



Gli strumenti BEI per l'efficiamento energetico

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1. EIB Facts & Numbers



The European Investment Bank

Long-term finance promoting European objectives

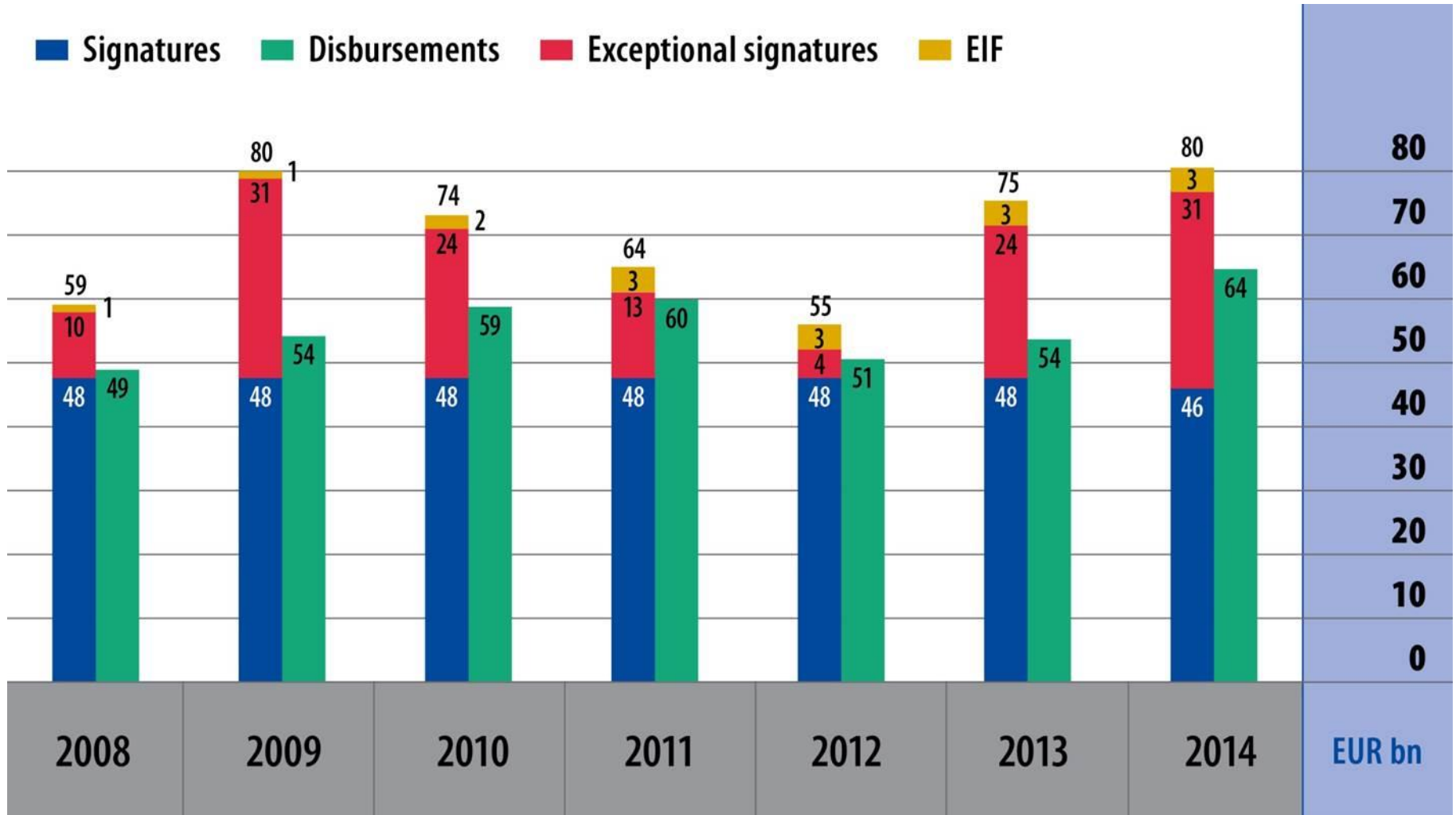
- ❖ European Union's long-term lending institution set up in 1958 by the Treaty of Rome.
- ❖ Largest multilateral lender and borrower in the world
- ❖ EIB shareholders are the 28 EU Member States
- ❖ Around 400 projects annually in over 160 countries
- ❖ Around 10% of financing is for projects outside the EU
- ❖ Financing is in support of EU priority objectives (climate change, infrastructure, energy, SMEs, regional development).



