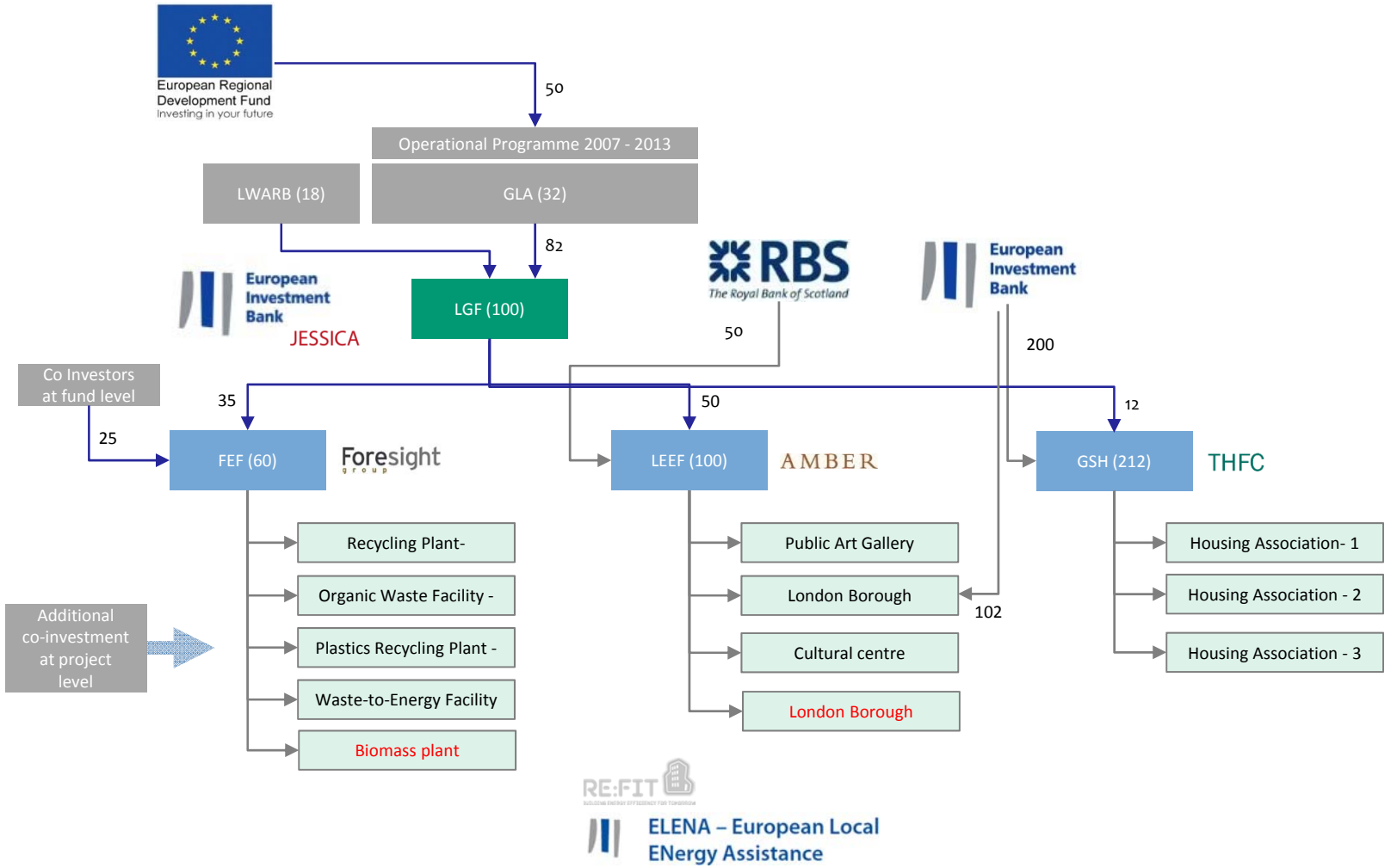
Finding the right approach for low carbon finance

