	Difficulties aggravated by the weak governance of condominiums	Professional homeowners
Structuration of the professional offer	SME separated per specialties, no comprehensive offer	Insufficient work scheduling (linked to weak governance)	Skilled professionals and assistance

Source: Vesta Conseil & Finance

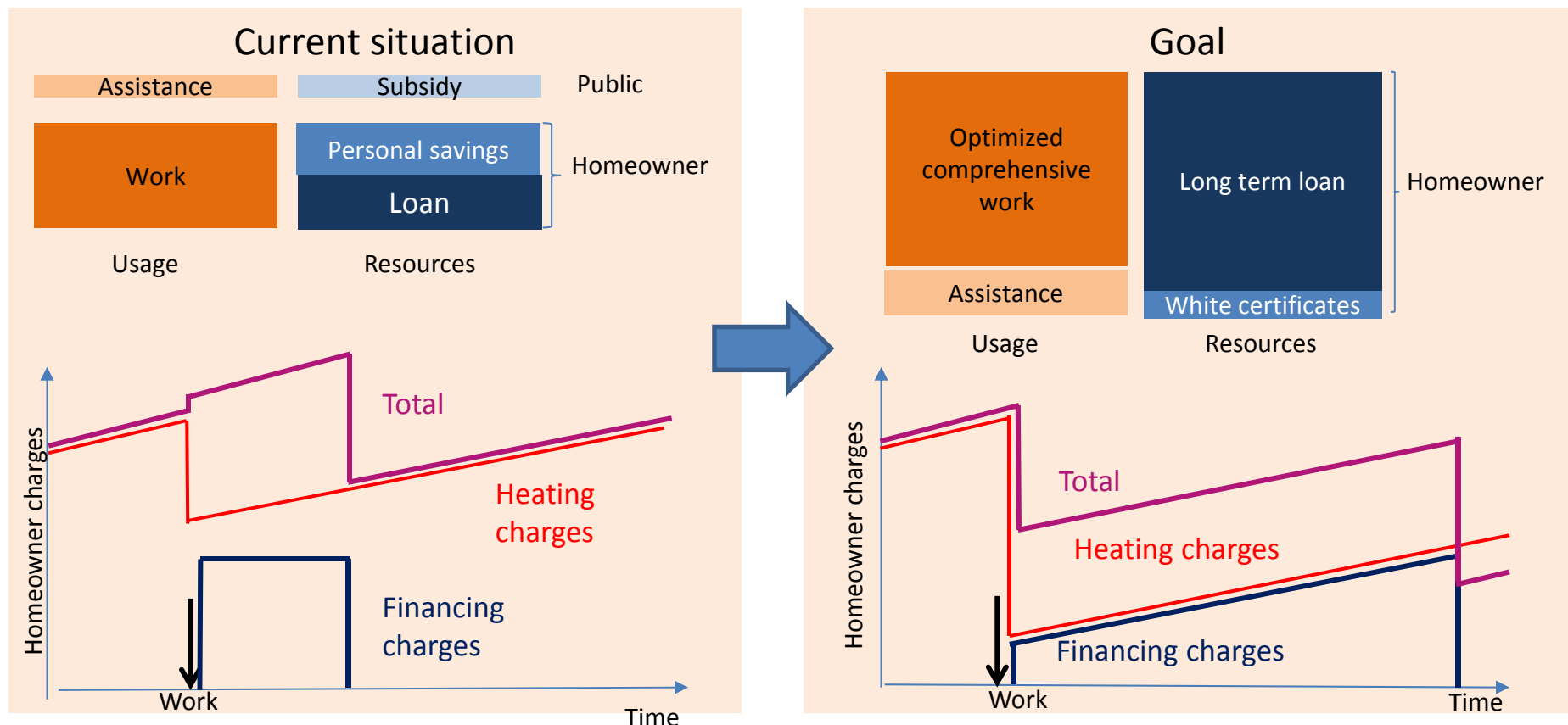


Financial engineering possibilities for social housing operators ?

- In France, access to very competitive loan and optimized valorization of energy savings certificates
 - *Equity if the limiting factor for social housing operators, not the existing loans characteristics*
 - *Cash flows (from rent) limited => is the contribution of tenants possible ?*
 - *Little success for EPC as it doesn't allow access to improved financial resource*
- Homeowners mostly well structured to conduct ambitious energy refurbishments
 - *Synergies in project management between social of housing and condominiums*
 - *Social housing operators in position to contribute to excellency clusters at regional level*
 - Databases / cartography of selling prices, rents and charges, allowing to compare houses benefiting from energy refurbishment
 - Awareness / training of inhabitants and technical services to work scheduling, maintenance, monitoring, ...
 - Consensus conferences
 - ...
 - *Mix residences (SHO co-owner and manager)*

Possible orientation followed by regional public authorities in France

- Maximize the interest, the will and the capacity of homeowners for realizing ambitious energy refurbishment
 - Levy effect linked to the financing of the study phase in the overall package and the inclusion of energy savings for evaluating the capacity of the homeowner to reimburse its loan*



