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GCPF MID-TERM EVALUATION REPORT

Mainstage report

Ipsos MORI, SQ Consult & EY



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About This Report

This report was prepared by Ipsos MORI, SQ Consult and EY. The report was reviewed and approved by: BEIS and KfW (on behalf of BMUB)

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List of Acronyms

ACP	Asia Climate Partners
ADB	Asian Development Bank
AESPR	Annual Environmental and Social Performance Report
AUM	Assets Under Management
BEIS	Department of Business, Energy & Industrial Strategy
BMUB	Ministry for the Environment, Nature Conservation, Building and Nuclear Safety
CDC	Centres for Disease Control and Prevention
CGAP	Consultative Group to Assist the Poor
CO₂	Carbon Dioxide
CTI PFAN	Cambodia-Climate Technology Initiative Private Financing Advisory Network
DAC	Development Assistance Committee
DB	Deutsche Bank
DD	Due Diligence
DEG	The German Investment and Development Corporation
DI	Direct Investment
E&S	Environment and Social
EBRD	European Bank for Reconstruction and Development
EE	Energy Efficiency
EEFP	Energy Efficiency Financing Platform
EIB	European Investment Bank
ESIA	Environmental and Social Impact Assessment
ESMS	Environmental and Social Management System
FI	Financial Institution
FMO	The Netherlands Development Finance Company
GCPF	Global Climate Partnership Fund
GHG	Greenhouse Gases
GNI	Gross National Income
IC	Investment Committee
ICF	International Climate Fund
IFC	International Finance Corporation
IREDA	Indian Renewable Energy Development Agency Ltd.
IM	Investment Manager
ITT	Invitation to Tender
KfW	KfW Development Bank
LCCR	Low Carbon, Climate Resilient
MIGA	Multilateral Investment Guarantee Agency
MFI	Monetary Financial Institutions
NBFC	Non-Bank Finance Company

ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
PI	Partner Institution
PIDG	Private Infrastructure Development Group
PPA	Power Purchase Agreements
PPIAF	Public Private Infrastructure Advisory Facility
QCA	Qualitative Comparative Analysis
rA	responsAbility
RBI	Reserve Bank of India
RE	Renewable Energy
REFIT	Renewable Energy Feed-In Tariff
SEMS	Safety and Environmental Management Systems
SOP	Standard Operating Procedure
SIFEM	Swiss Investment Fund for Emerging Markets
TA	Technical Assistance
TAF	Technical Assistance Facility
TAC	Technical Assistance Committee
ToR	Terms of Reference

1. Executive summary

Ipsos MORI, in association with SQ Consult and EY, was commissioned by the UK Department for Business, Energy and Industrial Strategy (BEIS) and the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) to undertake a mid-term evaluation of the Global Climate Partnership Fund (GCPF) in February 2017.

1.1 Overview of the GCPF and its mid-term evaluation

The Global Climate Partnership Fund (GCPF) is a public-private partnership which seeks to mobilise investment flows in energy efficiency (EE) and renewable energy (RE) projects in developing and emerging markets, with the key aim to reduce greenhouse gas emissions in Official Development Assistance (ODA) eligible countries.

This mid-term evaluation seeks to understand the effectiveness and relevance of the GCPF, efficiencies in processes and lessons for the design and implementation of future investments. This evaluation was also set-up to provide an assessment of the early signs of impact against the three objectives for the Fund set out above.

The evaluation adopted a theory-based approach to assess the ways in which the GCPF specifically, and relative to other external enablers, barriers and causal pathways, has led to progress against these objectives, and the Fund's intended intermediate outcomes. Primary data collection included interviews with: the GCPF board, Investment Committee, investors, GCPF partner institutions¹ and five in-depth case studies with Partner Institutions (PIs), Technical Assistance² (TA) consultants and end beneficiaries of the GCPF. Secondary data analysis was conducted using Fund monitoring information and operational and market-level benchmarking data. The theory-based evaluation framework guided the analysis and synthesis of the evidence across these data collection strands, with Contribution Analysis used to draw conclusions around the relative impact of the GCPF.

1.2 Suitability of the design and delivery model for the GCPF

This evaluation finds the design of the GCPF to offer a relevant and innovative model for supporting PIs in their development of green lending pipelines. It is helping PIs to overcome tangible market barriers in order to increase the uptake of energy efficiency and renewable energy technologies. Key elements of the Fund design that contribute to this are its direct working with local financing institutions, and the offer of Technical Assistance (alongside finance) as well as ongoing support and involvement from the Investment Manager.

¹ These are the financial institutions or direct investments to which the Fund offers senior or subordinated debt for mid- to long-term financing.

² In addition to its financial lending, the GCPF also provides a Technical Assistance Facility (TAF), primarily offering specialist technical assistance advice and capacity-building services for its partner institutions.

While benchmarking shows the GCPF to be offering flexible financing to PIs at competitive rates, PIs often hold a perception that finance could be offered at lower rates and this highlights the challenge for the GCPF of being compared against the availability of concessional finance.

The Fund has succeeded in attracting private finance. The location of the Fund in Western Europe, and the involvement of three national governments, is attractive to investors. For some, its mandate to focus on CO₂ savings, and the skills of the Investment Manager to make these types of investment, are also considered attractive characteristics of the Fund. There are however, ongoing challenges for attracting further private investment. These challenges relate to the relatively lower rates of return alongside Fund structure complexity and the GCPF's lack of an independent credit rating. The structure of the Fund, where public finance provides a risk cushion for private sector investors is intended to reduce the perceived and actual level of risk and support an appealing and market-comparable risk to return ratio. While this share class structure (where C-shares provide this cushion) had lowered risk perceptions among its existing investors, the Investment Manager Sales team have experienced challenges communicating this quickly and concisely to prospective investors. Funds offering higher returns in non-emerging markets and in more established technologies than the GCPF could be perceived as having more favourable risk to return ratios.

1.3 Early signs of impact from the GCPF

The GCPF has contributed towards its three key objectives in the following ways:

- **Mobilising and attracting more private and donor investment at fund level:** The existence of co-investors into the Fund demonstrates that the GCPF has been able to attract capital although progress has been slow, particularly in the attraction of private investment.
- **Increase in the number of energy efficiency or renewable energy investments:** The dispersal of over \$418 million in sub-loans across 28 PIs for assets that result in emission reductions of almost 435,000 tonnes of CO₂ per year and energy savings of over 5344,000 MWh³ demonstrates significant progress against this objective.
- **Increase the Fund's transformational potential by improving local knowledge and capacity:** There is stronger evidence to-date of the GCPF's transformational potential at a local level (for PIs and the recipients of sub-loans), than at an overall market or Fund level.
 - **Expanding the Fund, and encouraging replication of its model:** The GCPF has achieved some success in mobilising further capital and building the size of the Fund as well as expanding its geographical coverage, disbursement of loans and number of sub-loans. This offers potential to see larger-scale demonstration of impacts and market reform over a longer period, although this would be further

³ http://www.gcpf.lu/files/downloads/quarterly_reports/2017/Quarterly_GCPF_Q32017.pdf

enhanced through attraction of higher numbers of private investors and volumes of private capital. While the GCPF demonstrates potential for replicability of its model through its increasing returns since 2013, it is too early to expect to see this replication taking place.

- **Supporting replicability at PI level:** The TA Facility in particular has been instrumental in building and increasing capacity and capability within PIs. This offers the potential for green lending to be replicated with additional technologies and/or new credit lines, and this is already being realised to some extent.
- **Encouraging replication within local markets:** There are examples of PIs boosting awareness of the GCPF model within their communities and examples of other FIs seeking advice and information on the model being adopted. Where PIs have developed partnerships with local supply chains this also offers potential for further growth and strengthening of local markets for green lending products.
- **Transformational impacts for sub-loan recipients:** End beneficiaries engaged through this evaluation reported a range of socio-economic impacts as a result of their GCPF sub-loan. Where sub-loans had financed improved EE technologies reducing their energy costs, or RE technologies or project improving the access and reliability of energy supplies, recipients were benefiting from increased incomes as a result of enhanced output productivity. Word-of-mouth sharing of these co-benefits has driven demand leading to further uptake of GCPF sub-loans in some areas. The broader promotion of clean technologies and processes happening as a result of this local-level advocacy is contributing to the original sub-loans having impacts beyond the initial investment.

This mid-term evaluation of the GCPF suggests the Fund is contributing (above and beyond what might be achieved anyway in the absence of the Fund) to the realisation of CO₂ savings. It is achieving this by making its financial support conditional on stringent eligibility criteria around the required level of emission-savings offered by a new technology or process. While, in many cases, the PIs accessing finance through the GCPF would have likely been able to access alternative sources of finance, it is unlikely that these would have led to the same emissions-saving technologies being purchased.

1.4 Efficiency & effectiveness of the GCPF governance and delivery

Benchmarking of the fees incurred in the management of the GCPF suggests the Fund is being delivered at comparable levels of efficiency to other similar funds; total fees by headcount are comparable to a range of other public and private funding sources. The management fee for TA in place since the beginning of 2017⁴ also benchmarks well against other comparable facilities. This said, the Investment Manager is looking to further streamline the TA process, including pre-approved standard offerings of TA; an example of adaptive management.

⁴ Analysis of the fees incurred in the delivery of TA up to 2017 were also found to be broadly comparable, although towards the upper end of comparators reviewed.

The governance approach to the GCPF was felt to be fit for purpose and, in particular, to provide rigor to investment decisions. Although this has meant investment time lines are significantly longer than for other commercial funds, this is not adding to running costs of the Fund and was not seen to be at the detriment of the Fund in any other ways by investors, the Investment manager or PIs. Both stakeholders internal to the Fund, and external auditors, praised the due diligence and risk assessment activities which were considered to be more advanced than those in place in other similar Funds.

1.5 Conclusions and recommendations

The following conclusions are drawn about the early signs of success for the Fund. These are surmised against the three Development Assistance Criteria:

- **Relevance-** The GCPF is a relevant model for supporting PIs in their development of green lending pipelines. There remain challenges to leveraging the private sector at pace. These challenges relate to communicating the relative complexity of the Fund structure which offers protection to investors taking senior positions. A lack of understanding of this structure, and its rationale, means some potential investors may perceive potential returns as low compared to other opportunities. The relevance of the model is also not yet proven among Direct Investments.
- **Effectiveness-** The GCPF is effectively supporting the development of green lending pipelines which are driving uptake of energy efficiency and renewable energy technologies with associated emissions reduction as well as other socio-economic transformational potential. It has been less effective, however, at attracting private investment into the Fund which is required to sustain the Fund and demonstrate commerciality.
- **Efficiency-** Overall the GCPF has made good progress against its desired outcomes and has done so at comparable levels of efficiency to other funds. While this study finds that governance processes are complex compared to other commercial funds, the rigour of project selection and due diligence undertaken are valued by both internal and external stakeholders. There are concerns among PIs however, about the efficiency with which they are able to meet the GCPF's requirements particularly with regards to reporting.

The evaluation team has provided action-based recommendations to the Fund and its Investment Manager in the following key areas, with the aim of enabling the impact of the GCPF to be further maximised:

1. **A more streamlined presentation of the Fund structure**, ensuring this is clear and succinct for potential investors and emphasises the value of key aspects of the Fund's set-up (such as its location in Western Europe).
2. **Where Direct Investments are pursued**, consider delivery models that can encourage replicability potential (involving intermediary FIs for example), and where possible offer local currency financing (with local currency hedges) and extended tenures (up to 15 years).

3. **Ensure PIs are clear on the future intentions of the Fund** (including its appetite for re-investment), through the ongoing relationship between the Fund and the PIs.
4. **Refinements to the investment process**, and support a speeding up of key processes involved in due diligence and risk assessment (synthesising these with PI internal processes for example or sharing lists of due diligence consultants with DIs).
5. **Improve the clarity of the communication around the TA offer**, ensuring its value is recognised by PIs through engaging them further in identifying their support needs and publicising case-studies of how various types of TA support have been of value, and driven impact for other PIs.
6. **Support PIs in generating further demand for sub-loans**, through training PI staff on the end-user benefits of EE and RE technologies and facilitating a sharing of learning between PIs on effective ways of marketing sub-loans.
7. **Consideration of eligibility requirements for on-lending**, ensuring these are fit for purpose in particular markets (for example, whether higher capacity energy projects could be included where appropriate).
8. **Enhancing the value of being part of the GCPF community** through further knowledge sharing, for example process learning around the most efficient way of automating reporting requirements.
9. **Maximising PI engagement in the GCPF reporting requirements** to enhance the value of these processes for PIs, explaining how reporting of impacts could help PIs to attract future investors or for marketing their products.

The evaluation team also recommend areas warranting further assessment of impact given the short time frame over which the mid-term evaluation was conducted and the relatively early timing of this in relation to the period over which the longer-term impacts of the Fund are anticipated to be realised. The recommended areas for ongoing monitoring include: strategies for attracting private finance, supply chain effects, the impact of the GCPF by project type, impact on labour markets (job creation and gender equality), impacts among end-beneficiaries, and the sustainability of the GCPF impacts.

2. Introduction

This introduction provides an overview to the Global Climate Partnership Fund, its objectives and rationale and sets out the scope for the mid-term evaluation of the Fund and the structure through which its findings are presented in this report.

2.1 Overview of the Global Climate Partnership Fund

Objectives of the GCPF

The Global Climate Partnership Fund (GCPF) is a public-private partnership which seeks to mobilise investment flows in energy efficiency (EE) and renewable energy (RE) projects in developing and emerging markets⁵, with the key aim to reduce greenhouse gas emissions in Official Development Assistance (ODA) eligible countries. As such, the primary objectives of the Fund are threefold:

1. **Mobilise and attract more private and donor investment** at fund level.
2. See an **increase in the number of energy efficiency or renewable energy investments**.
3. **Increase the fund's transformational potential** by improving local knowledge and capacity.

Rationale for the GCPF and wider policy context

About 90% of the growth in energy demand over the next 25 years is expected in non-OECD countries. Energy efficiency is a relatively quick way to reduce demand and greenhouse gas emissions and RE schemes allow countries to meet energy demand without additional CO₂ emissions. However, EE is currently relatively underdeveloped in developing countries and deploying RE can also have slow progress. While the specific nature of barriers varies between locations, sectors and projects, the following areas were identified at the outset of the Fund as having the potential to hold back EE and RE projects:

- Price distortions from concessional finance below market prices.
- Existing subsidies and unequal tax burdens between renewables and other energy sources (which can result in an advantage for fossil-fuel based energy generation).
- Failure of the market to value the public benefits of RE and EE.

⁵ Middle Income countries are defined as Gross National Income (GNI) per capita of \$1,026-\$12,475 World Bank (<http://data.worldbank.org/about/country-classifications/country-and-lending-groups>)

- Market barriers such as inadequate information, lack of access to capital, "split incentives" between building owners and tenants, and high transaction costs for making small purchases.
- Commercialisation barriers faced by new technologies competing with mature technologies.

At the point at which the GCPF was launched, the private sector was not considered to have sufficient experience in providing finance for small-scale RE and EE projects in ODA-eligible countries and consequently to not be willing to assume the risk of these projects. This contributed to appropriate finance either not being available to small-to-medium sized enterprises (SMEs) and households, or lending being offered at unaffordable rates to compensate for the perceived risk⁶.

The GCPF was established by the German Government (BMUB) and development bank KfW (acting on behalf of BMUB and on its own account) in October 2010. Its formation reflected concerns that developing countries require funding and support in leveraging their initiatives to access their potential to both use energy efficiently and deploy renewable energy to follow low carbon development paths to avoid dangerous climate change and meet (international) climate goals. The GCPF further aims to engage the private sector by creating a viable fund that generates returns as well as facilitating sustainable investments that appeal to private investors⁷. In line with the barriers listed above, the GCPF specifically targets:

- **Lack of support for EE and RE projects** – The strategic case for the GCPF rests on the analysis that many local EE and RE projects and companies cannot access finance. By helping to finance such projects and companies, the GCPF is intended to mitigate the risks of dangerous climate change by helping to bring forward more EE and RE schemes than would otherwise be the case.
- **Weak local markets** – the GCPF funding is focused on a set of markets where the barriers to climate finance indicated above have been identified as holding back the development of the local market of loans for EE and RE schemes. By providing finance and technical assistance for these projects and companies (and the financial institutions involved) the programme can help to develop local financial markets⁸. The GCPF sets out to undermine the idea that investing in small-scale EE projects is high risk⁹ and to demonstrate the financial benefits to investing in these types of projects (as well as numerous other advantages).

⁶ Business Case and Intervention Summary (2013) <https://www.aidstream.org/files/documents/GCPF-Business-Case.pdf>

⁷ Source: Stakeholder Consultation with KfW conducted by Evaluation Team in April 2017

⁸ Monika Beck in GCPF Annual Report 2011

⁹ This perceived risk in part reflects the fact that investment in small-scale projects can often imply investments in SMEs – a number of existing studies suggest that banking in developing countries can be generally averse to lending to SMEs. See for example a recent review of this evidence, Dalberg 2011, Report on support to SMEs in developing countries through financial intermediaries

- **Evolving global markets** – In addition to replicating this local demonstration effect on a global level to potentially influence multiple weak local markets, the structure of the GCPF creates an opportunity to use public funding to leverage and directly work with private sector funding. The broad aspiration is that this public climate finance can be used to leverage private sector investments and can help to steer global investment flows towards projects that can mitigate climate change. The Fund aims to attract additional private and public investors by offering them a financial return in line with commercial market expectations, providing a vehicle for further private investment. The structure of the Fund, where public finance provides a risk cushion for private sector investors is intended to support this.

In addition to the focus on mitigating climate change, some public investors see a sustainable development and broader transformational change case for investment in the GCPF. Transformational change is defined here as a change which catalyses further change, enabling either a shift from one state to another (for example, from conventional to lower carbon investment patterns) or faster change (for example, accelerating the shift towards low carbon economies by accelerating the deployment of low carbon, climate resilient (LCCR) capital¹⁰).

Energy efficiency measures and renewable energy generation has the potential to deliver benefits besides CO₂ reduction, including a set of welfare and productivity improvements to households, SMEs and larger firms and the wider economy, through reducing energy bills and increasing productivity. Improvements in stable on-grid electricity supply (from additional supply and reduced demand) can potentially contribute to wider economic and human development, and evidence suggests that enabling economic growth has a positive link with poverty reduction in most circumstances¹¹.

Structure of the GCPF and progress to date

The Fund predominantly offers senior debt for mid- to long-term financing (as well as equity investments) for local financial institutions¹² (FIs) and direct investments (DIs). These routes differ in that the GCPF provides credit lines to FIs who in turn on-lend offering market rate loans to SMEs or households for RE or EE projects, whereas the GCPF lends directly to EE and RE projects or companies for DIs. The GCPF also provides a Technical Assistance Facility (TAF), which complements its financial services, primarily offering specialist technical assistance advice and capacity-building services for its partner institutions (PIs – either defined as FIs or DIs).

As of 30th September 2017, the GCPF has invested \$488 million in 28 partner institutions (including three direct investments) across 24 ODA eligible countries. In turn, partner

¹⁰ As defined by the International Climate Fund (ICF)

¹¹ BEIS business case

¹² The GCPF also provides sub-ordinated debt to financial institutions

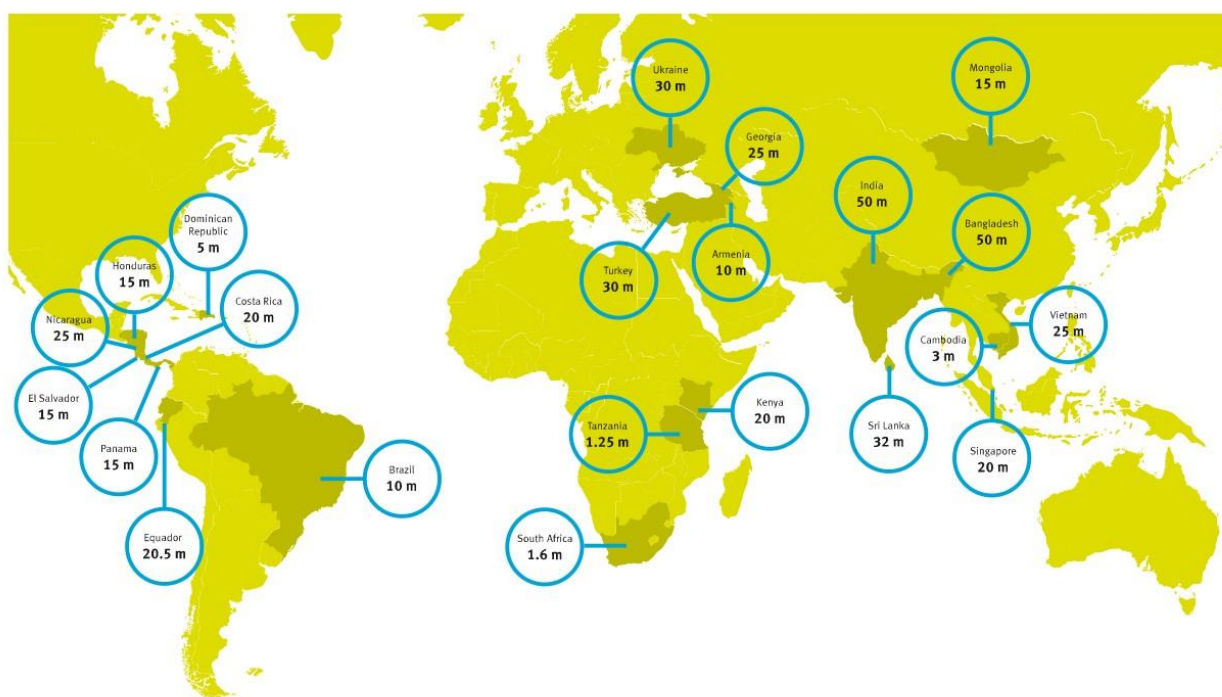
institutions have dispersed over \$418 million in sub-loans for assets that result in emission reductions of almost 435,000 tonnes of CO₂ per year and energy savings of over 544,000 MWh¹³.

