



Financing the energy renovation of buildings with Cohesion Policy funding

*Insights on the technical guidance
produced for DG Energy*

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About ICF

- We are one of the largest specialist providers of evaluation, policy analysis and communications support serving the European Commission.
- We have provided research and analysis to enhance the effectiveness, efficiency, impact and added value of EU policies and programmes for over a decade.
- Our services cover a broad spectrum of EU policies including all areas underpinning European Structural and Investment Funds (ESIF):
 - Sustainable energy
 - Research & innovation
 - Enterprise
 - Regional & urban policies
 - Economic & monetary policies
 - Employment & social inclusion;
 - Education & training
 - Environment & climate change
 - Internal Market regulation
 - Public procurement
 - SMEs & entrepreneurship
 - Financial instruments
 - Consumer policy
 - Public health
 - Food safety
 - Justice, migration & internal security

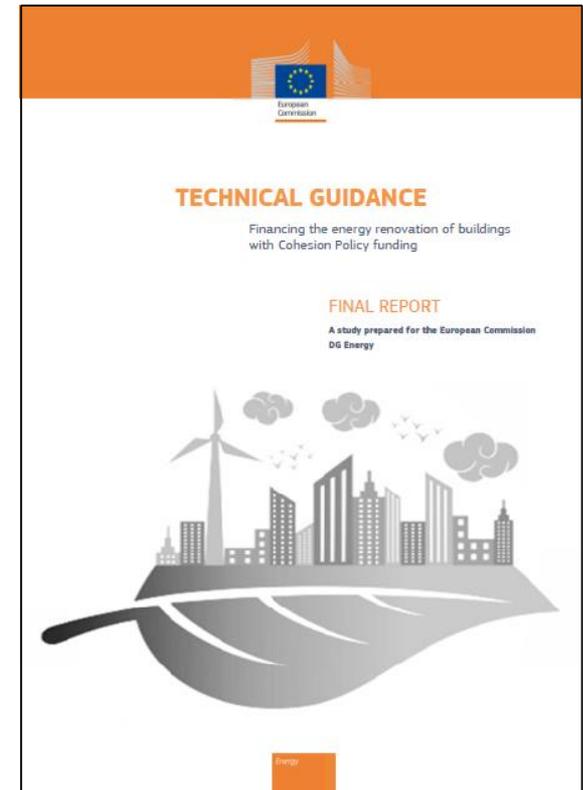
This presentation will...

- Provide insights into key financing steps which Managing Authorities (MAs) need to consider to support the financing of energy efficiency measures in buildings within Operational Programmes (OPs).
- Give insights into the ex-ante assessment which MAs must use to assess FIs.
- Explore the various implementation options which MAs can pursue.
- Discuss the advantages and disadvantages of different financing mechanisms.
- Provide details of Project Development Assistance (PDA) schemes which can be used to develop “bankable” projects to increase ‘absorption’ of funding.

Objectives of the guidance

Guidance on *Financing the Energy Renovation of Buildings with Cohesion Policy Funding (2014)*:

- Aims to help MAs plan and deploy sustainable energy investments in buildings within OPs
- Provides good practice approaches and case studies
- Informs MAs about the European requirements on buildings and energy efficiency
- Explores the different financing mechanisms that MAs can use to support SE projects with the aim to:
 - Launch large-scale investments in the energy renovation of buildings
 - Attract greater levels of private sector investment



