



Multi-Region Assistance Project- Revolving Investment for Cities in Europe (MRA-RICE)

Case Study - London

Case study

September 2018

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1 The Mayor of London Energy Efficiency Fund

1.1 Context

The Greater London Authority (GLA) decided to set up the Mayor of London Energy Efficiency Fund (MEEF) to contribute to London's ambition of being a zero-carbon city by 2050. To reach this goal MEEF's financing will support investments in small-scale renewable energy schemes, retrofitting and energy efficiency measures according to the policies set out in the London plan and London Environment Strategy.¹

The fund will potentially manage up to GBP 43 m of public financing contributed from the European Regional Development Fund (ERDF) by the GLA. In addition, GBP 100 m of investment has been committed by the European Investment Bank (EIB) under a Memorandum of Understanding (MoU).²

The **public financing has attracted further funding from private investors in addition to the EIB investment.** The public resources are used to address an existing market gap, enabling a number of projects to access funding, which otherwise would be either not available or too expensive. The funding gap for the period 2014 -2020 has been estimated in the ex-ante assessment at the level of GBP 2.7 bn to GBP 7.0 bn.

Private investors showed a strong interest in the MEEF and their participation is expected to exceed GBP 499 m. The MEEF was officially launched in July 2018.

Table 1: Key information on the MEEF

Type of FI	Debt (90%) and equity (10%)
Financial size	Total size: app. GBP 499 m <ul style="list-style-type: none">• GBP 43 m of public funds (GBP 43 m GLA)• Min. of GBP 456 m (Private Investors)
Public resources leverage	10.6x (leverage effect of the ERDF funds)
Thematic focus	Renewables, energy efficiency and decentralised energy
Final beneficiary	Public and private entities
Partners involved	Greater London Authority (GLA), private investors, EIB
Life of the Fund	2018-2038

¹ Greater London Authority. London Plan available at: <https://www.london.gov.uk/what-we-do/planning/london-plan>; London Environment Strategy at:
https://www.london.gov.uk/sites/default/files/london_environment_strategy_o.pdf

² This is subject to any agreement between the EU and UK post Brexit.

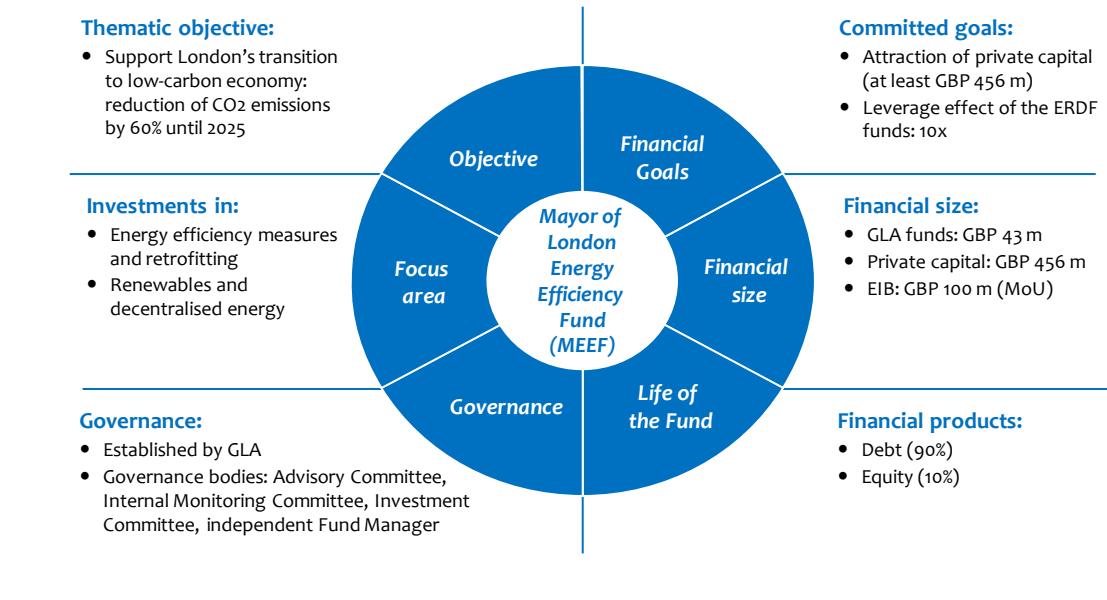
1.2 What is interesting about the MEEF?

