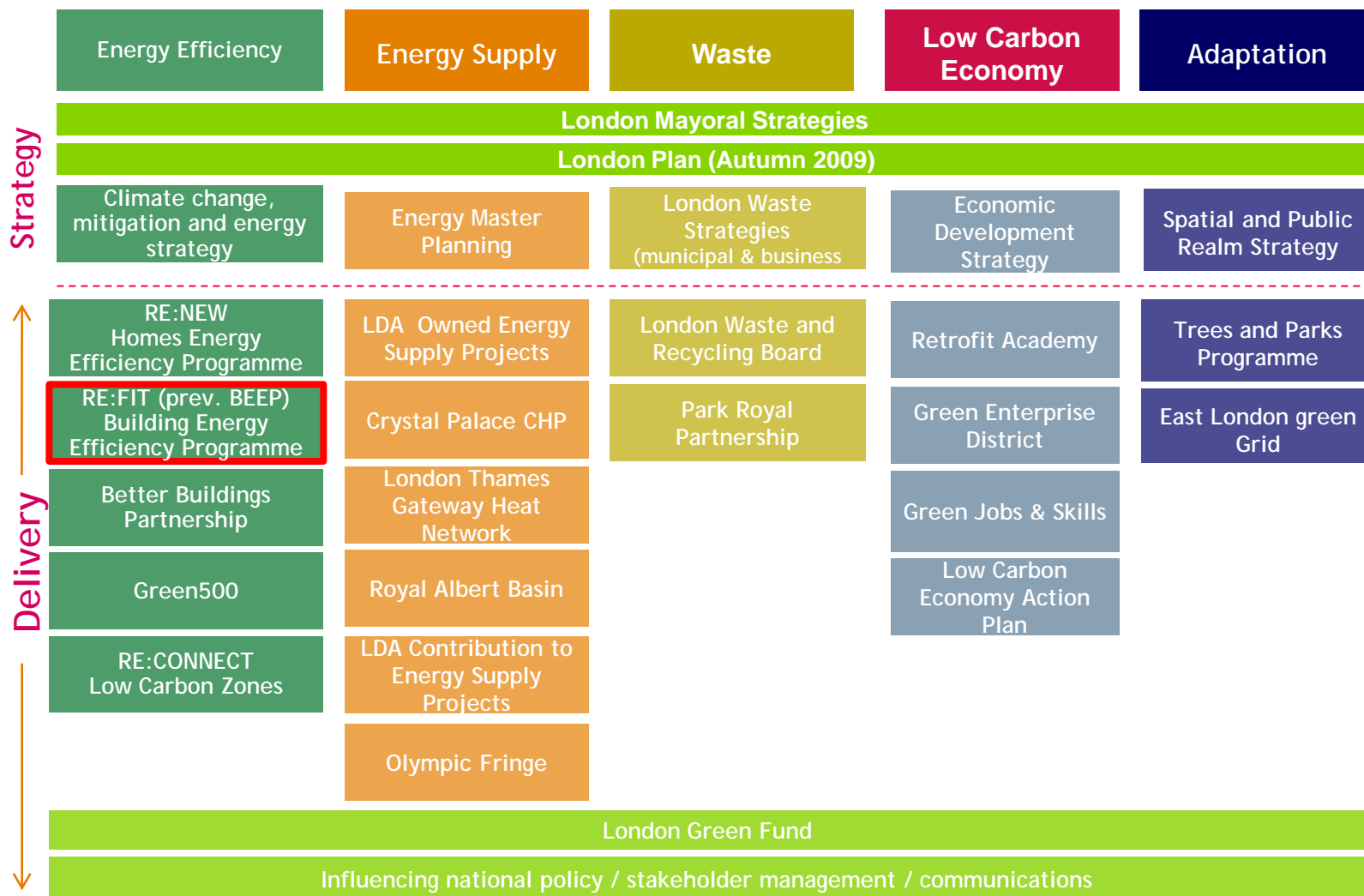


RE:FIT

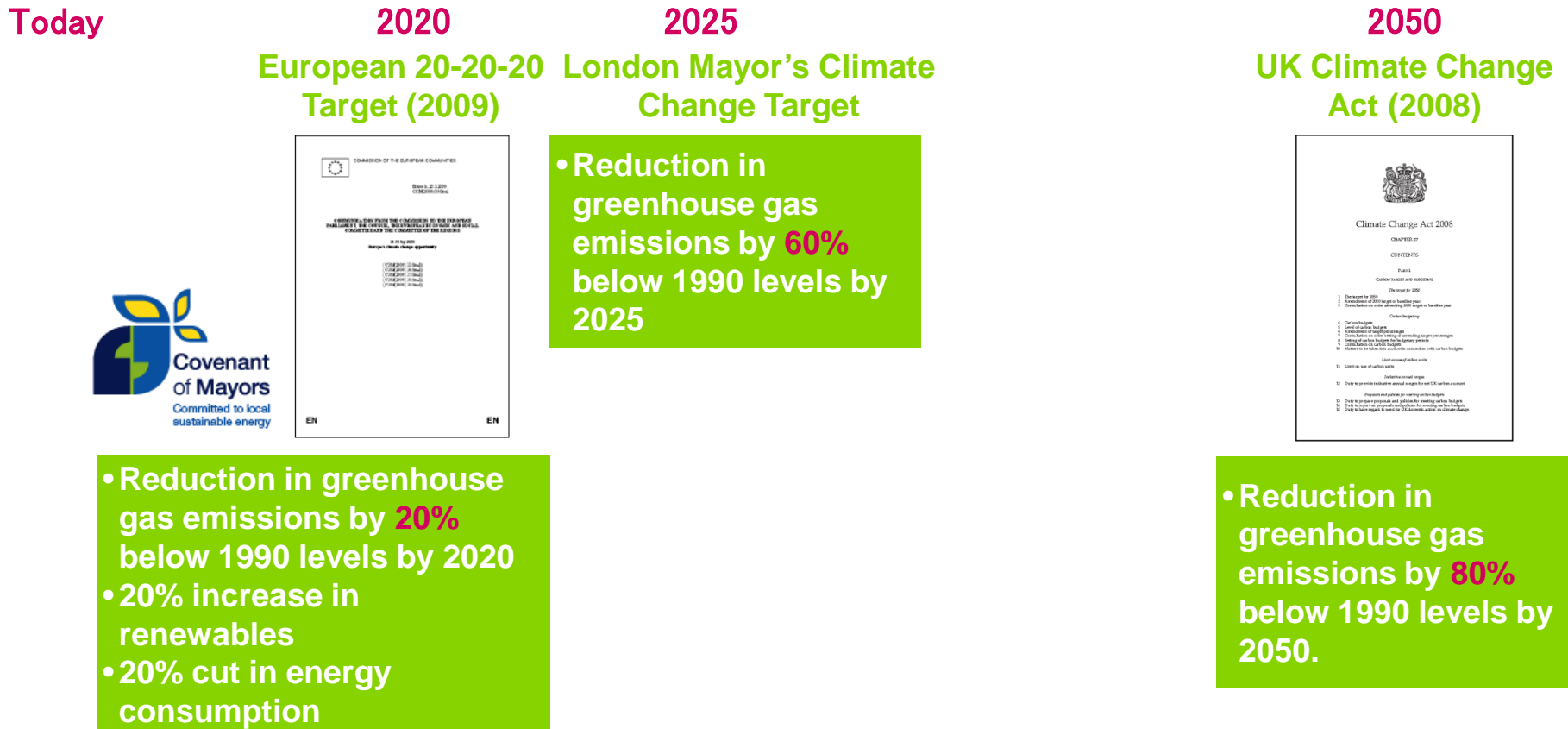
BUILDING ENERGY EFFICIENCY FOR TOMORROW

