



London Green Fund

Case Study

... supporting London's transition to a low carbon economy...







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The authors of this study are a consortium of three companies: t33 (lead), University of Strathclyde – EPRC and Spatial Foresight.

Abbreviations

EIB	European Investment Bank	
ERDF	European Regional Development Fund	
FEF	Foresight Environmental Fund (waste UDF)	
GLA	Greater London Authority (formerly London Development Agency)	
GSHF	Greener Social Housing Fund (social housing UDF)	
JESSICA	Joint European Support for Sustainable Investment in City Areas	
LDA	London Development Agency	
LEEF	London Energy Efficiency Fund (energy efficiency UDF)	
LGF	London Green Fund	
LWaRB	London Waste and Recycling Board	
RBS	Royal Bank of Scotland	
THFC	The Housing Finance Corporation	
UDF	Urban Development Fund	

Exchange rate: EUR 1 = GBP 0.85



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1 Summary

The London Green Fund (LGF) is an example of ERDF supporting the development of green infrastructure to contribute to London's ambitious carbon reduction targets: to make London one of the world's leading low carbon capitals by 2025 and a global leader in carbon finance.

The LGF consists of three urban development funds targeting investment in energy efficiency, waste and greener social housing. The contribution of EUR 60 million ERDF combined with public and private funds brings loan and equity funding for projects ranging from the city's first plastics recycling plant to the energy efficiency upgrading of London public buildings. In the case study, we focus in particular on the delivery of an innovative waste and composting facility which would not have been possible without London Green Fund's intervention.

The case study illustrates the challenges in establishing a fund in a new sector under changing market conditions. A number of adjustments have been made to the LGF's investment strategy to respond to a range of challenges and opportunities, for example, getting complex green infrastructure projects (e.g. decentralised energy, i.e. local generation of electricity) off the ground; identifying where the market failures occur (with changing public sector borrowing rates); and leveraging EIB loans for social housing.

To date, the LGF has invested GBP 99.4 million (EUR 117 million) in 15 projects with a combined project value of GBP 678 million (EUR 800 million). Forecast impacts envisage the creation of over 2,000 jobs including construction, 215,000 tonnes per annum CO2 saving, and 330,000 tonnes per annum waste to landfill. The EU leverage effect is 6.77 times the ERDF input.

A number of factors have contributed to the success of the LGF, not least a robust process for project steering and making necessary adjustments to strategy; the experience and knowledge of the Holding Fund manager; the long term vision and commitment of - as well as close cooperation between - stakeholders needed to meet the challenges in establishing and delivering such a ground breaking fund.



Name

London Green Fund (UK - London)

Funding source

ERDF

Type of FI

Debt and equity

Financial size

EUR 479.7 million (GBP 406.5 million) = EUR 70.8 million (GBP 60 million) ERDF + EUR 59 million (GBP 50 million) regional public funding + EUR 112.1 million (GBP 95 million) private funding + EUR 236+ million (GBP 200+ million) EIB loan)

Absorption rate

87.5 % (at the end of November 2014)

EU leverage

6.77x (leverage effect of ERDF funds)

Leverage of public resources

3.70x (leverage effect of ERDF funds and other public funds)

Re-investment

Funding will start to return to the LGF in 2015

Thematic focus

Energy efficiency and waste

Type of final recipient

Public organisations and private companies

Partners involved

Greater London Authority (GLA), London Waste and Recycling Board (LWaRB), European Investment Bank (EIB), RBS, INPP, pension funds and private investors

Timing

October 2009 - December 2015

Main results

Targets: 28,000 tonnes of CO2 saving p.a.; 245,000 tonnes of waste diverted from landfill p.a.; 100 jobs created. Forecast impacts (September 2014): creation of over 2,000 jobs (including construction), 214,963 tonnes per annum CO2 saving, and 330,980 tonnes per annum waste to landfill.



2 Objectives

As a densely populated global city, London is under environmental pressure and faces significant future environmental challenges in terms of further population and economic growth. The Mayor's London Plan and Economic Development Strategy both have a strong focus on the environment. The aim is for London to lead the world in its approach to tackling urban environmental challenges; in this context, to make London one of the world's leading low carbon capitals by 2025 (reducing emissions to 60% below 1990 levels) and a global leader in carbon finance.

