

LONDON
ENERGY
EFFICIENCY
FUND



AMBER
GREEN
Sustainable Capital

LEEF Launch Event 3 October 2011

A new source of finance for Energy Efficiency Retrofit projects in public sector buildings across London



ARUP

RBS
The Royal Bank of Scotland Group





Welcome & Introduction

Jenny Curtis & Leo Bedford,
Amber Infrastructure

Agenda

	Session	Presenter
1	Introduction to the London Energy Efficiency Fund (LEEF)	Jenny Curtis & Leo Bedford, Amber Infrastructure
2	Advantages of LEEF finance	Chris Fallis, RBS
3	RE:FIT and the new Programme Delivery Unit (PDU) as an option for Energy Efficiency projects	Virginie Caujolle Pradenc, GLA and David Mathieson, Turner & Townsend
4	How to access LEEF – eligible measures and application process	Malcolm Ball, Arup
5	Case study – London Borough of Islington	Graeme Law, LB Islington
6	Question & Answer session	Panel
7	Close, drinks & canapes	All

Why are we here?.....The case for LEEF:



Strategic case

- 50% of our non-domestic buildings and 75% of our housing stock will still be in use in 2050
- Need to address backlog maintenance/ capital refurbishment/ under-investment in public infrastructure
- Retrofitting London's public sector buildings will cost over £6 billion



Financial case

- London public sector spends £750m/ year on energy
- Energy costs are increasing + Carbon Reduction Commitment costs
- EE retrofit can save 20%+ energy and payback in 5-7 years
- Limited sources of dedicated low cost finance for EE