London's building retrofit programme

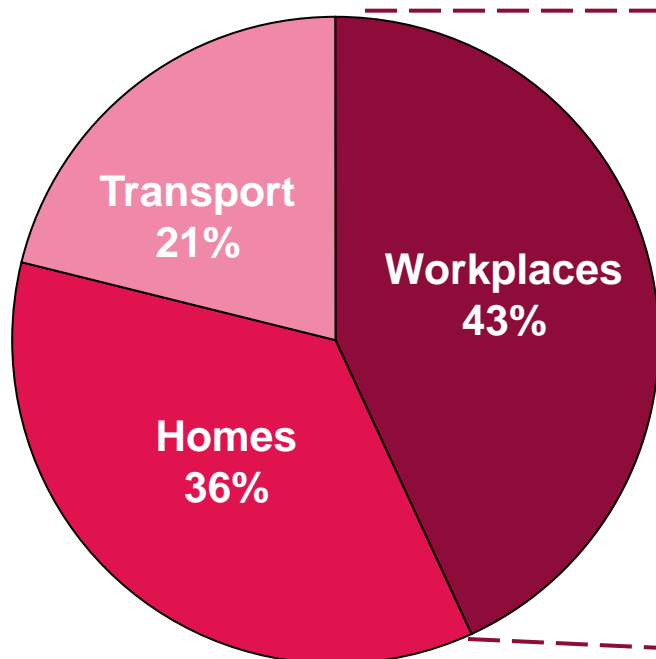
The climate change programmes – stimulating demand



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