The London 2007-2013 ERDF Programme worth EUR 182 million aims to promote sustainable, environmentally efficient growth, within four Priorities.

Priority		Budget
1	Business innovation and research and promoting eco-efficiency	EUR 38.8 million
2	Access to new markets and access to finance	EUR 54.2 million
3	Sustainable green infrastructure	EUR 85.5 million
4	Technical assistance	EUR 3.4 million

The main objective of the Sustainable Green Infrastructure Priority is to support sustainable economic growth by investing in low/zero carbon environmental infrastructure and premises, physical environmental enhancement and the retrofitting of existing building, including social housing. This will help London's transition to a low carbon economy, which will bring economic opportunities in terms of jobs and inward investment.

During negotiations with the European Commission for the 2007-2013 Operational Programme (OP), London undertook to investigate the opportunity for using the technical support offered under the JESSICA initiative (Joint European Support for Sustainable Investment in City Areas, which supported managing authorities interested in setting up financial instrument schemes for urban development) with a view to delivery of up to 70% of Priority 3 through a UDF. The London Green Fund (LGF), a holding fund for urban development projects, fills the market gap by targeting those projects that are not 'commercial' through the provision of the equity or loan capital needed to attract other investors.



It was recognised at the time that any urban development fund would be strategically important as returns from investments could be used to support other urban development projects. In addition, it would help to attract leverage and harness the experience and financial capacity of partners (primarily the European Investment Bank, one of the three partners in the JESSICA initiative, along with the European Commission and the Council of Europe Development Bank).

There is a range of other financial supports for green infrastructure in London, which links to LGF. ELENA (European Local Energy Assistance, run by EIB and funded by the EC) supports two programmes (RE:FIT and RE:NEW) designed to assist with the development of energy efficiency projects. RE:FIT was developed to provide a commercial model for public bodies to implement energy efficiency and integrated improvements to buildings, reducing energy consumption and carbon emissions. RE:NEW is a programme to install cost-effective energy efficiency measures in homes. The London Waste and Recycling Board also has a Targeted Infrastructure Investment Fund financed by UK Government to invest in waste projects to the extent that private sector funding is not available. In 2012, the UK Government established the Green Investment Bank with GBP 3.8 billion of public funds to invest in green projects, on commercial terms, across the UK and mobilise other private sector capital into the UK's green economy. All of these initiatives have linked to LGF at project level.

TEG Biogas – project financed by the financial instrument

TEG Biogas Dagenham is a new GBP 21 million, or EUR 24.8 million, waste and composting facility on the Mayor of London's London Sustainable Industries Park (LSIP). This project is an important first for London and provides a positive demonstration of a fully integrated renewable energy and waste management project. The 30,000 tonnes per annum anaerobic digestion (AD) and 19,000 tonnes per annum composting facility will see waste, which could have been sent to landfill, being used to create renewable energy and heat as well as compost



and digestate for the agriculture sector. The feedstock comes from source segregated food waste and mixed food and green waste produced by local households, commercial and manufacturing enterprises.



3 Set up of the financial instrument

This section charts the journey of the Fund from the early concept, through its process of establishment and implementation.

3.1 Preceding events

The use of a financial instrument was indicated as an option for the delivery of Priority 3 (P3): Sustainable green infrastructure in the draft OP for the period 2007-2013. In negotiations with the European Commission over the balance of funding between green infrastructure in P3 and the Lisbon-oriented business agenda in P1, it was agreed that London could allocate 45 percent of the budget to P3, and that a financial instrument would be actively pursued.

In 2008, DG Regio and the EIB commissioned a feasibility study for using a financial instrument in London. The report found that there was: (i) an indicative need for such an instrument in London (to make a step change in environmental investments; imperfect market conditions made the type of projects envisaged too risky for the private sector); (ii) an appropriate suite of activities for a financial instrument, and the economic development community was keen to embrace the vehicle. The objective was to move the market for investing in the environmental sector forward by de-risking and demonstrating investment feasibility; and (iii) the approach to deploying a financial instrument should be to support projects incapable of securing conventional commercial financing, to place ERDF funds in a Holding Fund (HF) responsible for setting up a Urban Development Fund (UDF) structure reflecting the scope and nature of investment opportunities. The report further recommended that the EIB was best placed to act as the Holding Fund manager for three reasons: it has proven fund management capability; its operational remit was aligned with the economic development agenda; and it could be directly appointed.