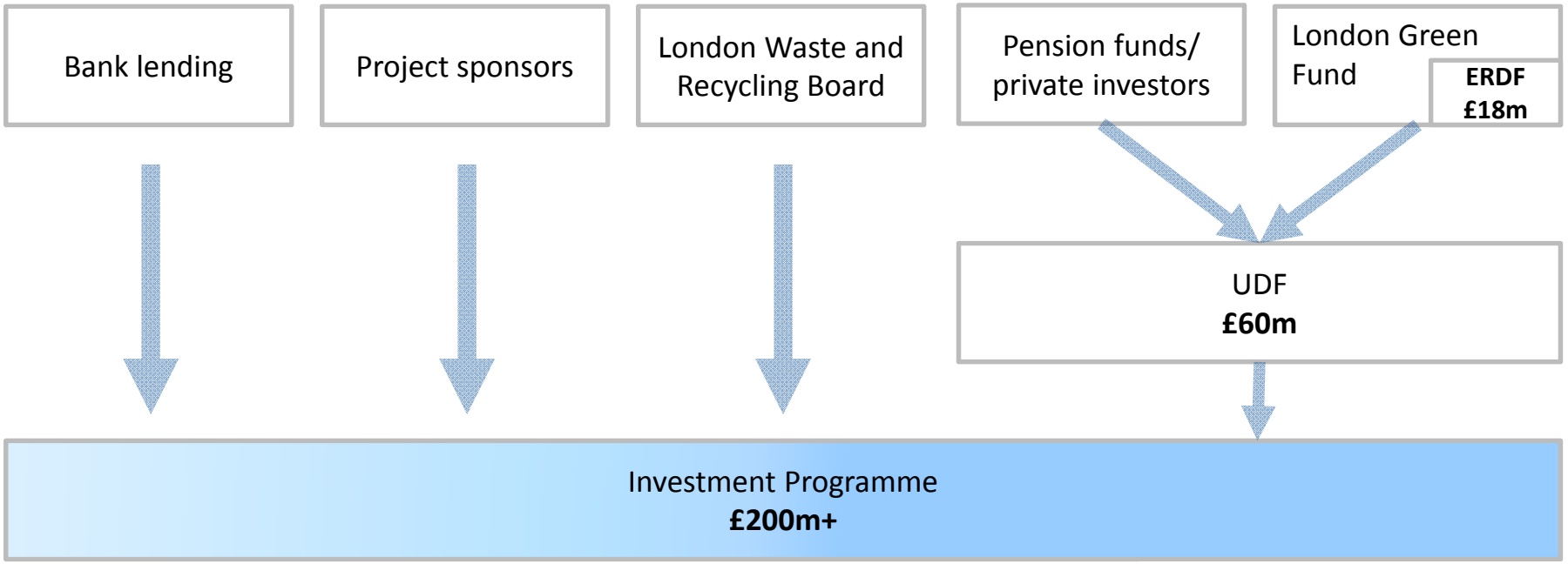
Workshop organized by CECODHAS Housing Europe
Brussels - March 4th 2014

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…


European Regional Development Fund
Investing in your future
50
Operational Programme 2007 - 2013
LWARB (18)
GLA (32)
82
European Investment Bank
JESSICA
LGF (100)
RBS
The Royal Bank of Scotland
50
European Investment Bank
200
Co Investors at fund level
25
35
50
12
FEF (60)
Foresight group
LEEF (100)
AMBER
GSH (212)
THFC
Recycling Plant-
Organic Waste Facility -
Plastics Recycling Plant -
Waste-to-Energy Facility
Biomass plant
Additional co-investment at project level
Public Art Gallery
London Borough
102
Cultural centre
London Borough
Housing Association- 1
Housing Association - 2
Housing Association - 3
RE:FIT
ELENA – European Local ENergy Assistance

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 group

Foresight Environmental Fund – TEG project signed

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 – Public Art gallery

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

GBP 400m loan to THFC for social housing

- In December 2012 the EIB provided a GBP 400m Framework loan to The Housing Finance Corporation, a not-for-profit intermediary in the UK social housing sector

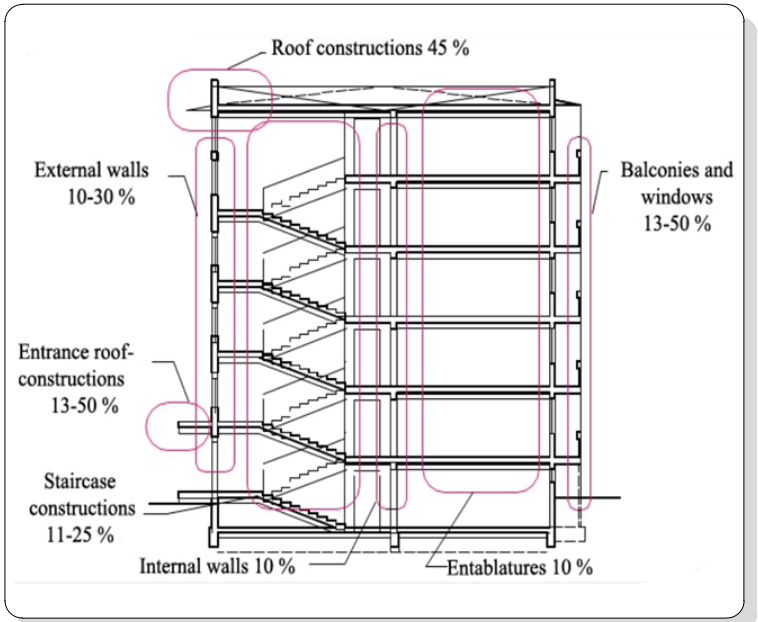
- The schemes will be small to medium-scale (investment below EUR 50m) and involve retrofitting and new build energy-efficient programmes carried out by registered UK housing associations