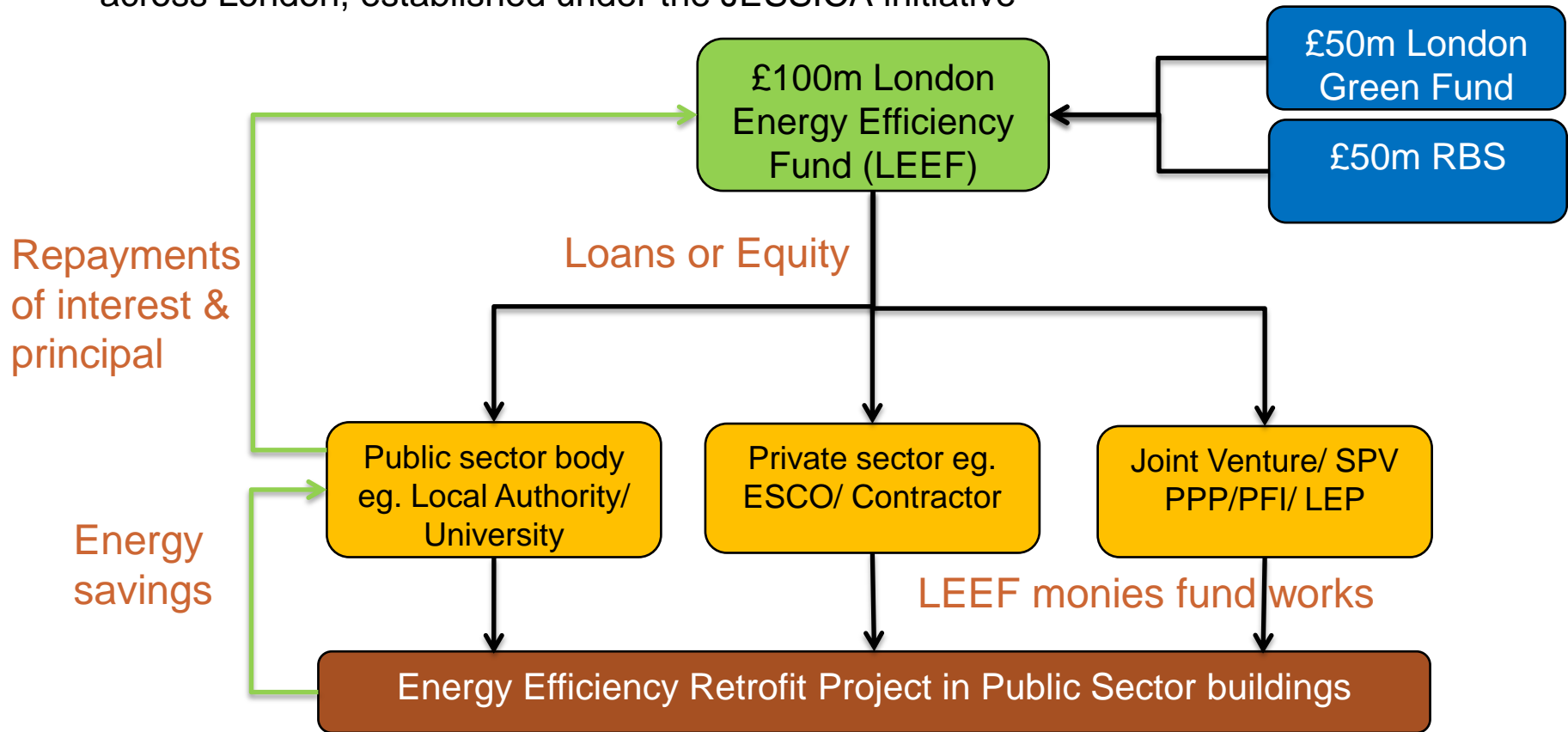


Environmental & Social case

- London's public sector buildings contribute 10% to the capital's carbon foot print
- Mayoral target to reduce London's emissions by 60% by 2025
- Reduce fuel poverty
- Create jobs in construction/ energy industries

What is LEEF?

- A new source of finance for Energy Efficiency Retrofit projects in public sector buildings across London, established under the JESSICA initiative



LEEF Team – who we are and what can we do for you?



Amber Infrastructure – Fund Manager

- Leading JESSICA fund manager; LEEF, Wales, Scotland
- FSA regulated infrastructure investor and manager in PFI/ PPP
- Project appraisal and financial structuring
- Independent Investment decision making



Arup – Technical Advisor

- Project sourcing and pipeline development
- Assistance and guidance on accessing LEEF
- Technical due diligence pre-investment
- Project monitoring post investment



RBS – Funder

- Expertise in public sector and green finance
- Provider of match funding to public investment
- Identification and appraisal of projects
- Credit risk assessment, pricing and structuring



Advantages of LEEF Finance

Chris Fallis, Head of Public Sector, RBS

Advantages of using LEEF finance



- Amber Green – Fund Manager
- Ove Arup Partners – Technical Advisor
- The Royal Bank of Scotland – Funder

- Sub market financing costs
- Fixed rate loan facility
- Reduced upfront costs

- Streamlined approval process
- Template documentation package

- Drawdown profile to match the capital expenditure – 100% funding
- Repayment profile up to 10 years tailored to projected energy savings and hence cost neutral

How much does it cost?

- Borrower credit strength / rating
- Security
- Project sponsor buy in, experience and capacity

- Portfolio diversification
- Annual £ Investment targets
- Energy Savings Ratio
- Cost per tonne CO2 saved
- Fund level financial returns

Borrower Risk



Project Risks



LEEF Investment Objectives



Interest Rate / Term / Fees

Drawdown and Repayment Profile

Security Required + Conditions Precedent

- Loan to cost / value
- Type of Energy Conservation Measures
- Revenue streams for repayment
- Work required to investment readiness