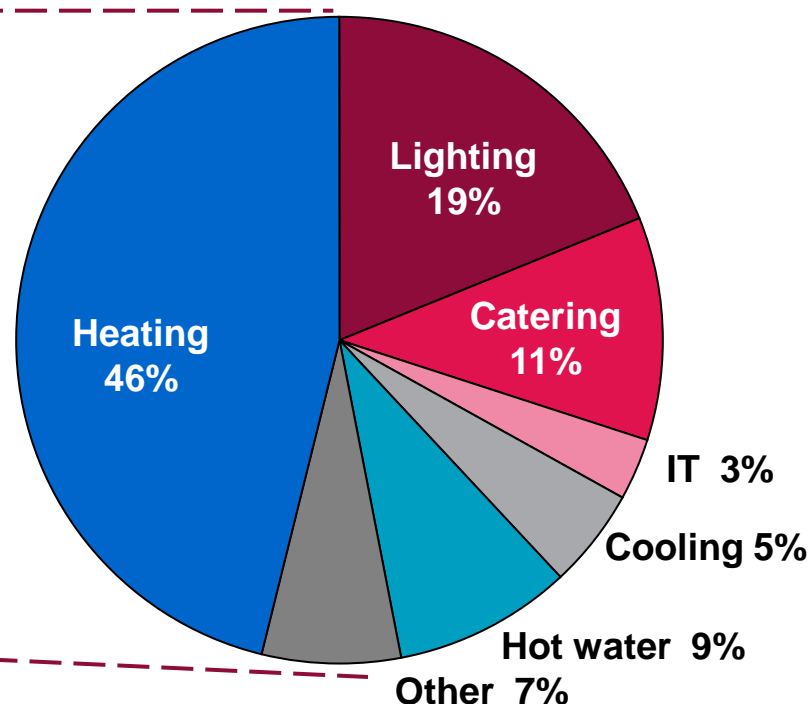


43% of London's total CO₂ emissions are from Commercial & Public Sector buildings