Renewable energy projects range from retail-size projects such as home solar systems to small-scale renewable power generation projects. Energy efficiency projects typically aim to reduce energy consumption or greenhouse gas emissions by at least 20%. For direct investments, EE and RE projects tend to be small to medium scale and must also be in an advanced development stage or fully authorized in order to be eligible for investment.

The Fund is structured into three tranches of shares, A, B and C. All shares are investments structured to provide annual returns. Class C shares represent the Fund's first-loss equity, Class B shares rank senior to the C share portion, and Class A shares rank senior to the other two share classes but junior to all other creditors of the Fund. BEIS, Danida¹⁴ and BMUB's investments are in C-shares.

Currently the investment manager is responsAbility who took over management of the fund from Deutsche Bank in November 2014¹⁵.

The map below provides an overview of the investments that have been made in each country since GCPF's inception.



Figures in USD

¹³ http://www.gcpf.lu/files/downloads/quarterly_reports/2017/Quarterly_GCPF_Q32017.pdf

¹⁴ Ministry of Foreign Affairs of Denmark

¹⁵ http://www.gcpf.lu/files/downloads/annual_reports/GCPF_AR-2014_web.pdf

Source : <https://www.gcpf.lu/portfolio.html>

2.2 Scope of evaluation

This mid-term evaluation seeks to understand the effectiveness and relevance of the Fund, efficiencies in processes and lessons for the design and implementation of future investments. The primary focus of this evaluation is an assessment of the processes and to look at early signs of impact since 2010 as well as considering the change in Investment Manager in 2014. This includes the assessment of the GCPF's role to: mobilise and attract more private and donor investment at fund-level; expand and diversify the existing portfolio through working effectively with the partner institutions and scaling up the capacity of financial institutions through the TAF; increase (co-) investments directly into energy efficiency or renewable energy projects; and increase the fund's transformational potential.

Evaluation objectives

The objectives for this evaluation relate to three of the five DAC criteria for evaluating development assistance¹⁶; relevance, efficiency and effectiveness:

Relevance

1. To what extent does GCPF meet the criteria or programme goals that have been applied at the time of inception?
2. To what extent, in which ways and in which contexts does the GCPF model meet the needs of the recipients of lending (both financial institutions and end-user)?
3. Are all activities and outputs of the programme consistent with the overall goal and the attainment of its objectives and (donor) intended impacts?
4. Have the problems and bottlenecks which the GCPF seeks to confront been correctly identified and is GCPF's concept able to remedy these problems?
5. Is financing really the relevant bottleneck for EE/RE investments in the target countries?

Efficiency

1. Is the fund an efficient delivery model to achieve desired outputs compared to alternatives and where can this efficiency be improved?
2. What lessons for efficient delivery can be taken into future funding vehicles?

¹⁶ <http://www.oecd.org/dac/evaluation/daccriteriaforevaluatingdevelopmentassistance.htm>

3. Whether, how and in what contexts has the structure, management and governance of the fund been, or is likely to be, successful in bringing in private capital?

Effectiveness

1. What can we learn about what is working (and not), for whom, and in what contexts, with regards to sub-loans being issued successfully and at scale?
2. What are the major factors influencing the achievement or non-achievement of the objectives?
3. Whether and in what contexts has the design of the fund (on-lending and direct investment), or the Technical Assistance (TA) had an effect on capacity development for local banks?

Limitations of the evaluation

While this evaluation has assessed the early-stage outcomes of the GCPF and the direction of travel towards longer-term outcomes, two key factors limit the extent to which it is possible to provide a robust full impact evaluation of the GCPF:

- **Timing** – this mid-term evaluation is occurring before many of the ultimate impacts from the Fund could be expected to be realised. This necessitates a focus on its anticipated early outcomes (up to and including the Intermediate Outcomes set out in the diagrammatic Theory of Change presented in this report), and an assessment of the likelihood with which these could be expected to contribute towards the intended longer-term outcomes and impacts.
- **Attribution** – An impact assessment aims to explore what would have happened in the absence of the GCPF. An experimental or quasi-experimental design that tests the intervention population against a counterfactual is commonly used to make such assessments. In the case of the GCPF it is highly challenging to select a suitable comparator group from which to build this counterfactual. Therefore, these options were not viable for the evaluation of the GCPF. A non-experimental, theory-based evaluation offered an alternative approach, benefiting from having the counterfactual analysis ‘built in’. This theory-based approach was conducted to seek out explanations about why outcomes have occurred in some cases and not in others, and what other factors have been related to the achievement of (or rate of progress towards) outcomes. While principles of Qualitative Comparative Analysis were adopted to assist the synthesis of case-study evidence that fed into this overall assessment, there were some limitations in how far the tools of QCA could be taken given the early stage of some of the projects reviewed and the small number of cases reviewed overall. However, coupled with the contribution analysis approach that has been employed, it has been possible to consider additional outcomes of interest and ‘factors’ which were not part of the original theory of change.

It is also important to note that the analysis set out in this report is based on the understanding of the evaluation team of information provided by the GCPF, key stakeholders consulted and from other publicly available data. It relies on data, information and explanations provided, in both written and oral form. There is potential for bias as interviews have been conducted with stakeholders willing to participate in the evaluation and accessed through information provided by the Investment Manager (or by partner institutions in the case of beneficiaries of the GCPF supported on-lending).

Two main strategies have been employed to guard against confirmation bias in the assessment of the GCPF's role in contributing to its expected outcomes: firstly, exploration of external enablers and barriers that offer alternative theories to that documented in the GCPF theory of change during interviews and subsequent analysis sessions; and secondly, internal peer review and quality assurance of the outcomes of the analysis process

Overview of the evaluation

The evaluation included two interlinked strands assessing the effectiveness, efficiency and relevance of the processes employed in the delivery scheme against the contribution these were able to make to driving the anticipated outcomes of the Fund. The Theory of Change found in Annex 1 provided the foundation for the assessment of impact while the Process Map in Figure 1.1 set out the key Fund processes for scrutiny.

Summary of data collection

The evaluation approach was designed to make the most of existing secondary evidence and collected new evidence from individuals involved in the design, delivery and oversight of the GCPF. The evaluation included five main work strands:

- Analysis of secondary evidence and monitoring information.
- Operational benchmarking of the funds fees and efficiency of the GCPF in comparison to other similar funds.
- Market benchmarking for each of the case study countries looking at GCPF's comparability to the local market.
- Stakeholder consultations with the board, investment committee, Investment Manager and investors.
- Case studies with financial institutions and direct investments as well as additional interviews with PIs to assess the process and impact of the GCPF.

Full details of the evaluation methodology for each of these workstrands can be found in Annex 3 This also details how each of these workstrands contributed to the evaluation questions set out above, and the approach to data analysis and synthesis within, and across, the evidence collection in order to present the findings in this report.

2.3 Structure of this report

The remaining sections of the report contain the following:

Section 3 reviews the suitability of the GCPF's design and delivery model. It comprises the following main sections, an assessment of the strategic and economic rationale for the fund, suitability of the design in attracting private investors, alignment with the needs of lending recipients and the barriers and enablers to identifying investment.

Section 4 assesses the early signs of impact, considering the contribution of the GCPF towards its objectives, assessment of the Fund's additionality and contribution to longer term outcomes.

Section 5 provides an assessment of GCPF delivery. This discusses the Fund's overall efficiency, governance structure and decision making, investment selection, communication with PIs, TA delivery and monitoring and reporting.

Section 6 provides the evaluation's conclusions regarding the relevance, efficiency and effectiveness of the GCPF, as well as the barriers and enablers to the realisation of impacts. It also provides a series of recommendations, both for the Investment Manager and for the future monitoring and evaluation of the Fund.

Note on reading this report:

The evaluation is based on data collection activity undertaken between February and August 2017. Where reference is made to PIs, the findings apply to both FIs and DIs. Where specific reference is made to either FIs or DIs, this indicates a finding which is particular to one or other of these types of PI.

3. Review of the suitability of the design and delivery model for the GCPF

This chapter examines the relevance of the design of the GCPF, in particular how suitable this is: within its strategic and economic context; for attracting investment; and in supporting appropriate Partner Institutions (PIs) to develop, and encourage uptake of, green lending products. Later sections of the report consider how effectively, and through what mechanisms, this Fund design contributes to its intended outcomes (Chapter 4), and how efficiently these outcomes are being delivered (Chapter 5).

Summary of key findings: the suitability of the GCPF design and delivery model

The GCPF offers a relevant and innovative model for supporting PIs in their development of green lending pipelines. It is helping the PIs engaged through this evaluation to overcome tangible market barriers in order to offer financing for energy efficiency and renewable energy technologies. Key elements of the Fund design that contribute to this are its direct working with local financing institutions, and the offer of Technical Assistance (alongside finance) as well as ongoing support and involvement from the Investment Manager.

While benchmarking shows the Fund to be offering flexible financing to PIs at competitive rates, most of the PIs consulted hold a perception that finance could be offered at lower rates. The availability of concessional finance in many of these markets highlights a significant challenge for the GCPF in overcoming these perceptions. The relevance of the model for Direct Investments is also less evidenced; 4.3% of the GCPF's investment has been lent directly to energy efficiency and renewable energy projects or companies¹⁷ (within the set maximum of 30%). While the Investment Manager suggested these investments are proving harder to identify and due diligence, an evaluation case-study focused on a DI provides initial evidence about the positive role played by the GCPF in supporting that project.

The model also faces challenges in the attraction of private investment into the Fund at pace. While the location of the Fund in Western Europe, and the involvement of three national governments, is attractive to investors, there are ongoing challenges for attracting further private investment as well as refinancing and keeping current investors committed. These challenges are related to communicating the complexity of the Fund structure, its lack of credit rating, and the relatively low rates of return in comparison to other EUR denominated commercial investment opportunities in RE/EE in less risky geographies.

¹⁷ Source: Q1 2017 GCPF report

3.1 Assessment of strategic and economic rationale for the GCPF

The formation of the GCPF reflected concerns that FIs in ODA eligible countries need funding and help in leveraging carbon investment pipelines. This is in order to increase the potential of businesses and households to use energy efficiently and deploy renewable energy; assisting the targeted countries in following low carbon development paths to avoid dangerous climate change and meet (international) climate goals. The evaluation has gathered evidence that broadly supports this rationale and case for intervention, and stakeholders identified ways in which the design of the GCPF had overcome market, economic and technical barriers.

Specifically, the GCPF was developed in response to the key barriers set out below. These are discussed against an assessment of the extent to which the design of the Fund has proved effective in overcoming these factors:

- **Concern that slow progress in developing EE and RE-focused finance schemes was delaying the uptake of these technologies and the benefits of their associated CO₂ emissions reductions.** Some PIs engaged through this evaluation viewed their involvement with the GCPF, and its specific requirements for EE and RE-related investing, as breaking new ground within these markets and helping them to get ahead of their competitors. This view was most commonly expressed among PIs where the market for EE and RE products was the least developed.

“[We wouldn’t have been doing green on-lending], for the next 2-3 years. It would have taken more years. Because of the fund we are at least 4-5 years ahead of all our competitors in Bangladesh.” -FI

“Our experience with GCPF actually helped us stay ahead of our competitors.”- FI

“I think [we would have been able to do it] but maybe it would have taken a bit longer... Or maybe we would have had to wait if we got another project.”- DI

- **Lack of market incentives to pursue financing for EE and RE products.** Evidence suggested that many of the PIs engaged through this evaluation, before their involvement with the GCPF, did value the public benefits (non-financial benefits) of RE and EE. In a number of cases the PIs saw themselves as pioneers with part of their organisational vision directed at green lending but had not had the market incentive (or available capital and know-how) to act upon this before GCPF. For example, in Ecuador the FI suggested that they felt it was their moral responsibility to develop the RE/EE loan products. Another PI highlighted the importance of having a RE specific fund:

“It is now important and necessary for the system to have a specific fund of this kind which can take care of the renewable energy needs, because this is a green fund...we need more of such support.” -FI

The focus of the GCPF was therefore suited to helping these PIs meet their pre-existing vision (although for some the focus of the Fund on CO₂ savings was secondary to their priority on other areas of sustainability, such as water or food scarcity or socio-economic impacts).

- **Market barriers** such as inadequate information (about the energy efficiency potential of certain technologies, for example), lack of access to capital for these types of projects, "split incentives" between building owners and tenants, and high transaction costs for making small purchases. Stakeholders engaged through this evaluation were in consensus that the design of the Fund had helped to mitigate some of the market barriers that PIs were experiencing. The specific element of the Fund design, and the associated market barrier of relevance, varied by market. For example, in a few cases inadequate information about the benefits of working in EE and RE had been addressed through TA activities providing evidence through baseline and benchmarking activities. There was mixed evidence for the lack of access to capital as a barrier, with most PIs able to find capital elsewhere but finding the GCPF capital appealing because it addressed another barrier for them; often this was attraction to the TAF or greater perceptions of risk associated with their own/other streams of capital (PIs associated GCPF capital with lower levels of risk due to Government involvement in the Fund).
- **Commercialisation barriers** faced by new technologies competing with mature technologies. This was a barrier reported by a small number of PIs engaged in this evaluation, who had found on-lending challenging as a result of consumer demand and loyalty to 'known' brands. However, in the majority of cases technologies were considered to be in high enough demand for PIs to commit to.

3.2 Suitability of Fund design for attraction of private investment

There have been substantial barriers to attracting private investment into the Fund. The complexity of the Fund structure, and the low level of returns it is able to deliver to investors have been key contributors to this challenge.

The following elements of the GCPF design have been identified as key enablers attracting investment into the Fund¹⁸:

- **The role of the UK, German and Danish government** and their position in mitigating financial risks.

¹⁸ This draws on evidence across consultations with: two investors into the Fund (one commercial and one development bank); the Investment Manager's Sales team; and external private sector investment experts.

- The desirability of the GCPF mandate, its **focus on CO₂ savings and the skills of the Investment Manager to make these types of investment**¹⁹. For at least one investor this was a key attraction of the Fund; involvement in the GCPF was a good way for this bank to meet their own internal mandate of carbon neutrality.
- In one case, the GCPF was seen as attractive because it is **based in Western Europe** and so provided an opportunity for this bank to invest in developing and middle income countries without doing so directly (this was outside their mandate).

The GCPF aims to attract additional private investment by offering financial returns in line with commercial market expectations. Existing investors into the Fund noted that returns were in line with their expectations but that primarily the Fund was attractive to them because it helped them to meet their green mandate. Benchmarking suggested, however, that **returns may not be high enough to attract investors** who could, for example, invest in Europe in lower risk markets with greater returns. The comparable yields (or returns through dividends) to investors in UK renewable energy funds, for example (which may offer an alternative means of meeting green mandates) is between 5.4-6.3%²⁰. The GCPF return rate is closer to 3.5% for shareholders and because of the markets it works in will be considered a riskier investment.

The structure of the Fund, where public finance provides a risk cushion for private sector investors is intended to reduce the perceived and actual level of risk and support an appealing and market-comparable risk to return ratio. While this share class structure (where C-shares provide this cushion) had lowered risk perceptions among its existing investors, the Investment Manager Sales team have experienced challenges communicating this quickly and concisely to prospective investors. Private sector investment experts consulted during this evaluation highlighted that it is unusual to have one fixed income class and three share holder classes and recognised the challenge of quickly and clearly communicating this structure to potential investors which may lead to it being overlooked in favour of simpler alternatives (for example, fixed income bonds). Funds offering higher returns in non-emerging markets and in more established technologies than the GCPF are likely, therefore, to be perceived as having more favourable risk to return ratios.

Two further barriers have been identified as influencing the attractiveness of the GCPF to potential investors:

- **The GCPF is not rated independently** which was recognised by the Investment Manager (with external private sector investment experts holding a similar view)

¹⁹ The attraction of 'impact investors' such as this (those with an institutional mandate to invest in the GCPF geographies, technologies of interest or with green goals) raises questions around the additionality of this investment. This evaluation was not able to confirm whether these finance flows had been increased, or simply re-directed from other earmarked green investments.

²⁰ For example: Bluefield Solar Income – 6.3%, Foresight Solar – 5.6%, Greencoat UK wind 5.4%, John Laing, Environmental Assets – 5.9%, NextEnergy Solar – 5.6%, The Renewables Infrastructure Group – 5.7% (Source: Bloomberg, accessed October 2017).

as a disadvantage to potential investors into the GCPF as this is often used as an accessible and reliable measure of risk. Although the GCPF has a low default record, this is not an indicator recognized by rating agencies.

- **The GCPF is not a listed product** so it has no liquidity, unlike some other green bonds.

3.3 Alignment with the needs of lending recipients

While benchmarking shows the GCPF to be offering flexible financing to PIs at competitive rates, PIs often held a perception that finance could be offered at lower rates and highlights the challenge for the GCPF of being compared against the availability of concessional finance. In general, however, PIs perceptions of the relevance and suitability of the GCPF were positive; the partnership approach with the Investment Manager was particularly attractive to PIs and, for some, so was the TA offer.

PIs consulted through this evaluation valued the commitment of the Investment Manager to working closely with them to identify their needs and ensure the Fund worked in an appropriate way for them and their local context. This was seen to contribute to the **flexibility of the Fund** (for example, in the structuring of finance or in the terms on which investments are made) which was seen as a key strength of the GCPF.

Case-study examples of specific ways in which the GCPF has demonstrated flexibility in meeting recipient needs.

In Namibia, flexibility in the funding model was needed to meet the requirements of a government contract. In this particular case the GCPF worked with the PI to develop a financial model which mitigated currency risk and allowed an FI to invest in RE that other local banks were struggling to invest in. Interviewees suggested that this was an innovative solution to the problem they were facing in funding this project.

In Cambodia, one PI had worked closely with the Investment Manager to agree the fees on which investment would be made to ensure these were appropriate in their local context. These negotiations, and ultimately coming to an agreement, was felt by the PI to have been important in establishing their working relationship with the Investment Manager and taking the project forward.

A key point of discussion with PIs engaged in this evaluation was the **cost of the GCPF capital** in comparison to other funding streams. While one of the five PIs engaged through the case-studies described it as 'affordable capital', the other PIs held a view that the GCPF finance was expensive compared to finance available from DFIs. This is likely to reflect the cheaper rate finance available to many of these PIs from DFIs such as the World Bank.

While this evaluation sought to benchmark the cost of GCPF capital for PIs this assessment has been limited by the lack of available data on the cost of local currency hedging. A high

level analysis of available data on the rates and terms on which other sources of (non-concessional) finance are available in the markets, showed the potential for profits to be made by the local PIs (who are on-lending GCPF sub-loans at market rates). However, once estimates of typical currency hedging costs borne by the PIs are included, it is feasible that some of the loans could actually be loss making, although the prevalence of this cannot be estimated.

The strength of feeling among PIs on the cost of the GCPF capital however (PIs commonly, and spontaneously, raised the price of GCPF finance as a key challenge during the evaluation consultations) stands to highlight the value and relevance of the GCPF to PIs for a variety of other reasons; providing an insight into the alignment of the model to the other needs of PIs.

