LONDON ENERGY EFFICIENCY FUND

AMBER GREEN

Sustainable Capital

Executive Summary

European Regional Development Fund
Investing in your future

RBS
The Royal Bank of Scotland

ARUP

Introduction to the London Energy Efficiency Fund (LEEF)

1. The London Green Fund (**LGF**) is a £100m Fund comprising of £50m from the London 2007-13 European Regional Development Fund (**ERDF**) programme, £32m from the Greater London Authority (**GLA**) and £18m from the London Waste and Recycling Board (**LWARB**). It has been designed to promote the development of a thriving low carbon economy in the capital in line with the Mayor of London's environmental and economic priorities. The LGF was set up under **JESSICA**, the European Union's Joint European Support for Sustainable Investment in City Areas initiative, supported by the European Investment Bank (**EIB**).

2. The LGF provides funding for three Urban Development Funds (**UDF**s) that invest directly in waste, energy efficiency, decentralised energy and social housing projects. They are 'revolving' investment funds, where monies invested in one project are repaid and then reinvested in other schemes.

3. The Energy Efficiency (**EE**) UDF, called London Energy Efficiency Fund (**LEEF**), was set up in August 2011 with £50m allocated from the LGF. It focuses on investing in energy efficiency retrofit to private and public sector buildings, including:

   a) The adaptation and/or refurbishment of existing private, public or voluntary sector buildings (e.g**.** Local Authorities, offices, industrial premises, universities, hospitals, schools) to make them more energy efficient, sustainable and environmentally friendly; and/or,

   b) Improvements to existing social housing estates to make them more energy efficient.

4. The **Amber Green Consortium**, led by Amber Infrastructure with funding from the Royal Bank of Scotland (**RBS**), and Arup as technical advisors, was appointed in 2011 to operate the EE UDF.

5. LEEF achieved its target of a **minimum of £70m of investment**, predominantly through senior or mezzanine loans, by the **end of December 2015** (in line with ERDF programme requirements), and is now in its **Recycling Period**. It has funds to invest in new projects and welcomes applications.

Eligible Projects

6. **Performance Targets** - LEEF is a sustainable investor, targeting a socio-economic return as well as a financial return on investment. Projects supported by LEEF should help deliver the Fund's overall carbon reduction targets. Each project should therefore aim to deliver:

   a) Energy Savings Ratio of at least 20% compared to conditions prior to investment; and

   b) An annual carbon reduction of less than £5,000 per tonne of CO2.

   If a project is unlikely to meet these targets, it is still well worth contacting LEEF and exploring the proposition in more depth.

7. **Eligible Technologies** – LEEF can support a wide range of building integral Energy Conservation Measures (**ECM**s) in buildings, including but not limited to the technologies **listed in the table below**. LEEF is also very keen to support campus based district heating and decentralised energy (Heating, Cooling & Power) projects.

Table 1: Energy Conservation Measures

Category	ECM Technology
Metering & Controls	- Automatic metering system
	- Building Management System (BMS) / controls upgrade
	- Smart Meters
Lighting	- Lighting control
	- Low energy lighting
Small Power	- Small power management controls
	- Low energy appliances and equipment
	- Voltage Optimisation
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
	- Waste Heat Recovery
	- Low grade Heating systems
Miscellaneous	- Vertical transportation control and management
	- High efficiency measures on hydraulic lifts
Fabric	- Infiltration measures (Air-tightness improvements)
	- Replacement glazing
	- Roof insulation upgrade
	- Wall insulation – over-cladding
Efficient Heating Production	- Combined heat and power
	- Tri-generation Combined Cooling Heat and Power
	- District Heating and Decentralised Energy (including distribution)
Low Carbon Technologies	- Fuel cells
	- Biomass boilers
	- Photovoltaic cells (PVs)
	- Medium scale wind
	- Biomass CHP
	- Ground Source Heat Pumps (GHP)
	- Micro Hydro systems
	- Solar Thermal systems
	- Energy Harvesting technologies
	- Air source heat pumps
Water Saving	- Low flow fixtures and fittings
	- Rainwater Harvesting systems
	- Grey water systems

8. **Eligible geographies** – LEEF can finance projects anywhere within the **33 London Boroughs**.

9. **Eligible borrowers/ project sponsors** – Projects may come from a variety of sources, and may be sponsored by public or private sector bodies (such as ESCOs or developers.) The Fund can lend to public or private sector entities; with ESCOs and SPVs also able to access funds.

Advantages of LEEF

10. LEEF provides many advantages over other potential sources of finance, including PWLB, Salix and commercial debt. These are summarised below:

- **Price** – LEEF financing may be cheaper than other sources of finance and thus offers excellent value for money for the public and private sectors. **LEEF is able to offer tenors of up to 10 years and interest rates from 1.8% per annum**. LEEF will lend up to £20m per project;

- **Term** – There are no maximum or minimum terms for LEEF money, or fixed payback periods. LEEF will consider 10-year money or short term development finance; potentially without early repayment penalties;

- **Flexibility** – LEEF can offer sculpted drawdown and repayment profiles which allow the borrower to match payments to expenditure and revenue savings: as a result projects can be revenue neutral or cash positive for the borrower.