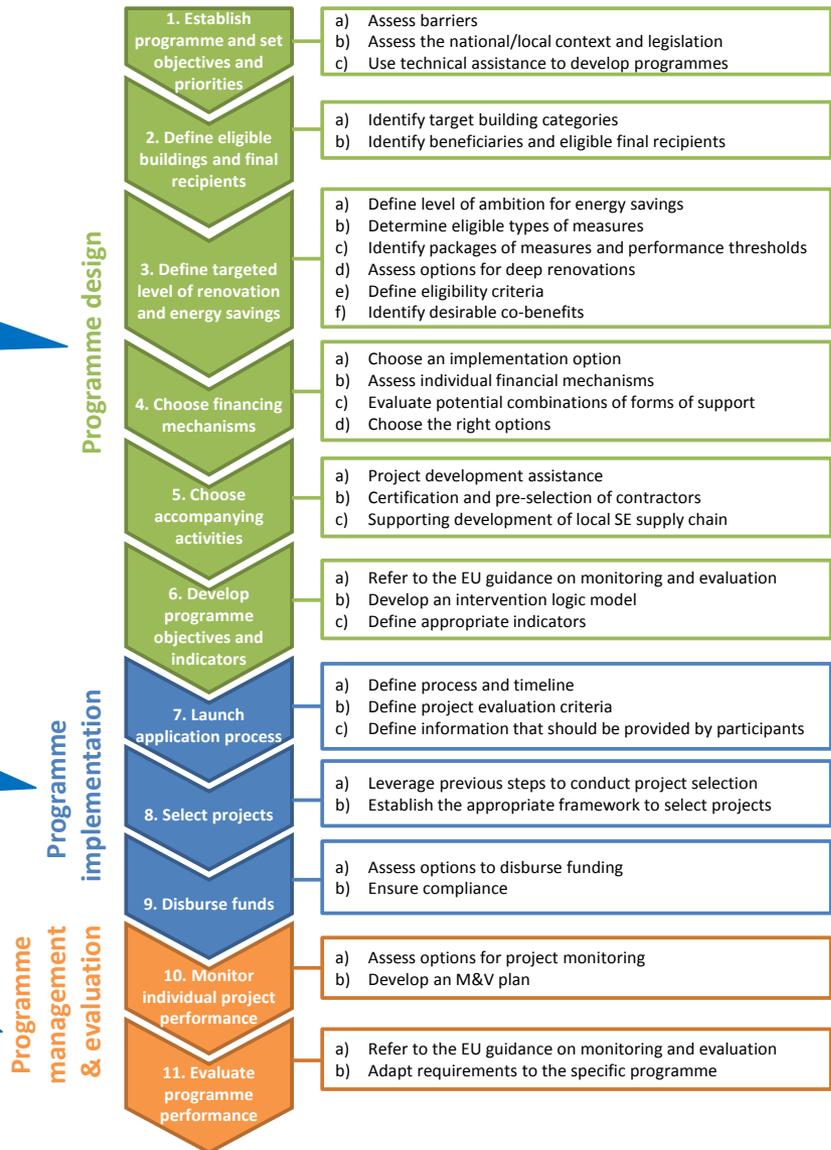
Summary roadmap in the technical guidance