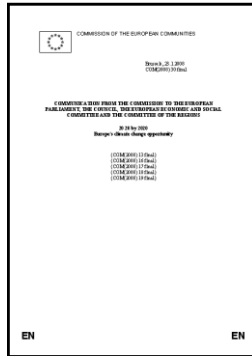
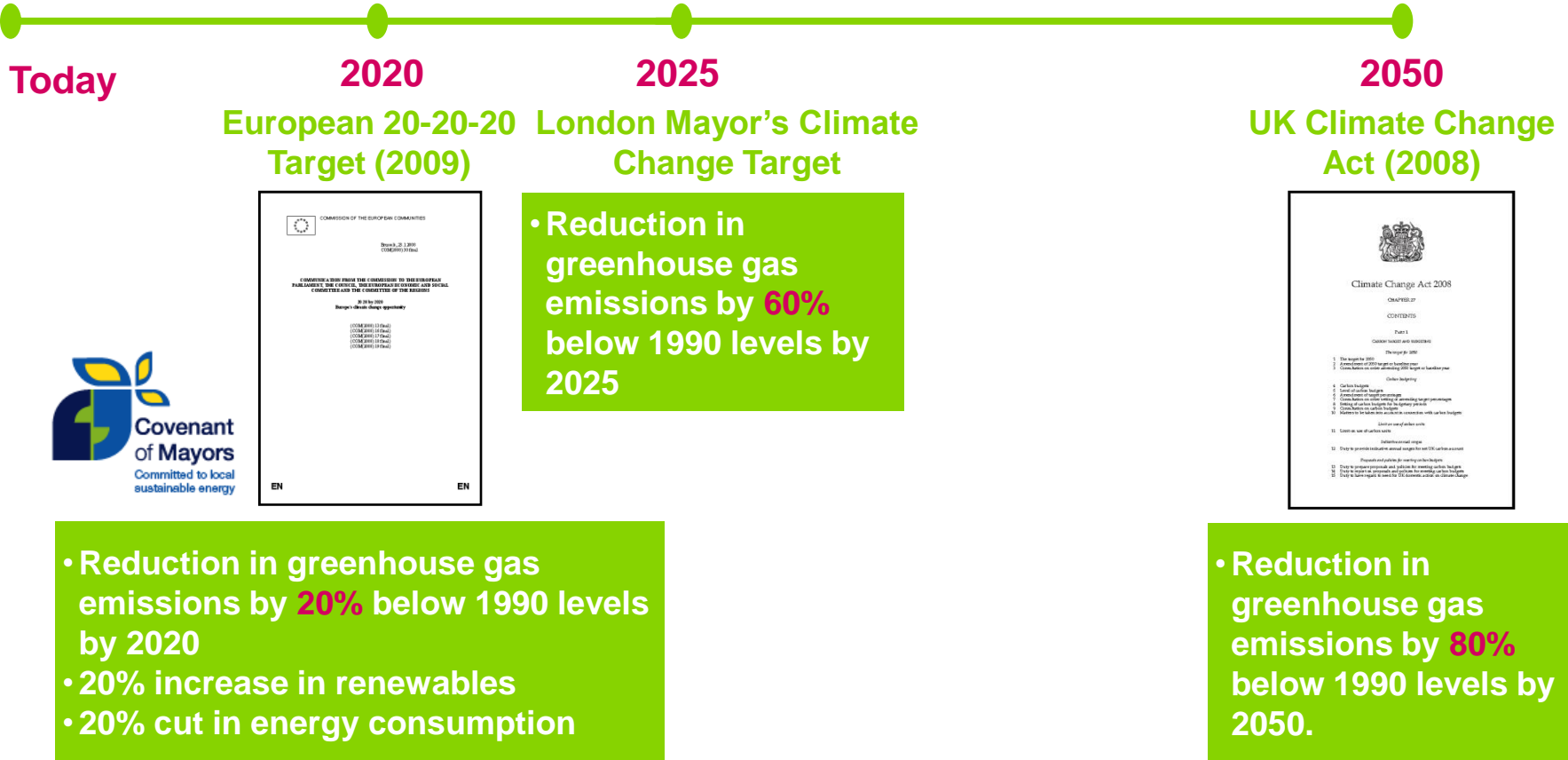
Introduction to RE:FIT as an option for EE Procurement and the Programme Delivery Unit –

Virginie Caujolle Pradenc, GLA and
David Mathieson, Turner & Townsend

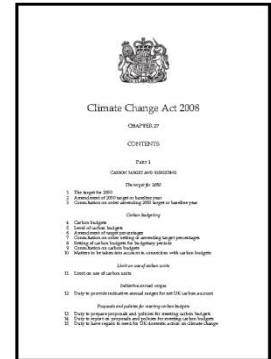
RE:FIT

BUILDING ENERGY EFFICIENCY FOR TOMORROW





• Reduction in greenhouse gas emissions by 60% below 1990 levels by 2025



• Reduction in greenhouse gas emissions by 80% below 1990 levels by 2050.