The LGF was designed to address market imperfections that make projects (or parts of projects) too risky for the private sector, e.g. uncertain market demand, new or emerging technology, or an unusually long lead time until returns are generated. Particularly at the time the Fund was being designed, the market was not willing to deliver 'at risk' funding.



In December 2009, the LGF Investment Board agreed a phased procurement approach for setting up two UDFs. In 2010, the EIB, LWaRB and the Investment Board developed UDF selection criteria, which the Programme Monitoring Committee (PMC) approved in April 2010 (for the waste UDF) and July 2010 (for the energy efficiency UDF). In August 2012, the LGF Investment Board approved the establishment of a third UDF: a green social housing fund.

Six bids were received for the Waste UDF and after the initial criteria checks, two were taken forward to a further bidding stage. Following the HF manager's assessment, in September 2010, the LGF Investment Board gave approval for Foresight Group LLP to be appointed as the preferred bidder for the Waste UDF. Following negotiation between the Holding Fund manager and Foresight, an operational agreement was signed on 2 March 2011 and the Foresight Environmental Fund (FEF) was officially launched by the Mayor of London on 21 March 2011.

Three bids were received for the Energy Efficiency UDF by the December 2010 deadline and, following the Holding Fund managers' assessment, in March 2011, the LGF Investment Board agreed to appoint Amber Infrastructure Ltd as the preferred bidder. The London Energy Efficiency Fund (LEEF) was finalised in August 2011, with a launch event in October 2011.

In August 2012, following approval for the establishment of a new green social housing UDF, the Holding Fund manager launched a procurement exercise to select an organisation to set up and manage the fund. The Housing Finance Corporation (THFC), a specialist non-for-profit funding intermediary, was selected as the preferred candidate in October 2012 and a contract was signed in February 2013.

Although the Funds are unusual in the commercial market due to their small geographic focus and niche investment area (environmental infrastructure), Fund Managers and private investors have been attracted to participate: the appointed Fund Managers all had a track record in environmental fund management and saw the financial instruments as opportunities for growing the corresponding market.



3.2 Funding and partners

The main funding and delivery partners are shown in the Table.

Role	Entity / institution	
Intermediate Body	Greater London Authority (formerly London Development Agency)	
Funding Partners	GLA, London Waste and Recycling Board	
Holding Fund Manager	European Investment Bank	
UDF Fund Managers	Foresight Group, Amber Infrastructure Ltd. and The Housing Finance Corporation	

Initially the LGF was a GBP 100 million (EUR 118 million) fund constituted by GBP 50 million (EUR 59 million) ERDF, GBP 18 million (EUR 21.2 million) cash from London Waste and Recycling Board (LWaRB) and GBP 32 million (EUR 37.8 million) of land assets from the London Development Agency (LDA). (The European Commission's approval was secured to match land assets to ERDF in lieu of cash due to LDA's financial constraints at the time.) In 2010, the LDA made a cash contribution of GBP 32 million (EUR 37.8 million) to the LGF, to allow for the removal of the LDA-owned sites committed to the fund; the focus of LEEF had shifted from support for large-scale decentralised system and district heating networks to other energy efficiency measures. (Following its abolition in 2012, the LDA was replaced by the Greater London Authority (GLA), as the Intermediate Body and Funding Partner).

In August 2014, an additional GBP 10 million (EUR 11.8 million) of ERDF plus GBP 1.5 million (EUR 1.8 million) in interest generated on 'idle funds' was added to the Fund's resources (into the LEEF).



The UDFs are contractually obliged to attract private sector funding into their funds: this includes a GBP 50 million (EUR 59 million) loan facility from Royal Bank of Scotland (RBS) and a GBP 20 million (EUR 23.6 million) provision from INPP (should equity investments be made) for LEEF; GBP 25 million (EUR 29.5 million) for the FEF, mainly from Pension Funds. The GSHF is linked to a GBP 400 million (EUR 472 million) EIB loan to THFC for investments, primarily in new affordable housing but also for retrofitting social housing. The LGF contract places an obligation on THFC to invest at least GBP 200 million (EUR 236 million) of EIB's funding in London-based projects.