A strong response to the crisis



■ Signatures ■ Disbursements ■ Exceptional signatures ■ EIF





Growth and jobs: four key priorities

Promoting sustainable growth and job creation in Europe and beyond



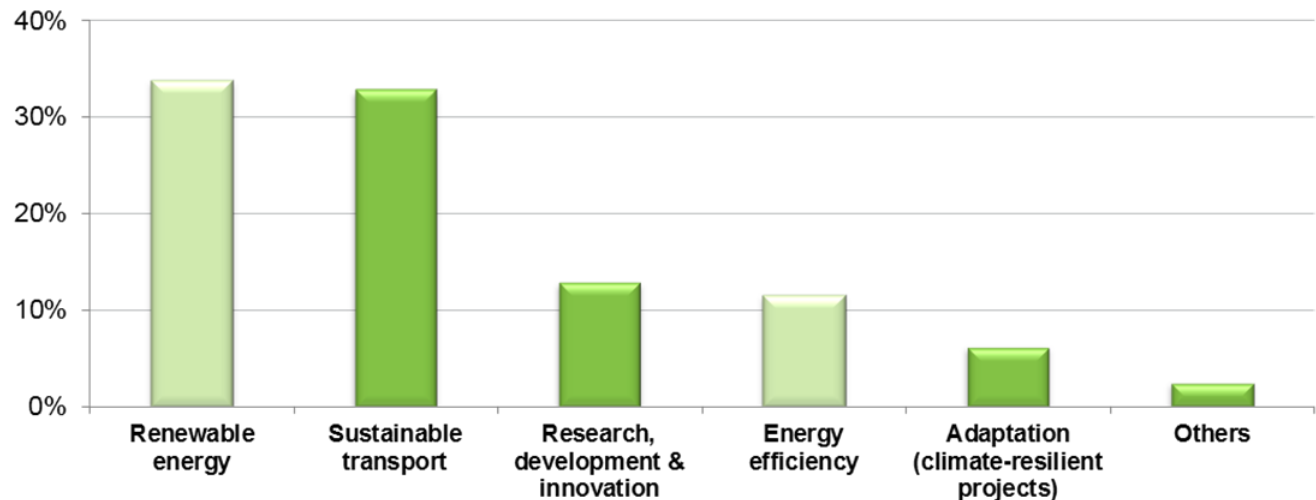


EIB Climate Action



- Efforts to mitigate / adapt to climate change are a top priority for EIB;
- More than 25% of total EIB lending goes towards Climate Action;
- Almost EUR 100bn of financing worldwide during 2008 – 2013;
- More than 50 in-house environmental specialists.

Sectorial breakdown of EIB Climate Action lending in 2013
Total: EUR 19bn (signed loans)



LENDING...	...BLENDING...	...ADVISING
<p>Loans</p> <p>But also:</p> <p>Guarantees</p> <p>Equity participation</p>	<p>Combining EIB finance with EU budget (Project Bond Initiative)</p> <p>Higher risk projects for innovation (RSFF)</p>	<p>Prepare & implement projects (JASPERS)</p> <p>Support for public / private partnerships (EPEC)</p> <p>Technical Assistance (ELENA)</p>

Attracting FUNDING for long-term growth

Instrument	Local energy projects/programmes can potentially access finance through:
<p>Investment Loans Direct loan for a specific investment project or programme, usually > EUR 25m</p>	<ul style="list-style-type: none"> • Loan to a City to finance an EE/RE programme • Loan to co-finance an Integrated Territorial Investment with structural funds • Loan to a private partner • R&D loans
<p>Framework Loans Loan for a programme of investments meeting defined criteria but not finally prepared at time of signing</p>	<ul style="list-style-type: none"> • Framework loan to a city or region to finance a programme of small or medium investments • Framework loan to co-finance investments under a structural fund operational programme • Framework loan to a bank to finance investments
<p>Global Loans Credit lines to banks</p>	<ul style="list-style-type: none"> • Multi-purpose credit line
<p>Funds Investment in a fund</p>	<ul style="list-style-type: none"> • Investment into an urban development fund, brownfield fund etc