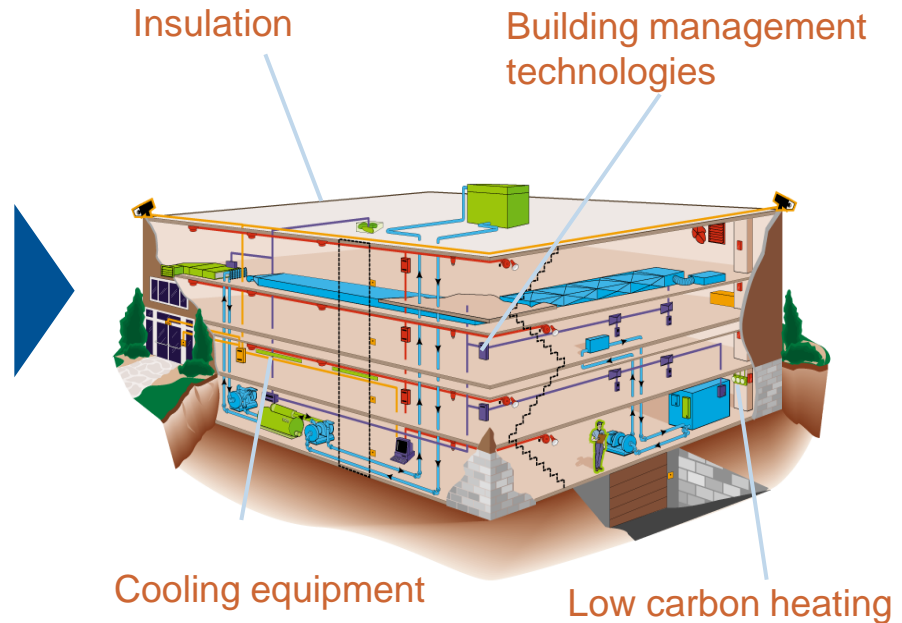
The Mayor is committed to London becoming the greenest city in the world and to a city that becomes a world leader in improving the environment

What is the RE:FIT building energy efficiency programme?

• **Energy Performance Contracting approach:** The public sector building owner identifies a portfolio of buildings they would like to retrofit, sets a target percentage energy savings and a payback period

• **An Energy service companies (ESCOs)** carry out the works and guarantee the resulting energy savings

• **This guarantees the payback of the initial investment** with the delivery risk transferred to the ESCo.
• Hence this is a cost neutral means to reduce energy bills and carbon footprint of buildings



The RE:FIT Framework of approved suppliers

- Balfour Beatty
- COFELY (GDF SUEZ)
- MITIE (Dalkia FM)
- EDF Energy
- E.ON Sustainable Energy Business
- Hoare Lea Consulting Engineers (Parkeray)
- Honeywell
- Hurleypalmerflatt
- Interserve
- Johnson Controls
- Schneider Electric - Strategic Building Solutions
- Willmott Dixon Partnerships

Key Benefits of the RE:FIT Framework

Significant guaranteed savings	Provide energy savings of 25% or more
Guaranteed performance	ESCo guarantees minimum energy savings
Innovation	Access to market leading suppliers and the latest energy saving products
Accelerates savings	Framework panel of approved suppliers you can procure from – procurement is fast and effective
Proven	42 buildings now completed through the Pilot, 33 more currently in installation in London
Support	The Programme Delivery Unit is there to support you throughout the RE:FIT process
Carbon Savings against your targets	Help to achieve your targets carbon savings under CRC
Single point of responsibility	Energy Service Company has contractual responsibility for performance

ELENA Funding for the RE:FIT PDU

- On 7 February 2011, the LDA was successful in securing funding from the European Commission under the ELENA (European Local ENergy Assistance) Programme
- The ELENA funding was used to procure a Programme Delivery Unit (PDU) to further drive take up of the RE:FIT programme over the next 3 years
- The total sum of the application is £2,671,000 of which 90 % will be provided by ELENA and 10% by the GLA