Indicative Terms of Investment

The following provides an overview of the indicative approach and target markets for the Fund:

a) The Fund provides repayable investment finance, and loans must therefore be repaid in full plus an interest element. The Fund is unable to provide grant funding and cannot confer state aid.

b) The Fund will target investments of between £3-10m (though the minimum is £1m and the maximum £20m), and the Fund would encourage project sponsors to consider how best to achieve economies of scale, for example by grouping buildings or eligible parts of broader refurbishment projects together. Smaller projects will be considered on a case by case basis. Draw down can be upfront or on a phased basis.

c) The GLA's RE:FIT programme provides a pre-procured framework of ESCOs and a template contracting approach linked to the provision of Energy Savings Performance Guarantees. Projects using the RE:FIT programme are one potential source of investments with the Fund, and are likely to share a number of synergies with the Fund's investment objectives. The Fund will be working closely with the RE:FIT team to ensure a joined up approach. However, there is no obligation for projects to use RE:FIT and it is expected that a range of different procurement routes will be used by project sponsors. Information on the RE:FIT programme can be found at http://www.refit.org.uk/.

d) Likewise, LEEF is very keen to support projects procured through the GLA's RE:NEW Programme for social housing. If you are such an entity, find out more at https://www.london.gov.uk/what-we-do/environment/energy/renew-0/what-renew and please get in contact with LEEF to discuss the proposed scheme in more depth.

e) The Fund may consider providing up to 100% of senior debt finance for projects if required and if appropriate security is provided.

f) The Fund will focus initially on the provision of senior debt. Mezzanine loans and equity are also available depending on the project financing structures and state aid considerations.

g) There is no set payback period required, but the Fund will focus on short term development loans and medium term (5-10) year loans in line with the anticipated payback period. Longer investment periods will be considered on a case by case basis.

h) The pricing of the Fund's loans will be dependent on the credit rating of the borrowing entity and the amount and level of security provided; the aim is to be able to structure the transaction so that a highly competitive rate can be offered.

i) The Fund may be able to offer flexible terms depending on the project (for example the potential to roll up interest during construction, to sculpt interest payments to energy savings, and to allow early repayment).

j) All projects will be subject to due diligence in the same way as a lending bank in order to ensure the Fund has the necessary assurance over technical and financial aspects of the project.

k) Projects will be required to comply with monitoring, reporting and publicity requirements linked to the provision of ERDF monies.

Indicative Application Process

Potential project sponsors should get in touch with the LEEF team for an informal discussion as part of first steps. LEEF aims to operate a streamlined application process with a quick turnaround on investment decisions and short form template loan documentation. In order to ensure projects meet the Fund's criteria and to manage risk, LEEF will review information in the following areas. Borrowers seeking investment from the Fund will need to address and evidence these areas through a written application process, supported by guidance from the Fund.

a) Eligibility & Strategic Fit

- Does the project align with the Mayor's London Plan and the London Climate Change Mitigation and Energy Strategy?

- Does the project align with the Carbon Reduction / Climate Change Strategy of the project sponsor and is it part of a co-ordinated energy efficiency programme?

- Does the project provide sufficient outputs in terms of carbon reduction and energy savings? Does the project support sustainable development objectives and achieve broader regeneration benefits)?

b) Financial Viability

- What is the financial structure of the project, and are other sources of finance secured?
- Are financial assumptions on costs, values, income and savings robust and verifiable?
- Is a project or corporate financial model available?
- Are the technologies/ measures proposed of appropriate type and quality?
- What is the payback period for the Fund's investment?
- What is the credit strength of the borrowing entity and what security can be provided?

c) Deliverability

- Is the project investment ready?
- When will the project be in a position to draw down investment from the Fund?
- What are the procurement arrangements and timetable for the delivery of the works?
- Is planning permission required and has it been secured?
- Have the required technical studies been undertaken?
- What is the track record of the project sponsor and borrower in delivering projects on time and budget and on taking on repayable loan finance?
- Does the project have access to appropriate technical and financial expertise to ensure delivery and minimise risk?
- Is there proven leadership and management/ political support for the project?
- What approvals are required before a loan agreement with the Fund can be signed?

Contact

Alex Gilbert or Leo Bedford

Amber Infrastructure Ltd
Two London Bridge
London
SE1 9RA

Tel: 020 7939 0550

Email: alex.gilbert@amberinfrastructure.com

Thomas Briault:

Ove Arup & Partners
13 Fitzroy Street
London
W1T 4BQ

Tel: 020 7755 4428

Email: Thomas.briault@arup.com