A small number of PIs suggested explicitly that they were **participating in the GCPF because they felt that the TA would be valuable** to them as an organisation. In these cases, TA helped build capacity; enabling these PIs to deliver green lending products for which they previously lacked some of the relevant technical skills and information. The TAF was a key point of differentiation between the Fund and other similar financing mechanisms; helping to attract PIs to be investees of the Fund and offering something additional to the rest of the market. Many of the PIs consulted also valued more ad-hoc, 'informal' TA from the Investment Manager, for example in completing the reporting tool.

Nevertheless, the evidence did also suggest some challenges and areas in which the TA offer, and the understanding of its potential benefits, could be improved. The Investment Manager sometimes experienced difficulties, for example, in engaging with PIs to assess their own TA needs. In a few cases, PIs did not see value in the TA commissioned for their own organisation, considering it to have only been of benefit to meet specific requirements of the GCPF.

Some PIs valued involvement in an **international fund** which they felt would raise their profile in the EE and RE markets and make them an attractive investee for other funds. This can be seen as desirable not just to the PI but also as it speaks to the Fund's objective of encouraging replicability – for example, through PIs growing their green on-lending through additional credit lines.

There were, however, some specific requirements of the Fund identified as being **unsuitable to particular regional markets or technologies**. This included, for example, the maximum cap of 50MW for wind generation capacity as explained below:

Case-study example of specific Fund requirements that were not deemed fit for purpose:

The cap of 50MW for generation capacity was not considered to be appropriate for the Indian market with one of the PI's interviewed wanting to see higher capacity energy projects supported by the GCPF - 100MW was suggested for wind energy projects:

“...What they give is too small of an amount for the kind of business which we have and the kind of appetite that we have...There are also various types of restrictions which have been

imposed by the Fund, for example you cannot give more than 5MW of this, 10MW of this, 50MW of this. That should actually be increased if the Fund wants to make meaningful use of its money because you don't have such small requirements anymore in India...To support such initiatives in India they need to remove the restrictions or at least make them better...If these restrictions are not removed, then borrowing from them would be a challenge.” -PI

Finally, there was some debate across the PIs engaged in this evaluation as to the extent to which the **focus on CO₂ reductions** was aligned with their own mandates. For some PIs, the broader mandate within which they see the GCPF fitting for their own organisation is led by poverty reduction, and often rural development, goals or broader sustainable resource use agendas. There are opportunities for these goals of the PIs to go hand-in-hand with the focus of the Fund on emissions reduction – for example, through financing of more energy efficient pumps that reduced emissions as well as water usage. Although this evaluation did not consult PIs beyond those already being financed through GCPF, this finding suggests that where communications about the Fund focus solely on CO₂ emissions, there is a risk that this may act as barrier to engaging prospective PIs looking for finance to support broader agendas – this may also apply to the attraction of investment into the Fund.

3.4 Barriers and enablers to identifying investments

A number of barriers and enablers were identified through engagement with the Investment Manager which have influenced their ability to identify suitable PIs to invest in:

- **Senior buy-in within PIs** has been found to be essential in closing deals. FIs are therefore most likely to engage with the Fund if involvement with the GCPF aligns with their overall business case and strategic aims as an organisation; this was found to be the case among many of the PIs engaged in this evaluation. For example, in Namibia the DI had an aim to work in RE but had not done so before their involvement with the GCPF because there was not the market incentive to do so.
- **Sufficient capacity within FIs on-lending department:** the GCPF is not a straightforward fund to work with in comparison to other commercial capital, largely as a result of the reporting and monitoring conditions, and so most FIs who are interested in the Fund have a certain level of capacity to be able to work with the Fund or engage with the TA offer. This basic level of engagement is needed before the TA is able to help FIs build their capacity. In a small number of cases FIs are still interested in working with GCPF but it is likely to be on a one-off basis which the Investment Manager saw as less well aligned with the IC's priorities.
- **Barriers within local economies and politics** have played a role in affecting access to deals in certain countries (e.g. inflation, consumer confidence, low interest rates weak regulatory frameworks²¹).

²¹ Please see the GCPF Mid-Term Evaluation Inception Report for further detail

- **Availability of alternative finance:** Some FIs are identified as having an appetite to develop green lending, and to be suited to a partnership with GCPF, but do not need the financing enough to incentivise them to work with GCPF in some cases this was because they had funding from DFIs at cheaper rates. This narrows down the pool of FIs who are suitable for GCPF and who have an agenda to work in EE/RE. The Investment Manager noted that *'it is a lot of work for our team vis-a-vis convincing financial institutions'*.

Concerns over competitive advantage: Interviews with existing DIs highlighted that these two PIs are not necessarily likely to publicise their partnership with the GCPF; the view of the Dis is that the two PIs see their involvement with the Fund as providing a competitive advantage which they do not want to share. This may reduce the success of word-of-mouth approaches to engaging further PIs, in particular DIs, based on the evaluation evidence gathered.

4. Assessing early signs of impact from the GCPF

This section examines the early signs of impact from the GCPF, considering the extent to which the evidence points towards the Fund contributing to the mobilisation of private capital through the attraction of private investors, the development of low carbon investment pipelines through Partner Institutions and the uptake of this finance to support energy efficiency and renewable energy projects with the ultimate aims of energy saved and CO₂ emission reductions realised. The intended outcomes and impacts of the GCPF are illustrated through the Theory of Change (further detail is provided in Annex 1). This depicts how different elements of the Fund were anticipated to interact to achieve its envisaged outcomes and impacts. This section also provides an assessment of the external enablers and barriers that are acting to either help or hinder the achievement of these outcomes, as well as considering any unintended outcomes of the Fund or from its interaction with these external factors.

A summary of the early signs of impact from the GCPF, and the external enablers and barriers, is presented in Table 4.1 (p44).

4.1 Approach to identifying early signs of impact

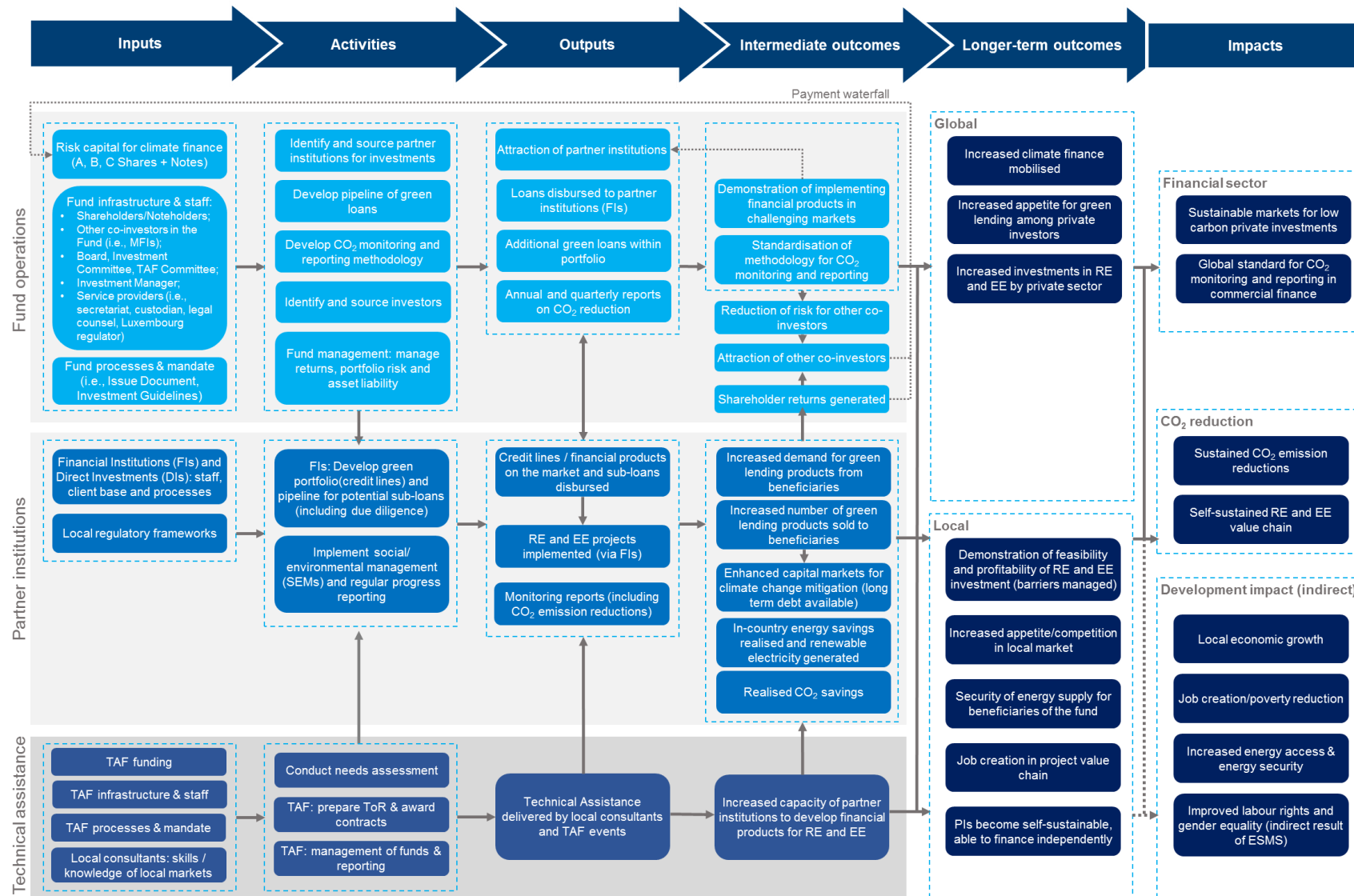
A key way of assessing the impact of the GCPF is to explore what may have happened in the absence of the Fund. Due to the limitations of selecting a comparison group, a non-statistical theory-based evaluation has been implemented. Theory-based evaluation seeks to collate evidence to test the proposed programme ‘theory’ about why and in what contexts outcomes have occurred, and by doing so enables an assessment of the potential impact of the intervention. By starting from the outcome rather than the intervention itself, theory-based evaluation considers cases where outcomes are realised and not realised, thus allowing for considerations of alternative theories and counterfactuals.

Based on an analysis of the feasibility and usefulness of several methodological options within the context of the GCPF mid-term evaluation at the inception stage, the evaluation team has employed a contribution analysis approach²². Contribution analysis is a technique for exploring the causality of an intervention in realising its desired outcomes. It provides a framework through which it is possible to consider the extent to which a particular treatment (the GCPF) can be associated with (or has contributed to) a set of outcomes (such as

²² Principles of QCA have also been employed as part of the analysis and synthesis approach of the case study evidence. More detail is provided in Annex 2b.

increased investment in EE and RE projects). Taking a contribution analysis approach draws on the theory of change (shown overleaf) to infer causality and assess the extent to which observed outcomes are due to the GCPF rather than other competing factors.

Figure 4.1: Theory of Change



Drawing on contribution analysis, the evaluation team identified a set of competing external factors that offer alternative explanations and pathways leading to the changes in the outcomes the GCPF is interested in. These potentially competing factors were identified through documentation review at the inception stage and categorised into key factors; economic stability, political environment, EE and RE market development and climate financing landscape.

In order to assess the extent to which these competing factors contribute to the GCPF's outcomes, causal assumptions have been developed articulating the links in the results chain of the theory of change. These assumptions have been tested primarily through stakeholder consultations and case study interviews to better assess the influence of external factors versus the GCPF. A summary of this analysis, and the conclusions drawn by the evaluation team from this evidence base is presented in Table 4.1. Further detail on the steps taken as part of this contribution analysis approach is provided in Annex 2b.

Due to timeframes, this evaluation does not provide a detailed assessment of the longer-term impacts of the GCPF which are anticipated to follow on from the intermediate and longer-term outcomes discussed in this section. This was out of scope for this mid-term evaluation which aimed to provide evidence of the plausibility of a cause and effect relationship between investments and the objectives of the Fund as a pre-cursor to a longer term full impact assessment. However, within the recommendations (Section 7), potential indicators are identified which could be implemented in order to test longer-term outcomes.

4.2 Contribution of GCPF towards achievement against its objectives

This section discusses the evidence for the contribution made by the GCPF to achieving progress against the Fund's primary objectives.

Evidence of the objective being achieved is discussed followed by an assessment of the contribution made by GCPF to this progress, considering the key elements of the Fund through which this has been achieved by the Fund as well as the relative role played by external factors. The extent to which the GCPF's contribution can be considered 'additional' (that is, whether it has achieved something at a greater scale, pace or scope than would have happened in the absence of the Fund) is also explored. At the end of this section, Table 4.1 presents the findings broken down against each of the individual intermediate outcomes shown in the Theory of Change.

Objective 1: Role of GCPF in mobilising and attracting more private and donor investment at fund level

Progress towards achievement of objective

The existence of three private co-investors into the Fund – including the addition of noteholders ASN Bank in 2016 (a private bank based in the Netherlands) and ÄVWL²³ (a German pension fund) in 2012 - demonstrates that GCPF has been able to attract capital although progress appears to be slow, particularly in the attraction of private investment.

GCPF is anticipated to contribute to longer term global outcomes in relation to mobilising and attracting private finance: increased climate finance mobilised (global level) and, increased appetite for green lending among private investors (global level). It is, however, too early at the point of this mid-term evaluation of the GCPF to expect to see progress against these impacts. Suggested indicators and means of monitoring progress against these impacts over the longer-term is provided in Table 7.1.

Contribution of GCPF in achieving its objective

There is evidence that mobilisation of investment to date has occurred through:

- Generating sufficient returns for shareholders within the context of a green mandate
- Demonstrating the success of the Fund's green mandate to interested investors

Among existing public sector and development bank shareholders, returns are not considered a high priority outcome; the two shareholders (one A class shareholder and one noteholder) interviewed for the evaluation stated that they are willing to accept a lower return due to their mandate and target to reach climate neutrality.

For these co-investors with a strong green mandate, GCPF has also been able to **demonstrate that it is a viable** fund structure through which CO₂ emission reduction can be brought about; the volume of sub-loans disbursed is a key indicator of this as these are linked to strict emission reduction targets. As of 30th September 2017, the GCPF has invested \$488 million in 28 partner institutions (including three direct investments) across 24 ODA eligible countries. In turn, partner institutions have dispersed over \$418 million in sub-loans for assets that result in emission reductions of almost 435,000 tonnes of CO₂ per year and energy savings of over 5344,000 MWh²⁴.

Reducing perceptions of risk among co-investors is a key means through which investment is attracted into the Fund. The track history of the GCPF and its Investment Manager has given existing and longer-term co-investors' confidence that it is possible to invest in small and medium sized investments in emerging countries without reducing capital. The design and phasing of the Fund with public investors acting as a risk cushion for private investors, and the involvement of three C-share national governments, was reported by existing investors as another important way in which the GCPF provides reassurances around

²³ ÄrzteVersorgung Westfalen-Lippe

²⁴ http://www.gcpf.lu/files/downloads/quarterly_reports/2017/Quarterly_GCPF_Q32017.pdf

acceptable levels of risk (given its context of investing in multiple small investments in emerging markets and in novel technologies and projects).

Internal barriers to progress against objective and related outcomes

As discussed in Section 3.2, the level of the **GCPF returns may not be high enough, however, to attract significant volumes of private investment.**

For more detail see Section 3.2 discussing the suitability of the Fund design for attraction of private investment section.

External enablers and barriers to attracting investment into the Fund

Evaluation evidence drawn from interviews with current investors, the Investment Manager (including the Sales team) as well as consultation with private sector investment experts and benchmarking analysis, highlights the following key factors – external to the Fund – which influence its achievements against its first key objective to attract investment:

Competing funds (offering higher rates of return but lower perceived risks and/or simpler structures): Co-investors are likely to have a strong green mandate but will also require a minimum rate of return, particularly those in the private sector. Where alternative investment opportunities offer higher rates of return even in investment environments that might be considered less risky, the GCPF will find it harder to attract interest. This is furthered where these investment opportunities also offer ways to meet green mandates (e.g. renewable energy funds)²⁵ and if they are simpler Fund structures to understand.

Political environment: As discussed above, a key element of the fund through which the GCPF attracts investment is in its demonstration of the Fund's ability to increase green lending pipelines (associated with resulting CO₂ savings). External factors that affect the scale and pace of green lending pipelines developing can, therefore, feedback into affecting the attraction of investment at Fund level. These factors include the political and regulatory environments in which PIs are seeking to offer the GCPF-financed products, as well as market readiness and levels of demand. The extent to which these factors are acting to either help or hinder the achievements of the GCPF in driving green lending are explored under the next objective.

Assessment of what would have happened in the absence of the Fund

There is limited evidence available at this stage (due to low numbers of private investors being involved in the GCPF) to assess whether private co-investors could have invested in other green funds and achieved the same outcomes.

²⁵ For example, yields (or returns through dividends) of between 5.4-6.3% are available from UK renewable energy funds (source: Bloomberg)

Objective 2: See an increase in the number of energy efficiency or renewable energy investments

Progress towards achievement of objective

As of 30th September, the GCPF has invested \$488 million in 28 partner institutions (including three direct investments) across 24 ODA eligible countries. In turn, partner institutions have dispersed over \$418 million in sub-loans for assets that result in emission reductions of almost 435,000 tonnes of CO₂ per year and energy savings of over 5344,000 MWh²⁶.

While the Fund has no specific projected targets, the rate of investment volume growth has been 17% year on year and a 42% increase in disbursement of sub-loans when compared with 2015 indicating significant progress²⁷.

Contribution of GCPF in achieving its objective

The GCPF has enabled PIs to develop and sell green lending products which are supporting uptake of energy efficiency and renewable energy projects and technologies. The key element of the fund through which the GCPF is achieving this is through:

- Provision of finance to support the development and provision of sub-loan products;
- Capacity building through the provision of Technical Assistance;
- Reporting requirements placed on PIs;
- Marketing of green loans led by PIs; and,
- PIs offering green financing at market rates

Provision of finance: The receipt of GCPF finance has enabled PIs to either set-up, or expand, their green lending portfolios.

“Since we have the GCPF we have more funds so we can increase our loans so we can continue to grow up...and we can increase our loans to the farmers.” – PI

“I think there will be more demand in the future related to the tractor and the power tiller because we have the Fund and we have the network with the farmers. Before we don’t have the specific fund for the power tiller. Now we can use the Fund from GCPF to give the tractors to the clients. If there is not the support (from GCPF) demand will increase but the support to the demand is limited” - FI

Capacity building through Technical Assistance: TA has been a key instrument contributing to the development of green lending pipelines – both the products and strategy for on-lending. For example, through:

- Providing GCPF PIs with an expert market analysis on green lending potential and concrete guidance to tap the full potential especially when reaching new clients
- Raising awareness on the benefits for EE and RE on-lending both at the bank and end-client levels

²⁶ http://www.gcpf.lu/files/downloads/quarterly_reports/2017/Quarterly_GCPF_Q32017.pdf

²⁷ GCPF 2016 Annual Report

- Building PIs staff capacity to assess the energy savings of potential investments or providing external expert support for investments requiring more complex technical assessments
- Assisting PIs in developing a systematic approach for green lending endorsed by top management and sustained by all relevant bank staff.

An example of the ways in which TA support provides the key element of the fund through which the GCPF is contributing to this objective is provided below:

Case-study example of ways in which TA has supported development of GCPF sub-loans in Ecuador

One FI has been working for 2 years with the GCPF on developing green car loans (sold via car dealers). If a car is 20% more efficient than the average in the market, the client is eligible for a green loan, at a reduced interest rate. The loans are sold via car dealers. The TA helped to develop a list of eligible cars on the market. Around 20 types of cars were initially found to be eligible and this list is updated once a year. The list has been used as a tool to expand the FIs business as it has identified new brands with whom the bank has no previous business relationship.

This FI has also received TA to help it identify relevant models of fridges and cooking hobs for which it purchases large volume portfolios of loans for domestic appliances.

"The Technical Assistance is critical as it helps us to develop new products"-FI

Reporting requirements: Standardised reporting has helped some PIs to indirectly improve their capabilities of green on-lending by providing a tool to ensure the most suitable projects are selected. For instance, in providing an example of how to report in an area they may not previously had experience in, or in providing an output that gave a clear account of the impact of their loans.

"the template developed by GCPF for reporting was very clear and very helpful for us to screen out the not eligible projects and for recording the eligible project." -PI

"GCPF showed us the mirror, we were doing some of this already but GCPF [reporting] helped us see the true impact of it and gave us a structure around it". -PI

Role of the GCPF in marketing of green loans: The evidence is more mixed around the extent to which the GCPF, through its PIs, is managing to increase demand for energy efficiency and renewable energy projects and technologies – across the case-studies conducted during this evaluation there were mixed reports around levels of latent demand for these technologies and awareness of available finance.