There are 11 stages in the roadmap

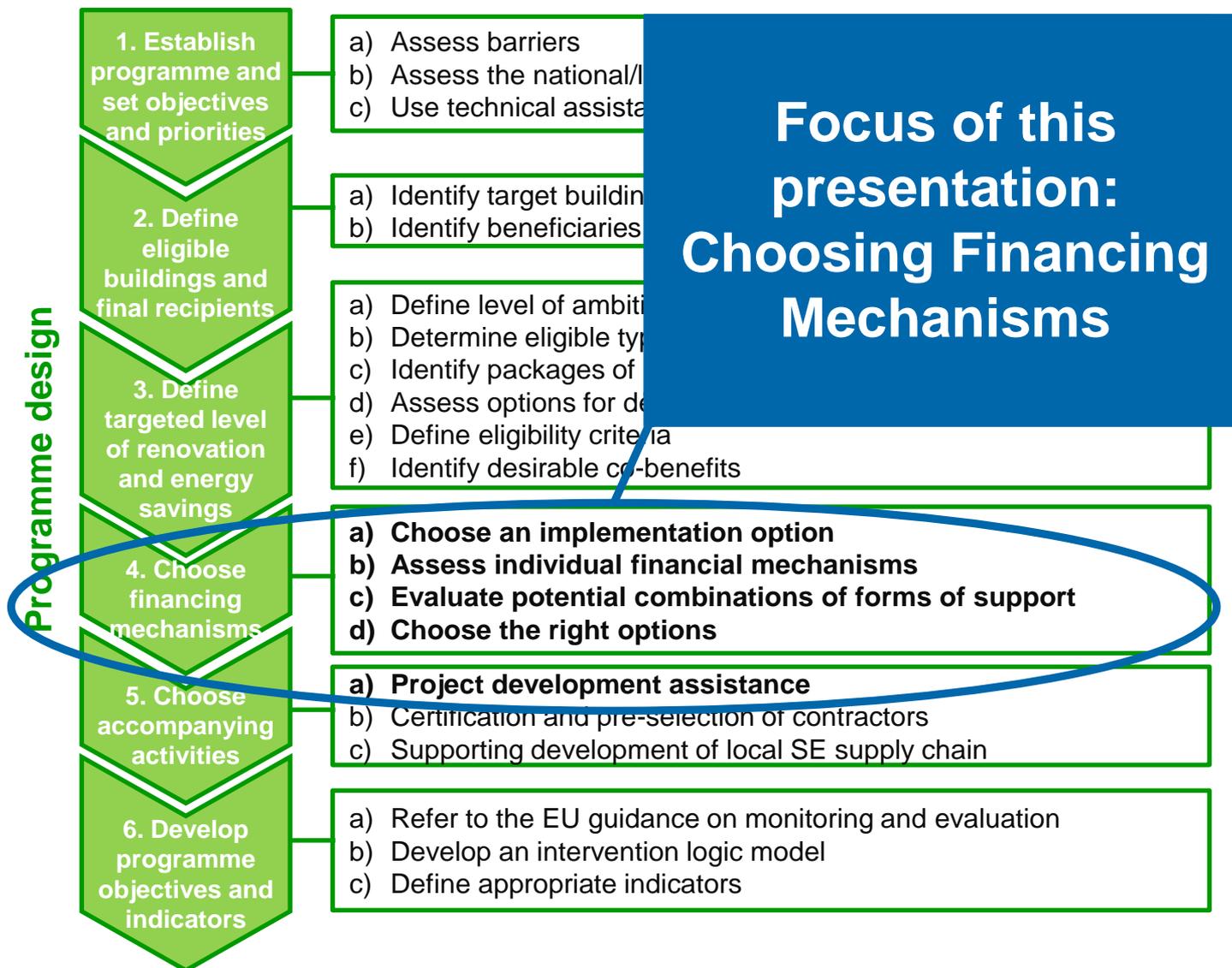
Programme design

Implementation

Management & Evaluation



Phase 1 : Programme design



Choosing the right financing mechanism

Step 4.1: Choose an implementation option



Rationale for using financial instruments

- **Move away from the ‘grant dependency’ culture** - through the use of loans, guarantees and equity/venture capital. *Note: 32 FIs focused on EE/RE in 2007-2013 period worth a total of EUR 600 million.*
- **Lever private sector financing** into a target set of projects to ensure policy objectives are met and increase the impact of ESIF programmes.
- **Help overcome market failures around access to finance**, including risks on the part of financial institutions associated with ‘intangible’ revenue streams (i.e. energy savings) and unsecured project finance.
- **Achieve higher quality, bankable projects** - because investments must be repaid and projects therefore receive far greater scrutiny.
- **Achieve a broader range of sustainable energy measures** to tackle ‘deeper’ levels of building renovation (grants can be used alongside too).
- **Achieve longer term sustainable finance** – potential for ‘revolving’ funds to reinvest revenues into future projects. *e.g. JESSICA model*