The Mayor of London's Energy Efficiency Fund (MEEF) is an example of a city fund that has **successfully involved private sector investors**. The fund is built on public participation of GBP 43 m deployed by the GLA using the ERDF. The Fund Manager is in charge of attracting additional funding from other investors (i.e. banks and other financial institutions) on top of the EIB and project promoters. These funds are can be employed at project level and, if possible, also at the fund level. It is expected that at least 60% of the total additional funding mobilised would come from private sector sources but so far this is 100%. The match funding is secured in accordance with (i) the EU Rules and regulations and State aid rules, (ii) investment strategy of the Fund, and (iii) does not come from the project sponsor's own resources. Furthermore, if the match funding is secured at the project level, the match funder is required to enter into a legally binding written agreement with the fund and the relevant project (for the provision of the funding prior to the investment of any ERDF into the given project).³

Thanks to the involvement of the private capital the fund was able to collect eleven times the initial amount of the ERDF.⁴ The leverage effect of public capital achieved by attracting private sector investors ensures **maximisation of the impact delivered by the public financing**.

The MEEF was **built on the reputation and experience gained with its predecessor** – the London Energy Efficiency Fund (LEEF), set up in 2011 as part of the London Green Fund (LGF). The holding fund management responsibility for the LGF was taken over from the EIB by the GLA in 2017. The LEEF comprised GBP 60 m from the Greater London Authority (GLA) and GBP 50 m from a commercial bank, achieving a total size of GBP 110 m. For comparison, the MEEF has reached the size of GBP 499 m, thus scaling-up five times comparing to the LEEF, although it is in the beginning of its operations. In addition, the GLA's investment strategy was developed specifically to provide a flexible framework, which allowed the fund to be structured and operate in a way that is attractive for private investments.

Figure 1: Summary of the Mayor of London Energy Efficiency Fund



³ Volume 2; Specification & Background Fund Manager for Mayor of London's Energy Efficiency Fund; TfL Reference Number: GLA 80787

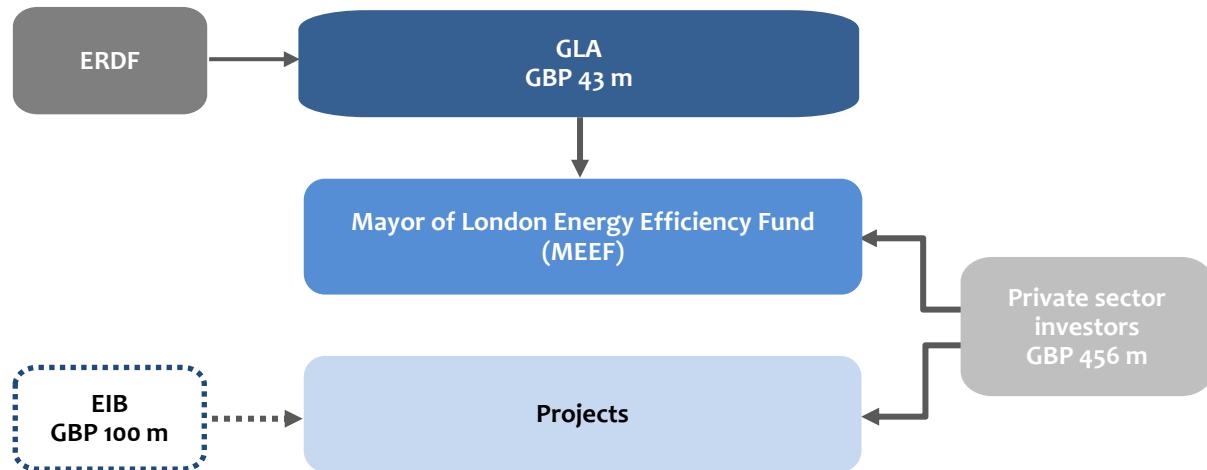
⁴ 10.6x leverage is already secured; Fund Manager expects this ratio to increase.