Funding sources	EUR (GBP in brackets)
ESIF (ERDF)	70.8 (60) million
Public	
- national	
- regional	59 (50) million: 21.2 (18) million from LWaRB and 37.8 (32) million from GLA
- local	
Private	59 (50) million from RBS, 23.6 (20) million from INPP (LEEF private funding), 29.5 (25) million from Pension Funds, individuals and syndicates (FEF funding) and 236+ (200+) million EIB funding for GSHF, 1.8 (1.5) million interest on idle funds
Total funding available	479.7 (406.5) million



3.3 Implementation

The LGF is managed by the European Investment Bank (EIB) on behalf of the GLA and LWaRB. It was set up using a 'holding fund model' and therefore does not invest directly in projects, but rather makes contributions to smaller UDFs.

60 92 European Investment Bank Europea Investm Bank 60 + 1.5 (interest earned by LGF) THFC Plasrecycle - 3.47 Tate - 17.8 100 TEG - 5.2 Croydon - 20 Closed Loop - 4.6 Salters - 4.7 A2Dominion - 4 LRRE - 5.2 Hackney - 4.5 React Energy - 5 St George's - 13 RE:FIT RE:NEW Willen Biogas - 4.3 ELENA - European Lo ENergy Assistance Orion Waste - 0.58 Forecast Reduction (Nov 2014): Leverage: 15-20 times IMPACTS 215,000 tonnes of CO2 pe 330,000 tonnes per d

Figure 1: Implementation structure of the London Green Fund (Figures in GBP)

Source: Greater London Authority, 2014

As Holding Fund Manager, the EIB's main responsibilities are (i) managing the initial capital contributed to the LGF and any proceeds from investments and interest earned on un-invested capital; (ii) establishing the UDFs and procuring organisations to manage the UDFs; and (iii) helping to monitor the performance of the UDFs.



The LEEF is managed by Amber Infrastructure Ltd. which also has urban development fund management experience in Wales and Scotland. Arup is the Technical Advisor to the fund; it supports projects which would like to access the fund, and undertakes due diligence and post-investment monitoring. RBS contributes a facility of £50million (EUR 59 million) to the UDF. A separate vehicle has been created for the provision of private sector equity to match any equity investments made.

For FEF, the Fund Manager, Foresight Group LLP, formed an investment company (Foresight Environmental Cell) to enable individual retail investors to participate in the FEF. The Greener Social Housing UDF (GSHF) is managed by The Housing Finance Corporation Ltd.

The main milestones for the LGF are as follows:

Time period	Action taken
September 2008	Scoping Study
October 2009	Funding agreement with HF manager and LGF launch
FEF: March 2011; LEEF: August 2011; GSHF: February 2013	UDFs appointed
March 2012	Foresight Group, Amber Infrastructure Ltd. and The Housing Finance Corporation
September 2012	
October 2013	First investment by FEF
by LEEF	
by GSHF	
31.12.2015	Final investment date
31.08.2018	LEEF re-investment deadline
LEEF and FEF: 2021; GSHF 2043	Return of funds to GLA



3.4 Governance

The Investment Board comprises seven representatives (a private sector chair nominated by the Mayor, and two representatives each from GLA, LWARB and London Enterprise Panel) and meets quarterly to provide overall direction for the LGF. Each UDF has an Advisory Committee that meets quarterly to monitor the deal flow, review the pipeline of eligible projects and share information. EIB, GLA and LWARB are represented on these.

Each UDF fund manager provides monitoring reports to the EIB which then reports to the Investment Board, GLA and LWaRB on a quarterly basis. The reports include data on financial outputs, pipeline projects and progress towards CO2, energy efficiency and job creation targets. Post-investment project monitoring for the LEEF is carried out by a number of technical advisors. Foresight implements the monitoring for the FEF.

Management fees are set according to the nature of the Fund. The equity fund, FEF, is established like a commercial fund with an annual management fee and a performance incentive of a share of net profits. The loan fund, LEEF, has an annual management fee plus performance incentives linked to achievement of environmental objectives. There is no performance incentive for THFC, which is a not-for-profit organisation.