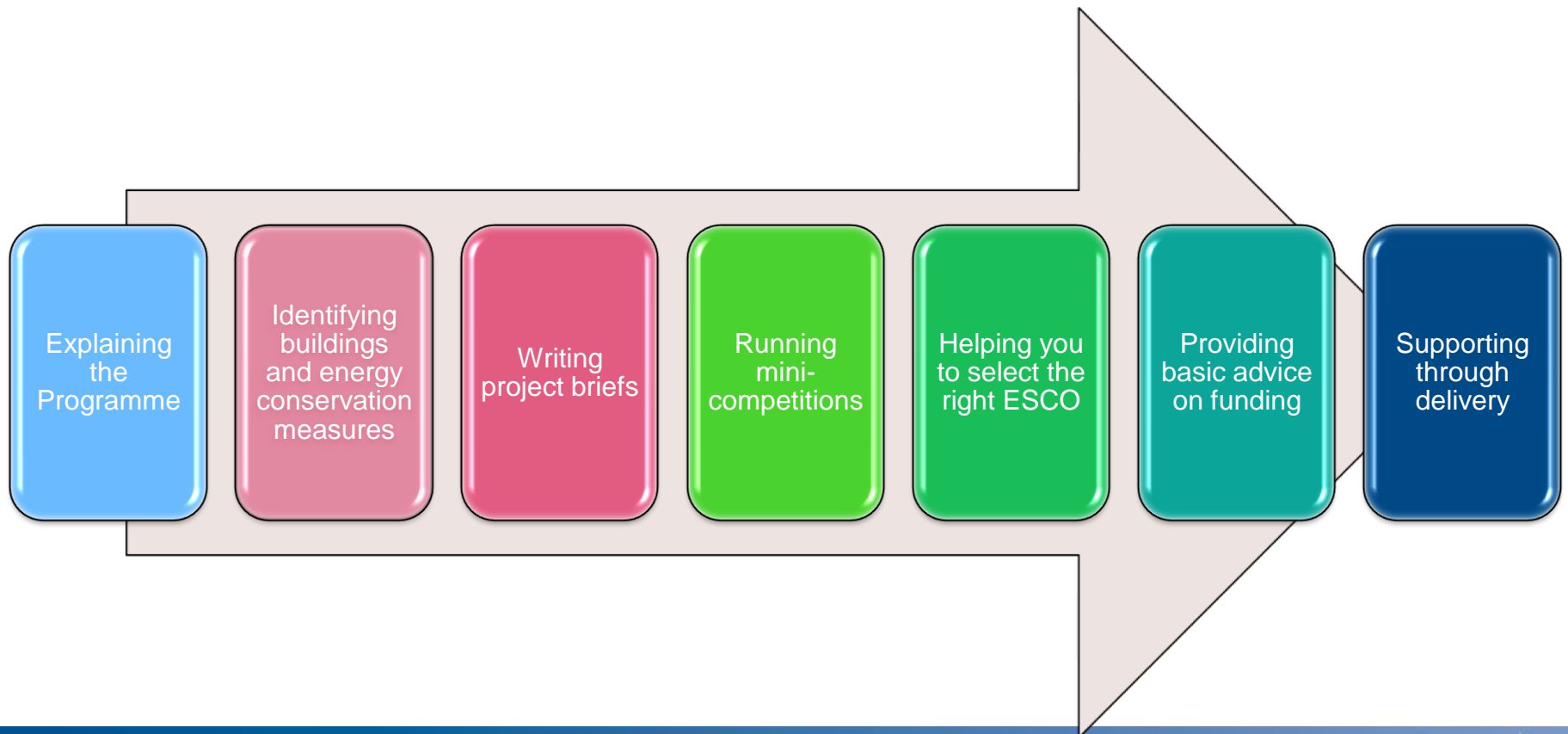


 **ELENA : le mécanisme européen d'assistance technique pour les projets énergétiques locaux**

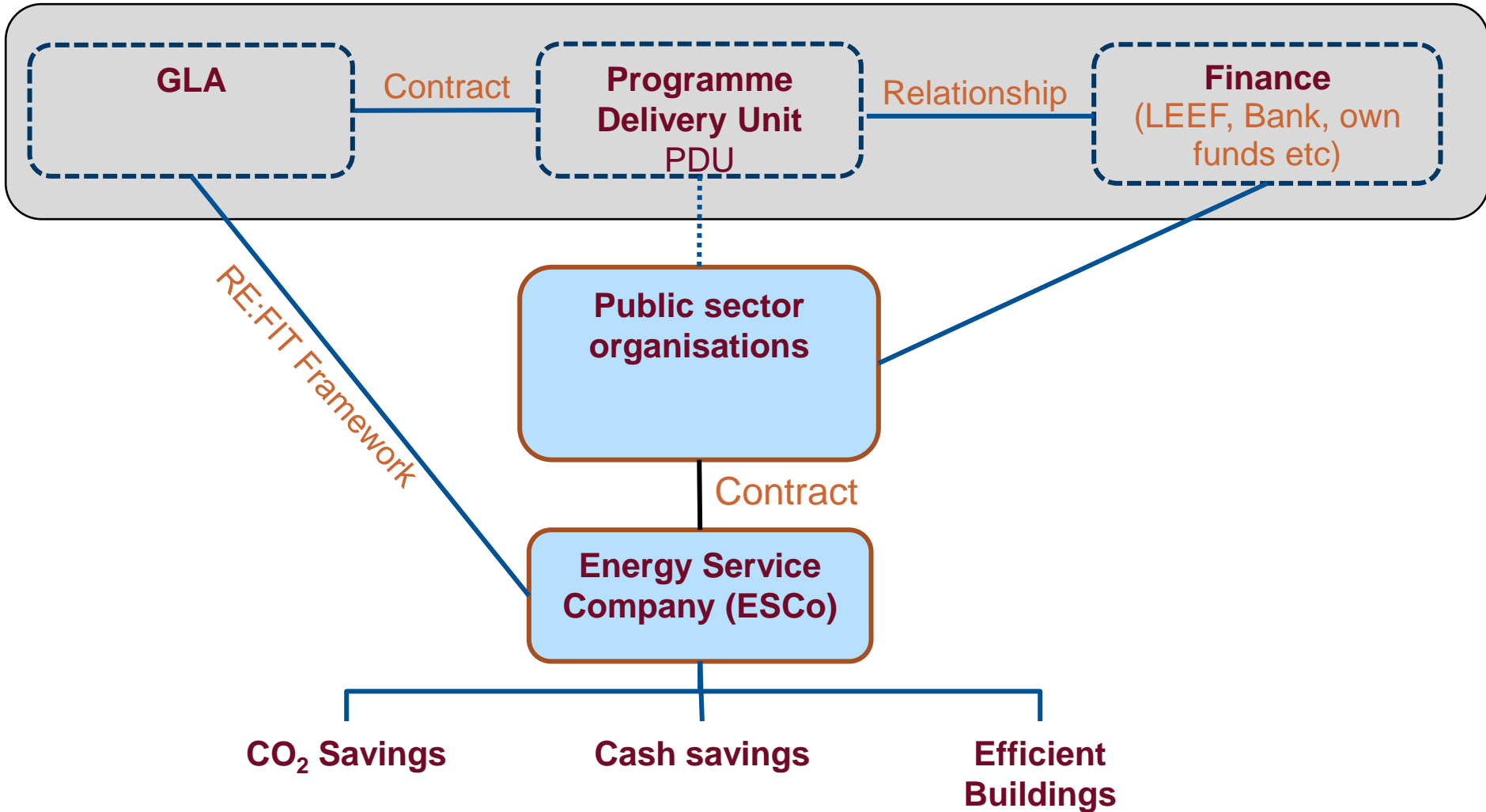
La lutte contre le changement climatique figure au premier rang des priorités de l'Union européenne et ce défi ne pourra être relevé sans la contribution active des acteurs locaux. ELENA est un mécanisme d'assistance technique qui, par le biais d'aides non remboursables, vise à soutenir l'élaboration de programmes d'investissement dans ce domaine.



- Combined expertise of Turner & Townsend and PA Consulting
- PDU is to manage the RE:FIT framework and facilitate the uptake by London based public sector organisations



RE:FIT Team Structure



How RE:FIT complements LEEF



For more information on RE:FIT.....

E-mail: REFIT@london.gov.uk or contact

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Greater London Authority
020 7983 4239

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Turner & Townsend
020 7544 5806