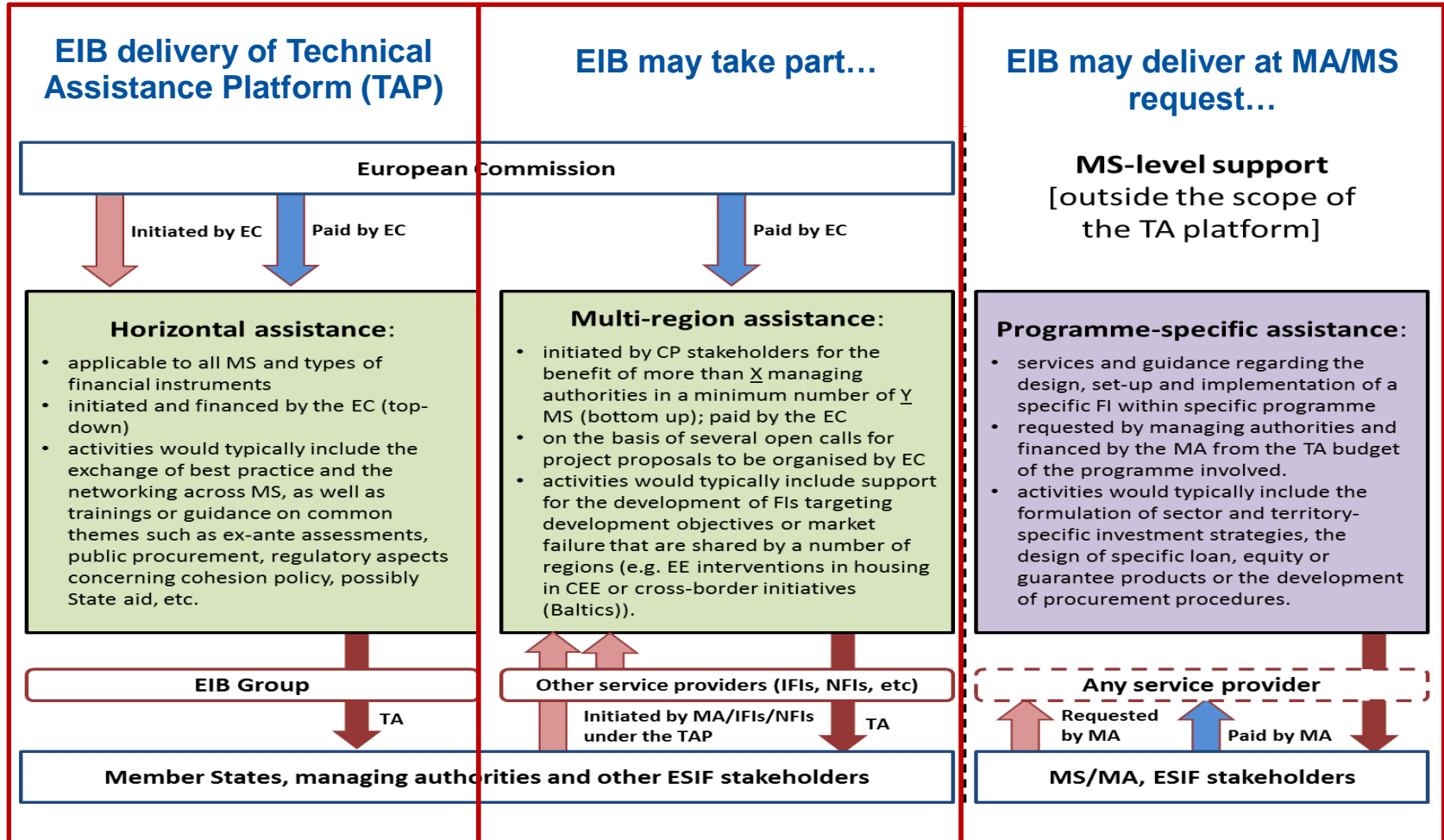
2. Financial Instruments

EIB role in assisting FI implementation

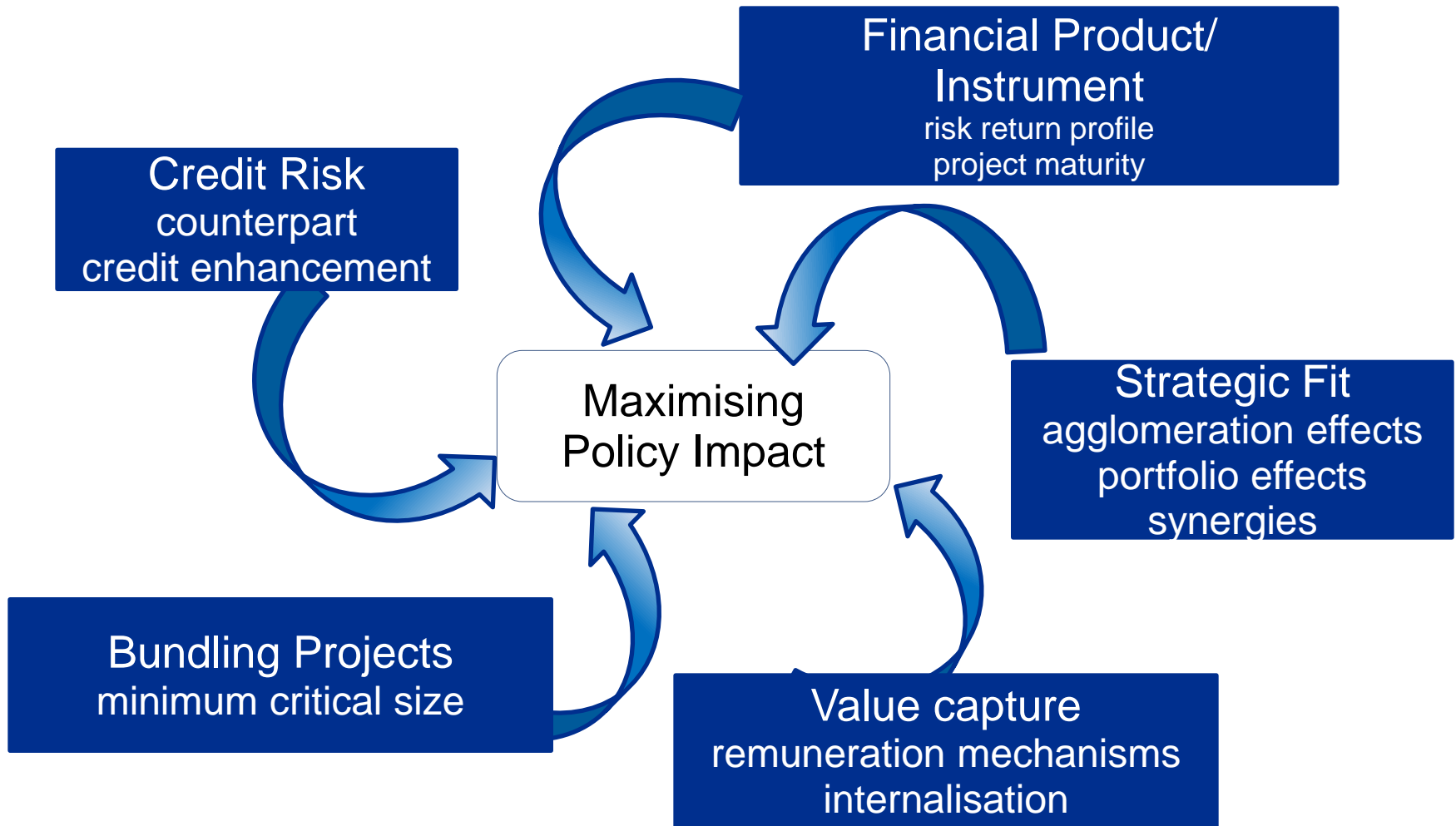
- Technical assistance and advisory services to establish viability of implementation
- Management of Funds of Funds (Holding Funds)
- Providing additional funding where possible and appropriate, normally at project level
- Supporting knowledge dissemination and capacity building to promote the rollout of FIs throughout the EU:

<http://www.fi-compass.eu/>

ESIF: Three forms of support available for Financial Instruments



Maximising Policy Impact via FIs



JESSICA: *Joint European Support for Sustainable Investment in City Areas*

- A centrally-funded technical assistance initiative of the European Commission and EIB supported by CEB in 2007-13 programming period

Mission: *To assist Managing Authorities* in defining long-term strategies for:

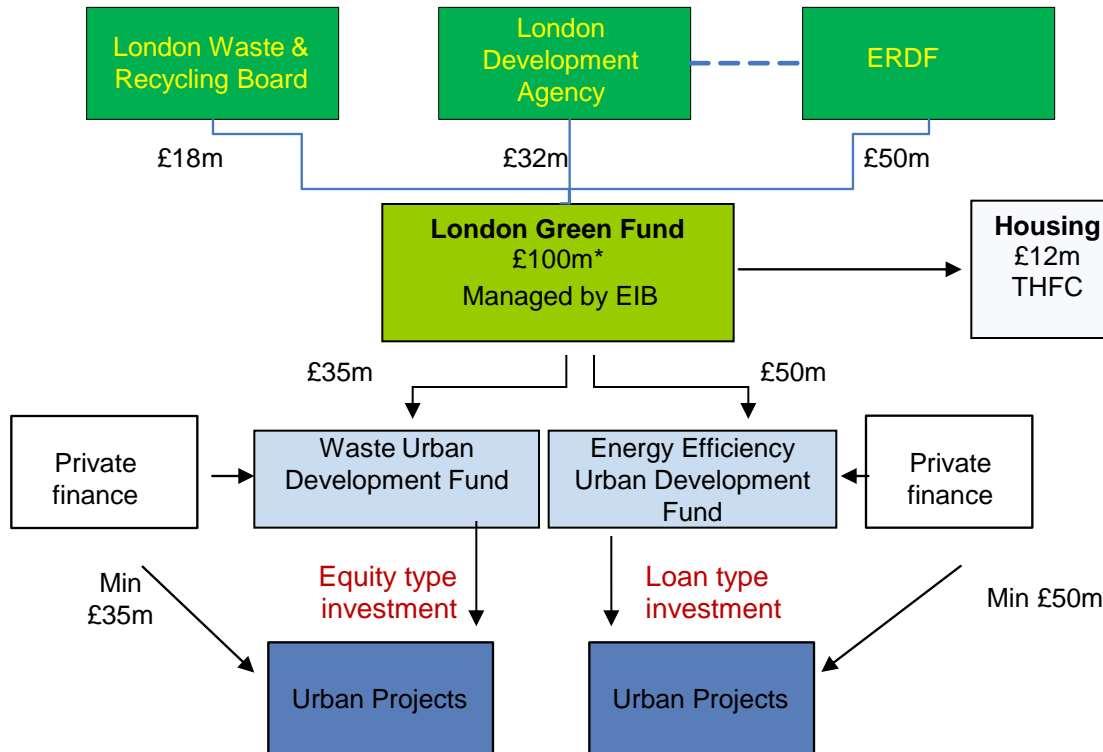
- sustainable urban development through investment activity
- financed through investing some of their EU Structural Funds allocations in “revolving” financial instruments.

Support for projects including: urban infrastructure, heritage or cultural sites, redevelopment of brownfield sites, creation of new commercial floor space for SMEs, IT and/or R&D sectors, university buildings, energy efficiency improvements.

The London Green Fund - Strategy

- The London Green Fund (a JESSICA Holding Fund) established in late 2009 to invest in carbon reduction projects in line with the Climate Change component of the London Plan
- Focused on energy efficiency, waste and decentralised energy as the “3 biggest carbon reduction opportunities for London”
- Governed by an Investment Board , chaired by a private sector independent, and with representatives from:
 - Greater London Authority (as Managing Authority);
 - Environmental Agency; and the
 - London Waste and Recycling Board
- Strategic relationship between public sector sponsors and UDF managers in terms of identifying and/or co-financing projects
- Considered a “trailblazer” for the UK’s Green Investment Bank, which focuses on the same sectors, and is also a co-investor in one of the first waste projects...

The London Green Fund (Holding Fund)