Step 4.1: Choose an implementation option

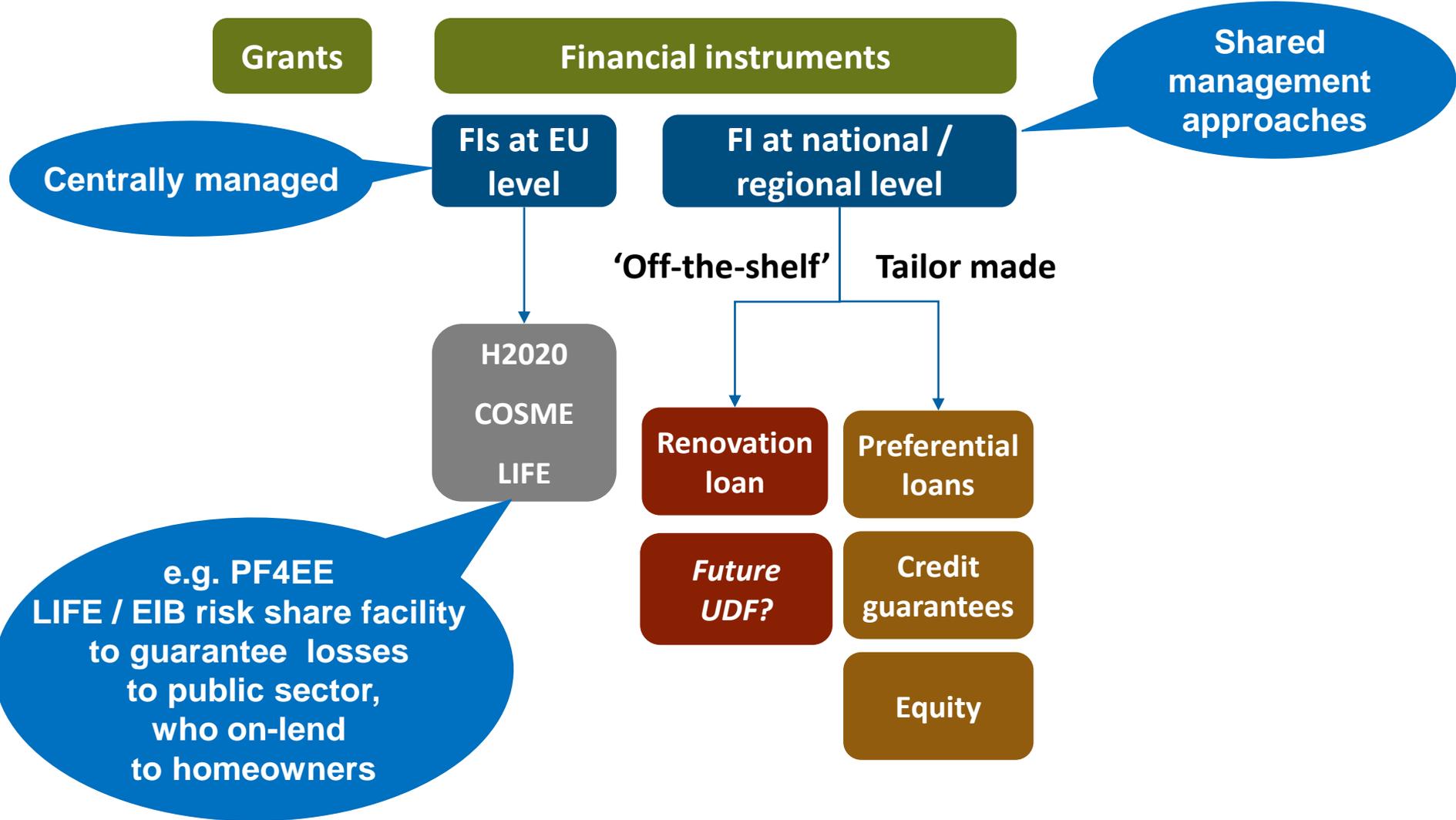


Approach

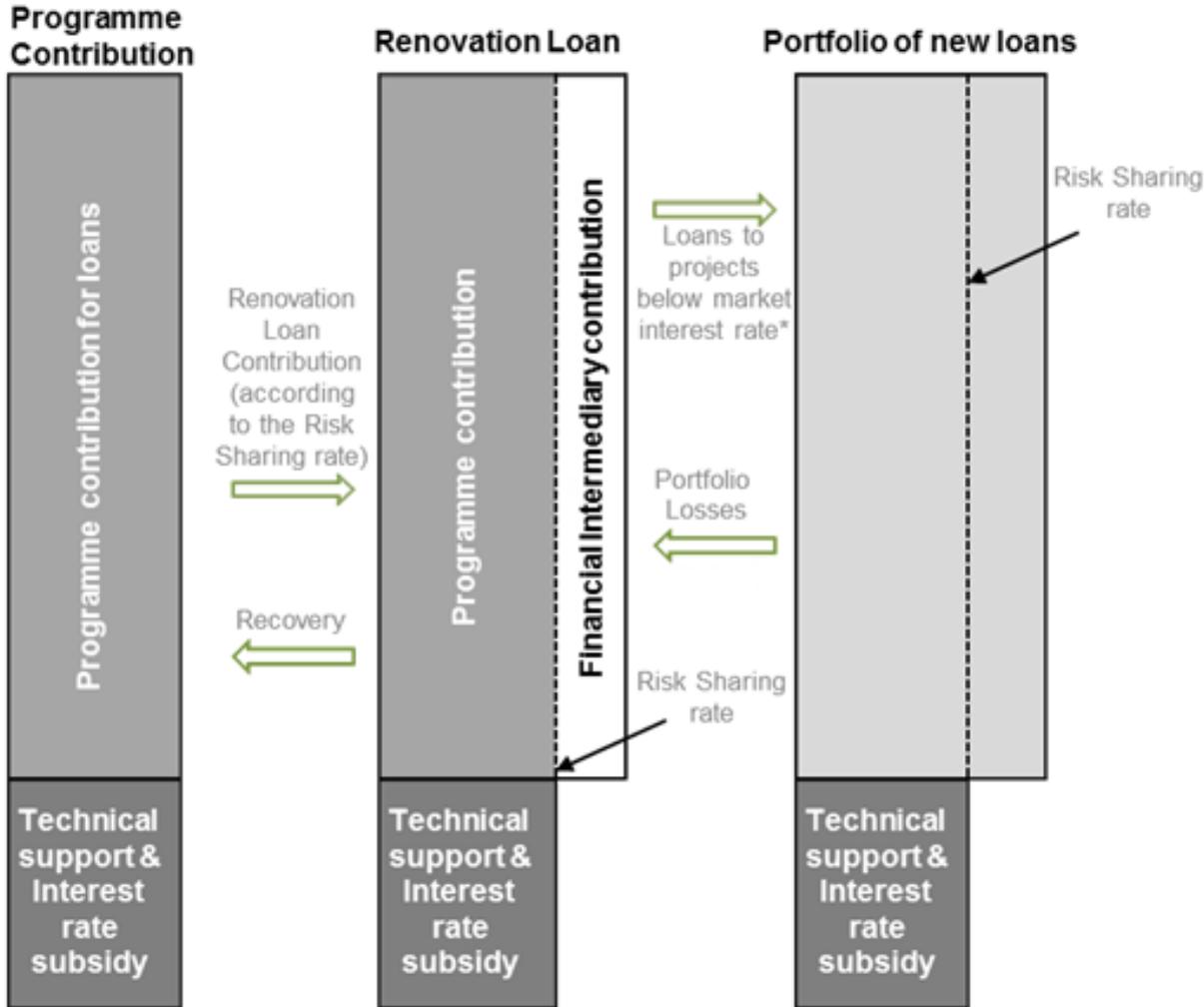
- Key criteria for whether activities are suited to a FI will be:
 - (1) **Is income generated or savings achieved?**
 - (2) **Is there final beneficiary interest?**
 - (3) **Is there interest amongst financial intermediaries?**
- To use ESIF for FIs, **MAAs must now carry out an ex-ante assessment***. Several criteria need evaluation:
 - How the FI fulfils policy objectives
 - Market failures the FI seeks to resolve;
 - Value added of the FI (additionality & potential crowding out effects);
 - Estimated leverage the FI will generate from private investment;
 - What lessons can be applied from previous approaches; and,
 - Proposed investment strategy - target beneficiaries, financial products and **most appropriate implementation option** (*see next slide*).
- **Ex-ante can be carried out internally or by independent consultants.**