**CO₂ emissions from London, 2008
(excluding aviation)**

100% = 44.7 million tonnes CO₂



**Commercial & Public Sector CO₂ emissions
from London, 2008**

100% = 19.2 million tonnes CO₂

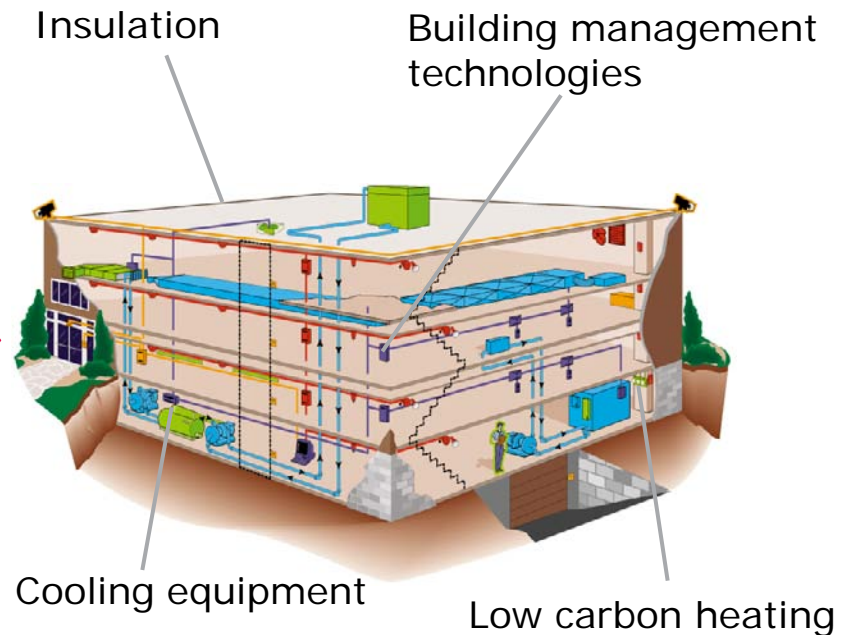
Public sector comprised of health (23%), education (47%) and offices (30%)

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



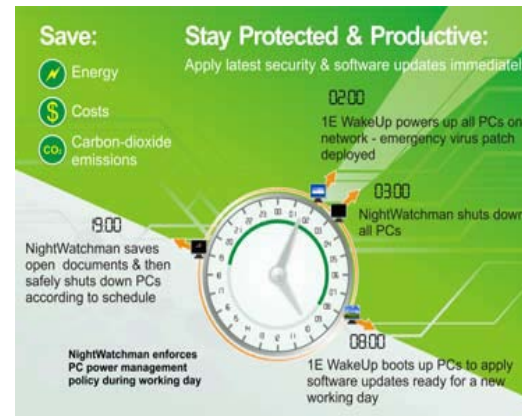
The Framework of Approved Suppliers

- 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

Energy Conservations Measures

- CHP
- VSDs on pumps and fans
- PC control
- Voltage optimisation
- Lighting & controls
- BMS controls
- Heat recovery
- Solar thermal
- Photovoltaic panels
- Cavity wall insulation
- Loft insulation
- Insulation to pipework
- Secondary glazing
- Draught proofing
- Radiator reflector panels

Integral MLS Digital Detector

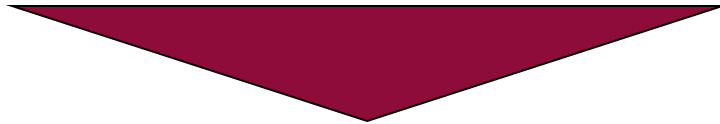


1E Nightwatchman software for PC auto shutdown



RE:FIT Pilot – SUCCESSFULLY COMPLETED Retrofits complete on 42 buildings

- 10 London fire stations
- 10 London police buildings
- 22 office buildings owned by Transport for London




- £7million investment
- 28% energy savings identified on average
- £1million per year savings from energy bills
- 7 year simple payback



A pilot has proved the model

- we are now extending the model to the whole of London's public sector

underway

	Tranche 1 Initial Pilot 	Rollout of RE:FIT Framework London Public Sector Publics
Aim	To pilot concept of Energy performance contracting and help develop retrofit market	Facilitate Energy Performance Contracting across London public sector buildings
Buildings Covered	42	40% of public sector
CO₂ Reduction (tonnes)	Over 5,000	2,500,000
M² Retrofitted (est)	145,852	11,000,000
Total Spend (£m est)	7	400
Status	<ul style="list-style-type: none"> - 42 buildings completed - Average of 28% reduction in energy consumption identified - Payback period 7 years –saving of £1m per annum 	<ul style="list-style-type: none"> - Panel of suppliers in place since January 2010 - Public sector organisations now using the framework

Key Benefits of the RE:FIT Framework

Significant guaranteed savings	Provides guaranteed energy savings from ESCO's 25% energy savings or more
Innovation	Access to market leading suppliers and the latest energy Saving products
Ready to use	Cuts out the time delay, hassle & expense of OJEU procurement process
Proven	Piloted by TfL, Metropolitan Police and London Fire Brigade
Sustainable	Makes retrofit of existing buildings sustainable
Alternative financing solutions	Banks, public works loan board, London Green Fund
GLA support	Support & advice with standardised contracts & toolkits. ELENA funding secured to support this
Single point of responsibility	ESCO has contractual responsibility for performance