2 Structure of the MEEF

2.1 Overview

The set-up of the MEEF is presented in the Figure below.

Figure 2: Set-up of the MEEF



The fund has been established as a separate legal entity in accordance with the Article, 38 (4) of Regulation 1303/2013. In this case, the legal entity has been set up using the Limited Partnership structure, which is commonly used for Investment Funds in the UK.

The GLA plays a number of important roles in the set-up of the MEEF.

- Firstly, it is an intermediate body, which entrusts the ERDF resources to the MEEF.
- Secondly, it is a Limited Partner of the MEEF since it provides junior capital to the fund in the form of equity.

The GLA contributed GBP 43 m of the ERDF resources to the fund. The Fund Manager secured additional GBP 456 m from the private sector investors, at the fund level. Furthermore, the EIB has also joined the scheme with additional GBP 100 m committed under a Memorandum of Understanding (MoU).

The participation of **private investors**, which has already been secured, amounts up to 91% of the total fund capital. This success is also due to the **involvement of an independent and experienced Fund Manager**, who helped to build the reputation of the fund and its creditability among private investors.

2.2 Independent Fund Manager

The Amber Infrastructure Group (Amber) has been appointed to act as an independent Fund Manager of the fund. Amber is also the Fund Manager of the LEEF, which was set up under the LGF. The LGF was established under the European Commission's JESSICA initiative during the previous programming period. Amber has brought credibility and has built a strong reputation of the fund based on the successful track record of the LEEF's performance.

The Fund Manager is responsible for providing an independent evaluation of projects and presenting them to the Investment Committee for approval.

The Fund Manager has also successfully attracted private sector capital to the fund (alongside the GLA and the EIB), which is committed in principle at fund level and invested on a project-by-project basis. The Fund Manager also contributes financially to the fund in order to align interests with the GLA as a principal equity investor. This contribution is set at the minimum of one per cent of the MEEF's initial capital, i.e. at least GBP 0.43 m.

Management fees will be paid to the Fund Manager on the basis set out in the Agreement and in accordance with Article 42 of Common Provisions Regulation 1303/2013 and Article 12-14 of the Commission Delegated Regulation (EU) No 480/2014 (CDR). They will be paid subject to the achievement of the following criteria:⁵

- Disbursement (agreed annual investment amount paid to final recipients),
- Output (agreed annual output targets for both annual decrease of GHG and additional funding secured); and
- Returns (agreed annual repayment/realisation amount).

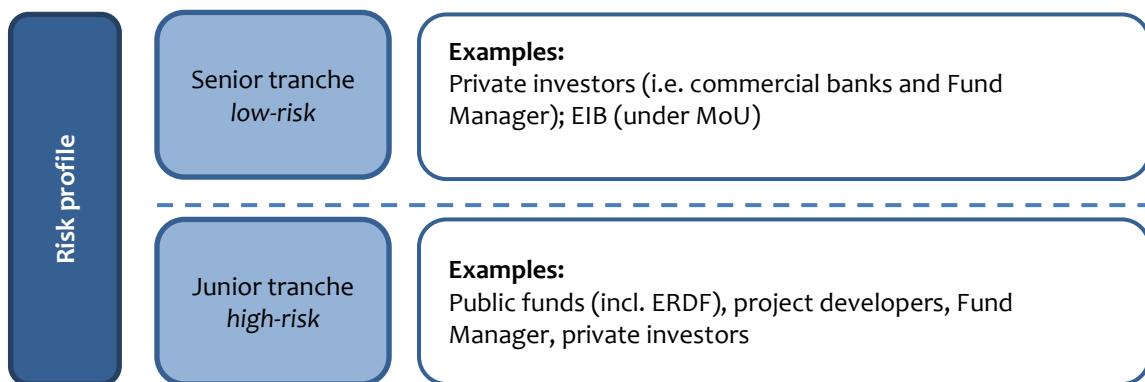
2.3 Co-Investment arrangements

To cater to the different types of project needs, investors with different risk profiles and investment horizons have been involved in the set-up of MEEF. Particularly, the high-risk profile or long-investment horizon of some public projects result in financing difficulties when securing funding.