* As set out under Article 38 of the Common Provisions Regulation (No 1303/2013)

There are various implementation options – shared management or EU level contribution



'Off the shelf' Renovation Loan (2014 – 2020)



Focus on financing EE / RE measures in multi-apartment/social housing

Risk-sharing facility

- Financial intermediary provides minimum 15% & distributes loans;
- MA covers remaining 85%

OP contribution: €5 - 30m

Preferential Loan term: up to 20 years

Pre-defined but still flexible as per regional need

State aid compatible

Grant for technical support up to 5% of ESIF contribution

* Full benefit of preferential interest rate is passed to house owners

Source: DG REGIO, 2014

Step 4.2: Assess individual financing mechanisms



	Advantages	Disadvantages
Grants	<ul style="list-style-type: none"> • Achieve various policy objectives • Target innovative technologies • Go beyond 'business as usual' • Conditions can be attached 	<ul style="list-style-type: none"> • Limited leverage • One time spend • Risk of overspend • Can see product price mark ups
Preferential Loans	<ul style="list-style-type: none"> • Final recipients incentivised by reduced interest rates to select most cost effective measures • Returns reinvestable into projects • Administratively fairly simple • Particularly suitable for economic depressed areas, immature or financially constrained markets 	<ul style="list-style-type: none"> • EE savings may not be considered as cash flow by some financial intermediaries, extending pay-back • Recipients may not see benefits of a low interest rate loan • Not suited to poorer households
Guarantees	<ul style="list-style-type: none"> • Helps bridge perceived credit risks • Bank/MA assumes debt obligation in case borrower (e.g. ESCO) defaults • Help developers access finance & reduce cost of capital (less equity) 	<ul style="list-style-type: none"> • Partial credit guarantee schemes do not provide adequate solution to situations where a project investor has insufficient equity.

Step 4.2: Assess individual financing mechanisms



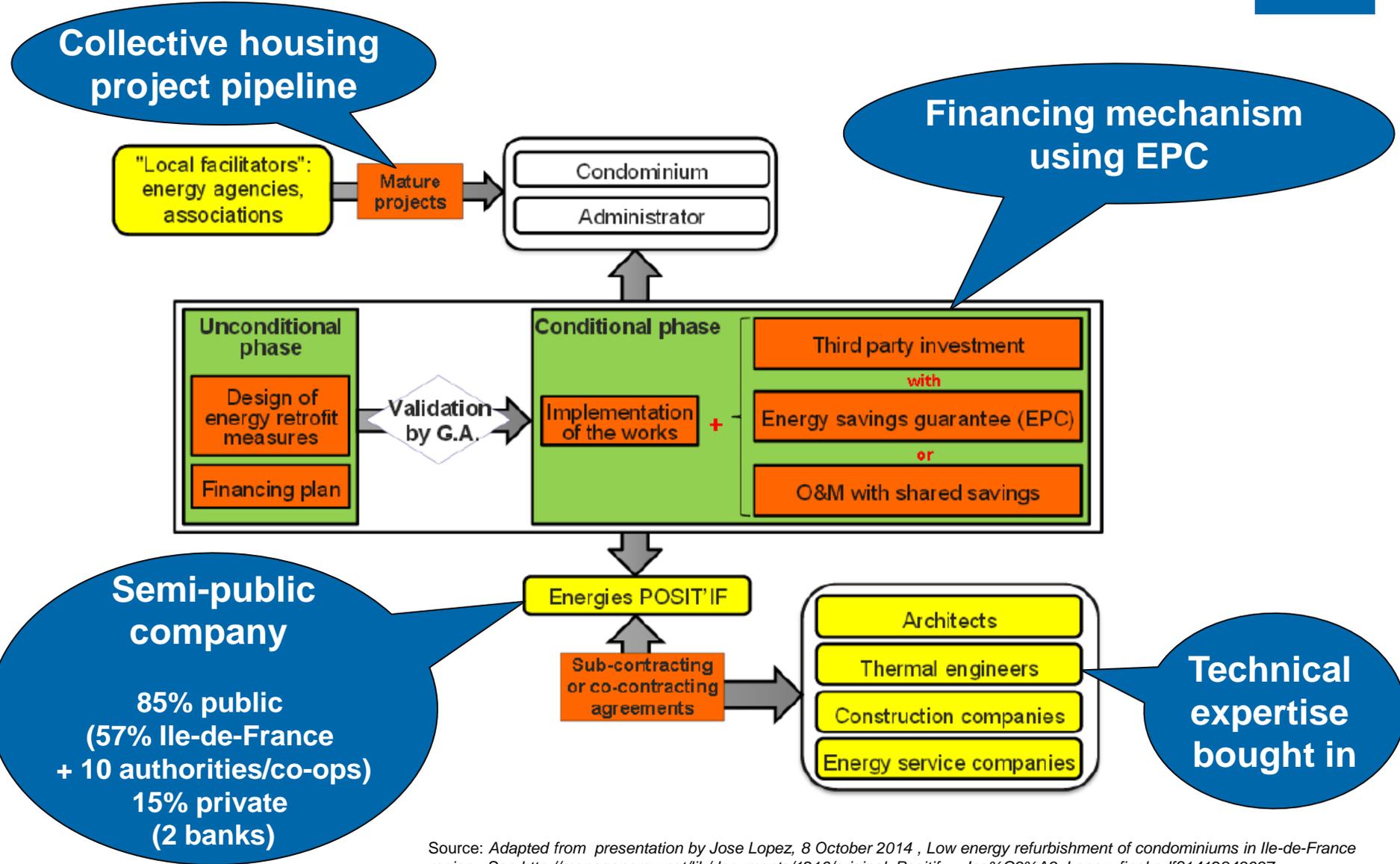
	Advantages	Disadvantages
Equity	<ul style="list-style-type: none"> • Direct investment into a legal entity • Overcomes market failure • Creates working capital 	<ul style="list-style-type: none"> • Higher risk as limited/no share liquidity and may need further capital if working capital runs out
Energy Performance Contract (EPC)	<ul style="list-style-type: none"> • Simple principle: energy costs are reduced through a capital investment • Stream of income from energy savings repays upfront investment costs for contract duration • Guaranteed level of energy performance for contract duration • Properly modelled FIs can de-risk EPC & motivate ESCOs to take longer-term engagements, getting closer to 'deep renovation' • Shields client from risk • Devolve technical expertise to ESCO • ESCO either provides third party investment or facilitates access to bank lending and/or grants 	<ul style="list-style-type: none"> • EPCs only concern an agreement on savings, not the measures to be implemented • Complex to arrange: each project needs detailed assessment to work out savings • Relatively high transaction costs • ESCOs tend to focus on "low-hanging fruit" options that have shorter paybacks and lower risk exposure • Energy savings need continuous monitoring and verification • Any failure or shortfall from expected result requires reconciliation to recover shortfall