In many cases the FIs channelled the GCPF sub-loans to sectors where they have significant experience, so they had **well-established networks and existing relationships with potential clients** that could be used to promote loans for new EE/RE products. Bank staff, such as credit and loan officers, have taken an active role in promoting the new loans and explaining EE benefits to clients for some FIs.

Training staff on the benefits of EE technologies (in some cases provided via TA) has been important, particularly where FIs have faced challenges generating demand for their products due to limited understanding of new technologies and the benefits of EE among clients. Training staff on these benefits has been important both to shift the perceptions of staff themselves on the value of promoting finance related to these products, and also in helping to train them in how to best explain these benefits to prospective clients.

“Officers ... don’t understand the motives. There is a need for TA to raise awareness of motives, make staff understand that it’s part of climate protection.” – TA Consultant

Another key way in which FIs have boosted take-up of loans (particularly for newer technologies) has been **initially targeting early adopters and influencers** who spread awareness and interest further to create a multiple effect within the community through word of mouth and advocacy. In one example, an FI had used videos and other marketing materials to educate their corporate and retail clients on EE/ RE investments.

“GCPF helped us increase demand for this type of investment, because with GCPF fund we support those industrial leaders to make those investments, and once they did it now there are a lot of followers doing it”. -FI

In some cases, the FIs reach clients by establishing **partnerships with the suppliers and manufacturers of the EE/RE products**, who then pass on the information about the new green loans.

One of the case-studies in India, for example, demonstrated both increased awareness and demand for more energy efficient irrigation technologies as a result of the GCPF funding. This has been led not just by the PI’s client outreach teams but also through sub-loan recipients advocating the finance to their own contacts and further spreading awareness and uptake, as detailed further below:

Case-study example of multiplier effects & contribution to transformational change in India:

Loan received from FI to cover the cost of well construction, pump and drip irrigation pipes.

The recipient of one GCPF supported sub-loan had become a local role model; up to 6 further farmers in the local area had taken out GCPF sub-loans after learning about the initial recipient’s experience working with the PI to receive a green loan and the impacts this loan had for him (reduced electricity costs, reduced water use, reduced labour costs, increased crop yield and income).

One of these further recipients was visited as part of the case-study with this PI and reported that he had financed his children through school and his son through engineering college, as well as renovating his home, as a result of the productivity benefits realised through the GCPF loan. He is now considering a further loan for a polyhouse to grow flowers for export. This farmer himself also reported up to 5 farmers who have adopted drip-irrigation as a result of seeing his new set-up (although he was uncertain of whether loans had been required by these smaller plot holders).



Close network of local farmers sharing experiences

He is also being visited by a Government minister who plans to publicise his success and share it as an example of best practice to encourage further take-up (an example of an external enabler – see below).

Availability of green financing at market rates: The case-studies conducted for this evaluation also involved the gathering and analysing of benchmarking information for each of the five markets selected. A comparison of the GCPF sub-loans marketed by PIs against other available finance shows that GCPF on-lending has been offered at a similar interest rate, and for similar lengths of time, as other loans available on the market through different FIs. The suitability of the GCPF product (provided by PIs) for its ultimate beneficiaries was confirmed by those interviewed in the case-study locations, who reported the finance available to them to be at market rate. Ways in which PIs have made their financial product stand out, and encourage uptake, has been through differentiating themselves in the market through, for example, offering shorter turnaround times for set-up of the loan or offering broader packages of support (advice as well as finance).

Raising awareness of these new, but market-rate credit lines has been important for PIs, and has been achieved in some of the ways set out above:

“Most customers didn’t know banks can offer something for that [green lending]. For example, [if there was] buyers’ demands they [buyers] would buy EE machinery”.
– PI

External enablers and barriers to increasing the number of energy efficiency or renewable energy investments

Evaluation evidence drawn from interviews with PIs (including but also beyond those who were the focus of the five case-studies) as well as interviews with sub-loan beneficiaries and TA consultants highlights the following key factors – external to the Fund – which influence its achievements towards increasing the number of EE/RE investments:

- **Broader marketing of EE/RE technologies:** Beyond the marketing led by PIs, awareness and interest in EE/RE technologies depends on the extent to which government and/or industry-led marketing supports the case for these products. There were examples, for instance, within the case-study locations of industry events having played an important role in driving demand; in one such case a farmer had been

convinced to take up a new technology after attending a conference that explained the benefits on efficiency and yield.

- **Electricity prices and availability of subsidies:** Levels of demand for EE and RE technologies are also closely linked to the price of traditional power sources and the availability of any subsidies to offset the cost of these. For example, in India electricity use for agricultural purposes is subsidised by 17%, reducing demand for more energy efficient, or renewable, technologies. In some cases, subsidies are available for these newer, cleaner technologies which can act as a driver of uptake.
- **Levels and reliability of electricity access:** Where households and businesses face power outages or constrained on-grid connectivity this can drive levels of consumer demand for the types of technology being financed through the GCPF sub-loans.

Case-study example of external factors helping drive uptake of EE technologies in Cambodia

Demand for a brand of energy efficient tractors and power tillers being financed through GCPF sub-loans is already high, mainly due to local perceptions of their quality (although other models are favoured in other areas). The FI expects that demand is likely to keep increasing with growing rural prosperity, with other competitors also financing this type of machinery.



Power tiller eligible for GCPF sub-loan

The TA provided to this FI via the GCPF is enabling it, however, to develop specific loan products it can market at these energy efficient models specifically. The GCPF funds will also enable the FI to lend to a greater volume of customers. The impact of the GCPF support, and the extent to which it competes against other available finance, is yet to be seen as this FI are in the early-stages of developing their sub-loan product.

Longer-term increases in green lending for other types of investment will depend on what else the FI chooses to develop and how they market these new products. The FI has already expressed an interest in exploring the eligibility of other technologies, such as EE cars and motorbikes.

Assessment of what would have happened in the absence of the Fund

This evaluation finds the GCPF support to have been crucial for most FIs in developing successful green finance products which are driving uptake of EE/RE technologies. A number of the GCPF FIs reported that they were able to develop new credit lines and products earlier to the market than they might have been able to otherwise. Where FIs were already working on green credit products, the GCPF provided the required knowledge that accelerated development and led to marketable products

“I think [we would have been able to do it] but maybe it would have taken a bit longer, as the transaction size was quite small. Or maybe we would have had to wait if we got another project”. – FI

The role of TA in particular appears to have been crucial in supporting the increase in EE and RE investments. One FI acknowledged that while they could have developed the products themselves, the impact of the TA has been to *“get more understanding of the way they should develop products, from the first to the last step.”* And so, while this evaluation has found that some FIs may have financed similar loan recipients in the absence of the GCPF, the 20% energy reduction requirement is likely to have been much lower through alternative funding sources. This requirement, and the delivery of TA to support the identification of suitable technologies and projects, had led to additional uptake of EE and RE technologies and their associated CO₂ savings. Many FIs themselves reported that the level of emissions reduction would not have happened at the same rate or within the same time scales in the absence of the GCPF due to their likelihood to lend within less stringent energy saving criteria. An example of this conclusion being borne out in practice is provided through the case-study example below:

Example of contribution to CO₂ emission reduction using GCPF finance for: Micro-loans in India

In India, the GCPF funding is being used by one FI to on-lend to individual farmers for the installation of three types of technology: drip irrigation, irrigation pumps and photovoltaic pumps. The FI reported that without the GCPF they would be financing the same types of loan as they’ve proven it’s a commercial model that works.

The GCPF is recognised to have catalysed the initiation of their financing in this area, however. It is also possible that while the FI may have financed similar types of customers in the absence of GCPF, **the focus on energy efficiency specifically (through the 20% energy reduction requirement of GCPF) is likely to have been lower** (with greater focus on water savings and crop yield increases), and unintended consequences of increased energy use could even have been possible (for example, through a greater focus on drip irrigation than solar pumps to replace electric or diesel alternatives).

Looking forward, now that the demonstration effects of financing these types of product are clear, private sector investment through this FI would be likely to continue in the absence of the GCPF. While it is not known whether the FI would continue to target the same level of energy savings in the absence of the GCPF requirement, this may be sustained if the current Government-backed subsidies (which reduce the upfront cost – and therefore the loan amount – for more energy efficient pumps) continue to make these EE products more commercially attractive and reduce the risks associated with financing them. Given the range of factors, and changing circumstances that can affect the extent to which financing from the GCPF goes above and beyond what would happen anyway in the absence of the Fund, it is important for second tranches of loans to be re-assessed for additionality.

A further way in which the GCPF is set-up to help drive additional take-up of EE and RE technologies was considered by one investor, as well as members of the Board, to be through the processes in place to assess the potential for the contribution of the Fund at an

early stage in the selection of markets and PIs. Key to this is the in-depth knowledge of the Investment Manager into the sectors and markets in which the GCPF may be additional, with particular consideration to competition from DFIs.

In the longer term, while there is evidence that FIs have increased their sale of green lending products using the GCPF finance, it is too early to see whether this is sustained through renewal of GCPF loans, new credit lines drawing on other sources of finance or the FI's own finance. Some FIs indicated, for instance, that they would expect to use other funds to support green lending products such as solar rooftops, hydro and wind power, and in at least one case a FI reported trying to sign another credit line for this type of financing. There is already some evidence of FIs starting to use the information they collect on the energy (usually communicated as financial) saving potential of technologies financed through their loans for marketing green products, and there is potential for this to further build green lending pipelines going forwards. There is also some evidence that FIs are being approached by other FIs in the market to learn from their approach.

Objective 3: Increase the Fund's transformational potential by improving local knowledge and capacity

Progress towards achievement of objective

This evaluation finds evidence of the Fund's transformational potential at a local level (for PIs and the recipients of sub-loans). While potential elements of the fund through which the GCPF could generate transformation change at an overall market or Fund level can be identified, there is currently less evidence of this transformation starting to take place (as may be expected at the stage of this mid-term evaluation of the GCPF).

Transformational potential is defined here as a change which catalyses further change, enabling either a shift from one state to another (for example, from conventional to lower carbon investment patterns) or a faster change (for example, accelerating deployment of low carbon).

Contribution of GCPF in achieving its objective within the Fund

The contribution of the GCPF to the Fund's transformational potential can be divided into different levels: outcomes among market, PIs and sub-loan recipients. The key element of the fund through which the GCPF is achieving progress in demonstrating this potential is through:

- Supporting markets in:
 - Enhancing capital markets;
 - Replicating the GCPF model.
- Supporting PIs in:
 - Capacity building through the provision of TA;
 - Expanding their green lending portfolios;
 - Improving their market position;

- Implementing sustainable policies;
- Through sub-loans delivered via PIs, supporting end-beneficiaries in:
 - Building greater awareness of environmental issues;
 - Accessing more reliable energy supplies;
 - Increasing productivity and reducing operational costs;
 - Increasing quality of life.

Supporting market-level transformation

At a Fund level, the GCPF aims to **grow the size of the Fund**, as well as **encourage replication of its model**, in order to achieve sustainable markets for low carbon private investments. It has achieved some success in mobilising further capital and building the size of the Fund as well as expanding its geographical coverage, disbursement of loans and number of sub-loans. This offers potential to see larger-scale demonstration of impacts and market reform over a longer period, although this would be further enhanced through attraction of higher numbers of private investors and volumes of private capital. While the GCPF demonstrates potential for replicability of its model through its increasing returns since 2013, it is too early to expect to see this replication taking place.

Supporting FI-level transformation

There is evidence that the GCPF has been able to **increase the capacity of the PIs** engaged through this evaluation to provide capital for climate change mitigation. It has done this by working with PIs through the deal making process and, in particular, through its TAF. TA has often provided vital capacity building to FIs in how to work in RE and EE-related lending, identify suitable projects for financing and demonstrate that market-rate returns can be made. Among the FIs consulted, the GCPF can be seen to have provided the proof of concept around the commercial potential of green lending for EE and RE projects and technologies.

“In corporate banking we do not develop products, based on customer requirements we change everything. Now we have a good understanding of EE. This experience has helped us. Understanding financing requirements of these issues for clients has helped us.” - FI

In several cases, TA has been acknowledged by the FI as a key driver in building understanding among their staff in these areas, to aid their development of green loan products, as well as utilise the knowledge they have gained to develop other green loans.

“We can take that experience to develop other new products within (FI) itself.” - FI

The GCPF is also considered to have provided a **competitive advantage** to some FIs consulted, through the development of green lending which is considered by the FI to have improved their market position and branding. There was also an example of an FI where the raising of their green lending profile was anticipated to offer them potential to export internationally and maximise their global offer.

Example of capacity building for FI in Cambodia

The main impact observed is an increase in the FI's knowledge and capacity around developing and offering green lending. Managers noted that the TA is providing them with expertise in a field where they previously were, in the words of one manager, "illiterate"; particularly with regards to EE issues and technologies. Although the FI had already gathered some experience with solar loans, and DFI-funded biodigester loans, this does not seem to have improved their capacity in the same way. The FI plans to cascade the knowledge gained through their experience working with the GCPF down from management to local officers.

However, in a few cases TA has served a lesser role in capacity building and, instead, has served a more transactional purpose to meet requirements of the GCPF. This has been the case where the TA has been targeted at specific requirements of the Fund from which the PI has been fairly removed (such as technical baselines studies).

At a PI level, there are also examples of transformation taking place internally within their organisations in the form of **cultural change**. While many of the PIs engaged in this evaluation already had strong sustainability agendas as the outset of the GCPF (as discussed in Chapter 3), in the example of the PI below, the GCPF funding had furthered this, encouraging the FI to develop an environmental policy including a dedicated sustainability team.

Example of broader uptake of sustainability practices within an FI in Ecuador

This FI has integrated green lending activities in its internal processes and procedures:

- Based on the engagement with the GCPF the FI has changed internal procedures to meet the requirements of their multilateral partners. This includes the implementation of an environmental policy. Green loans are now part of the bank's positioning.
- A dedicated 'sustainability team' was established in 2011 with one person which has since grown to a team of six.
- The FI's buildings department actively promotes the idea of sustainable housing, for example by employees speaking at conferences.
- The car loan department market special products for greener vehicles.
- Gained experience with new green technologies and internal capacity building in the risk assessment team improves future risk assessments

"Becoming 'green' has become part of the culture of the bank. Not just with green loans, but also internally by trying to reduce consumption of things like paper and water" - chief risk business credit

This FI is now also working on improving the environmental consciousness inside and outside the bank with the aim to achieve a greener bank overall. The bank has, for example, introduced a green policy and environmental processes with the GCPF's requirements for obtaining a green loan. For new (clean) technologies, as an internal requirement, the bank now requires the benefits for the client to be assessed, such as lower costs, or higher

productivity. Applications for these technologies are subject to a risk assessment with an external consultant typically hired to conduct this. Exposure to and working with these technologies leads to an improved internal knowledge within the bank about the technologies.

They have also executed a eco/green awareness campaign, focused on energy, water, waste and climate change. The FI is developing and delivering (via internal resource) related e-learning training for bank executives. The Investment Manager has provided support in the form of information to prepare this training.

While the original collaboration started mainly with the objective of raising funds for the bank, the collaboration with the GCPF has triggered larger changes in thinking and processes, for example leading to gender loans that are exclusively working with women.

In addition to these steps being influenced by the GCPF, the FI is also being influenced by a number of other programmes and influences. The FI is reporting on its sustainability as per the rules and guidance of the Dow Jones Sustainability Index, for instance.

Replicability of the model demonstrated by FIs by others in country and more widely should be investigated as part of a longer-term evaluation of the impacts of the GCPF at a market level. There is some evidence to date of the potential for FIs beyond those already involved in the GCPF to replicate this model of delivering green lending. There are examples of FIs boosting awareness of the GCPF model within their communities and examples of other FIs seeking advice and information on the model being adopted.

For one FI in Namibia, the project is believed to have provided a proof of concept for other renewable energy investments in the region. While not the only model being considered, it has provided evidence of its effectiveness and replicability.

Another case study with an FI demonstrated that the GCPF has the potential to be particularly effective in **enabling local markets** for renewable energy and energy efficiency products to grow through enabling a partnership approach between the FI and their supply chain.

Case-study example of partnership approach to enhance RE/EE markets in India due to the GCPF:

The FI is nationally renowned for its partnership approach to financing – creating strong links between themselves and individual farmers, as well as irrigation equipment manufacturers and installers and crop processing factories (for example, sugar crushing plants). The outcomes of this partnership approach provide security to the supply chain as well as to farmers, and is encouraging positive promotion of the RE/EE products and financing through word-of-mouth. For example, the FI had initiated joint ventures such as Operational

Maintenance warranties which provide farmers with assurances about the quality of the new equipment, feeding into positive word-of-mouth endorsements and greater uptake.

The FI had also helped finance five start-up businesses (not through GCPF funds) which further build the supply chain and contribute to transformational change – this includes, for example, a solar pump installation company, and a company manufacturing efficient farm machinery.

In an effort to encourage a multiplier effect, the FI has shared its learning, and details of its partnership model, to representatives across government and in the irrigation business. The FI reports that other banks are now replicating this model demonstrating the potential for transformational change. The FI's leadership in this field is also demonstrated through another GCPF FI contacting the FI to seek further advice on replicating a similar model.

Supporting transformational impacts for sub-loan recipients and end-beneficiaries

Beneficiaries of sub-loans engaged through this evaluation (where on-lending was directly to individuals or SMEs) reported a range of socio-economic impacts as a result of their GCPF sub-loan. Where sub-loans had financed improved EE technologies reducing their energy costs, or RE technologies or projects improving the access and reliability of energy supplies, recipients were benefiting from increased incomes as a result of enhanced output productivity. An example of this is given overleaf.

Scaling-up of these downstream impacts is also occurring through increased awareness of sub-loan recipients that banks have a role to play in RE and EE financing (although wide scale evidence collection measuring awareness of this was not within scope of this evaluation), and word-of-mouth advocacy driving further uptake of green lending.

Case-study example of downstream impacts in India: Amit, sugar cane farmer: has used GCPF finance to install solar pumps

Motivation to apply for loan: This farmer had seen marketing materials from the Government and through manufacturers for solar technology. He called the pump manufacturer to enquire about solar-driven pumps. As a customer of the FI, he received marketing about their offer to finance solar-technology and he applied for a loan.

Finance received: This farmer received a loan from the PI to cover the cost of 20 solar panels and a 5 horse-power pump.

Direct outcomes of project conducted with GCPF finance received:

- 13 acres of banana plantation now irrigated through a solar-powered pump



Solar PV to power irrigation pump

- 24-hour a day electricity provision, which also powers his family home and new street lights outside and provides solar water heating (battery storage provides him with 3 days back up)
- Crop yield increase of 15-20% (as he can run the solar powered pump for longer than the previous electric-powered pump as the electricity supply in his area is very intermittent, sometimes only providing 2 hours per day).

There is evidence of the potential for larger-scale impacts of the GCPF for securing energy supplies through on-lending to other FIs or large companies. The sustainability of this is undetermined at this stage however, due to a limited evidence base and the early stages of these projects. One example of the GCPF's contribution to the security of supply is an investment in a solar generation facility in Namibia, which has started generating electricity and is contributing to the Namibian power grid; though the long term reliability and affordability of this for beneficiaries is unknown. In another example, the GCPF funding provided a large sub-loan to set up a wind farm project in India, again contributing to the local energy supply.

Energy supply impacts: GCPF sub-loan for wind power in India

Completed in 2016, this loan included an investment in 25 wind turbines (2MW per turbine) that have been erected on the site of a planned 300MW wind farm. The sub-loan recipient company has a 20-year Power Purchase Agreement with the Regional Electricity Board to whom they sell the generated electricity. The 50MW wind project is spread across seven local villages, largely farming villages given the agricultural setting, with small populations of approximately 300-400 people each. A local representative of the Regional Electricity Board indicated that they see the wind farm as a key source of energy, benefitting local villages through increased availability of a steady power supply. It was reported that four hours of load shedding used to be required but this is no longer the case and power cuts have reduced. However, the Regional Electricity Board hope and expect the capacity to increase (the total windfarm is projected to be 300MW, including other funders). With the current availability, they can meet the needs of those residing in an urban area to an extent but require more power to meet the needs of the local both urban and rural populations.

External enablers and barriers to increasing the Fund's transformational potential

There are a number of factors to increasing transformational potential including market competition and consumer demand (which have already been discussed), as well as investor appetite, market conditions and political regulation or mandates (both globally and nationally). These factors combine to both enable and impede transformational change.