In this case, **public resources with a higher risk profile can be employed to unlock access to investors with a lower-risk profile** (i.e. commercial banks or investment funds) as illustrated in the Figure below. Junior capital will initially be contributed by the project promoter, who may also secure technical assistance support from the GLA or other public authorities. In some cases, other investors may also take a high-risk position. Public funds are subsequently deployed to cover the remaining amount of the market failure and therefore unlock access to private investors, as well as the EIB low-risk capital.

⁵ Volume 2; Specification & Background Fund Manager for Mayor of London's Energy Efficiency Fund; TfL Reference Number: GLA 80787

Figure 3: Stratification of investors for the MEEF



Prior to the launch of the fund, Amber has negotiated and agreed terms with a number of private investors to act as co-investors in the fund, including Lloyds Bank, National Westminster Bank, Santander UK, Sumitomo Mitsui Banking Corporation and Triodos Bank. In addition, the EIB entered into a MoU agreeing to contribute up to GBP 100 m.

The structure of the fund does not require the private sector investors nor the EIB to contribute to every project. Amber, following the initial appraisal of a potential project, invites one or more of the private sector investors to participate in the project, alongside the public funds. The private sector investor will then, based on the Amber's appraisal and its own knowledge of the project, provide details of how it will participate in the project.

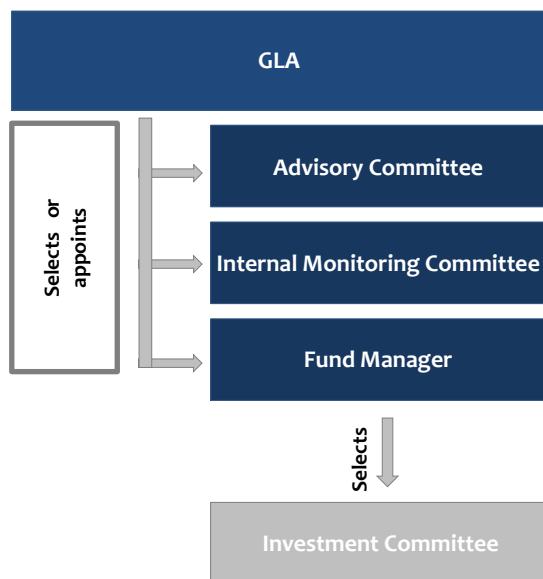
Following project approval by the MEEF and co-investors, the investment is made to the project through a single agreement between MEEF and the project. However, the different rights of the investors are governed separately by inter-creditor agreements. Amber will then manage and monitor the investment on behalf of the MEEF and the co-investors. This novel structure is expected to provide a robust sustainable long-term framework for leveraging the public resources in the financial instrument. By reserving to the co-investors the right to approve individual projects, the operation is able to secure the initial commitment from co-investors that allows Amber to develop its project pipeline at the appropriate scale. At the same time, by having a single set of procedures governing project appraisal, terms of investment, inter-creditor arrangements and monitoring, the process to secure investment into a project is relatively streamlined.

3 Governance of MEEF

3.1 Role of the GLA

The GLA is the promoter of the financial instrument and prior to establishing the fund conducted an ex-ante assessment in accordance with Art 37(2) CPR. Following the ex-ante assessment the GLA developed the initial Investment Strategy for the fund and led the selection process to appoint the independent Fund Manager in accordance with the EU and national procurement rules.