TEG Biogas – project financed by the financial instrument

A new Special Purpose Vehicle (SPV), TEG Biogas (London) Limited, was created for the construction and operation of the new processing plant. This was funded by a GBP 9 million (EUR 10.6 million) investment from the Foresight Environment Fund (FEF) and an additional GBP 2 million (EUR 2.4 million) from Foresight's UK Waste Resources and Energy Investments Fund (UKWREI) which is managed on behalf of the Green Investment Bank. UKWREI also secured a further GBP 2 million (EUR 2.4 million) in matched private sector funding from Quercus Assets Selection SCA SICAV-SIF (an institutional fund).

Alongside the equity investment, senior debt of GBP 7.9 million (EUR 9.3 million) is being provided by London Waste and Recycling Board (LWaRB) and Investec Bank plc.

The TEG Group is now providing operating and maintenance services to TEG Biogas under a 15 year contract.



4 Strategy

This section discusses the main aspects of the investment strategy and the types of projects that have been generated.

4.1 Investment strategy

The investment strategy is to support viable but not commercially attractive public and private sector waste management, decentralised energy and energy efficiency projects across all 33 London Boroughs that help to meet the Mayor's environmental target, through an open choice of procurement and delivery routes.

The design of the Fund facilitates this in a number of ways: by segmenting the market into three UDFs; by setting performance targets at the project level and incentivising Fund Managers to achieve certain thresholds in environmental performance; by keeping flexibility to use loans or equity within the LEEF framework; and by allowing the Holding Fund, with Investment Board approval, freedom to adjust the investment strategy to achieve the Fund's objectives.

4.2 State Aid

The fund was designed to ensure that State aid rules are adhered to at all levels. The fund managers were procured through an open and competitive process, which was published in OJEU, to eliminate any advantage on a selective basis. Where the LGF monies are invested alongside private investors, this is done on a pari passu basis. For instance, GBP 35 million (EUR 41.3 million) from the LGF has been allocated to the waste fund and the fund manager secured an additional GBP 25 million (EUR 29.5 million) from private investors. Both sets of funding – LGF and private – are invested, as equity finance, on the same terms and conditions. Also, for the energy efficiency fund that provides loan finance, the rates are based on the EC's method for setting reference and discount rates.

Clarifications had to be sought for the proposed use of land as in kind contribution in order to match EU funding.



4.3 Financial products and terms

The LEEF offers loans of up to 12 years, targeting investments from GBP 3 to 10 million (EUR 3.5 to 11.8 million) with a potential of up to GBP 20 million (EUR 23.6 million), although smaller projects from GBP 1 million (EUR 1.18 million) may be considered on a case by case basis. The Fund has focused initially on the provision of senior debt. There are two types of repayment model: (ii) payment of interest only, once the loan is drawn down with the repayment of the capital later or (ii) payment of capital and interest at the outset. Mezzanine loans and equity are also available depending on the project financing structures and state aid considerations.

The FEF offers equity, normally with a limit, at Foresight's discretion, of 10 percent of the Fund (this can be extended to 15 percent with Advisory Committee approval, and indeed has happened twice for large projects where the larger share was necessary to retain controlling rights).

GSHF provides 30 year loans to Registered Providers of social housing.

There is no formal 'soft support', such as technical assistance, advice, mentoring, grants for preparatory steps, etc. combined within LGF. The Fund Managers provide an informal advisory service to projects considering use of the Fund. ELENA (European Local Energy Assistance, run by EIB and funded by the EC) supports two programmes (RE:FIT and RE:NEW) designed to assist with the development of energy efficiency projects. The provision of technical assistance is likely to be further developed in any future phase of the LGF.

Beyond interest payments, no principal repayments have been returned to LGF yet, however, Amber anticipates the first returns to the LEEF in 2015. Amber may re-invest in similar projects under the same investment policy until the end of August 2018 before returning all funds to GLA in 2021. Interest generated on loans is received by the Holding Fund and GLA decides where to use it (for urban development in London). Foresight (FEF) is taking a flexible approach to exit projects at the right stage, within the 10 year term of the Fund. Again, all funds will return to GLA in 2021. The GSHF loans will be longer-term, with a final repayment date of 2043; all monies will return directly to GLA.



4.4 Final recipients targeted

The LEEF is open to the private sector as well as the public, voluntary and third sector bodies including private sector landlords, owner-occupiers, tenants, developers, energy service companies and joint ventures/special purpose vehicles; the beneficiaries to date have included an Art Gallery, local authorities, and a hospital. The FEF targets companies in recycling and renewable energy generation from waste. GSHF targets registered social housing providers.