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

Basic facts about Lithuania and its apartment blocks

- Population - 3 million and declining
- More than 38,000 apartment blocks, of which 24,000 are in need of refurbishment = **EUR 5bn of investment need**.
- **66 % of population live in apartment blocks**, 97% privately owned, only 3% municipal rental stock.
- The decision to undertaken renovation of an apartment block building requires a **majority consent of apartment owners**.



The age structure of buildings:

26 % built before 1960

65 % built between 1960 – 1990

9 % built after 1990

- **65 %** of multi-apartment blocks are served by district heating systems
- **Average energy savings for a single building are estimated to be circa 50%**

JESSICA scheme in Lithuania

Ministries of Finance and of Environment
contribution of circa EUR 150m from Operational Programme:
« Promotion of Cohesion 2007-2013 »

European Investment Bank — **JESSICA Holding Fund managed by EIB**

Investment Committee

Contingent loans

Urban Development Funds

Lithuanian banks:

ŠIAULIŲ BANKAS — Swedbank — SEB

Modernisation Loans

Repayments

PROJECTS:

Eligible energy efficiency projects in multi-apartment buildings

BORROWERS:

Individual owners of apartments in multi-apartment buildings / administrators of commonly used premises of multi-apartment buildings



Housing Energy Saving Agency (HESA)

TA for project preparation and approval of grant components

Key terms of a JESSICA renovation loan in Lithuania

Support elements	→	**100% grant or JESSICA loan*** to prepare renovation documentation
	→	**15%** loan rebate for where minimum energy efficiency level is met (class "D" level, 20% reduction) + **25%*** grant from CCP, i.e. sale of AAUs (40% reduction)
	→	Exceptional **100% subsidy** on all expenses for low-income persons
Maturity	→	up to **20 years**
Interest rate	→	fixed for entire loan period at **3% p.a.**
Self-financing	→	bank may require a down payment (not more than 5%)
Maximum monthly instalment	→	determined for each multi-apartment building
Insurance	→	no loan insurance requirements
Guarantees	→	no third party guarantee requirements
Grace period	→	**2** years, during construction

*Until 31/12/2014

Pipeline of projects

- Around **2000** buildings have **taken a majority decision** to undertake a renovation project using JESSICA funds = **EUR 400-500m**
- Around **1000** of these have had their **investment plans approved** by the government agency = **EUR 200-250m**
- Around **110** of these have **signed financing contracts** with intermediary banks
- Around **50 of these are already completed**
- Significant construction work expected in Spring 2014!






Example: JESSICA project (Vaišvilos 9, Plungė)

Area of apartments	2590 m²
Number of floors	5
Number of apartments	50
Year of construction	1978
Date of completion	September 20, 2011
Investments	**EUR 385.319** *(Šiaulių bankas UDF)*
Implemented measures	Heating and hot water system upgrading; replacement of windows and exterior doors; roof insulation; wall insulation; basement ceiling insulation; insulation of base; drinking water pipelines and equipment replacement; repair works of sewage system; floor insulation on the ground; electrical wiring repair works; and stairwell repair works
Energy efficiency class *(according to Energy Performance Certification classification)*	Rating before upgrading – E, planned rating – C, **achieved rating – B**
Heating before upgrade	**293,94 kWh/m²**
Heating after upgrade	**121,01 kWh/m²**
Energy saving	**65%**

Benefits of JESSICA in Lithuania

- **Recycling** via repayable investment - **24,000** multi-apartment blocks need to be renovated by **2020** - huge financial resources required.
- Model to combine **both grants, technical assistance and loans in a single financial instrument** – replicable in Lithuania and other MSs
- Large scale national programme with a potential to become an important stimulus for the economy, especially in terms of the **construction sector and local jobs**.
- Implementation of the programme for the improvement of energy efficiency will ensure **lower heating bills for residents, lower carbon emissions** and **reduce foreign energy dependency**.
- **Social impacts** such as reducing fuel poverty, improved health conditions, inclusion and potentially also youth unemployment.