Under the MEEF structure, the GLA is responsible for the selection of an independent Fund Manager and the appointment of city representatives to the Advisory Committee and the Internal Monitoring Committee. On the other hand, the independent **Fund Manager** is the one that **appoints members** of the Investment Committee, who take the investment decisions. However, GLA has stipulated that the Investment Committee must include an independent member (i.e. not an employee or associate of the Fund Manager or any companies associated with the Fund Manager).



When developing both LEEF and MEEF, the GLA carried out research to get a better understanding on a number of relevant matters, such as: cause of the market failure, identification of the finance gap, best intervention target, as well as the assessment of demand/supply capacity and capability.

The design of the funds has been clearly outlined, however, it also allowed for flexibility to adapt the implemented model or investment focus to the changing market conditions. For instance, the LEEF's initial focus was to finance local authority projects; however, as the level of available grants was reduced and these projects were no longer available, the focus of the fund was changed to the creative and health sectors. A similar approach will be taken for the MEEF.

3.2 Roles and responsibilities of governance bodies

The roles of the main bodies involved in the governance of the financial instrument are discussed in the following section and summarised in the Table below.

Table 2: Roles and responsibilities of the main bodies under the MEEF structure

Body	Members	Responsibility
Investment Committee	Senior staff members from the Fund Manager's Group Plus one independent member (expert in Energy Efficiency)	<ul style="list-style-type: none"> Takes investment decisions
Advisory Committee	Initially 4 people: <ul style="list-style-type: none"> 2 GLA representatives and 2 Fund Manager representatives Any other Limited Partner, who invests equity to the Fund will appoint additional member	<ul style="list-style-type: none"> Provides strategic guidance Advises on investment opportunities Takes only decisions regarding the conflict of interest
Internal Monitoring Committee	Senior staff from the GLA and external experts	<ul style="list-style-type: none"> In charge of contract management function Provides advisory services to the GLA regarding the Fund's performance and its objectives
Fund Manager	Independent body to the GLA	<ul style="list-style-type: none"> Manages the fund Provides performance updates Invests its own capital into the fund Attracts the private sector capital to the fund Builds the credibility and reputation of the fund among investors

The **Investment Committee** is an internal body appointed by the Fund Manager. It is composed of senior staff members from the Fund Manager Group, including its Chief Executive, Investment Officer and Senior Officers. Furthermore, one independent member, who is an expert in energy efficiency and has not invested in any projects, is involved. The Investment Committee takes an investment decision in a two-stage process described in section 3.3 below.

The **Advisory Committee** is an external body to the GLA and the Fund Manager. It consists of members appointed by the GLA and the independent Fund Manager together with representatives of other investors, who have contributed to the fund providing equity. The role of the Advisory Committee is to provide strategic guidance and advices on investments. The Committee might also advise the Fund Manager in case of any conflicts of interests.

The **Internal Monitoring Committee (IMC)** is an internal body set up by the GLA. It is composed of the GLA staff and external experts in energy efficiency that are responsible for the promotion and management of the financial instrument on behalf of the authority.

The Internal Monitoring Committee provides monitoring and strategic advices to the GLA

The IMC is responsible for the relationship with the Fund Manager and provides monitoring function.

1. Project pipeline review

- The IMC facilitates development of projects by sharing ideas and knowledge, including the referral to the GLA technical assistance three programmes [RE:FIT (for energy efficiency retrofit projects), RE:NEW (for home energy retrofit projects) and DEEP (for decentralised energy enabling projects)].

2. Portfolio monitoring

- The IMC challenges the Fund Manager to ensure the maximisation of benefits defined by the MEEF's investment strategy, including non-financial returns.