David Rees
PA Consulting
020 7798 2609

MAYOR OF LONDON



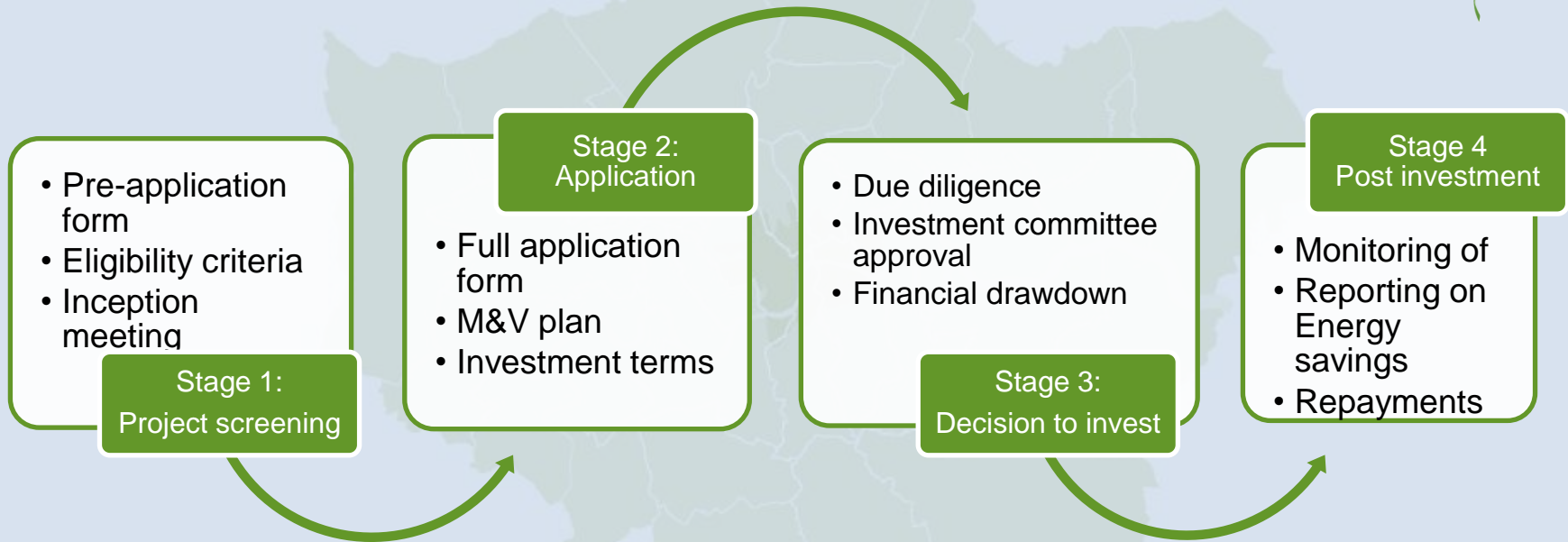
PA Consulting
Group



How to access LEEF funding

Malcolm Ball, Arup

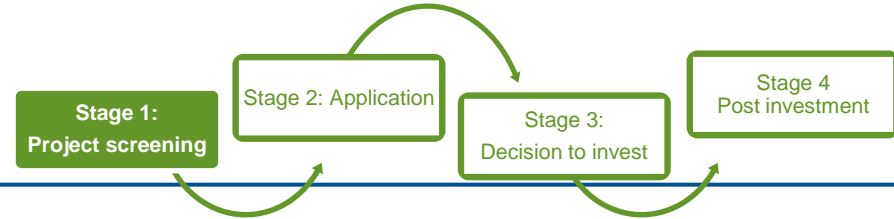
Application process



Objective: to ensure that projects move seamlessly into a positive funding outcome



Eligibility criteria



- **LEEF output targets:**
 - £1500/tonneCO₂
 - 20% carbon dioxide saving
 - 20% energy saving
- **Eligible technologies:**
 - Building energy efficiency
 - Building integrated low and zero carbon technologies
- Any **location** within 33 London Boroughs:
- **Borrowers** can be public, private or JV entities
- Broad definition of '**Public Sector Building**'
- Open choice of procurement and delivery routes; RE:FIT and EPC **optional**



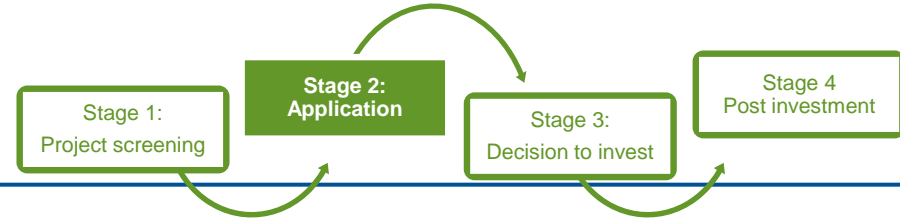
Eligible technologies

CATEGORY	ENERGY CONSERVATION MEASURE (ECM)
Metering & Controls	Automatic metering system
	Building Management System (BMS) / controls upgrade
Lighting	Lighting control
	Low energy lighting
Small Power	Small power management controls
	Low energy appliances and equipment
HVAC (Heating, Ventilation and Air Conditioning)	Boiler upgrade
	Variable speed drives for fans and pumps
	Air handling unit heat recovery
	Chiller upgrade
	Domestic hot water services, point of use generation
Miscellaneous	Vertical transportation, control and management
	High efficiency measures on hydraulic lifts