- **Political regulation:** The Paris Agreement and the requirement for countries to submit Nationally Determined Contributions is identified as one of the most important enablers of capital markets developing around climate change mitigation activity. The development of in-country policy frameworks for climate, or energy savings, is reducing risks for investors, encouraging foreign investment and providing clear incentive to focus on products such as green and climate bonds.
- **Investee appetite and market conditions:** Senior-level buy-in at FIs or within individual projects or companies, is an important driver of their likelihood of becoming a PI with the GCPF, or replicating its model themselves. For example, in the case of the DI Namibia, this deal with the GCPF was felt to rest on the high-level buy-in from their management team that the RE space was one they wanted to move into. However, they are finding it difficult to replicate the GCPF model because of the particular government requirements. There is also a need for demand and appetite within PIs in order to identify and support key areas of learning and develop capabilities in which to increase the fund's transformational potential.

Assessment of what would have happened in the absence of the fund

The case-study evidence from this evaluation suggests that without the GCPF funding, FIs are unlikely to have developed their green lending portfolios at the same pace and scale; this would have reduced the potential for the types of transformational change set out in this section. The key role of the GCPF has been the TA Facility to support an increase in the capacity of PIs to conduct RE and EE related lending and to provide capital for climate change mitigation.

Longer term outcomes related to this GCPF objective

The GCPF is anticipated to contribute to increasing transformational potential over the longer term through: increased appetite/competition in local market; job creation in the project value chain; and through PIs becoming self-sustainable, and able to financial independently.

In-depth analysis of the local competition was out of scope for this evaluation and so it is not possible to say whether there has been increased appetite for RE/EE investment at a market level. The evaluation case-studies signal that the GCPF has helped facilitate PI entry into the market, however, which may in future influence other non-GCPF funded PIs. There are also examples among the case-study PIs of their appetite being increased to develop other types of green lending. However, only future projects will show how far the PI has indeed sustainably improved its capacity to independently develop such products.

The PIs engaged in this evaluation demonstrated an awareness of the importance of investing in EE and RE sectors within their organisations in order to **become self-sustainable** and continue to push this agenda, yet they realise that this is a long term goal, which creates additional challenges.

A financial institution based in Nicaragua also indicates that there has been a shift in attitudes within the organisation which indicates a desire to **become self-sustainable** in this area. They are encouraging knowledge sharing among employees to support families and neighbourhoods through the GCPF.

“If you ask in Nicaragua about green lines of credits, most potential clients will mention [FI] green line...now we are more aware of the environment, employees are more concerned about the environment. Not only the credit department where employees usually offer this type of investment, but also the other departments...GCPF was like the key that opened the door for this type of investment, for this type of awareness among our clients, among our employees, among the country”- FI

Through the case-studies conducted for this evaluation there are also examples of job creation in the project value chain, for example in the running of the solar plant in Namibia. Further scaling-up of investments and projects is likely to contribute to further job creation, although this would need to be evidenced through ongoing monitoring of the impacts of the GCPF, and its funded projects, over the longer term.

4.3 Assessing the GCPF’s contribution against intended outcomes

Having explored the progress made by the GCPF against its three key objectives, Table 4.1 overleaf now summarises the evidence base at an individual outcome level. This presents the contribution analysis approach taken to assess the role of the GCPF in driving progress towards each of these outcomes, drawing on evidence from five case studies, plus five additional PIs consultations with wider stakeholders and performance level data. This details intermediate outcomes identified in the theory of change and the corresponding assumptions about how the GCPF contributes to achieving these (causal assumption) and early evidence for GCPF contribution. The table also outlines the external enablers and barriers to realising these outcomes.

Table 4.1 Summary assessment of contribution of the GCPF to anticipated intermediate outcomes

INTERMEDIATE OUTCOMES	CAUSAL ASSUMPTION	EARLY INDICATION OF CONTRIBUTION OF GCPF	EXTERNAL BARRIERS & ENABLERS TO IMPACT
As detailed in the Theory of Change for the GCPF	<i>Assumed causal link between the role of the GCPF and the intended outcome</i>	Extent to which hypothesis is supported by evidence <i>Key internal elements of the Fund driving outcome</i>	Other influencing factors that may have contributed to the progress against the outcome
Fund operation level			
Demonstration of implementing financial products in challenging markets	<i>GCPF generates an increased investment pipeline of green lending, demonstrating success of green mandate</i>	The GCPF has supported the increased portfolio of green financial products through lending to PIs. This demonstrates the ability of the Fund to deliver against green mandates to investors. <i>This is due to the design of the GCPF model; combining both financial support and the delivery of technical assistance reliant on close partnerships with PIs.</i>	<ul style="list-style-type: none"> • Political & market environment: levels of government support and incentives, or industry-led marketing, for technologies financed through green lending affects market readiness and demand. • Competing funds: DFIs may offer better or concessional rates to PIs, reducing the number of PIs partnering with the GCPF and so the volume of green lending created (at the target level of emissions savings).
Reduction of risk for other co-investors	<i>GCPF can demonstrate and communicate to potential investors that green lending is lower risk</i>	This has been demonstrated to the GCPF's existing investors through achieving the expected levels of return. However, challenges attracting further (private) investment are related to wider risk perceptions not being shifted. <i>The design of the Fund, with C-class shares to reduce risk, is the key element of the fund by which this is achieved.</i> Communicating the complex structure to potential investors has been a barrier, however.	<ul style="list-style-type: none"> • Co-investor mind-sets: for example, perceiving EE projects, and/or emerging market investment, to be high risk. However, attitudes can be shifted through building knowledge and demonstrating success. • Competing investment opportunities: alternative funds offering lower perceived levels of risk (due to investment location or product type) compete for investment.

INTERMEDIATE OUTCOMES	CAUSAL ASSUMPTION	EARLY INDICATION OF CONTRIBUTION OF GCPF	EXTERNAL BARRIERS & ENABLERS TO IMPACT
Attraction of other co-investors	<i>GCPF is designed in a way that attracts public and private sector investors</i>	<p>The existence of private co-investment into the Fund demonstrates that the GCPF has been able to attract some private co-investors though progress is slow. <i>The demonstration of green impacts, and the location of the Fund in Western Europe, are the key elements of the Fund by which this is achieved (allowing green and/or global investment mandates to be met at lower risk).</i> The rate of public co-investment indicates that there are challenges in attracting additional public co-investment as there has been no new public co-investors since 2013, however, both BMUB and BEIS increased their contributions in 2016.</p> <p>Ongoing perceptions of risk (discussed above) and low financial returns are barriers to attracting additional private investors. This tends to be less of a concern for public investors.</p>	<ul style="list-style-type: none"> • Co-investor mind-sets: for example, perceiving EE projects, and/or emerging market investment, to be high risk. However, attitudes can be shifted through building knowledge and demonstrating success. • Competing investment opportunities: alternative funds offering lower perceived levels of risk (due to investment location or product type) compete for investment.
Shareholder returns generated	<i>GCPF can generate profits and financial returns on investment</i>	<p>The GCPF has generated financial returns and paid shareholder returns in line with expectations. <i>Regular reporting on the GCPF outcomes to shareholders is the key element of the Fund by which this is demonstrated</i></p> <p>Development bank shareholders also consider non-financial returns (i.e. transformational change) such as CO₂ reductions to be a key measure of success.</p>	Not applicable

INTERMEDIATE OUTCOMES	CAUSAL ASSUMPTION	EARLY INDICATION OF CONTRIBUTION OF GCPF	EXTERNAL BARRIERS & ENABLERS TO IMPACT
Enhanced capital markets for climate change mitigation	<i>GCPF successfully lends at market rates to projects which generate in-country energy savings and reduce CO2 emissions helping to mitigate climate change, demonstrate appeal to co-investors and subsequently enhance capital markets</i>	The GCPF demonstrates the potential to enhance capital markets for climate change mitigation (and thus increase the Fund's transformational potential). <i>The key element of the fund for doing so is by lending to PIs who are managing to generate margins (albeit subject to the cost of local currency hedges which it has not been possible to benchmark) in their offer of green lending products to support EE and RE technologies with CO2 emission reduction potential. Where PIs have formed partnerships in the sourcing, distribution and payback of their sub-loans with local supply chains this offers further transformational change potential in local markets.</i>	<ul style="list-style-type: none"> A wide range of factors affect capital markets outside of the GCPF, including investee appetite, market competition, consumer demand and political regulation or mandates (both globally and nationally) which can both enable and impede this outcome.
Standardisation of methodology for CO ₂ monitoring and reporting	<i>The methodology for reporting CO₂ reductions will facilitate a new standardisation of measurement approaches amongst partner institutions outside of GCPF funding</i>	While not a primary benefit sought from the GCPF, this is a co-benefit which could be realised in the longer-term. Many of the PIs engaged in this evaluation have reported the benefits to their organisations of standardised reporting and in a few cases, early evidence indicates that PIs are likely to continue to use these, or spread use of them, beyond their CGPF products. <i>The reporting requirements of the GCPF, and TA delivery to support this, are key element of the fund through which this is being achieved.</i>	<ul style="list-style-type: none"> Barriers and enablers include PIs previous experience with similar tools and level of buy-in, such as through dealings with other MFIs or global funds or on the other hand, conflicting requirements from different institutions.
Partner Institution level			

INTERMEDIATE OUTCOMES	CAUSAL ASSUMPTION	EARLY INDICATION OF CONTRIBUTION OF GCPF	EXTERNAL BARRIERS & ENABLERS TO IMPACT
Increased demand for green lending products from beneficiaries	<i>Partner institutions must increase awareness of suitable new credit lines and financial products appropriate to the market and beneficiaries</i>	The GCPF has enabled PIs to develop green lending products which, on the whole, are being offered at appropriate rates when compared to other offers on the market in the respective geographies. The evidence is currently mixed, however, as to whether the PIs have successfully increased demand for these products – in one case this evidence is missing as the product is yet to be launched, but in others there are mixed reports around levels of latent demand and awareness of the GCPF-supported products. <i>The marketing of green lending products to prospective clients by PIs is the key element of the fund to achieving this outcome.</i>	<ul style="list-style-type: none"> • Government initiatives: either via information campaigns, or in some areas via financial incentives, demand is being driven among consumers, businesses and project developers for technologies financed through green on-lending in some areas. • Industry led marketing and customer advocacy are also driving demand for finance for some newer technologies, although consumer loyalty to certain brands/models or the availability of spare parts is hindering uptake in some cases.
Increased number of green lending products sold to beneficiaries	<p><i>Partner institutions offer suitable new credit lines and financial products appropriate to the market and beneficiaries (net of deadweight and displacement)</i></p> <p><i>TA facility supports PI funding streams to deliver suitable new credit lines</i></p>	PIs engaged in this evaluation had been able to, or were in the process of, developing new credit lines and products earlier to the market than they would have done otherwise. It is too early to see whether this is sustained (with the same level of energy savings being targeted) through new credit lines drawing on other sources of non-GCPF finance or the PI's own finance. <i>The provision of GCPF finance alongside TA support has been the key element of the fund supporting PIs to increase their green lending portfolios. Reporting requirements have also indirectly contributed by improving the capability of PIs to select the most suitable technologies for sub-loans.</i>	<ul style="list-style-type: none"> • Government initiatives: either via information campaigns, or in some areas via financial incentives, demand is being driven among consumers, businesses and project developers for technologies financed through green on-lending in some areas. • Industry led marketing and customer advocacy are also driving demand for finance for some newer technologies, although consumer loyalty to certain brands/models or the availability of spare parts is hindering uptake in some cases.

INTERMEDIATE OUTCOMES	CAUSAL ASSUMPTION	EARLY INDICATION OF CONTRIBUTION OF GCPF	EXTERNAL BARRIERS & ENABLERS TO IMPACT
In-country energy savings realised and renewable electricity generated	<p><i>Increase in the number of EE and RE projects funded through GCPF results in 'in-country' energy savings.</i></p> <p><i>TA delivered by the GCPF will increase knowledge & understanding in green lending practices resulting in increased capacity to develop successful RE and EE projects.</i></p>	<p>The GCPF (and in particular its TAF) has built internal capacity within PIs that has led to the development, marketing and delivery of green on-lending to projects contributing to mitigation of climate change. <i>The requirements placed on GCPF finance, alongside TA support to meet these requirements, has driven green on-lending to projects delivering the required level of energy savings.</i></p>	<ul style="list-style-type: none"> • Drivers of uptake of finance for EE/RE technologies as above. • User behaviour or error: the extent to which deemed energy savings are realised may be affected by a variety of factors, including for example, installation or user error/behaviour (such as maintaining use of older technologies alongside newer funded ones)
Realised CO₂ savings	<p><i>The financing of EE and RE projects through the GCPF, supported in their identification through TA, will deliver the intended CO₂ savings</i></p>	<p>The GCPF (and in particular its TAF) has built internal capacity within PIs that has led to the development, marketing and delivery of green on-lending to projects contributing to mitigation of climate change. <i>The requirements placed on GCPF finance, alongside TA support to meet these requirements, has driven green on-lending to projects delivering the required level of CO₂ savings.</i></p>	<ul style="list-style-type: none"> • Drivers of uptake of finance for EE/RE technologies as above. • Accuracy of reporting • User behaviour or error: the extent to which deemed emissions savings are realised may be affected by a variety of factors, including for example, installation or user error/behaviour (such as maintaining use of older technologies alongside newer funded ones).
Technical Assistance level			
Increased capacity of partner institutions to develop financial products for RE and EE	<p><i>Technical assistance delivered by the GCPF will increase knowledge and understanding in green lending practices resulting in increased capacity to develop successful RE and EE projects.</i></p>	<p>The GCPF has been able to increase the capacity of PIs to provide capital for climate change mitigation. <i>Delivery of TA to support PIs in identifying, marketing and reporting on suitable projects has been the key element of the fund for this.</i></p>	<ul style="list-style-type: none"> • Market competition: a potential barrier may be the availability of TA through other providers, although the evaluation has not been able to capture any evidence of this.

5. Efficiency and effectiveness of GCPF governance and delivery

This chapter examines the efficiency of the GCPF's management overall and its management and delivery of TA activities specifically. It explores the effectiveness of the Fund's overall governance approach as well as its processes in relation to: investment sourcing, assessment and selection, Fund delivery, monitoring and reporting and the TAF.

Summary of key findings: efficiency and effectiveness of the GCPF delivery

Benchmarking of the fees incurred in the management of the GCPF suggests the Fund is being delivered at comparable levels of efficiency to other similar funds; total fees by headcount are comparable to a range of other public and private funding sources.

The governance approach to the GCPF was felt to be fit for purpose and, in particular, to provide rigor to investment decisions. Although this has meant investment time lines are significantly longer than for other commercial funds, this is not adding to running costs of the Fund and was not seen to be at the detriment of the Fund in any other ways by investors, the Investment manager or Pls. Both stakeholders internal to the Fund, and external auditors, praised the due diligence and risk assessment activities which were considered to be more advanced than those in place in other similar Funds.

Investment sourcing and networking has been an area of key focus and heavy investment for the Investment Manager and this remains a challenging aspect of Fund delivery (barriers to engaging further Pls were discussed in Chapter 3). However, once engaged, Pls consulted via this evaluation were positive about the open and transparent lines of communication they have with the Investment Manager; both in the set-up and agreement of their initial investment and on an ongoing basis.

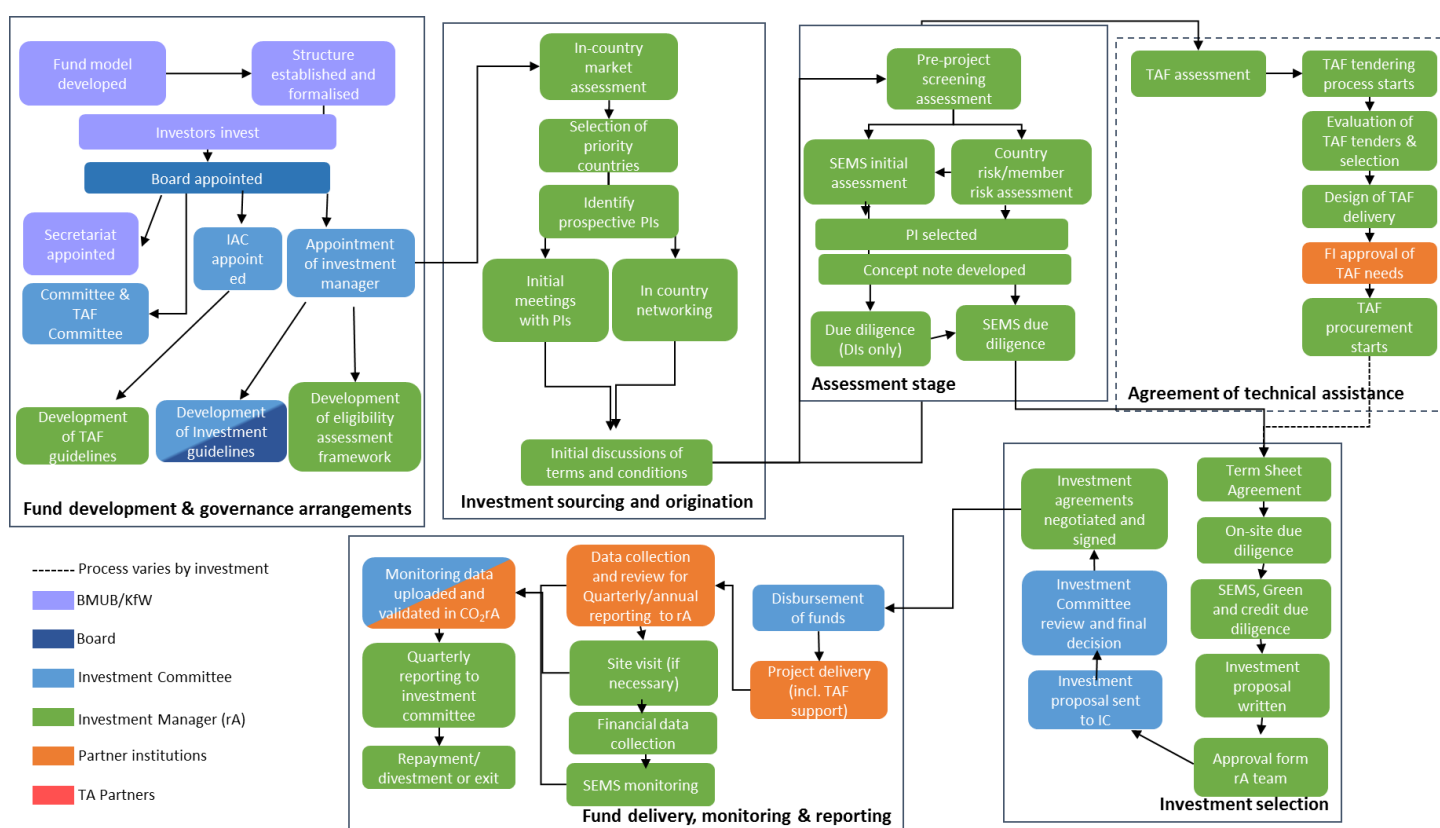
The monitoring and reporting requirements of the Fund were generally clear to Pls, although were found burdensome in some cases, particularly when providing beneficiary details for large volumes of sub-loans. In general, Pls found these processes more unfamiliar than DIs. However, most Pls did not find the requirements technically challenging, although some needed support, which they received from the Investment Manager.

The Investment Manager is looking to streamline the TA process, including pre-approved standard offerings of TA; an example of adaptive management. This streamlining, as well as recent changes to the fee structure for the TA, has helped to bring the costs of delivering TA in line with other TA facilities. While the management fee for TA up to the end of 2016 was similar, but at the upper end, when benchmarked against comparators, the revised approach (in place since the beginning of 2017), benchmarks well especially as some of the

TA projects are small (under \$25,000) which will often require similar levels of management to larger TA programmes.

The key processes involved in the delivery of the GCPF are presented in Figure 5.1. Through the rest of this chapter, evidence regarding the efficiency, effectiveness and relevance of these processes is presented.

Figure 5.1: Process Map



5.1 Assessment of the efficiency of GCPF's delivery

Benchmarking of the fees incurred in the management of the GCPF suggests the Fund is being delivered at comparable levels of efficiency to other similar funds; total fees by headcount are comparable to a range of other public and private funding sources (as shown in Table 5.1²⁸). Further detail and discussion of this analysis is presented in Annex 3.