Funding Options

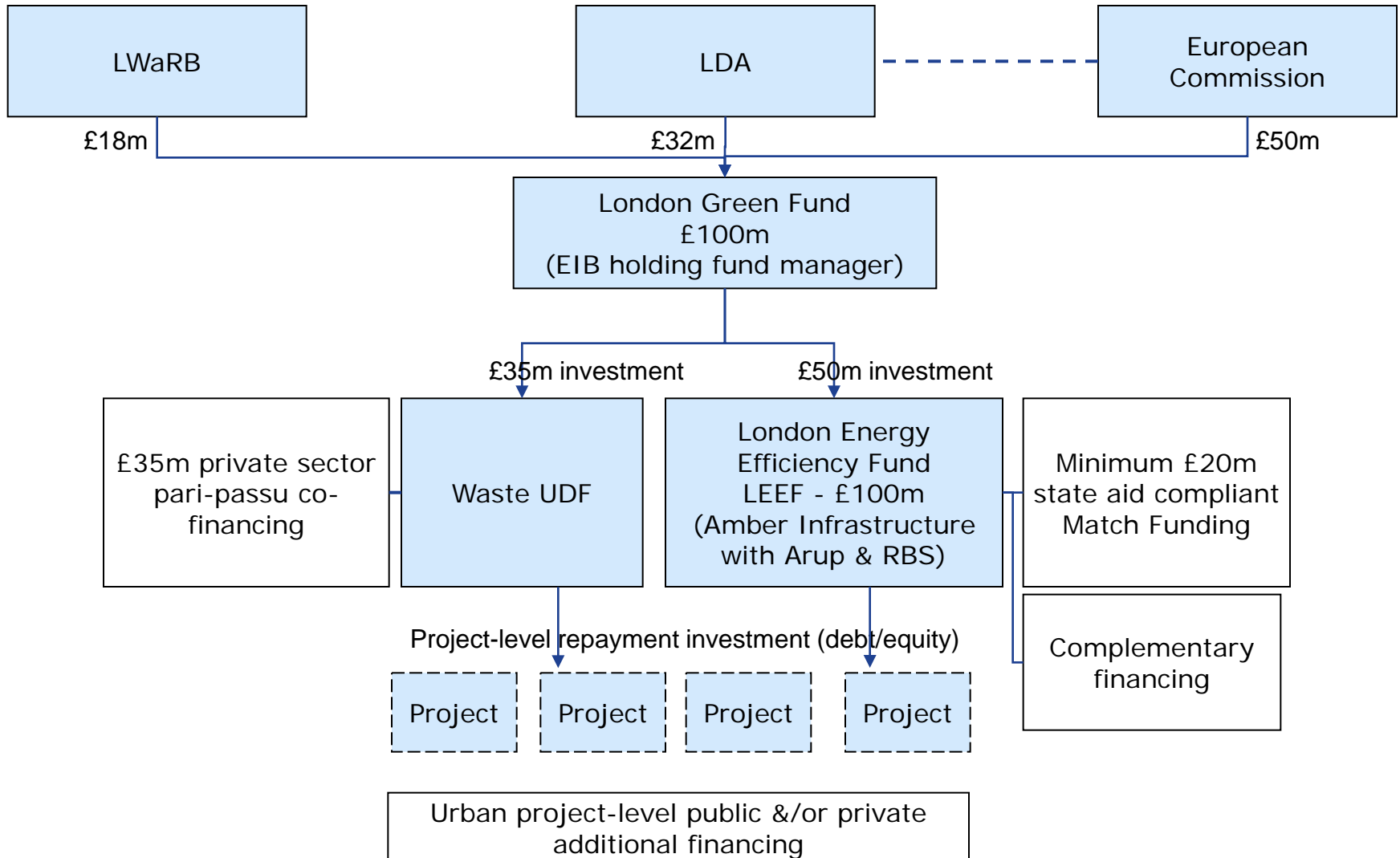
Own Funds

Borrowing – on balance sheet

e.g.:

- Salix
- Banks
- Public Works Loan Board (PWLB)
- London Green Fund
- Others

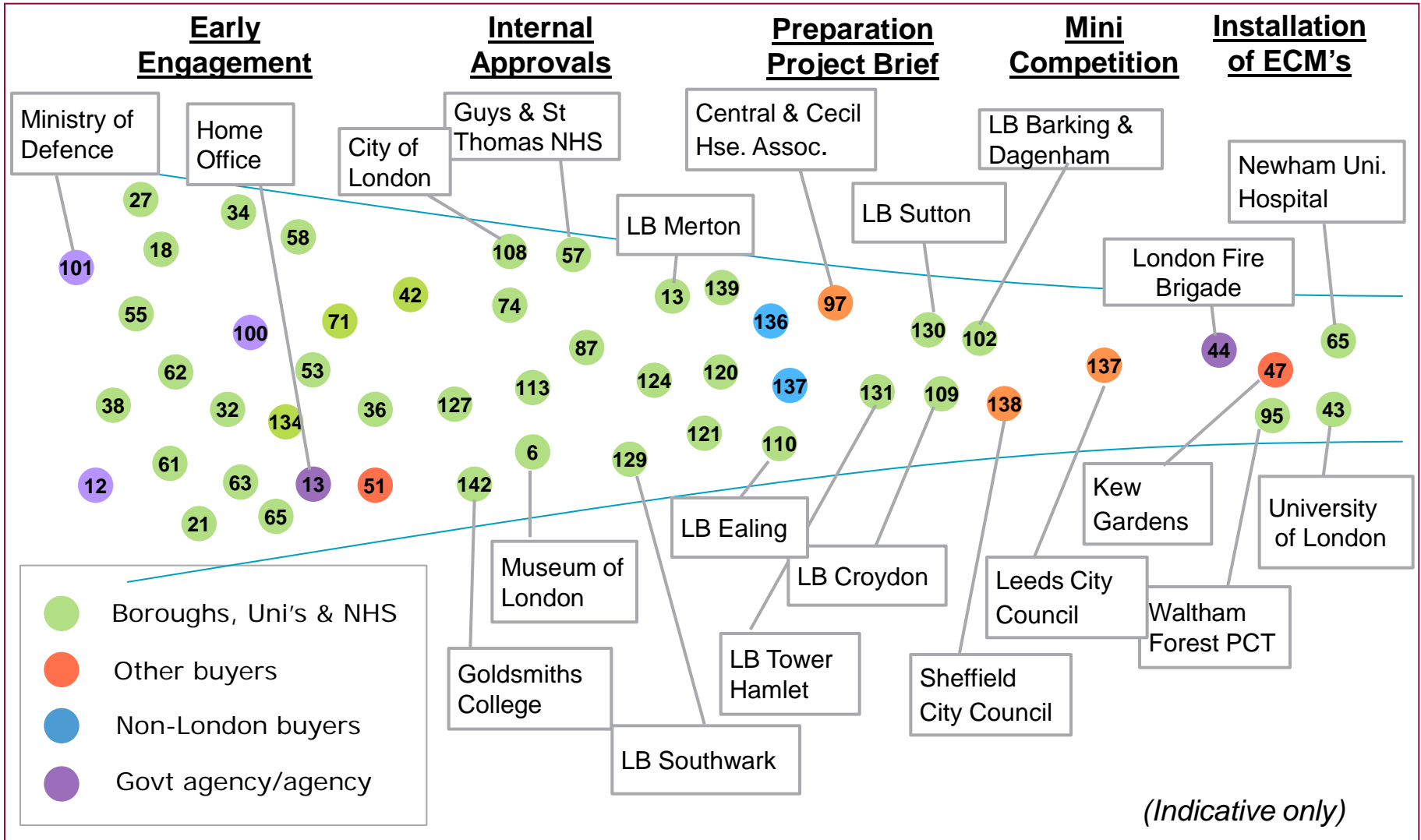
London Green Fund



Requirements of the London Energy Efficiency Fund (LEEF)