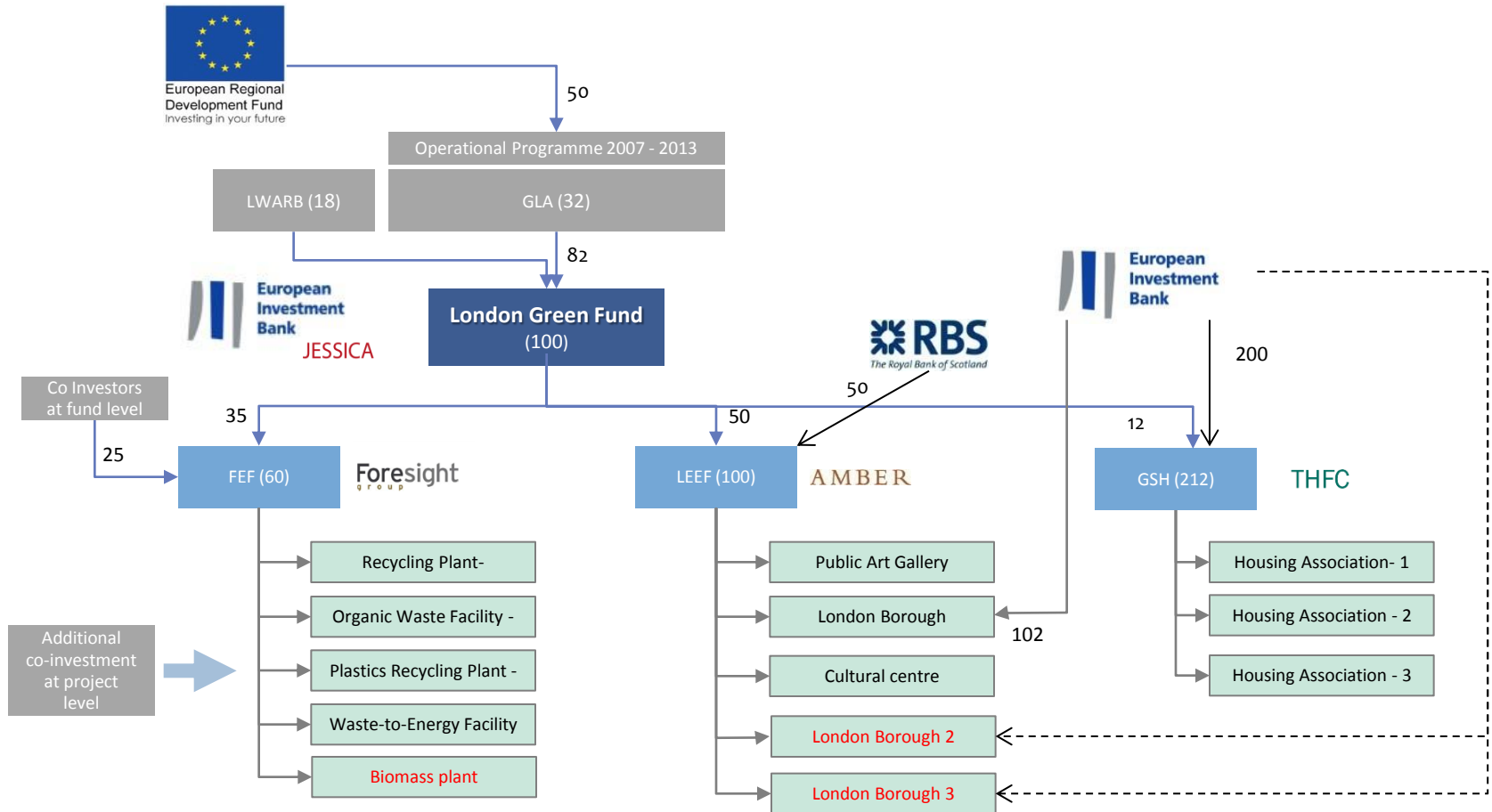


Aiming to deliver outputs/impacts on job creation, tons of carbon saved, and minimum energy usage savings

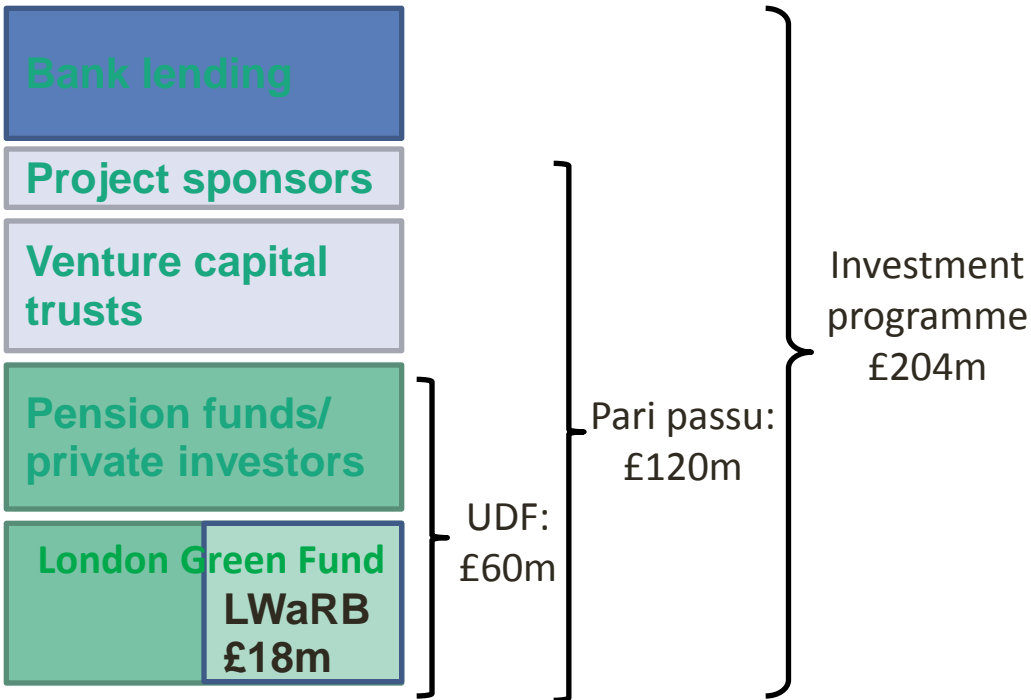
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- Focused on energy efficiency, waste and decentralised energy as the “3 biggest carbon reduction opportunities for London”
- Governed by representatives from the Greater London Authority, the Environmental Agency and the London Waste and Recycling Board. The Mayor’s environmental advisor sits on the Investment Board

Fund Management Services

The London Green Fund



In line with the Mayor's municipal waste strategy, and in close collaboration with the London Waste and Recycling Board...