Step 4.2: Assess individual financing mechanisms



	Optimal applications	Examples
Grants	<ul style="list-style-type: none"> Promotion of new technologies in projects which are below cost-optimal Work well in combination with loans 	<ul style="list-style-type: none"> Renewable Heat Premium Payment Scheme, DECC, UK - subsidises high capital cost of biomass boilers, heat pumps, etc.
Preferential Loans	<ul style="list-style-type: none"> Support a mixture of EE measures Partial refurbishment, major renovation and new construction 	<ul style="list-style-type: none"> KfW housing renovation loan
Guarantees	<ul style="list-style-type: none"> Help small financial institutions and ESCOs to access capital at acceptable costs 	<ul style="list-style-type: none"> Bulgarian Energy Efficiency Fund – offers partial credit guarantees for ESCOs
Equity	<ul style="list-style-type: none"> Local semi-public company 	<ul style="list-style-type: none"> Energies POSIT'IF (France) OSER, Rhone-Alpes (France)
EPC	<ul style="list-style-type: none"> Suited to large scale or 'bundled' public sector projects due to their complexity (also companies) 	<ul style="list-style-type: none"> Many projects use EPC, primarily through ESCOs

Energies POSIT'IF (France) - a semi-public ESCO: Potential model for an Operational Programme?



Source: Adapted from presentation by Jose Lopez, 8 October 2014, Low energy refurbishment of condominiums in Ile-de-France region. See http://managenergy.net/lib/documents/1216/original_Positif_-_Jos%C3%A9_Lopez_final.pdf?1412843637

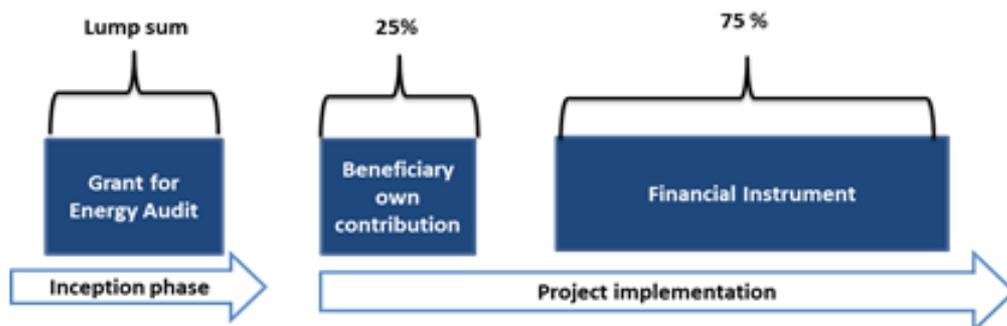
Step 4.3 Evaluate combinations of support