3. Policy and strategic advice

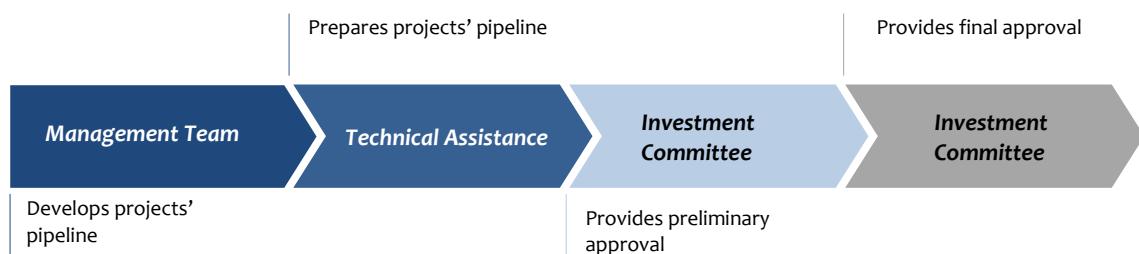
- The IMC advises how the benefits of the fund should be reinvested and how the fund should evolve in order to address the market gap for projects in energy efficiency.

4. Fund's progress monitoring

- The IMC controls how the fund is performing during its lifecycle.

3.3 Project financing process

It is planned that the MEEF will support financially **at least 30 projects**, in addition the fund will provide equity, alongside debt. Individual investments made by the MEEF will most probably average from **GBP 1 m to GBP 10 m** with a **tenor for loans up to 20 years**. The process chart below illustrates how various bodies are involved in developing projects' pipeline and preparing it for capital investments.



The **Fund Manager is responsible for sourcing projects** and is in charge of making sure that selected projects fit with the investment strategy and are investment-ready. The **Amber's Management Team** works with a long-list of projects that is developed under their coordination, as well as preselects projects.

The **Internal Monitoring Committee** can also be involved in the identification of projects. It may also help with **development of business cases for projects** that may form part of the project pipeline through referral to GLA's technical assistance programmes. For example, where the Fund Manager identifies a potentially eligible project, a request for consideration of Technical Assistance (TA) services can be referred to the Internal Monitoring Committee or directly to the TA providers to help develop project's business case. The IMC has access to support from GLA's programmes

RE:FIT, RE:NEW or DEEP. These programmes are designed to support energy efficiency projects in general are not exclusively available for MEEF projects.

Nevertheless, the TA provided under these programmes can be tailored to meet the needs of projects eligible for MEEF investment. As a result, the TA enables projects to get “investment-ready” for example by reviewing their potential, formulating business plans, advising on funding and procurement, as well as, potentially, supporting the procurement process.

The **Investment Committee** decides, which investment-ready projects will benefit from the funds of the MEEF. The decision-making process comprises two stages:

First stage: preliminary approval	Second stage: final approval
<ul style="list-style-type: none">• Credit quality check• Eligibility of the deal• Availability of the match-funding• Check for the potential conflict of interest and regulatory aspects• Negotiations with borrowers that cover credit approval	<ul style="list-style-type: none">• First agreement with the borrower• Due diligence is undertaken, including legal, technical and State aid aspects• Following the agreements and the due diligence, the deal is signed

In order to meet the target of 30 projects funded, the Management Team of the Fund Manager is going to work on the pipeline of about 100 projects to **build the portfolio of 40 investment-ready projects for the Investment Committee**. This dedicated team gathers information about projects from projects’ developers as well as helps them develop their business plans.

Currently, the **Fund Manager is working on an initial package of 10 projects** that have already been presented to the Investment Committee for the first stage approval. Among these projects, the MEEF is going to invest through **senior debt** (over 90% of the total MEEF investment) and through **equity** (the remaining amount). Senior debt is composed of:

- Corporate loans, which represent 70% of senior debt and
- Project finance loans, which comprises 30% of senior debt.

To maximise the leverage of the public funding, the Fund Manager liaises closely with the co-investors in order to optimise the allocation of the high-risk capital coming from the GLA (the ERDF sources).

3.4 Target impacts for MEEF

As the MEEF is finalising the development of its project pipeline, only the city’s targets of the economic and environmental impacts of the fund can be presented at the moment. The fund’s specification identifies the following objectives:

- About 30 enterprises should receive support from the MEEF;
- At least GBP 260 m of additional funding to the ERDF money will be secured by the Fund Manager, both at the Fund and at the Project level;
- An additional capacity of 17 MW of renewable energy will be supported;
- About 36,746 tonnes of CO₂eq of GHG should be decreased annually;

- The energy consumption of 774 of households should be improved;
- The energy consumption of public building should decrease annually by 747,190kWh.