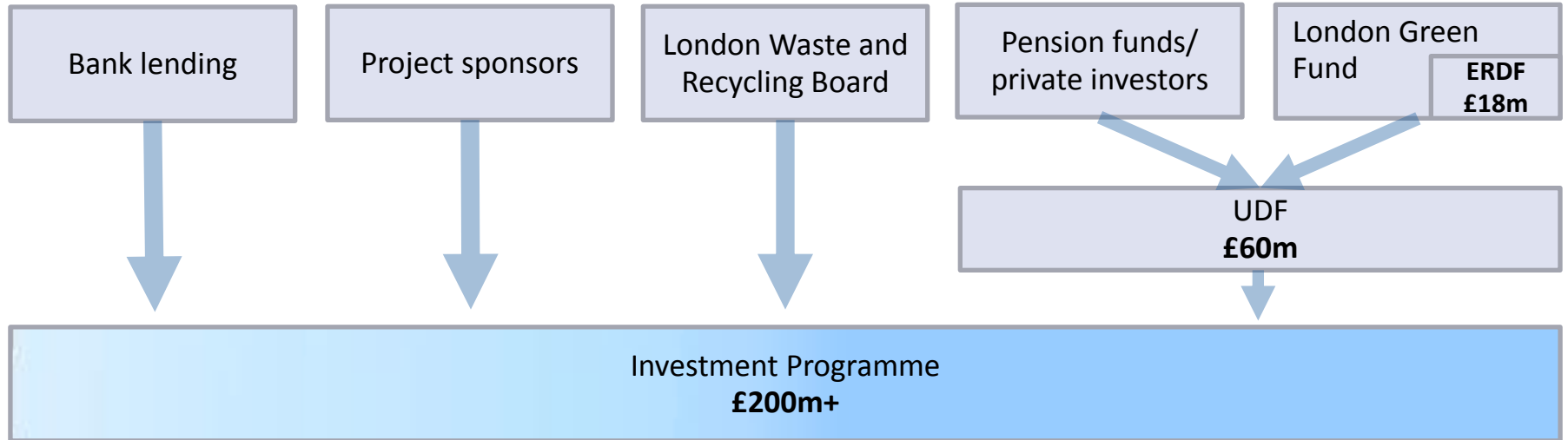


...the waste UDF will primarily finance, via equity or equity-type investment, the construction or expansion of:

- Waste to energy/fuel facilities (excluding incineration)
- Value added re-use, recycling or reprocessing facilities



Foresight Environmental Fund



The Foresight Environmental Fund UDF is primarily financing, via equity or equity-type investment, the construction and expansion of:

- Waste to energy / fuel facilities (excluding incineration)
- Value added re-use, recycling or reprocessing facilities



Foresight Environmental Fund TEG project

Background: Construction of a £21m organic waste TEG facility in the Sustainable Industries Park in Dagenham, London, the UK's largest concentration of environmental industries



Best practice because...

It will also produce over 36,000 tonnes p.a. of AD digestate and 14,000 tonnes p.a. of compost for agricultural use

TEG will be central London's first Anaerobic Digestion (AD) plant



The new facility will be capable of processing 49,000 tonnes per annum of food and green waste via AD and In-vessel composting

The facility will generate approximately 1.4MW of electricity, sufficient to power approximately 2,000 homes

London Energy Efficiency Fund (LEEF)

Designed to provide cheap loan financing for retrofit and low carbon heating projects in local authority, university, hospital, social housing and other public buildings

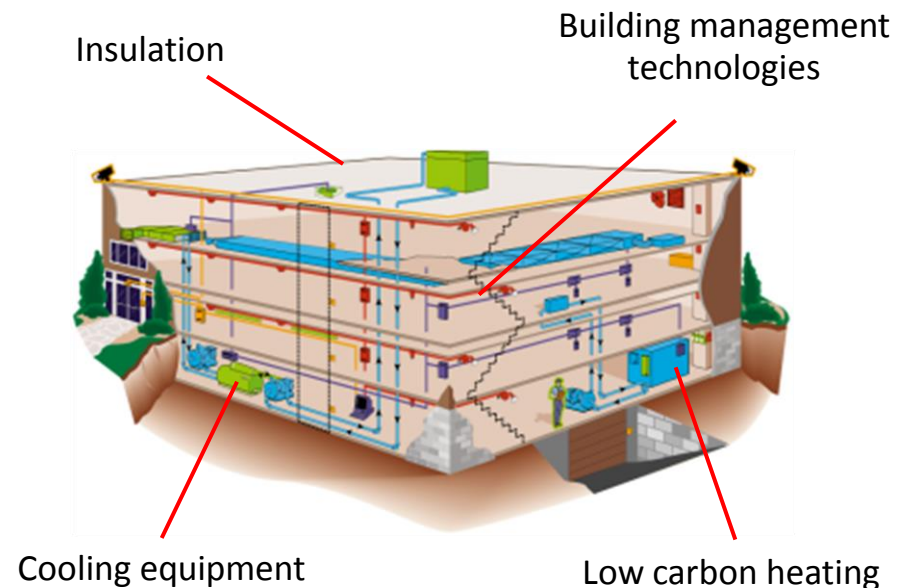
Low cost financing in exchange for carbon reduction benefits

As a provider of cheap debt, return expectations for the fund are low. The fund manager has a significant component of fees linked to maximising carbon reduction and energy efficiency impacts.

Leveraging other EIB/EC products

The EIB managed ELENA facility is providing technical assistance for project preparation

 ELENA – European Local ENergy Assistance



Rising energy costs, changing legislation and challenging carbon reduction targets are forcing organisations to think creatively about sustainable investment in their buildings

20m of LEEF financing

- Off balance sheet loan structure
- Total Project costs of £260m
- Forecast Energy savings of 26% (7.7GWh)
- Forecast CO2 savings of 2,500 tonnes p.a.
- Carbon neutral new build extension



- Energy Conservation Measures include:
- Pioneering transformer waste heat recovery
- River Thames bore-hole water cooling
- Passive measures to building fabric
- ‘Gallery standard’ lighting and controls
- Display area solar control and insulation
- High efficiency boilers and chillers
- Upgraded Building Management Systems
- Sub-metering

Example THFC project – Gallions Housing Association

- The Parkview Hub retrofit aims to be a national example of sustainable refurbishment, and to transform the image of South Thamesmead
- A comprehensive retrofitting of a five-storey linear block with 18 housing units, including conversion of existing underused garage spaces for retail, community and other local facilities
- The project will be a test case for future investment to reduce fuel poverty, promote social interaction, increase resident satisfaction and reduce the fear of crime