MAs can tailor interventions to meet objectives and combine financing mechanisms

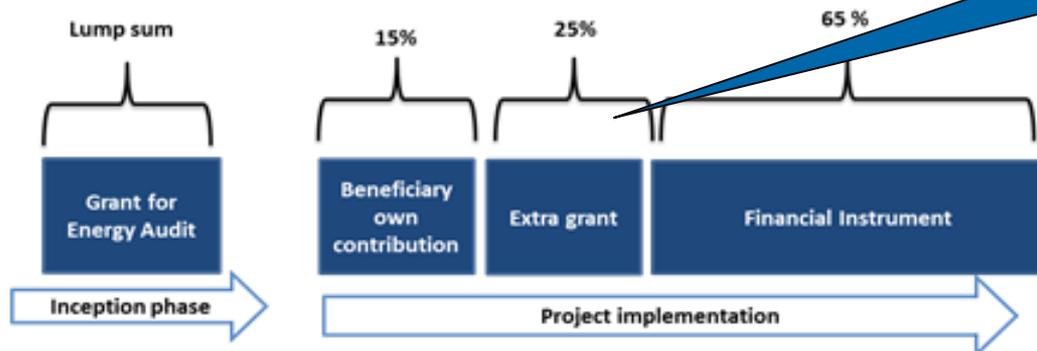
However, need to consider :

- Maturity of local market, key players and their needs;
 - Nature of FI and how it best addresses needs;
 - Project types (i.e. R&D or implementation)
- e.g. preferential loans/credit guarantees combined with grants

If EE measures achieve class C:



If EE measures achieve class B:



Grant used to achieve greater savings alongside a loan

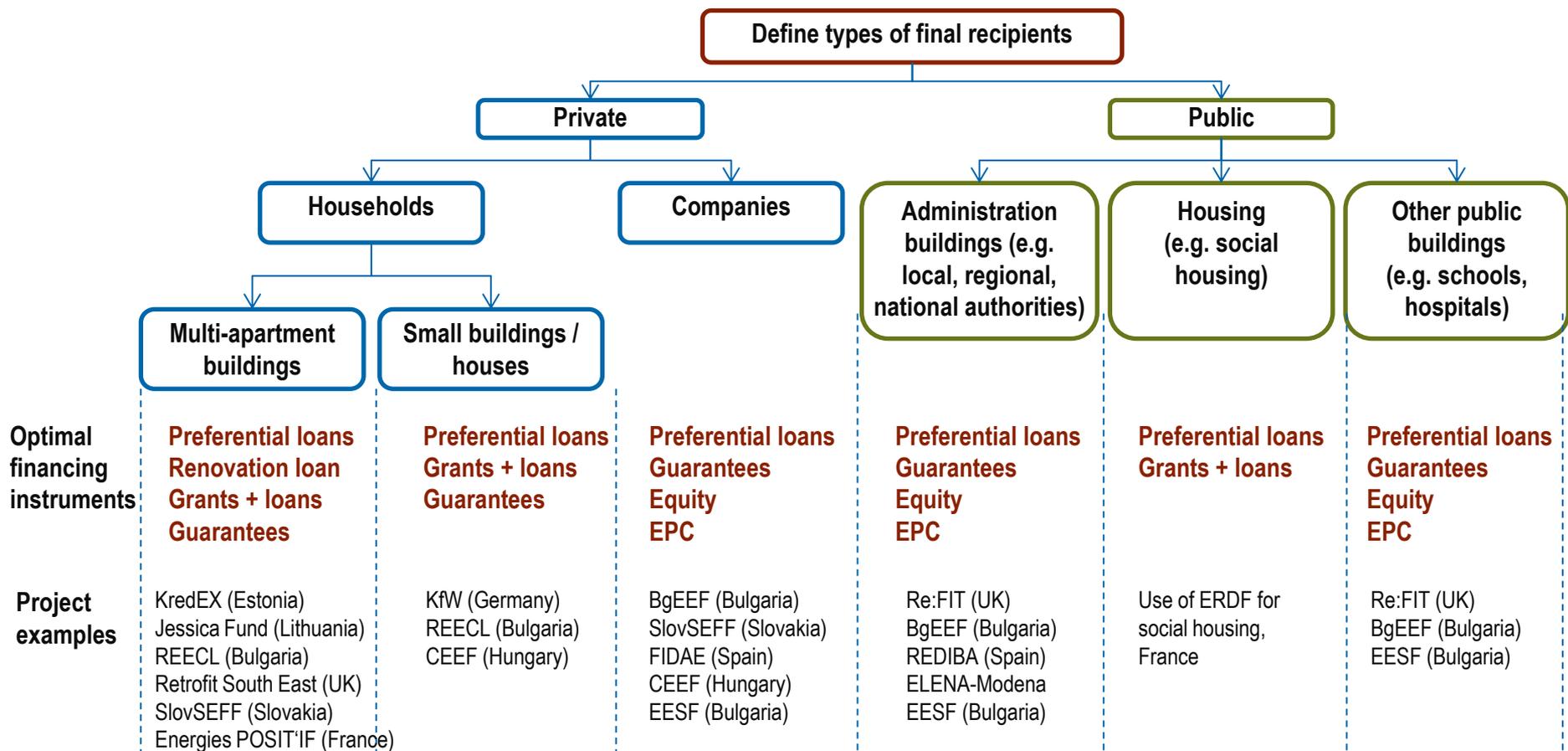
Grants & loan schemes:

- Initiative for Energy Conservation in Homes (Greece)
- KREDEX (Estonia)

Step 4.4 Choosing the right financing options

MAs need to evaluate appropriateness of financing mechanisms

Best option will depend on **local context, building types, final recipients targeted and programme objectives** – such as a combination of energy savings, support for local supply chains, skills enhancement



Step 5.1 Project Development Assistance (PDA)



Grant-supported assistance* to public authorities/bodies to help develop **“bankable” sustainable energy projects in order to increase ‘absorption’ of funding.** Also assist project developers throughout project development cycle.

PDA under Horizon 2020

(formerly MLEI)

- Project Investment volume: €6m – €50m
- Mandatory leverage factor: 15 or higher
- Target groups: public and private project promoters including such public/private infrastructure operators, cities, etc.
- Sectors covered in 2014 include public and private buildings amongst others

European Local Energy Assistance (ELENA) facilities

- EIB, KfW, CEB (Council of Europe Development Bank), EBRD
- Investment volumes: >€50m for EIB-ELENA; <€50m for rest
- Mandatory leverage factor: > 20 for all facilities
- Sectors covered in 2014 include energy efficiency in public and private buildings (although different criteria for each)

* For example covering feasibility and market studies, structuring of programmes, business plans, energy audits, preparation of tendering procedures and contractual arrangements and project implementation units

€59m to help build capacity under EE call in Horizon 2020 (opens Dec '14; closes June '15)



EE7: Innovative approaches to improve capacity in public authorities	<ul style="list-style-type: none">• Empowering public authorities to plan, finance & implement ambitious sustainable energy policies and plans
EE9: Empowering stakeholders to assist public authorities	<ul style="list-style-type: none">• Assist public authorities to define and implement sustainable energy policies and measures• Large scale capacity building or engagement activities
EE 19: Financeability and attractiveness of sustainable energy investments	<ul style="list-style-type: none">• Development of frameworks for the standardisation & benchmarking of investments• Targeting public institutional investors (e.g. public or semi-public pension schemes)• EU & national sustainable energy financing Platforms
EE 20: Project Development Assistance	<ul style="list-style-type: none">• Public and private project promoters leading to credible pipeline of bankable aggregated projects and financial schemes & display of innovative financing solutions
EE 21: Development & market roll-out of innovative energy services & financial schemes for sustainable energy	<ul style="list-style-type: none">• Roll-out of business models for innovative EE services• Replication of successful innovative financing solutions

Source: EASME http://managenergy.net/lib/documents/1227/original_RENNER_-_Funding_opportunity_in_H2020.pdf?1412843994

Translating policy into practice....example of a regional agency investigating use of FIs



Tees Valley Unlimited, North East England, UK

Focus: Retrofitting of social housing – tender for consultancy work, October 2014

Investigating the potential to establish a 'Financial Engineering Instrument' to support the retrofit of existing social housing stock in the Tees Valley. Initial discussions suggest sufficient need and demand for a £20m (€24m) programme.

Identified benefits:

- Reduce CO₂ emissions;
- Help tackle fuel poverty;
- Incentivise house builders to provide energy efficiency measures in new homes not currently commercially viable due to current house prices and market demand;
- Provide training opportunities; and,
- Assist Tees Valley to reduce its environmental footprint.

Agency is currently engaging with Tees Valley Registered Providers (social landlords) on approach, housing unit numbers, locations, technologies to invest in, costs, the funding model and opportunities to link into ESF training projects.

Summary

- There is wide acceptance and good exemplars to show that FIs can effectively finance energy renovations in buildings, yielding many benefits.
- Common Provisions Regulation governing ESIF provides implementation options for MAs to consider and sets rules on how to make a business case for FIs.
- Different financing mechanisms can be deployed and blended together (e.g. grant and loan), depending on the objectives of the MA and the OP's level of ambition.
- Support is available through EU-wide schemes to help with Project Development Assistance (PDA) covering, inter alia, energy audits, preparation of tendering procedures and contractual arrangements. PDA can aid development of “bankable” sustainable energy projects to increase ‘absorption’ of funding.

These insights can help Member States to develop more effective long-term strategies for mobilising investment in the renovation of the national stock of residential and commercial buildings (under Article 4 of the EED)