Eligible technologies

CATEGORY	ECM TECHNOLOGY
Fabric	Infiltration measures (air-tightness improvements)
	Replacement glazing
	Roof insulation upgrade
	Wall insulation - overcladding
CHP (Combined Heat and Power)	Combined heat and power (building integral)
Low and zero carbon technologies	Bio-mass boilers
	Photovoltaic cells (PVs)
	Medium scale wind
	Biomass CHP
	Ground Source Heat Pumps (GHP)

Inception meeting



1. Project pipeline

- Carbon reduction programme
- Outline of projects, capital and operational costs, carbon and energy savings

2. Financing options

- What options are your finance team considering; both for EE and in the context of wider capital spending?

3. LEEF debt

- Indicative terms

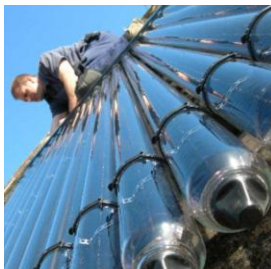
4. Timetable

- Implementation timeline for technologies

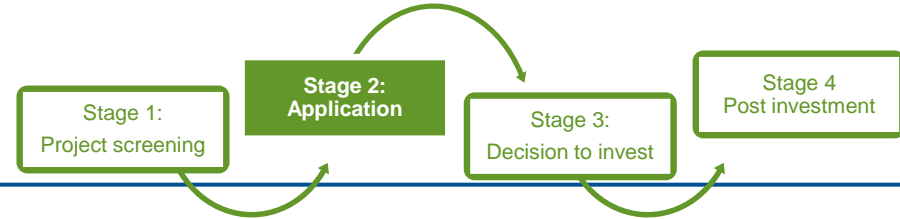
5. Procurement and **delivery** approach

- Eg. existing framework arrangements/ RE:FIT/ Joint Venture / new procurement

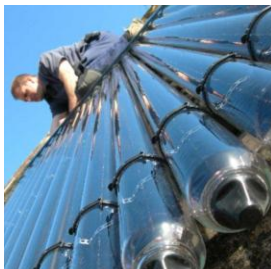
6. Proposed **Measurement & Verification** plan



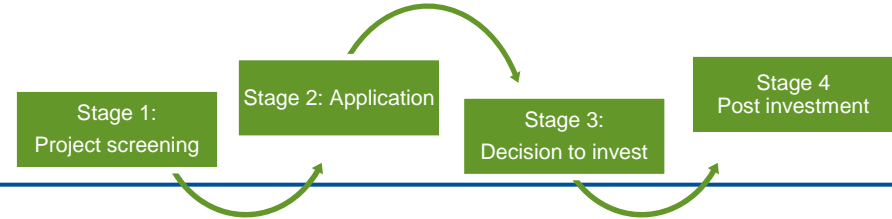
Full application



1. Overview of Proposed Investment
2. Eligibility & Strategic Fit
3. Technical Viability
 - Technologies
 - Output Targets
 - Measurement and Verification Plan
 - Project Risks
 - Permits and Planning
4. Deliverability
5. Financial Viability



Top tips



- If in doubt call LEEF, don't self select
- We will stay in touch after inception meeting
- Consider as educated finance
- What makes a good deal?
 - Balance of technologies
 - Strong management buy in
 - Scale
 - Good fit with eligibility criteria
 - Programme of investment
 - Ready to go projects





Questions?

LEEF - Key Messages

1. Retrofitting your buildings is a 'No Brainer'

- **Save money** on Energy and finance costs
- **Save Carbon**
- **Invest** in and improve building fabric / appearance
- Most capital works/ refurbishment programmes will contain eligible EE technologies

2. LEEF provides excellent Added Value....

- **Low cost** finance – can be cheaper than PWLB/ retail banks
- **Flexible** terms allowing EE projects to be revenue neutral
- Access to dedicated team of technical/ financial **experts** for EE in London

3. Join the dots and get 'Investment Ready'

- Link up Finance, Estates & Environment to secure internal **approvals**
- Consider use of (free) support from **RE:FIT** Programme Delivery Unit
- LEEF **Drop in Session** at Arup on 9 November 12-4pm
- **www.leef.co.uk** or **email enquiries@leef.co.uk**