Table 3: Examples of projects financed by MEEF's predecessor London Energy Efficiency Fund

	Purpose	Loan size [GBP m]	Term of loan [years]
Project 1	Development of CHP energy centre to create local heat network for regeneration site.	14.5	6
Project 2	Installation of communal heating systems for 10 tower blocks located in London Borough of Hackney.	4.6	12
Project 3	Development of network enabling the reuse of the existing waste energy heat sources.	6	10
Project 4	Implementation of energy efficiency measures across hospital properties and installation of combined heat and power facility.	13.3	10
Project 5	Installation of energy efficiency measures across two sites.	4.6	10
Project 6	Implementation of energy efficiency measures in Council properties including primary schools, civic buildings and libraries.	3.6	10
Project 7	Retrofit and installation of Energy Conservation Measures and innovative Low Carbon Infrastructure.	20	5

4 Conclusions

4.1 What and how can be replicable from this model of the city fund?

4.1.1 Importance of the capability and capacity building within the city

The strong internal capability at the city level is one of the main strengths that contributed to the successful implementation of the city funds in London, including the MEEF. The GLA has managed to develop a strong internal team of experts, who have formed the internal Monitoring Committee and are in charge of the city fund as well as take care of facilitating the development of the selected investment opportunities.

The internal organisation should be developed in each city aspiring to establish a city fund, as well as to scale up its experience with city funds.

The availability of TA to enable investment projects to get finance-ready has also played a crucial role in the success of financial instruments in London to date. The city reinvests part of the returns made by the London Green Fund in TA that is offered to projects under the MEEF. Furthermore, other streams of money could be secured to provide TA to projects that the city recognises as strategically important.

The development of city's internal capability smoothens the process of projects' pipeline development and the set-up of any new instruments.

The experience gained with city funds and an internal capability enable the city to carefully monitor the fund's performance and to develop its projects' pipeline.

4.1.2 Fund set-up

In order to attract the private sector investors, the city needs to appoint an independent Fund Manager, who guarantees the independence of investment decisions taken by the city fund. The city has recognised that **in order to bring private sector investors, the control over the fund needs to be shared** with a trusted Fund Manager.

The City plays an important role in the fund set-up as well as in the day-to-day monitoring. The MEEF's organisation is developed at the city level by the internal team, which is in charge of the design and implementation of the city funds' investment strategy. The internal experts take care of the contract management and the relationships with an independent Fund Manager.

The GLA appoints members, who create an evaluation panel, and selects the trusted-independent Fund Manager. The GLA maintains the control of the fund's performance and challenges the Fund Manager to reach the highest performance of its fund through the developed structure. The GLA appoints its members for the Advisory Committee and for the Internal Monitoring Committee to monitor how the objectives of the investment strategy are optimised.

The fund's governance structure is split among four bodies: Investment Committee, Advisory Committee, Internal Monitoring Committee and Fund Manager.

4.1.3 Leveraging public money through revolving instruments

The GLA has successfully developed a model for leveraging public money through the city funds. The city employs the public money to support projects, which have the highest-risk profiles and cannot be financed through the existing market supply. The public sector involvement reduces the remaining projects' risks and attracts private sector investors.

Since the available public money is shrinking, while the needs of emerging sectors are increasing, this approach is of a critical importance. Employment of the **public capital through the revolving instruments is a solution** for cities: first, to leverage the size of their co-financed investment, and second, to reinvest invested capital and gained revenues in the future investments. The financial instrument has secured the commitment of private finance that will account for over 90% of the fund size. The size of the MEEF increased five times comparing to the LEEF (from GBP 111 m to GBP 499 m), while the committed involvement of private investors increased ten times (from GBP 50 m to GBP 456 m).

The public funding is used as a tool that mitigates too high-risk for private sector investors and unlocks access to additional capital.