3. The ELENA Facility

Technical Assistance

The ELENA Facility



Supported by

INTELLIGENT ENERGY

EUROPE 



European Local ENergy Assistance -- ELENA

- EC-EIB cooperation to support local and regional authorities to reach 20-20-20 targets
- Grant facility: managed by EIB; funded by EU budget (CIP/IEE programme)
 - Budget 2009 - 2013: EUR 93 m (allocations can be made until end 2015)
 - 90% funding rate (grant)
- Project development support for energy efficiency; local renewables; clean urban transport
- **Minimum investment leverage** required (ratio 20, claw back possibility)
- Market replication focus (min. investment EUR 30 m)



ELENA

(Project Development Services)

Support to Final Beneficiaries with:

- Additional technical staff
- Additional Technical studies
- Additional Feasibility studies
- Procurement/tendering
- Financial structuring

INVESTMENT PROGRAMMES/PROJECTS

- **EE and RES investment in public and private buildings**, including social housing and street and traffic lighting;
- **Urban transport** to support increased energy efficiency and integration of renewable energy sources;
- **Local energy infrastructure** to support developments in above sectors including smart grids, ICT, etc.

Selection criteria

- ❖ Eligibility of the beneficiary
- ❖ Eligibility of the investment programme (min EUR 30m)
- ❖ Potential bankability of the investment programme
- ❖ Financial and technical capacity to implement an investment programme
- ❖ Contribution to the EU's "20-20-20" goals
- ❖ Leverage (min 20)
- ❖ Use of state of the art technologies
- ❖ Needs of LAs and impacts on local development, including SMEs
- ❖ Contribution to dissemination of best practices or emerging technologies on the EU market
- ❖ Verification that ELENA is not used for investment programs that can be more effectively supported by other EU funds.
- ❖ No other EU assistance is available for the same beneficiary and the same purpose



Provincial support structure

- ❖ Objective:
Assistance for small or medium-sized municipalities in carrying out projects
- ❖ Preparatory activities:
Identifying buildings with potential for EE improvement through simplified energy audits
- ❖ Support required from ELENA
 - Setting up a support unit
 - Selection of procedure for implementation of investments, normally via ESCOs, building lots
 - Preparation of calls for tender and negotiations with bidders



Regional support structure

❖ Objective:

Provide assistance to small/medium-sized municipalities in developing projects

❖ Preparatory activities:

Identifying roofs for photovoltaic facilities

❖ Support required from ELENA:

- Setting up a support unit
- Selection of procedure for implementation of investments, normally via private firms
- Preparation of calls for tender and negotiations with bidders

Examples of hybrid buses



- ❖ Beneficiary: City
- ❖ Objective: replacing public buses with more energy efficient ones
- ❖ Preparatory activities: identifying replacement needs and type of buses
- ❖ Support required from ELENA:
 - Additional analyses, in particular of operational risks associated with hybrid buses
 - Selection of procedure implementation of investments
 - Preparation of calls for tender and negotiations with bidders



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ADDITIONAL SLIDES



Beneficiaries for ESCO project Development

Supporting cities:

- ❖ City of Paris
- ❖ Greater London Authority (RE:FIT, DEPDU)
- ❖ Villa Nova de Gaia
- ❖ City of Ljubljana
- ❖ Bristol
- ❖ Birmingham

Supporting provinces and small municipalities:

- ❖ Province of Barcelona (part of the programme)
- ❖ Province of Milan
- ❖ Province of Modena (part of the programme)
- ❖ Province of Chieti
- ❖ Province of Padova
- ❖ Region of Murcia
- ❖ ADENE Portugal
- ❖ Castilla y León



ELENA examples



Energy Efficiency in the Province of Milan



Finance provided by local Banks, supported by EIB loan (EUR 65 m).
TA provided by the EIB-ELENA facility

Problem

Large EE potential in public buildings but budget constrained municipalities with a lack of technical capacity to develop a flow of projects.

Solution

Adopt energy performance contracting

- ❖ *aggregate projects*
- ❖ *coordinate at Province level*
- ❖ *standardise contracts*

Programme:

Refurbishment of existing school buildings in some 30 to 40 municipalities.

Implementation by ESCOs who pay the investments costs and guarantee energy savings (around 20%); serve debt through energy savings.



ELENA examples



Energy Efficiency in the Province of Milan

- ❖ The Province of Milan (PoM) as supporting structure under the Covenant of Mayors (CoM, 56 Municipalities joined the CoM);
- ❖ Objective: assist Municipalities to exploit the EE and RES potential in municipal buildings
- ❖ Preparatory activities: Joint study with EIB to identify the investment potential (EUR 90m).
- ❖ Elena support requested in order to:
 - Set up of investment programme support unit
 - Assess existing audits to allow for the terms of reference set up
 - Preparation of tender documents and contract negotiation with suppliers and banks
 - Monitor the results, disseminate and transfer the know-how
- ❖ Elena budget: EUR 2.16 m (support EUR 1.94m).
- ❖ EIB loan of EUR 65m provided to activate Energy Performance Contracts (EPC) with guaranteed results in favour of the municipalities through Energy Service Companies (ESCOs).