- Direct lending by December 2015 to:
 - ✓ Public sector bodies and/or voluntary sector organisations for energy efficiency measures to their building stock
 - ✓ Energy service providers that have been procured by the public/voluntary sector to deliver a 'funded' energy service solution for energy efficiency in public buildings or social housing
- Secure state aid compliant match funding, at a UDF level, of at least £20m, and to the extent possible, additional private sector complementary financing
- Work with stakeholders to develop a financing model that would provide further investment opportunities to the UDF
- LEEF Manager: Amber Infrastructure with ARUP and RBS
- Fund open from September 2011

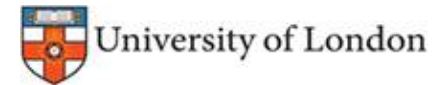
>140 organisations are in the RE:FIT pipeline



Public sector organisations who have signed up to RE:FIT



Goldsmiths
UNIVERSITY OF LONDON



Pipeline

RE:FIT

Mini Competitions
Timeline (indicative only)*

Key

Internal Approvals
Prepare Project Brief
Mini Competition
Tender Assessment
IGP
Installation

Tender Return
Sign Services Agreement
Sign JCT Contract



No	Buyer	Very Approximate Investment**	Indicative No. of Buildings* (Draft)	Indicative CO2 Reduction Tonnes/ annum* (Draft)	Selected ESCo	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Notes
Mini Competitions Launched																					
1	University of London	up to £200,000	3	299	Supplier selected																Energy Savings / M&V
2	Newham University Hospital	up to £400,000	1	473	Supplier selected																Energy Savings / M&V
3	Waltham Forest PCT	up to £280,000	9	304	Supplier selected																Energy Savings / M&V
4	Kew Gardens	up to £260,000	10	507	Supplier appointed																Energy Savings / M&V
5	London Fire Brigade	up to £800,000	10	519	Supplier appointed																
6	Leeds City Council	up to £1,000,000	10	865	Tenders being prepared																
Preparing Project Briefs / Mini Competition (Estimated)																					
Local Authorities																					
7	London Borough	up to £600,000	15	862																	
8	London Borough	up to £3,000,000	10	2,586																	
9	London Borough	circa £1,000,000	10	865																	
10	London Borough	circa £1,000,000	6	865																	
11	London Borough	circa £12,000,000	72	10,383																	
12	London Borough	circa £200,000	1	173																	
13	London Borough	circa £600,000	3	433																	
14	London Borough	circa £5,000,000	30	4,326																	
NHS																					
15	London Foundation Trust	up to £700,000	4	806																	
Cultural & Heritage																					
16	Museum	up to £5,000,000	30	4,326																	
Colleges / Universities																					
17	London College	up to £200,000	1	173																	
18	London University	up to £1,200,000	7	1,038																	
19	London University	up to £4,000,000	24	3,461																	
Other Public Sector																					
20	London Public Sector	up to £800,000	12	519																	
Total		£ 37,640,000	269	33,426																	
<p>Notes</p> <p>* This is the latest information that we have and is based on updates provided by buying organisations. Therefore, this could be subject to change as individual organisations develop and finalise documentation.</p> <p>** All timelines are indicative and subject to change, delay and cancellation.</p> <p>*** This is the latest information that we have and is based on updates provided by buying organisations. Therefore, the estimated investment values are indicative and subject to variances upwards & downwards and cancellation.</p>																					

ELENA Funding to procure a Programme Delivery Unit

- 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 will be 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
- GLA to direct use of £100,000, but remainder of grant can be used
- The leverage requirement under this agreement is to achieve at least 25 times the amount of the ELENA funding.



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.



This will represent a capital investment of over £60m over 3 years

The Programme Delivery Unit (PDU)

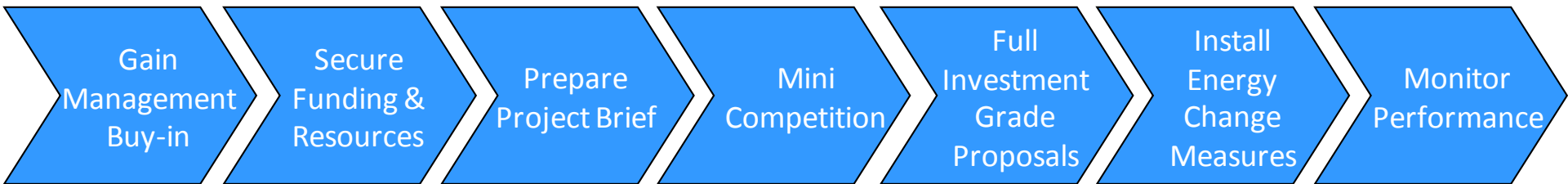
The role of the PDU is to manage the RE:FIT framework and facilitate the uptake by London based public sector organisations.