²⁸ It is important to note when comparing GCPF with all of these comparators that there are a number of challenges. For example, public sector comparators such as CDC, FMO and the IFC offer blended financial instruments (specifically debt and equity). This may make direct comparison challenging. As such, caution should be used in considering these as direct comparators. Similarly, in the case of private sector comparators – few (if any) are working in environments as challenging as GCPF.

5.2 Governance approach and decision making

The governance approach to the GCPF was felt to provide rigor to investment decisions. Although investment time lines were reported to be significantly longer than for other commercial funds (involving decision making processes between five key parties²⁹), this has not added to running costs of the Fund and was not seen to be at the detriment of the Fund in any other ways by investors, the Investment manager or PIs.

Taking the investment committee (IC) as an example of one part of the governance process of the GCPF, while this was considered to be time intensive as it requires additional capacity from the Investment Manager to prepare and quality assure IC reports, this process was valued by some investors and PIs consulted as it was felt to ensure rigor in investment decisions. A small number of PIs highlighted delays incurred as a result of this IC approval process but did not indicate that this had any effect on their decision to continue with the GCPF or effect the deal reached. A recommendation made by one PI to speed up the decision-making process was to allow pre-approval to be arranged for some amendments.

The collaborative approach taken to designing a project with a PI, identifying its TA needs, and ensuring reporting and legal documentation requirements are understood, was also highlighted as a process which is more complex than for standard deals. On average it takes 3-12 months for PIs to complete the investment process and 4-18 months to complete Direct Investments. This compares to 6 weeks to 2-3 months for other funds overseen by the Investment Manager.

In recognition of this, and to encourage engagement with the GCPF from PIs, internal structures have been changed within the Investment Manager to ensure that in each region there is a green lending officer. Feedback from PIs on the support offered by these local posts, where they had been put in place, was positive

5.3 Investment sourcing, assessment and selection

Sourcing investments for the GCPF has largely been achieved through networking based on pre-existing relationships between PIs and the Investment Manager. Challenges have been encountered in the identification of suitable DIs, however. Overall, the GCPF is seen to have a rigorous and sufficiently diligent approach to investment selection and risk assessment on the prospective portfolio.

The Investment Manager has attended up to three presentations and conferences per year to promote the Fund among prospective PIs and on average two presentations or conferences per year targeting DIs specifically.

²⁹ The governance of the GCPF constitutes five key parties: the Board, the Investment Committee, the TA Committee, the Investment Manager and the Secretariat.

A small proportion of the GCPF investment to date has been via DIs (4.2% as of Q2 2017, out of a maximum share of the portfolio set at 30%). The Investment Manager reported DIs to have been more challenging to identify and set up, compared to working with FIs, due to their one-off nature; significantly longer timeframes are needed to work through the requirements, and suitability, of individual discrete projects or companies. The expansion of the loan tenure for DIs from 10 years to 15 years (provided eligibility criteria are in place) has allowed the Investment Manager more flexibility, however, to meet the needs of DIs (a view shared by both the Investment Manager and one DI interviewed).

The Investment Manager and Board reported that it has also been challenging to demonstrate that individual DIs will be associated with a high level of additionality because in some cases DIs may be sufficiently developed at the point of investment and likely to be able to find funding elsewhere.

The tools and standardised assessments that the Investment Manager has developed to assist with investment selection and due diligence were compared favourably to other funds by those internal to the Fund, investors and external auditors. The GCPF, through its requirement for baseline studies, portfolio screening and CO₂ reporting, is seen to have a rigorous approach to investment selection. One investor noted that whilst, *“it can be cumbersome the tools are in place, they are on a good track”*. The assessment and selection process is therefore considered sufficiently diligent and there is no evidence to suggest that unnecessary risks are being taken or that the mandate is not being adhered to.

Among those internal to the Fund, a view was held that the approach to due diligence and assessment has been constantly evolving and improving, due to factors such as development of tools and checks, streamlining of processes and lessons learned from increased experience. Easier access to resources within the Investment Manager, and offices on the ground, were attributed as factors leading to more efficient execution of fund management tasks and closer oversight of potential risks.

Example of evolving due diligence processes:

The due diligence process is considered to be more intensive for DIs as without an intermediary there is no option to spread the risk. It has been acknowledged by the GCPF team that they need more capacity for managing DIs, and there have been recent developments in terms of the make-up of the IC, with two new members joining to replace one outgoing member. Of the two new members, one has specific experience with DIs, the other with FIs, which may lead to better streamlining of workload as well as increasing capacity for DIs.

There have been cases of projects being identified as having unacceptable levels of risk after approval of the FI and in each case the investment was not made as a result.

Examples of risk identification:

In one case, a deal was approved and signed, but a severe deterioration in the country's operating environment (linked to the collapse in oil prices, which led to a sharp devaluation) resulted in several covenant breaches prior to disbursement taking place. Accordingly, the Investment Manager did not proceed with the investment.

In another case a deal was approved and close to signing, but the devaluation of the local currency resulted in heightened operational and banking sector risks. Accordingly, the Investment Manager did not proceed with the investment.

The investors consulted also have a positive view of the portfolio in terms of risk and only one case was mentioned as an exception to this. The payback levels achieved and the subsequent low levels of default across the portfolio (as well as the insurance available for microfinance loans in the case of defaults) were flagged as evidence of this.

Both DI and FIs consulted viewed the initial assessment process, as well as the reporting requirements once the investment had been made, as being burdensome on them, however, in terms of the time commitment required. The PIs offering this view were those who had less experience working with other similar funds or in the EE or RE sector. The communication and clarity of requirements from GCPF at the assessment stage, and in relation to ongoing reporting and monitoring, was generally felt to be good by the PIs consulted in this evaluation however (discussed further in section 5.4 and section 5.6).

5.4 Communication with Partnering Institutions

Most of the PIs involved in this evaluation were positive about, what they described to be, open and transparent communications with the Investment Manager in the set-up and agreement of their investment. Some PIs attributed the successful investment in their organisation to these communications. Feedback regarding the communication more generally between the Investment Manager and PIs was also positive.

In particular, most PIs were impressed by the level of technical expertise and on the ground knowledge that the Investment Manager offered to investees. The majority of PIs reported that prior to their involvement in the GCPF that they had an existing relationship with the Investment Manager and this may, therefore, have contributed to positive communication going forward.

“We have had very good dealings with the Fund, got their support and their understanding. I think everything went very smoothly and whenever we had a problem, [Investment Manager representative] mediated to guide us about what was necessary and in what manner the Fund was expecting the answer. We were guided all the way. Things were made easy because of [Investment Manager representative]” -FI

“GCPF is affordable capital and it's not just a deal, it's a partnership.” -FI

There was also positive feedback from TA consultants about the communications, and technical expertise, of the Investment Manager.

“It is great to work with a funding agency that really understand the work that you’re doing. It’s great when you have a funding agency where you can really bounce ideas back and forth.” -TA Consultant

There was just one instance of a PI, which was now well established in green lending and had been involved in the GCPF for some years, which saw the GCPF as “*simply a source of finance*” and perceived themselves to be the sector experts and by contrast to receive little additional value, in terms of technical expertise or knowledge, from the Investment Manager.

5.5 Efficiency of TA delivery via the GCPF and lessons learned

Among many PIs engaged in this evaluation, the TA provided by the GCPF was identified as the most valued element of the Fund for them. The cost of delivering TA is in line with other TA facilities.

Once deals have been agreed some PIs are offered TA. An assessment of the efficiency of the TAF has involved benchmarking of the management costs incurred by this element of the GCPF against available comparators such as the EIB, IMF and EBRD. This has taken into account that the payment structure for the TAF has recently been changed.

Making a comparison of the proportion of the Fund value expended on TA is challenging due to the range of operating models through which TA is implemented across the potential comparators and the differing sizes of TA projects funded.

The original fee structure for the TAF was higher than most that are comparable such as PPIAF, but in line with some facilities like CGAP and the Cities Alliance, although this does not account for differences in the size of TA projects, as a proportion of the cost is fixed and TAF projects can be smaller in value than the PPIAF. While the TA provided through some funds is at a lower cost of the Fund value, this is generally in cases where the TA is managed on a procured basis. In these instances, TA is procured from a third party (i.e. consulting firm) and managed by the procuring entity but without the procurer being involved in implementation. This is the model largely adopted by PPIAF and the PIDG.

At the higher cost end more of the TA is implemented by the procuring agent and / or more time is spent managing processes that support the implementation of the TA or in sharing or promoting outputs from it. This is the model largely adopted by the Cities Alliance and CGAP.

Overall these comparisons suggest that based on the original management cost model, the TAF under the GCPF was charged at a slightly higher rate than most TA Facilities. However, the revised approach in place since the beginning of 2017, benchmarks well against other comparable facilities. In addition, on the basis that GCPF is more involved in the

procurement and implementation of the TA, a comparison of the costs of this element of the Fund compare relatively favourably to the most appropriate benchmarks.

An assessment of the fees incurred should, however, also be considered in the context of favourable feedback about the value of, and additionality of, the TA the GCPF provides; it was commonly identified by most PIs as the most valued element of the Fund for them.

Lessons learned through delivery of TA

While TA was generally highly regarded and a key selling point of the Fund, the Investment Manager, PIs as well as TA consultants identified lessons learned and possible improvements.

The Investment Manager noted that engaging with PIs (including consideration of PIs beyond those involved in this evaluation) to assess their TA needs can be challenging. PIs may not have a good understanding of what needs they have for TA, and the ways in which TA could potentially support them. As a result of this the Investment Manager is working to develop standardised TA packages that should help provide a more transparent offer of the support available, set clear expectations and explain the potential value to PIs. The Investment Manager also expects streamlined processes with consultants already contracted and available to be deployed as and when support is needed to speed up the process of offering and commissioning TA.

A more standardised and streamlined approach may also allow the TAF to spread learnings to new PIs. More standardised support will draw upon the Investment Manager's knowledge of what works and help them to offer PIs new ideas that they might not have previously considered.

The importance of overcoming these challenges is evident in the experience of one PI consulted. This FI reported that under GCPF they tended to finance standardised investments, which had led them to believe their organisation did not need any TA and to not apply for any support. However, the FI subsequently acknowledges the potential benefit to them of having used the TAF, and so the value in ensuring the offer is understood:

“If we receive proposals from branches to see if their clients are eligible for EE funding, we review the initial phase and say yes or no, but TA could help us. We could get their comment on technical issues, as we are not experts, we are not engineers, so we may be misguided. TA could help us fund more investments instead of rejecting them.” - FI

A lack of clarity over the timings for TA consultancies was raised by a few PIs, and in at least one case was linked to no clear communication stream being established between the two independent TA consultancies commissioned for this assignment.

5.6 Monitoring and reporting

The GCPF requires regular monitoring data and reports from PIs, to ensure they have a comprehensive record of sub-loans financed, including energy efficiency and/ or carbon emission savings. PIs tended to find these processes clear, but found they could be burdensome. This varied according to the previous experience of PIs working with these kinds of tools and the volume of sub-loans being issued. There was also mixed feedback on the perceived benefit gained by PIs in meeting these requirements.

While in general the monitoring and reporting requirements placed on PIs by the Investment Manager were felt to be clear, they were often found burdensome. Views on this differed between DIs and FIs. Both DIs included in the evaluation found the reporting requirements straight forward as they were accustomed to monitoring and reporting requirements on that type of renewable energy, and found that GCPF's requirements were in line with their expectations. These DIs felt that requirements had been fully communicated going forward. However, some FIs found meeting the requirements more difficult – most commonly where large volumes of sub-loans were being administered or where they felt that the reporting requirements had evolved over time. In these cases, there was a desire among FIs to receive further communication from the Investment Manager explaining the value to the Fund of this detailed level of reporting.

Example of FI who found reporting burdensome:

In one case an FI had found that the reporting requirements evolved over time with new requests frequently being made by the Investment Manager which required updates to the reporting processes and templates. This had been found onerous for the FI, particularly given they have issued more than 4,000 GCPF sub-loans and so a small change to the requirements is amplified across a large network of local monitoring officers and recipients.

In general, however, where FIs had experienced difficulties, they found the Investment Manager very receptive in helping them to solve problems. For example, some FIs reported the process to be quite technical, but were able to get support from the Investment Manager in using it.

“They clearly communicated to us, were in touch, they supported us a lot.” -FI

Capacity for **SEMS monitoring and reporting**, and consequently the burden this placed on PIs, varied. Overall, the SEMS requirements were seen to strengthen internal processes for less experienced PIs.

In some cases, for example where PIs were already borrowing from the IFC, SEMS monitoring and reporting processes were already established in PIs, meaning such requirements for the GCPF were easy to meet. Another PI was supportive of the GCPF's requirements around this as it provided a ***“new way of thinking and updating internal***

procedures". TA was needed to support some PIs with less experience of green lending and the associated frameworks to help them meet the SEMS requirements of the GCPF.

Case-study example of alignment of GCPF requirements with other funds:

In one case a FI had an established Environmental and Social and Governance framework and a dedicated team focusing on this which provided the necessary tools and support for the transaction team. The ESG was set-up in 2013, just ahead of GCPF's investment, when the IFC became an investor into the FI. The requirements of GCPF were subsequently found to align fairly closely with the IFC requirements (although placing a greater emphasis on energy efficiency reporting), as well as those of CDC and ADB who are also investors in the FI.

In some cases, PIs also reported having to overcome a learning curve in order to be able to use the **carbon reporting tool**, but after an initial learning period they find it easy to use.

Case-study example of using the Carbon Reporting tool:

In one case, a PI was hampered in their use of the carbon reporting tool by their IT security procedures meaning they were unable to access the tool webpage. An alternative process was set-up with details of investments sent in a spreadsheet to the Investment Manager who then calculate the savings for the PI. While this reduced the burden on the PI, it meant the PI did not receive feedback on CO₂ savings, and which lines in the portfolio were deemed eligible for GCPF. This has restricted their capacity building in understanding CO₂ savings and serves to demonstrate the potential value of the tool when in use.

6. Conclusions: summary of the GCPF's mid-term effectiveness and impact

This section summarises the key findings from the mid-term evaluation of the GCPF. It details evidence of early signs of success for the Fund against its objectives and considers the extent to which external factors have helped or hindered these achievements.

6.1 Summary assessment of the GCPF's relevance, efficiency and effectiveness

The progress and achievements of the GCPF to date are first considered against the three DAC criteria for assessing development assistance programmes: Relevance, Efficiency and Effectiveness³⁰.

Relevance: The GCPF is a relevant model for supporting Partner Institutions (PIs) in their development of green lending pipelines. There remain challenges to leveraging the private sector at pace, which in the case of the GCPF relate to communicating the complexity of the Fund structure, and the low level of returns it is able to deliver (when balanced by potential investors against perceived levels of risk). The relevance of the model is also not yet proven among Direct Investments.

The GCPF is meeting the needs of its PIs and is helping them to overcome tangible barriers. Through both the provision of finance and Technical Assistance (TA) the GCPF supports the development and implementation of green lending products. Increasing green lending is often a shared goal between the PI and the Fund, further demonstrating the relevance of the GCPF in meeting the needs of its PIs: PIs engaged in this evaluation often had a vision or mandate to do this but had not progressed their green lending at scale or pace prior to the GCPF due either to constrained capital or limited skills and knowledge in how to do so.

The relevance of the model for Direct Investments is less well evidenced; 4.2% of the GCPF's investment has been lent directly to energy efficiency and renewable energy projects or companies³¹ (within the set maximum of 30%). While these investments are proving harder to identify and due diligence, an evaluation case-study focused on a DI provides initial evidence about the positive role played by the GCPF in supporting that project.

³⁰ As detailed in Chapter 2, the objectives set for this mid-term evaluation were framed against the first three DAC criteria. An evaluation of the GCPF in the longer-term would be expected to assess the achievements of the Fund against the fourth and fifth DAC criteria (Impact and Sustainability).

³¹ Source: Q1 2017 GCPF report.

The PIs engaged through this evaluation are offering GCPF sub-loans at comparable market rates demonstrating that green financing is managing to compete with other finance products available to sub-loan recipients which do not meet the same green credentials. and it is possible that for some PIs the GCPF loan is loss-making once local currency hedges are accounted for. The overall rates of return from the Fund (around 3.5% depending on share class³²) do not compare favourably to other (higher return, and often perceived to be lower risk³³) investment options, however; reducing the attraction (and potential relevance) of the GCPF particularly for private investors.

Effectiveness: The GCPF is effectively supporting the development of green lending pipelines which are driving uptake of energy efficiency and renewable energy technologies with associated emissions reduction as well as other socio-economic transformational potential. It has been less effective, however, at attracting private investment into the Fund which is required to sustain the Fund and demonstrate commerciality.

Key factors that are contributing to the effectiveness of the GCPF overall are: the provision of TA to identify suitable technologies which provide the desired level of energy savings (and which, in many cases, would not be financed in the absence of the Fund); the ability of partnering Financial Institutions (FIs) to make sub-loans which offer transformational potential (where this is being achieved most effectively, FIs are effectively using existing networks, supply chain organisations, word-of-mouth and advocacy activities as well as industry events). External factors further influencing the achievement of the Fund's objectives include alignment to local and national incentives, consumer demand and market readiness.

A key area for further focus is the attraction of private capital into the Fund. This has been discussed above when considering the relevance of the GCPF model to the investor market, and is further explored in the assessment of the GCPF's progress against its objectives.

³² Publicly available data on returns in the Q1 2017 GCPF report 3.48% returns to A Shares and 3.6% returns to B Shares.

³³ While the presence of C-shares within the GCPF structure aims to lessen perceptions of risk, and demonstrate a relatively more appealing risk to return ratio, it is challenging to quickly and concisely communicate this set-up to potential investors. Funds offering higher returns in non-emerging markets and in more established technologies than the GCPF are likely, therefore, to be perceived as having more favourable risk to return ratios.

Efficiency: Overall the GCPF has made good progress against its desired outcomes and, in spite of complex governance processes and longer investment timelines, has done so at comparable levels of efficiency to other funds. There are concerns among PIs however, about the efficiency with which they are able to meet the GCPF's requirements.

As of 30th September, the GCPF has invested \$488 million in 28 partner institutions (including three direct investments) across 24 ODA eligible countries³⁴. Among the PIs investigated through this evaluation, the GCPF has supported them to increase their green portfolios at a faster rate, and achieving greater emissions reduction, than is likely to have occurred in the absence of the Fund. The GCPF is found to have been efficient in the achievement of these goals; management costs (analysed based on total fees by headcount) for the delivery of the GCPF are comparable with other similar Funds. The management fee for TA in place since the beginning of 2017³⁵ also benchmarks well against other comparable facilities.

It will be important, however, to ensure processes are reviewed on an ongoing basis to keep them as streamlined as possible. This is particularly true of the TA offer under its new fee structure, and making sure its efficiency is maximised by assisting PIs in fully valuing the support it can offer and the outcomes it can drive.

PIs would welcome any support, or sharing of learning, that can help them to improve the efficiency of their involvement in the GCPF, and in particular their efficiency in meeting the monitoring and reporting requirements. This may help attract and retain PIs.

6.2 Summary assessment of the GCPF's progress against its objectives

This section summarises the evaluation evidence against each of the GCPF's three key objectives to provide an assessment of its progress towards each.

Objective 1: Mobilising and attracting more private and donor investment at fund level

The GCPF has been able to attract private financing but this remains a key challenge.

The involvement of the UK, German and Danish governments has been key to reducing perceptions of risk associated with the Fund, and in so doing, attracting private capital. The location of the Fund based in Western Europe is also attractive as it provides an opportunity for investment in developing and middle income countries (meeting mandates around having global, and sometimes green impact), without doing so directly. Generating financial return for shareholders as loans are being repaid in the short term also helps to generate interest in the Fund.

³⁴ http://www.gcpf.lu/files/downloads/quarterly_reports/2017/Quarterly_GCPF_Q32017.pdf

³⁵ Analysis of the fees incurred in the delivery of TA up to 2017 were also found to be broadly comparable, although towards the upper end of comparators reviewed.

The low number of new private co-investors over the lifetime of the Fund demonstrates a need to consider additional strategies for attracting more private finance, however. Complexities in the Fund set-up, and the challenge of explaining this to investors (who are often time-poor, and may prioritise simpler propositions), as well as its lack of an independent rating are likely to continue to hinder this as they make the Fund less accessible and appear less reliable. Offering low levels of return within this context further reduces the attraction to investors.

Progress has been reported by the Investment Manager's Sales team in engaging investors through more streamlined communication approaches. This has not, however, been able to be independently assessed due to challenges engaging the investment community in this evaluation. Recommendations for evaluating this in the longer-term are provided later in this section.