1. Barriers to EE&RE investments

- ❖ Engaging municipalities
- ❖ Innovative approach
- ❖ Financing: Limited access to financing sources
- ❖ Moving from planning to implementation
- ❖ Context changes: RE regulation, elections, political priorities
- ❖ Ensuring the continuity of the programme

2. ESCO specific barriers

- ❖ Lack of understanding of ESCO activities
 - “Overselling the concept”
 - Public sector needs better understanding of industry views
- ❖ Projects/Programmes are often designed from a technical viewpoint only
 - Results of energy audits imposed on ESCOs
 - Mistrust in ESCOs leading to micro-management
- ❖ Lack of harmonised standard tools
 - Contracts
 - Tender documentation
 - M&V



3. ESCO specific lessons learnt

- ❖ No common terminology
 - Energy Services remains an unclear product
 - Pure Demand side measures vs. Combination with energy supply
- ❖ ESCO industry has no clear offer
 - Guarantees ?
 - Energy sales ?
 - Financing ?
- ❖ Balance sheet treatment issues
 - Seems to apply to EE projects only



Challenges to create a sustainable project pipeline

- ❖ Identification of projects
 - Not all buildings are suitable for ESCO interventions
 - Need for more comprehensive refurbishment ?
 - Pay-back times too long
 - Combination of grants with ESCO funding?

- ❖ Long project lead-time
 - Priorities in public sector change with elections
 - Changes in baseline (use of buildings, self-introduced EE measures)
 - Changing rules
 - Opposition against private sector participation

- ❖ ESCO appetite for new projects
 - Limited financing capacities

EIB Instruments for EE

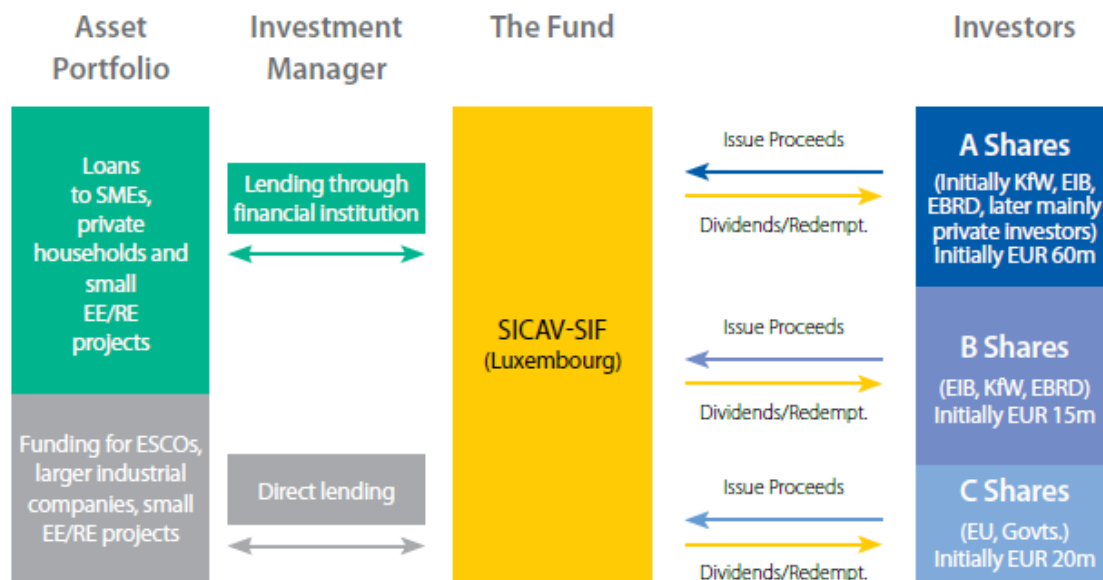
Debt fund: Green for Growth Fund



GREEN FOR GROWTH FUND
SOUTHEAST EUROPE

INVESTING IN ENERGY EFFICIENCY
AND RENEWABLE ENERGY

- ❖ The Green for Growth Fund (GGF) aims to foster energy efficiency and renewable energy investments in South-East Europe and Turkey
- ❖ Initiated by the EIB and KfW and supported by the European Commission, GGF works predominantly through the provision of dedicated financing to businesses and households directly or through partnerships with financial institutions

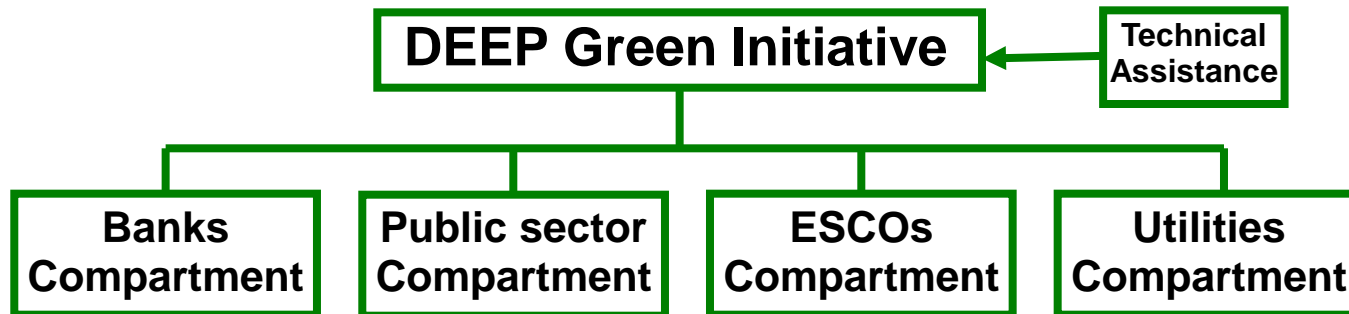


Issuance of different share tranches (A, B, C and later Notes) offers investors different risk-return profiles

EIB Instruments for EE



DEEP Green Initiative



An innovative instrument

- Debt for Energy Efficiency Projects Green (DEEP Green) is a new initiative launched by the EIB to support EE programmes promoted by the 4 key players in the EE sector: banks, public sector, ESCOs and utilities.

De-risking

- DEEP Green aims at fostering the development of EE programmes, by aggregating small and risky projects and overcoming the two main barriers to the development of bankable EE initiatives.

Increase of loans

- DEEP Green aims at increasing the volumes of loans currently available for the EE sector while developing new potential opportunities to combine EIB and other commercial banks lending.