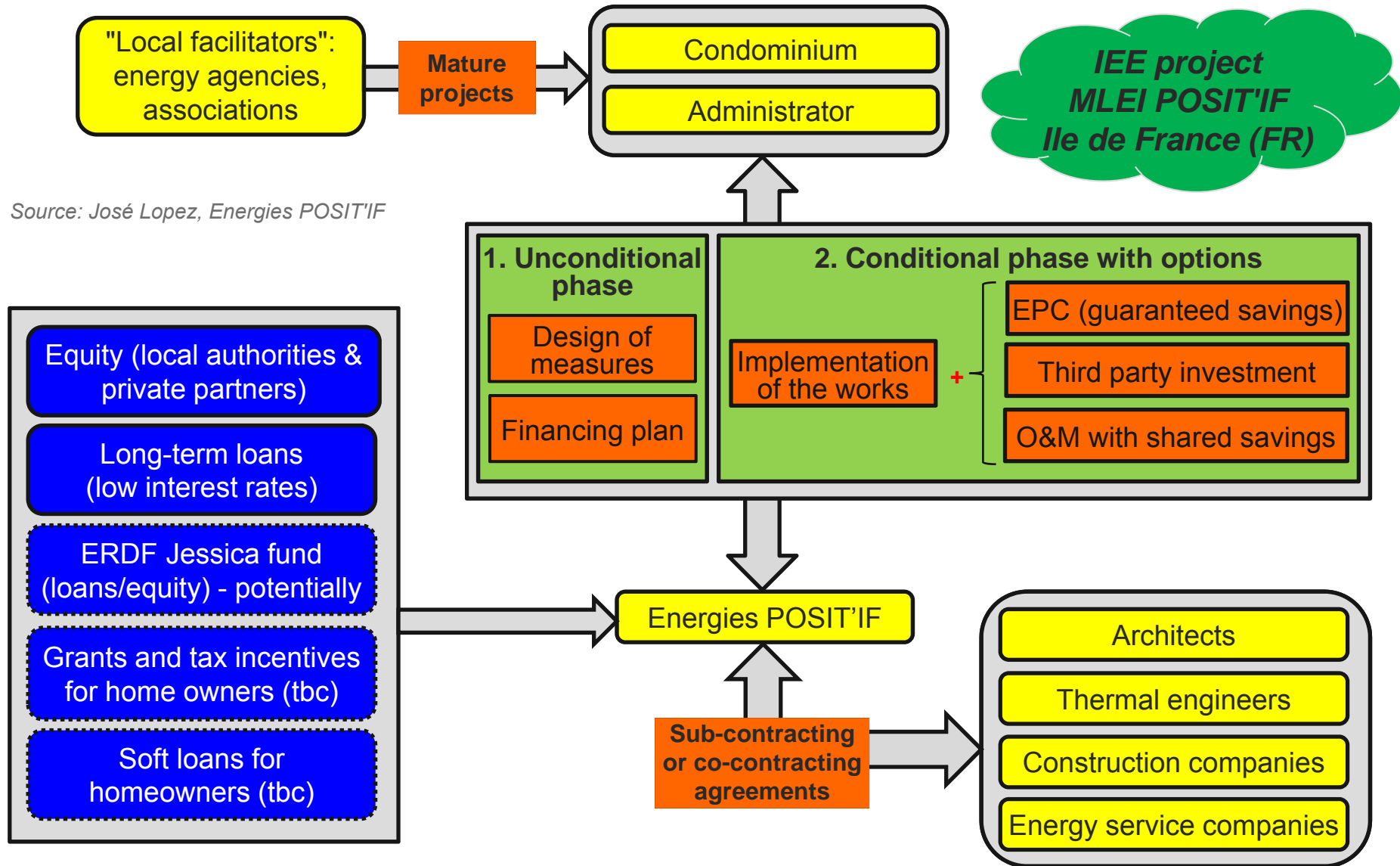


Examples of regional initiatives in the private housing sector (not exhaustive) ■

- Calls for expressions of interest to the banking sector
 - *Nord Pas de Calais, (Alsace), (Picardie), (Rhône-Alpes)*
- Trusted third party
 - *Franche Comté, Pays Voironnais, possibly several more*
- Third-party financiers
 - *2 active (Energies Posit'if, SEM PI), several more in preparation*
- Energy efficiency public services
 - *Picardie, (Alsace)*
- Regional guarantee funds
 - *One national and several regional in preparation*