Turner and Townsend, supported by PA Consulting Group, are the preferred bidder selected from a recent procurement process to run the RE:FIT Programme Delivery Unit on behalf of the GLA. The team is to be in place at the end of September 2011 and will:

- Act as the public face of the RE:FIT programme, proactively recruiting building owners into the programme and supporting organisations throughout the process
- Promote the Framework to public sector organisations through meetings and events
- Help public sector bodies to identify buildings and energy conservation measures, write Project Briefs and run Mini-Competitions to select an Energy Service Company who will retrofit their buildings and guarantee savings
- Provide technical support and guidance throughout the procurement process and basic advice regarding sourcing funding information

The GLA have committed to save approximately 100,000 tonnes of CO₂ over 3 years through the PDU

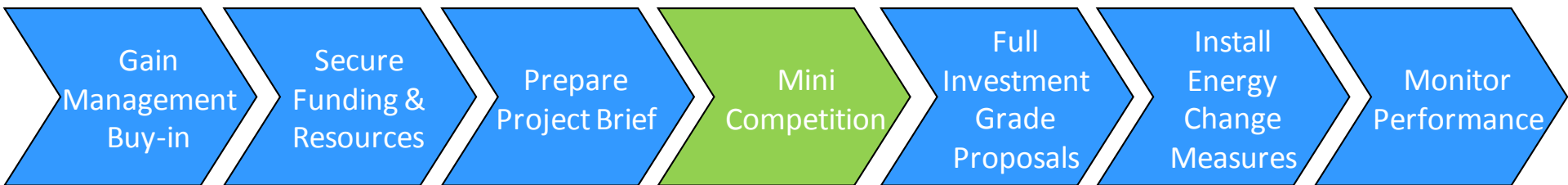
Core RE:FIT Process & the Programme Delivery Unit



- Buyer organisations need to have high-level internal support and a certain capability/capacity level to implement
- The buyer organisation will need to cover basic aspects such as data gathering and site visits, and their overall ownership of the process and results will be key for progressing to successful implementation
- The Programme Delivery Unit team will provide support throughout all the stages from September 2011 to September 2014 for free

Core RE:FIT Process & the Programme Delivery Unit

Mini-competition process



- There are 3 options Buyers can use when conducting a mini-competition, typically requiring an increasing level of effort from bidders:
 - Desktop Assessment (DTA)
 - Investment Grade Audit sample (IGA)
 - Investment Grade Proposal - Full Portfolio(IGP)
- All contain main Energy Performance Contracting principles

Awards Received

London is the first city in the world to appoint an approved panel of energy savings companies that undertake energy audits, identify energy savings measures and installs them

- RE:FIT was Highly Commended for 'GO Sustainability Initiative of the Year' at the GO Awards for Excellence in Public Procurement 2010/11
- RE:FIT was Commended at the Government Business Awards 2011 in the 'Sustainability Award' category
- The RE:FIT initiative has won the best "Technical Project" at the ManagEnergy Annual Awards in Brussels on 13 April 2011. The Award, recognises the most outstanding, ambitious and innovative projects with energy-saving measures



RE:FIT - Summary

- Significant Mayoral support behind the RE:FIT programme and great opportunity to be involved
- There is an increasing recognition of the need for public sector organisations to reduce energy use and carbon emissions
- Clients can face significant barriers using alternative solutions such as Competitive Dialogue Tender (cost, time and capability issues) and Restricted Tender (ability to define requirements)
- RE:FIT provides a tested and readily accessible approach
- The Programme Delivery Unit will not only further drive the take up of RE:FIT over the next three years in London but will support public sector organisations throughout the process for free

Thank you