The London Green Fund has been promoted by the Fund Managers primarily through direct engagement with their target beneficiaries. The early market testing brought forward an initial pipeline of prospective investees, but for various reasons, most of these prospects have not been funded. For example, the development of the London Thames Gateway Heat Network project was suspended in April 2011 due to the poor market response to the Heat Purchase Agreement Invitation to Negotiate (i.e. purchasing low carbon heat from heat producers). Partners such as GLA and LWaRB have assisted with the promotion of the LGF through public relations activity and their own operational networks.

4.5 Project types

The LEEF envisages two types of projects: the adaptation or refurbishment of existing public sector and commercial buildings to make them more sustainable and environmentally friendly; and decentralised energy schemes and associated distribution systems, including retrofit works to existing combined heat and power (CHP) and district energy networks. To date, four projects concern the former and two concern CHP.

Funding to one London Borough supports energy efficiency measure in a number of the Council's properties including over 50 primary schools, 10 civic buildings, three libraries and a 1960s arts centre.



The FEF primarily finances the construction or expansion of: (i) waste to energy facilities; (ii) value added re-use, recycling or reprocessing facilities; and (iii) other facilities displacing fossil fuel such as 'waste to fuel'. Other important parameters influence investment selection: achieving highest value for materials, environmental sustainability, appropriate size to local needs, reliable technologies, and value creation/exit strategy. To date, three waste to energy, three waste recycling and one combined waste to energy / waste recycling projects have received investment.

The first project to receive funding was the UK's first dedicated plant for recycling post-consumer shopping bags and films; this facility has the capacity to handle 20,000 tonnes per annum.

The GHSF has targeted social housing refurbishment projects. Loans of GBP 4 million (EUR 4.7 million) each were allocated to three Registered Providers to fund a range of retrofit projects. The first project, undertaken by Gallions Housing Association, comprised the environmental regeneration of a concrete housing block. The block of 18 apartments will be renovated to the equivalent of the PassivHaus retrofit standard. Innovative methods will be used which allow installation of a new building envelope around existing properties while tenants continue to live in their homes.



4.6 Changes in Strategy

The original investment strategy envisaged two UDFs, for decentralised energy and for waste. Following soft market testing and a change to Regulations, the focus of the decentralised energy UDF changed to retrofitting of public buildings and social housing, although decentralised energy projects would still be possible with the approval of the Investment Board.

The third UDF was created to broaden the delivery structure of LGF and to create a UDF to focus on the implementation of energy efficient measures for existing social housing (adding to the scope of the LGF) through THFC. This vehicle also enabled the leveraging of GBP 200+ million (EUR 236+ million) funding to London within an EIB GBP 400 million (EUR 472 million) housing loan to THFC. The key success factor has been combining the retrofitting strategy of GSHF (where the financial benefits accrue to the tenants) with the EIB's new affordable housing delivered to high environmental specification (whereby social Housing Providers can recoup the benefits).

TEG Biogas – project financed by the financial instrument

TEG was introduced to the LGF by the Foresight Group who manage FEF. Mick Fishwick, Chief Executive: "FEF is a supportive and active funder. They know our space well, and they are innovative and tenacious, as you have to be in our sector. We had courted a huge number of funders without success. It was a very difficult environment, mid recession, and we could not close the funding gap to make the project happen. FEF pulled together a consortium and brought the LGF together with the UK Green Investment Bank – the project would have failed without their support.



5 Achievements

Although most projects are not yet fully completed, the forecast economic and environmental impacts are very encouraging. The wider achievements of the Fund are also considered.

5.1 Output

The LGF has invested GBP 99.4 million (EUR 117.3 million), in 15 projects with a combined project value of GBP 678 million (EUR 800 million). Forecast impacts (September 2014) envisage the creation of over 2,000 jobs (including construction), 214,963 tonnes per annum CO2 saving, and 330,980 tonnes per annum waste to landfill.

Wider achievements include:

- Making investments that represent a step change in green infrastructure,
 e.g. the first anaerobic digestion plant in London.
- Demonstrating the ability to construct a financial instrument with limited geography and restricted focus which has attracted private sector investment.
- The ability to attract private finance using public funds has increased the size of investment available. The EIB, having played a direct role in the Fund, has committed to invest some GBP 800 million (EUR 944 million) in London, either directly or indirectly through the relationship with the LGF.