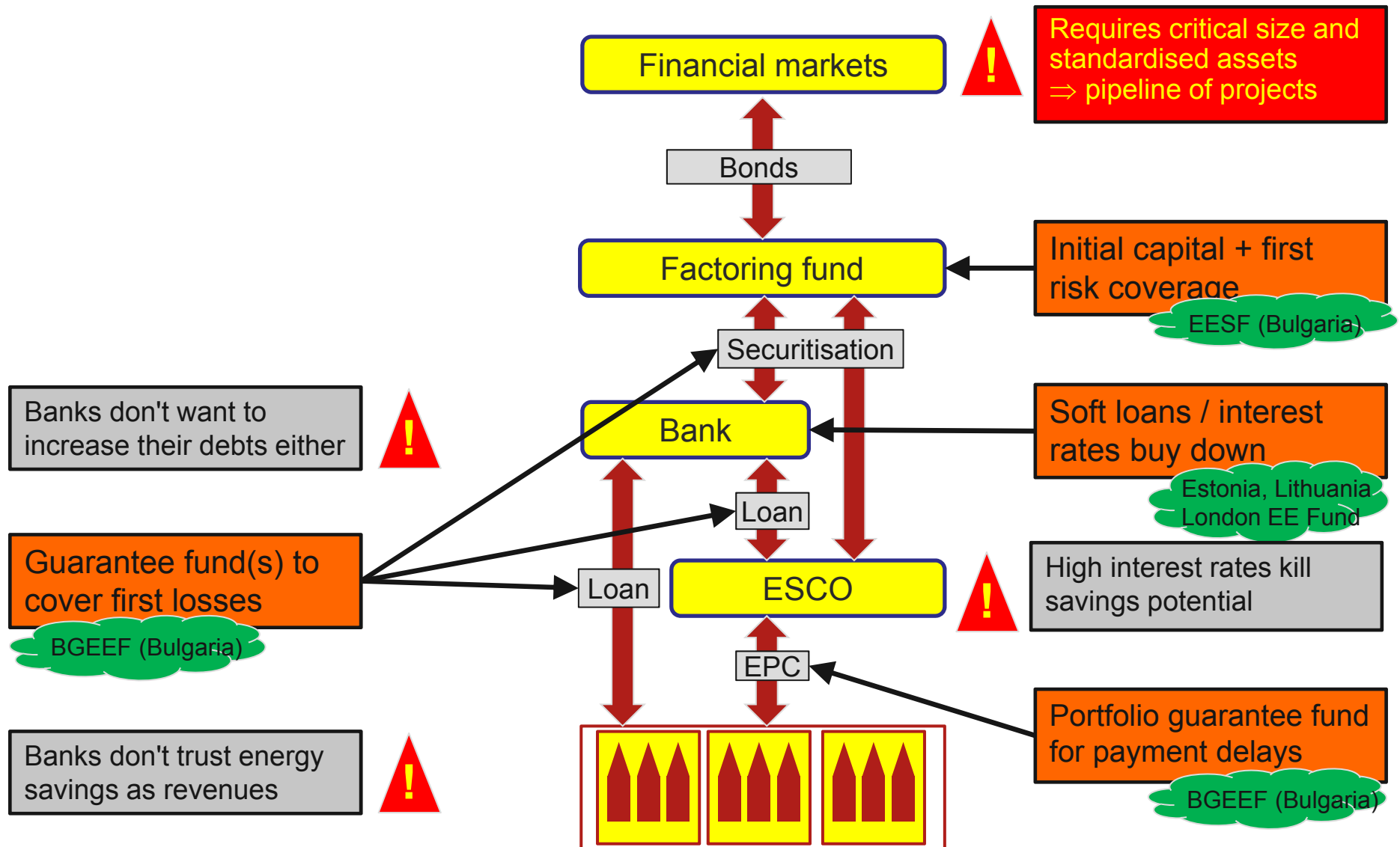
Energies POSIT'IF: public third party investment operator for condominiums



Source: José Lopez, Energies POSIT'IF

Increasing available funding

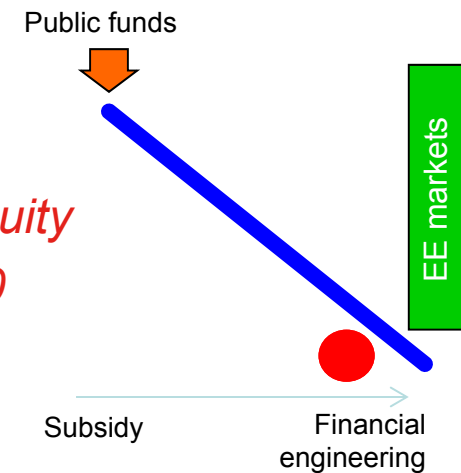
Public support schemes



Scaling up ■

Public intervention needed !

- 20% of EU structural funds allocated to EE and RES
 - = €17bn (2014-2020)
 - = 2% of required investments by 2020 (€115bn / year)
- Use public subsidies to leverage private funding
 - "Jessica" funds using EU Structural funds for soft loans (Estonia, Lithuania, London), guarantees on loans, or equity
 - Project development assistance: €1 in grant leads to €20 invested (ELENA, MLEI PDA – IEE programme)
- We have all the pieces of the puzzle! But the vision is lacking...
- Diffusion of the existing models is essential to replicate them
- Massive capacity building is needed for public authorities



THANK YOU FOR YOUR ATTENTION

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