Objective 2: Increase in number of energy efficiency or renewable energy investments

The GCPF has supported PIs to develop successful green credit products that finance energy efficiency (EE) and renewable energy (RE) technologies that meet the required emissions reduction targets. The dispersal of over \$418 million in sub-loans for assets that result in emission reductions of almost 435,000 tonnes of CO₂ per year and energy savings of over 5344,000 MWh demonstrates this to have been achieved. Where PIs engaged in this evaluation were already working on green credit products, the GCPF provided the required knowledge that accelerated development and led to marketable products. It also ensured the technologies being financed met emission reduction targets which are not likely to have been met in the absence of the Fund. Further discussion of the additionality of the outcomes supported by the GCPF is presented later in this section.

Together, the approach of the GCPF to work directly with local financial institutions and the offer of TA, as well as ongoing support and involvement from the Investment Manager (which in most cases is considered well targeted and aligned to an understanding of local markets), has been an effective model for achieving the key goal of encouraging private sector lending to facilitate EE and RE projects. The delivery of 54 TA projects (with six additional projects approved in Q1 2017), in particular has supported PIs to develop more diverse green lending portfolios. TA has supported the development of businesses cases for EE and RE and put in place monitoring and reporting processes, which if sustained, could assist new products being added if wider market factors and business priorities within PIs remain favourable. There is also opportunity for PIs to use the information they collect about the impact of their sub-loans for further marketing of their green products. A few PIs consulted through this evaluation are doing this to build awareness and increase their green lending pipelines.

In the longer term, while there is evidence that PIs have increased their sale of green lending products using the GCPF finance, it is too early to see whether this is sustained through new credit lines drawing on other sources of finance or the PI's own finance. However, it is

important to note that a crucial condition for successful placement of green loans is the existing relationship between a PI and the end-beneficiary. The focus on identifying opportunities within existing PI's portfolios is a good first step to sell green loans.

Objective 3: Likelihood of the Fund's future transformational impact

There is stronger evidence to-date of the GCPF's transformational potential at a local level (for PIs and the recipients of sub-loans), than at an overall market or Fund level.

At a **Fund level**, the GCPF aims to grow the size of the Fund, as well as encourage replication of its model, in order to achieve sustainable markets for low carbon private investments. It has achieved some success in mobilising further capital and building the size of the Fund as well as expanding its geographical coverage, disbursement of loans and number of sub-loans. This offers potential to see larger-scale demonstration of impacts and market reform over a longer period, although this would be further enhanced through attraction of higher numbers of private investors and volumes of private capital. While the GCPF demonstrates potential for replicability of its model through its increasing returns since 2013, it is too early to expect to see this replication taking place.

Local level transformational change potential has been explored through the five case studies with PIs conducted during this evaluation. While these offer examples of small-scale transformational change – for PIs themselves, the markets in which they operate, and the beneficiaries of sub-loans - it is important to be cautious when extrapolating these findings across the wider Fund.

- **Replicability of financing model at PI level:** The TA facility has been instrumental in building and increasing capacity and capability within PIs. This offers the potential for green lending to be replicated with additional technologies and/or new credit lines. This potential is already being realised to some extent; a few PIs consulted for this evaluation are considering further products to add to green pipelines having built their capacity and demonstrated success through returns. Demand-led replicability may also occur as in some areas beneficiaries are promoting the positive benefits of EE and RE products and encouraging further interest in green financing.
- **Replicability by others in country and more widely:** There is some evidence to date of the potential for FIs beyond those already involved in the GCPF to replicate this model of delivering green lending. There are examples of PIs boosting awareness of the GCPF model within their communities and examples of other FIs seeking advice and information on the model being adopted. Where PIs have developed partnerships with local supply chains this also offers potential for further growth and strengthening of local markets for green lending products. A longer-term evaluation of the impact of the GCPF would need to gather evidence on the extent to which replication has occurred.
- **Transformational impacts for sub-loan recipients:** Beneficiaries engaged through this evaluation reported a range of socio-economic impacts as a result of their GCPF

sub-loan. Where sub-loans had financed improved EE technologies reducing their energy costs, or RE technologies or project improving the access and reliability of energy supplies, recipients were benefiting from increased incomes as a result of enhanced output productivity.

6.3 Contribution made by the GCPF to its targeted outcomes

The evidence from this mid-term evaluation of the GCPF suggests the Fund is contributing to CO₂ savings that would not otherwise have been brought about at the same rate. It is achieving this by increasing the pace and quality (in terms of the green credentials) of lending by making its financial support conditional on stringent eligibility criteria. While PIs are likely in many cases to have sourced other finance, the requirements, and the overall package of the GCPF support including TA to identify suitable emissions-saving technologies, has increased the contribution it has made to its targeted outcomes.

This section assesses the contribution made by the GCPF to its targeted outcomes based on the case study evidence gathered during this evaluation. As this is based on a small number of PIs, it is difficult to determine the extent to which the GCPF has contributed to (additional) CO₂ reductions across all of its investments but this provides an indication of some of the key ways in which the GCPF can be expected to contribute to this as well as some barriers the Fund may face in demonstrating this.

A key aim for the GCPF is to generate CO₂ emission savings through the financing of energy efficiency and renewable energy projects that would not have been funded without the GCPF support. This support can be considered either as financial or technical and the additionality of the outcomes of this support is not simply based on whether or not the project (and associated outcomes) would have happened or not, but whether it would have happened at the same time, scale and with the same scope (achieving the same level of emissions reduction, for example), as well as whether any increased knowledge or capacity building would have been achieved in the absence of the GCPF.

The evidence gathered by this evaluation suggests that the GCPF has contributed to CO₂ savings – both in terms of overall volume of emissions (as non-GCPF supported lending is unlikely to have met the same emission saving levels) and the timing with which this emission saving has been brought about (as GCPF has accelerated the implementation of green lending).

While case study evidence indicates that alternative finance was available in at least four out of the five PIs, the overall package of GCPF support, including its TAF has enabled it to contribute to CO₂ savings. The TA has been a key means of achieving this, by for example, helping to develop internal manpower, identifying existing products which can be marketed or setting up new green lending departments and mandates.

Where case-study PIs reported that their project would have been funded in the absence of the GCPF this was usually with differences in key characteristics, in particular lower thresholds for CO₂ savings and less reporting and monitoring requirements as well as being financed at a slower rate meaning CO₂ reductions, and also outcomes for end beneficiaries, would have taken longer to be realised. In several cases different technologies might have been employed which would have resulted in lower CO₂ reductions.

6.4 External enablers and barriers to the realisation of intended impacts

Two main external contributory factors identified by the evaluation that are interacting with the GCPF to impact on the success of the Fund are the existence of: other incentives driving demand for green lending products; and competing capital in the case of PIs, and competing levels of return in the case of investors.

The GCPF supports new (innovative, clean) technologies in upcoming markets. It aims to help these technologies to gain market share and contribute to further market penetration. Government initiatives, either via information campaigns, or in some areas via financial incentives (including subsidised technology costs), is driving demand among consumers, businesses and project developers for technologies financed through green on-lending in some areas. Where PIs are aware of, and able to align the development of green credit lines to, any local and/or national government incentive schemes, this is therefore supporting an increase in market penetration of EE and RE technologies and the uptake of green loans. Industry-led marketing and customer advocacy are also driving demand for finance for some newer technologies. Again, where PIs are developing partnerships with supply chain organisations, and working closely with early adopters and influencers, this is maximising demand and take-up of sub-loans.

Market readiness can be a barrier for green loans however. This can be caused by either a lack of understanding of the (financial) benefits of clean technologies, or if PIs do not have the manpower (or capacity/management attention) or skills (knowledge and experience) to focus on the development of green loan products.

PIs often consider the GCPF capital to be expensive due to the availability of cheaper concessional financing through development banks and the costs of local currency hedging. This poses a risk for the attraction of further Partner Institutions and also for the retention of some existing relationships which would affect the scale of impact achieved by the GCPF

7. Recommended actions for fund management and ongoing evaluation

This section provides two sets of recommendations: firstly, recommended actions to the Fund and its Investment Manager to further maximise the impact of the GCPF; and secondly, suggested activities for the evaluation of the Fund over the longer term.

7.1 Recommendations for enhancing effectiveness, efficiency and relevance of the GCPF

This section provides suggested specific actions based on the evaluation evidence for ways in which the GCPF could further improve the effectiveness, efficiency and relevance of its set-up and processes in order to maximise outcomes and impacts in the longer-term. The recommendations are split out into key areas of the Fund's activities and are presented as suggested actions for the Investment Manager.

a) Communicating the Fund to investors: Streamline presentation of fund structure

Finding: The GCPF³⁶ has a complex fund structure which can reduce its attractiveness as an investment prospect, particularly among private investors.

Suggested Actions:

- Develop presentation of the GCPF offer to investors in which the fund's structure is clearly and concisely explained. Include upfront within this communication, the relevance and value of the Fund's location in Western Europe.
- Discussion on the potential to combine A and B shares as one step towards a more streamlined offer for investors, and whether lower returns to B-shareholders could provide higher returns to the private sector.
- Consideration of how to further reduce the potential costs of local currency hedging to allow greater capital deployment.
- Utilise networking events such as the GCPF Academy for existing co-investors to share first-hand experience of the Fund to potential co-investors in an effort to alleviate any concerns held.
- To further widen the potential pool of interested investors (who may have a range of mandates), the Fund could consider expanding the reporting of co-benefits from the GCPF. PIs engaged through this evaluation noted the benefits of their GCPF-supported on-lending in driving wider sustainability goals, such as water conservation or air

³⁶ Due to its single fixed income class and three share holder classes

pollution mitigation, as well as socio-economic goals around increased production. It is understood that CO₂ savings are core to the vision of the GCPF but it may be fruitful to use reporting to tell broader stories of impact and co-benefits that could help tap unmet demand in the investor market.

b) Diversity of Fund portfolio: Where Direct Investments are pursued, design these in appropriate way to maximise likelihood of deal success, additionality and replicability

Finding: A small proportion of the GCPF investment to date has been via Direct Investments (4.2% as of Q2 2017). While the FI route is likely to more effectively drive the aims of the GCPF for capacity building and replicability (through green lending portfolio development), the DI case-study conducted during this evaluation demonstrated positive (and additional) impacts from the GCPF support provided. It also highlighted the potential value of a hybrid approach (detailed further below) suggesting there may be room to grow this area of the portfolio (up to a maximum of 30%) in a way that effectively contributes to the GCPF objectives.

Suggested Actions:

- Learning can be taken from the blended model adopted by the GCPF in Namibia in order to have the potential for further replicability through the DI approach. Here, an intermediary FI was the recipient of the GCPF investment which was then on-lent to a discrete project (as a Direct Investment). Under this approach, the GCPF can contribute to capacity building as the intermediary may be able to replicate the approach to other projects they are working on. In the Namibia case-study this also helped to overcome currency risk.
- If there is agreement across the Fund to expand the DI portfolio some key actions required to achieve this are likely to include:
 - Consider local currency financing (with hedging of currency risk) to help attract further DIs by meeting unmet demand for this type of investment.
 - Maintaining the extension of the tenure length for DIs (now up to 15 years if eligibility criteria are in place). The Investment Manager has already found this is opening up more possibilities as it better suits the needs of a typical DI investment plan.
 - Building in additional time into the process through which staff at the Investment Manager close deals. This is needed to work through the complexities of the fund with DIs, and the additional requirements placed on them (for example around due diligence), and will be important to reduce the risk of losing prospective DIs.

c) Role of Investment Manager: Maintain effective relationships with PIs

Finding: The Investment Manager, and particularly its role in delivering both formal TA and more informal ongoing support, is seen as crucial to the success of the Fund. There was sometimes a lack of clarity for the PIs, however, about the future intentions of the Fund.

Suggested Actions:

- The evaluation team recommend no change to the Investment Manager role or any major changes in governance arrangements.
- Any changes to the ambition, scale or structure of the Fund should be communicated as early as possible to all parties involved. The appetite of the Fund – in relation to the intended size, number and repeat of future investments to PIs - was not always clear and so any changes should be communicated explicitly to PIs. Though given the range of factors, and changing circumstances, that can affect the extent to which financing from the GCPF goes above and beyond what would happen anyway in the absence of the Fund, it is important for second tranches of loans to be re-assessed for additionality.

d) Delivery approach: Continue to refine investment process and support a speeding up of key processes involved in due diligence and risk assessment

Finding: The collaborative approach taken to designing a project with a PI, identifying its TA needs, and ensuring reporting and legal documentation requirements are understood to involve processes which are more complex than for standard deals. On average it takes 3-12 months for PIs to complete the investment process and 4-18 months in the case of Direct Investments. This compares to 6 weeks to 2-3 months for other funds overseen by the Investment Manager and, as such, the GCPF process was deemed lengthy and time consuming by both PIs and the Investment Manager.

Suggested Actions:

- Consider allowing pre-approval for some amendments in order to speed up the decision making process.
- Continue to ensure that in cases where the GCPF due diligence and risk assessment processes are running alongside PI internal processes that these are synthesised where possible to reduce timescales and burden on PIs.
- When working with DIs it is particularly important to draw on lessons learned to help them in running an efficient process; for example, by sharing knowledge about the risk profile of technologies, or sharing lists of due diligence consultants that PIs have previously worked with.

e) Technical Assistance offer: Improve the clarity and communication of the TA offer

Finding: Some PIs do not see the value of commissioning TA and do not understand the potential benefit to their organisation. This can also result in issues for the Investment Manager in engaging PIs to assess their TA needs and in relationships between PIs and the appointed TA consultants.

Suggested Actions:

- Improve the clarity of the TA offer to PIs and encourage more involved engagement from PIs in assessments of their own support needs. The planned standardisation of TA packages is likely to assist with this need to be clearer about the potential options available to PIs. This will also provide greater opportunity for TA consultants to build relationships with PIs as a result of clearer specifications and timetables.
- Case-studies of how various types of TA support have been of value, and driven impact, for other PIs could also be considered.
- Early communication of the time requirements from PIs during the set-up of TA to ensure PIs give sufficient time and engagement.
- Continue close review of the ongoing TA needs of PIs through a more formalised process to ensure that all opportunities are being taken to ensure that PIs have the tools to sustain the impact of the GCPF.

f) Driving uptake of sub-loans: supporting PIs to generate further demand

Finding: In some areas consumer demand is lagging behind the availability of EE and RE technologies and the green lending being developed to support uptake of these. Additional actions can be considered to drive further uptake of the GCPF sub-loans:

Suggested Actions:

- Promote training of PI staff, and offer this through TA, on the end-user benefits of EE and RE technologies. Alongside this, encourage PIs to learn more about current levels of demand, the existing market and the availability of any aligning incentives (from government or industry) for the technologies being financed by their sub-loans; consider whether there is a role for TA in supporting this.
- Facilitate the sharing of experiences between PIs of effective ways they've found to market their sub-loans. This could be achieved through GCPF Academy presentations, or circulated case-studies, sharing:
 - effective marketing messages (around benefits of EE)
 - effective strategies (e.g. use of early adopters / influencers to get word of mouth advocacy spreading across communities)
 - use of supply chain organisations (to maximise use of network links)

g) Eligibility requirements for on-lending: Consider higher capacity energy projects

Finding: The cap of 50MW for generation capacity was not considered to be appropriate for the Indian market with one of the PI's interviewed wanting to see higher capacity energy projects supported by the GCPF; 100MW was suggested for wind energy projects

Suggested Action:

- Consider reviewing generation capacity limits to assess whether this can or should be amended.

h) Knowledge sharing: Enhance value of being part of GCPF community through further knowledge sharing

Finding: There is a desire from PIs for more sharing of learning within the GCPF ‘community’ – for example, process learning around the most efficient way of automating reporting requirements.

Suggested Action:

- Encourage use of the new online platform being launched – consider how it can help to facilitate connections between PIs who may be relevant to one another (for example, PIs working in similar sectors, on-lending similar types of technology or to similar types or volumes of beneficiary).

h) Maximise PI engagement in reporting: Improve communication on value of requirements

Finding: Some PIs have faced challenges in reporting and monitoring their GCPF supported on-lending and feel the requirements are over burdensome (most commonly where their GCPF investment is spread across a large number of individual sub-loans).

Suggested Action:

- Explain the value and purpose of the reporting requirements, both to the GCPF at an overall fund level and for PIs themselves (for example, in helping attract future investors or for marketing their products).

7.2 Recommendations for future monitoring and evaluation

This section considers areas related to the delivery and impact of the GCPF which warrant further investigation given the short time frame over which the mid-term evaluation was conducted and the relatively early timing of this in relation to the period over which the longer-term impacts of the Fund are anticipated to be realised.

Recommended areas for further investigation

- **Strategies for attracting private finance:** While this evaluation has assessed the suitability of the GCPF structure and offer for attracting private investment, additional research could be conducted to further facilitate the development, implementation and assessment of new strategies to attract more private financing. Evidence during this evaluation was gathered from existing investors into the GCPF, so future evaluations could build on this by engaging a wider pool of potential investors to further identify key barriers and drivers. A review of the extent to which similar funds are growing and attracting potential investors could also be conducted under further evaluation work.
- **Supply chain effects:** The GCPF supports new (innovative, clean) technologies in upcoming markets. This is expected to help gain market share and contribute to further

market penetration resulting in (further) development of local value chains (e.g. suppliers, maintenance providers). There are examples of this already happening, for example through a PI in India linking up with machinery suppliers. This ensures that value chains become sustainable as long as market share remains. The existing scope of the evaluation did not address the impact of the GCPF on the supply chain and this could be considered within future evaluative work. It would warrant further investigation to assess the feasibility of evaluating this in greater detail given the potential challenges of attributing impacts to the GCPF specifically but an estimation of this impact may be feasible from analysis of financial data from supply chain organisations against monitoring information on the volume, and purpose, of GCPF sub-loans.

- **Impact of the GCPF by project type:** Only a limited number of GCPF funded projects were able to be explored through this evaluation (five through in-depth case-studies). Future evaluation would benefit from a more detailed assessment of the role and impacts of the GCPF across different types of projects. This would involve developing a set of project typologies of the GCPF investment (for example, by geography, type of technology funded, type of beneficiary targeted, typical size of sub-loan) and conducting a larger number of case studies (the number conducted would depend on available budgets and timescales, but indicatively in the order of 20 to 25 across 5 key categories) or a quantitative survey among PIs (and possibly end-beneficiaries) to capture information for which sub-group analysis would be possible.
- **Impact on labour market (job creation and gender equality):** Existing evidence has been limited in terms of labour market effects of the GCPF. Quantitative research with project end-beneficiaries would ideally be carried out to explore this effect.
- **Assessment of socio-economic impacts for end-beneficiaries:** More substantive research is also recommended into the impact of the GCPF once it reaches end-beneficiaries. Capturing additional contact information for this group would provide an initial starting point for further evaluation.
- **Sustainability of the GCPF impacts:** Within the scope of this evaluation, the team has explored the effects of the GCPF at one point in time and it is therefore not possible to state whether effects have been maintained over a longer time period, efficiencies have increased or whether projects financed have been able to maintain the outcomes realised (i.e. reduced CO₂ emissions, security of energy supply). Longitudinal research, collecting evidence at key points throughout the lifecycle of the fund, will enable GCPF to track changes over a long period and pinpoint whether the intermediate outcomes continue to be realised and whether longer term outcomes and impacts have been realised.
- **Additionality of the Fund:** As discussed in Chapter 4, a contribution analysis approach to assessing the impact and additionality of the GCPF has been conducted. Other forms of assessment were discounted due to lack of feasibility or robustness. However, as the Fund grows it may be possible to implement some of these approaches; for example, identifying a counterfactual group if demand outstrips available investment or support capacity.

Suggested evaluation tasks:

In order to explore the areas noted above, the evaluation team would recommend the following evaluation tasks:

- **Additional set of interviews with investors:** building on the current evaluation by engaging both investors associated with, and unconnected to, the GCPF in order to identify drivers and barriers to investment into the Fund to support developing further strategies for attracting private finance. This would require further exploration but may include approaching investors who are members of groups such as the Global Investor Coalition on Climate Change or SIFs (e.g. Eurosif) as well as drawing on the Investment Manager and Board's own networks.

Timescale: this is not reliant on any fund specific activities and therefore could be conducted at any point

- **Periodic data collection** such as consultations and/or surveys with key audience groups (e.g. board members, committee members, investment manager, partner institutions and end-beneficiaries) in order to track the longitudinal impact of the Fund. This would draw on the impact evaluation framework to assess longer term impact over time.

Timescale: the data points selected would be contingent on budget, key evidence required and burden on those involved. The evaluation team would recommend collecting periodic data at the most every 6 months.