TEG Biogas – project financed by the financial instrument

TEG Biogas will achieve landfill diversion, job creation (6 jobs), renewable energy generation and CO2 displacement impacts. The plant will produce 1.4MW of renewable energy p.a., 10-15% used on site and the remainder sold under a Power Purchase Agreement. Residual heat produced by the plant will amount to 1.15MW and will be used by the plant's nearest neighbour, a plastic bottle recycling plant, which has also received investment from the FEF. The facility will also produce over 36,000 tonnes p.a. of AD digestate and 14,000 tonnes p.a. of compost for agricultural use. Without LGF the project would not have gone ahead.



6 Lessons learned

The LGF has worked with an innovative combination of objectives and approach. Below we summarise the key success factors and learning that may prove useful for the next generation of Funds.

6.1 Main success factors

Having an independent Investment Board to steer the process, adjust the investment strategy and ensure sound decision-making, has been vital.

The experience and knowledge of the Holding Fund Manager has given credibility and confidence to the LGF, to GLA as Managing Authority and to private sector investors.

Having revolving funds is economically efficient and instils discipline in the process and a focus on financial, economic and social sustainability.

Long term vision and commitment have been important to overcome the teething problems in setting up a fund in a new area for the ERDF. Close cooperation between stakeholders has been essential, particularly in navigating the relatively untested models of FIs for urban development and energy efficiency.

It has been important to have a mix of skills and experience at governance levels, with a combined understanding of commercial investment requirements and of economic development objectives, and for all parties to appreciate the complexities in generating (sometimes innovative) green infrastructure projects.

6.2 Main challenges

During set up, a key challenge was fitting the Fund into Regulations somewhat more suited for grant support. For the 2014-2020 period, a new regulatory framework including more specific provisions concerning the set-up, design and implementation of financial instruments are now in place.



Following the signing of the HF agreement, a period of 2.5 years elapsed before making the first investment. The partners worked hard to establish the framework of UDFs and set an investment strategy which was appropriate to changing market conditions. In addition, projects of this nature have a long development period. There is now a strong pipeline of projects coming forward for investment, however, lessons have been learned in identifying realistic prospects and in the need for project development support.

During implementation, the LGF has had to respond to changes in the market. The economic crisis has been a factor. Interest rates have been low and the public sector (a key initial target for the LEEF in particular) has been able to borrow from the Public Works Loan Board (PWLB) very cheaply, thereby reducing the potential market for the LGF. The LEEF has been more attractive for e.g. universities and charities which cannot access the PWLB; therefore marketing has been targeted towards this sector.

The initial pipeline did not, in the main, produce viable projects. The level of project development support and lead time to investment was not fully appreciated at the start. Decentralised Energy (i.e. local generation of electricity) proved to be complex, taking a long time to achieve completion. Other projects have required considerable resources to support potential projects towards investment readiness. LGF has had the flexibility to change the investment strategy, e.g. removing the emphasis on large Decentralised Energy projects. However, the LGF objective is to take a longer term approach in terms of investment decisions with a view to achieving a step change in the region's capacity to invest in green infrastructure.

The Fund was initially conceived to use private match at the Holding Fund level, but with the financial crisis, the strategy was changed to use public match. At the time, LDA had land assets but no cash; LDA land could be used for the large Decentralised Energy projects that were envisaged. However, negotiating with the European Commission to allow the use of land assets as match took time. The change in Regulations to allow ERDF to be matched at the project level provides a greater degree of flexibility.



6.3 Outlook

The European Structural and Investment Funds Strategy for 2014-2020 of the London Local Enterprise Partnership (LEP) continues the thematic focus on low carbon, green and environmental infrastructure within the Priority 'Investing in London's infrastructure'. Financial instruments will be used where this is the most suitable way to address identified market failures and particularly where there is significant potential for leveraging private investment or making cost savings.

The need for project development support, identified in this period, should be taken forward in any future similar schemes by providing project development funding that will enable a pipeline of commercially viable projects to be developed and taken to market for investment. Discussions have also taken place to align the next generation LGF with the UK Government's Green Investment Bank. An ex-ante assessment is being carried out to inform the possible use of ERDF programme funds in this context.