- More detailed **collation of end-beneficiary and supply chain contact details** by PIs and the Investment Manager in order to aid research among these groups. The additional burden this may place on PIs should be considered however, and the feasibility of this is likely to depend on the extent to which this process becomes more automated for PIs. If feasible, this would be used to conduct the following key tasks:
 - Survey among end-beneficiaries to assess labour market effects not currently captured.
 - Interviews with supply chain organisations involved in the GCPF financed projects in order to assess supply side effects.

Timescale: Surveys among end-beneficiaries could be conducted at the point at which projects receive funding and at the close of the project. Due to the varied timescales for these projects, we would recommend conducting these surveys in batches dependent on project start and end dates. Among the supply chain, interviews could similarly take place using a pre and post model and would need to be linked to project start and end date.

- **Develop a project typology** drawing on the GCPF sub-loan portfolio collated by the Investment Manager in order to support project level analysis of the impact of GCPF across different types of projects (i.e. EE vs RE, off grid vs. on grid, geographic area etc.).

Timescale: this is not contingent on fund specific activity; however, this is likely to need updating regularly to ensure the portfolio information is accurate.

- **Increase the number of case studies conducted or implement large scale survey** among PIs to facilitate sub-group analysis and provide more substantive evidence of outcomes realised.

Timescale: this could be aligned with key activities or milestones of the Fund i.e. 5 years since the Investment Manager took over or a specific number of loans or volume of investment has been disbursed.

- **Identify and consult with any PIs who consider but do not take finance from the Fund** (or unsuccessful PIs where these exist, for example if demand outstripped supply) to assess additionality of the Fund and lessons learned. Identifying and sampling this group would be contingent on the number of, and reasons for, PIs falling into these circumstances.

Timescale: this is contingent in PIs becoming available which meet these sets of circumstances.

Table 7.1 below presents the potential performance measures which could be used to monitor progress over time against the intended longer-term outcomes and impacts of the GCPF. These would need to be integrated with the GCPF reporting processes already in place to avoid duplication, and maximise the value of those reporting outputs to a future longer-term evaluation of the Fund.

Table 7.1 Evidence required to track performance against outcomes periodically

LONGER-TERM OUTCOMES AND IMPACTS	POTENTIAL PERFORMANCE MEASURE(S)	Limitations for measurement
INCREASED CLIMATE FINANCE MOBILISED	<ul style="list-style-type: none"> ▪ Volume of public and private finance mobilised for RE/EE purposes ▪ Collation of perceptions through interviews among board and committee members ▪ Collation of perceptions through interviews among investment manager 	<p><i>Availability of comprehensive data at required level of detail</i></p> <p><i>Ability to attribute GCPF interventions to the list of potential external factors</i></p>
INCREASED APPETITE FOR GREEN LENDING AMONG PRIVATE INVESTORS	<ul style="list-style-type: none"> ▪ Number of private investors in target countries active in green lending ▪ Collation of perceptions through interviews among board and committee members ▪ Collation of perceptions through interviews among investment manager 	<p><i>Availability of comprehensive data at required level of detail</i></p>

Recommended actions for fund management and ongoing evaluation

INCREASED INVESTMENTS IN RE AND EE BY PRIVATE SECTOR	<ul style="list-style-type: none"> ▪ Volume of private finance mobilised for RE/EE purposes ▪ Collation of perceptions through interviews among board and committee members ▪ Collation of perceptions through interviews among investment manager 	<i>Availability of comprehensive data at required level of detail; confidentiality of data</i>
REPLICATION OF GCPF REPORTING STANDARDS FOR CO₂ MONITORING	<ul style="list-style-type: none"> ▪ Number of other funds or orgs. using reporting standards ▪ Collation of perceptions through interviews among shareholders ▪ Collation of perceptions through interviews among investment manager 	<i>Possible confidentiality of monitoring and reporting standards/ methodologies.</i>
DEMONSTRATION OF FEASIBILITY AND PROFITABILITY OF RE AND EE INVESTMENT (BARRIERS MANAGED)	<ul style="list-style-type: none"> ▪ Cumulative annual Energy Savings (MWh/yr) of loans disbursed since inception of the Fund ▪ Amount of climate finance required for ongoing activities ▪ Collation of perceptions through interviews among investment manager ▪ Collation of perceptions through interviews among partner institutions 	<i>Availability of information; confidentiality of data</i>
INCREASED APPETITE/COMPETITION IN LOCAL MARKET	<ul style="list-style-type: none"> ▪ Number of financial institutions active in EE/RE funding ▪ Collation of perceptions through interviews among investment manager ▪ Collation of perceptions through interviews among partner institutions 	<i>Availability of information</i>
SECURITY OF ENERGY SUPPLY FOR BENEFICIARIES OF THE FUND	<ul style="list-style-type: none"> ▪ Cumulative annual Energy Savings (MWh/yr) of loans disbursed since inception of the Fund ▪ Level of installed capacity in target countries ▪ Energy intensity in target countries ▪ Collation of perceptions through interviews among investment manager ▪ Collation of perceptions through interviews among end-beneficiaries 	
JOB CREATION IN PROJECT VALUE CHAIN	<ul style="list-style-type: none"> ▪ Number of jobs created through project activities (men/women) ▪ Collation of perceptions through interviews among investment manager ▪ Collation of perceptions through interviews among end-beneficiaries 	<i>Availability of information</i>
PIS BECOME SELF-SUSTAINABLE, ABLE TO FINANCE INDEPENDENTLY	<ul style="list-style-type: none"> ▪ Number of PIs financing RE/EE projects independently ▪ Collation of perceptions through interviews among partner institutions ▪ Collation of perceptions through interviews among investment manager 	<i>Availability of information</i>



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GCPF MID-TERM EVALUATION REPORT

Mainstage report – Annex

Ipsos MORI, SQ Consult & EY



September 2017

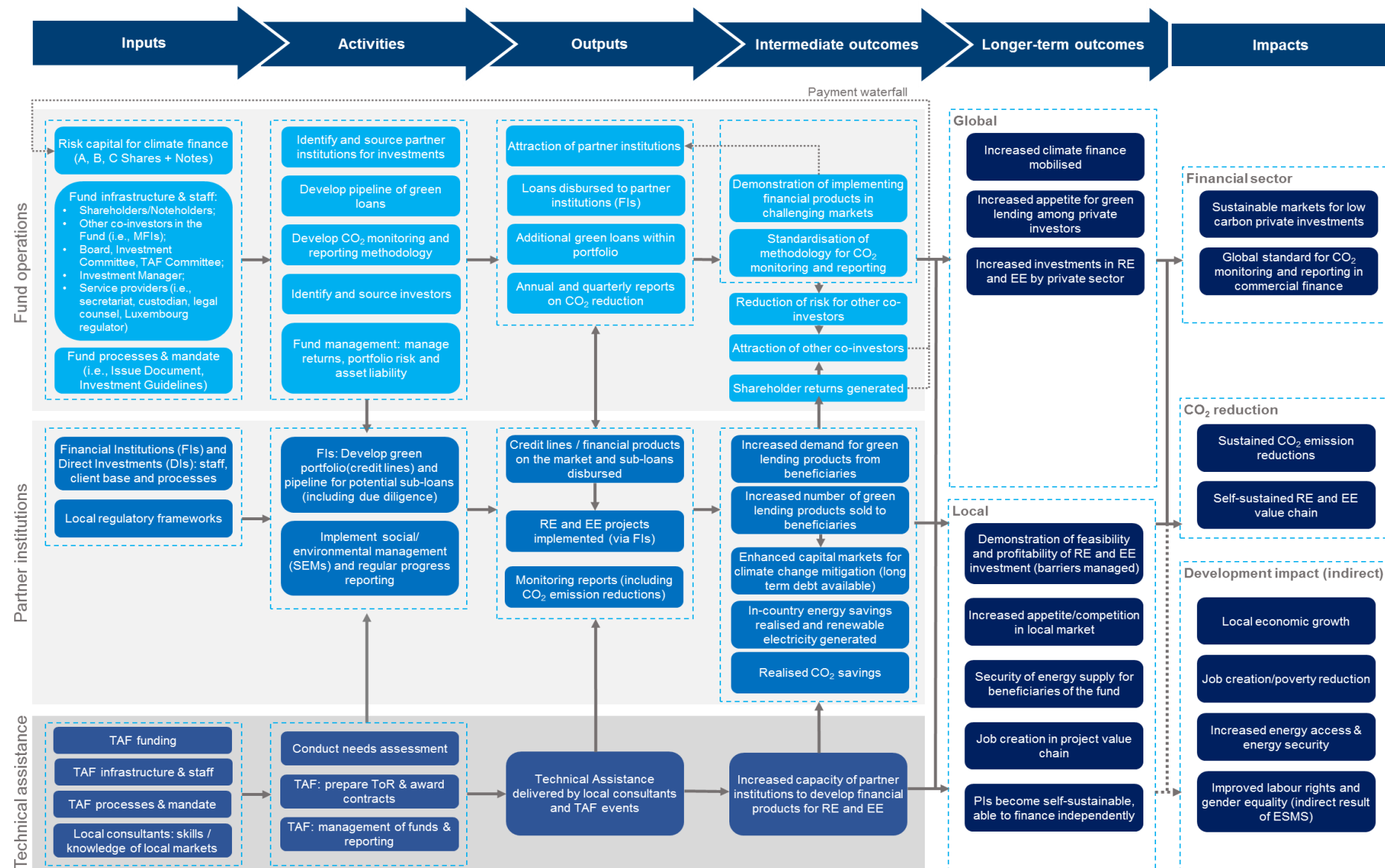
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Annex 1: Theory of Change

This section provides an overall framework for understanding GCPF. It defines a Theory of Change that identifies the causal processes through which the programme is intended to result in its expected outputs, outcomes and subsequent impacts. This is summarised in Figure 1.1 overleaf with supporting narrative below.

Figure 1.1 Theory of Change for the GCPF



1.1 Inputs

Inputs are the elements that are available or used to realise the desired outputs, outcomes and impacts of the programme. These have been grouped for analysis into three categories as follows: fund operations, partner institutions and technical assistance.

Fund operations

This category covers all the input provided by the shareholders (money and staff), the governance structure of the fund and the Investment Manager, responsibility. The investment guidelines and the issue document provide the mandate for the fund. The different shareholders (C, B, A shares) provide the risk capital (total Net Asset Value as of Q4 2016: 330,149,444 USD; of which BEIS has contributed 12.8%, BMUB 21.19% and KfW 15.37%³⁷). Additionally, the fund has private noteholders. The fund is based in Luxembourg and Luxembourg regulations provide the legal structure. The staff of the fund are important inputs as they bring relevant country and market expertise and skills to the fund. The fund is governed by the Board and Investment Committee. Daily operations are carried out through the Investment Manager and other service providers. The Technical Assistance Facility has its own governance structure and staff.

Partner institutions

The Partner Institutions (PIs) are the investees, including both financial institution partners (FIs), who on-lend GCPF funds to eligible sub-projects, as well as direct investment partners (DIs). The FIs are typically local banks and depending on market conditions and development level of a country, these can be Tier 1, Tier 2 or Tier 3 banks. The FIs receive either a loan (or in a small number of cases subordinate debt) from GCPF for the development of credit lines, or other financial products for energy efficiency (energy savings) or renewable energy generation. FIs then issue loans to their clients, who are the final beneficiary of GCPF once they take on a loan. Staff of the banks complements the IM's country intelligence and market analysis and implement and market the green credit lines. The governance process of the FI defines how lending to end-users takes place. DIs are typically small- to mid-sized energy efficiency or renewable energy projects that cannot obtain funding from local FIs due to their complexity,³⁸ the long tenors required or lack of expertise at the local financial institutions. Additional targets are small and medium suppliers of renewable and energy efficiency technology.

Technical Assistance

³⁷ Global Climate Partnership Fund Quarterly Report to Shareholders Q4 2016

³⁸ GCPF Annual Report 2015

To further support the objective of the fund, in addition to finance, the fund aims to enhance the institutional capacity of FIs, to allow them to develop green lending products thorough a mix of formal and informal support. Technical assistance can also include activities to improve PI's environmental and social management systems (ESMS) and feasibility studies for potential DIs. The technical assistance is coordinated by the Technical Assistance Facility (TAF) and overseen by the Technical Assistance Committee (TAC). The TAF is operated by the Investment Manager and ensures the most appropriate support is provided. Operational processes and reporting procedures have been developed to deliver the technical assistance. The technical assistance is provided to the FI by external consultants, who are contracted by the Investment Manager based on the needs of the FI. The consultants bring skills and knowhow of local markets, legal structuring, development of EE/RE-related financial products and environmental impacts.

The criteria upon which consultants are selected includes the capacity to provide targeted advice, including their experience and understanding of local realities and markets. If available, local consultants are more likely to be invited to tender. For other support tasks, internationally operating consultancies may be selected to ensure the required technical skills are available for the project, ideally together with a local counterpart.

1.2 Activities

Activities describe what GCPF does with its resources to realise the desired outputs, outcome and impacts. For analysis, activities have also been grouped at the level of: fund operations, partner institutions and technical assistance.

Fund operations

The activities at the fund operations level can be further divided into two categories. The first relates to governance of the fund including the Board (activities to represent strategic decisions) and the Investment Committee (activities to represent investment decisions). The second category relates to the process of originating, agreeing and managing investments by the Investment Manager. A key element of this is assuring FIs of the market benefits of green lending. This includes activities related to management of current investments (steering, oversight, reporting) and activities to grow the fund (raising money, new shareholders). The fund management covers the full cycle from identification and sourcing of investments, market analysis, deal structuring and negotiating terms, signing of loans and reporting. The Investment Manager also develops the reporting standards for returns and impacts in terms of CO₂ reduction and green loans financed.

Partner institutions

Activities at the PI level, and more specifically among FIs, tend to cover the full cycle for the development of new financial products. This includes market research and marketing, development of a pipeline of potential investments and the development of new credit lines

or other financial products. The ultimate goal for FIs is to create a self-sustaining green lending product that addresses the technical understanding gaps and financial needs of its clients in a straight-forward and easy to use manner. It is understood that the engagement model for DIs is likely to vary materially between investments.

Technical Assistance

The TAF identifies the needs of a PI, agrees and specifies these, and procures appropriate consultant support. To do so, the IM prepares a Terms of Reference (ToR), tenders consultants, and prepares the proposal. The TAC approves or rejects the IM's proposal. The TAF also assures that consultants deliver the requested support. They monitor and evaluate the delivery of technical assistance and report on the use of funds. The consultants will conduct support as per the applicable ToR.

1.3 Outputs

Outputs are the elements that result directly from the activities specified above, and the same grouping has been applied here (fund operations, partner institutions and technical assistance).

Fund operations

At the fund level, the main outputs are the attraction of partner institutions, loans provided to financial institutions and the direct investments made. The loans are disbursed by the Investment Manager, following a positive Investment Committee decision. The Investment Manager prepares annual reports in consultation with the Board including insights in the amount of CO₂ reduction that can be expected from the overall portfolio. Other outputs include two pipelines of leads. The first consist of potential investors, who might invest in GCPF. The second pipeline considers potential investees.

Partner institutions

At the PI level, the main outputs are the loans and financing provided to the end-beneficiaries. Among FIs, these result from newly developed credit lines or financial products that directly result in energy savings or generate renewable energy investments. The contracting and issuance of loans is to be managed and the results reported to the fund via the Investment Manager.

Technical Assistance

The outputs from the technical assistance programmes delivered by the consultants are technical reports, tools, training sessions, workshops and (in one instance) a knowledge-sharing event (GCPF Academy), and other project specific deliverables.

1.4 Intermediate Outcomes

Intermediate outcomes are changes that come about as a direct or indirect effect of the outputs described above, and the same grouping has been applied (fund operations, partner institutions and technical assistance).

Fund operations

At the fund level, building on the pipeline to provide loans to PIs is expected to result in the realisation of shareholder returns (some of which may be invested through the fund as additional input) and the demonstration of the broad GCPF model. The aim is also that the methodology for reporting CO₂ reductions will facilitate a standardisation of measurement approaches amongst PIs.

Partner institutions

Among FIs, offering new credit lines, financial products, and dispersing sub-loans can be expected to result in an increased level of green lending. It is important to note that this increase may not be equal to the total amount of lending associated with GCPF due to scope for co-funding by partner institutions, deadweight and displacement. These issues are discussed in more detail in section 2.2. (Contextual Issues).

Where GCPF results in a net increase in the number of energy efficiency and renewable energy projects proceeding, this can be expected to result in 'in country' energy savings, the increased generation of renewable electricity and the realisation of CO₂ savings. External factors, such as, political environment or regulatory frameworks, will also have a bearing on the extent to which these outcomes will be achieved (as discussed later in this chapter).

Technical Assistance

The technical assistance delivered by GCPF such as training or workshops is intended to increase knowledge and understanding in green lending practices and green investments and as a result, may increase capacity of FIs to develop successful financial product for energy efficiency and renewable energy and of project developers and SMEs to develop successful investments and business models.

1.5 Longer term Outcomes

The following longer-term effects are expected:

Global

Through this process it is hoped that GCPF can demonstrate that green lending is lower risk than the financial community assumes.

A set of demonstration effects are expected to emerge from the successful delivery of the fund on the global appetite for green lending among private investors. By demonstrating that

it is possible to attract PIs, that investments can be low risk and generate shareholder returns as well as showing that investments can result in energy savings, GCPF is expected to ultimately attract a wider pool of investors to enhance capital markets.

As a result of developing a more standardised set of monitoring requirements which provide accurate and realised CO₂ savings, GCPF hopes to influence best practice for the development of future international (impact) reporting standards.

Local

At a local level, the delivery of additional projects unlocked by increased lending can be expected to support the demonstration of the feasibility and profitability of energy efficiency and renewable energy investments in developing countries. This demonstration can be expected to influence both the local supply and demand for green lending – the appetite amongst borrowers and entry into the market (competition) amongst lenders.

This expansion of the market, together with the completion of projects unlocked by GCPF investment can be expected to collectively increase the security of the energy supply. Additionally, in some instances, it is hoped that project delivery will lead to job creation – either for the loan recipient, or in broader project value chains. These effects rely on the assumption that end-beneficiaries have the ability to afford the energy efficient solutions and services that are the target of projects. The enhanced relevance of green technology can potentially also create a better integration with national and local policy-making, further improving the framework conditions for green investment.

Lending is expected to increase both appetite and competition in the local financing market and to support financial institutions to become more financially independent. This will be partly dependent on the extent to which FIs have been able to increase their capacity through technical assistance.

1.6 Impacts

The following long-term changes are expected to emerge as a result of GCPF. These impacts have been grouped in terms of their relevance for the financial sector, CO₂ reductions and development effects.

Financial sector

GCPF is expected to contribute to the creation of sustainable markets for low carbon private investments globally by mobilising climate finance and increasing appetite and investments by the private sector.

CO₂ reduction

The development of the green lending market described above, as well as directly unlocking a set of projects, is expected to have a lasting effect on CO₂ emissions reductions by directly

unlocking delivery of additional energy efficiency and renewable energy projects as well as through demonstration effects. This market development can also be expected to have a positive effect on the supply chain in supporting the delivery of energy efficiency and renewable energy projects by self-sustainable FIs independent of GCPF and improved political frameworks for green investment.

Development impact

Development impact is considered an indirect impact of GCPF by the demonstration of energy efficiency and renewable energy projects contributing to local economic growth via the increased affordable energy access and security for the end beneficiaries of the fund. Further indirect impacts that may potentially be seen are improved labour rights and gender equality.

1.7 External factors

The extent to which the inputs highlighted in the theory of change above result in the anticipated impacts are determined by both internal decisions and external influences. During the inception stage, the evaluation team scoped out the factors which are expected to have an influence on the desired impacts and are crucial in the development of our contribution analysis approach (further detail is provided in Annex 2b).

The external context for GCPF intervention in targeted markets and sectors is defined by the following key factors:

- **Economic stability:** A stable economy provides a framework for investments: low inflation, control of inflation, consumer confidence, low interest rates. In developing countries, economic stability is easily disrupted leading to higher risk margins for investment.
- **Political environment:** Weak regulatory frameworks and lack of enforcement hamper energy savings, or generating of renewables, as existing incentive structures often lead to a preference for fossil fuel based energy generation. Existing subsidies and unequal tax burdens between renewables and other energy sources often lead to an advantage for fossil fuel based energy generation. Concessional finance can contribute to price distortions by providing financing and/or products below market prices. Price distortions affect investor interest.
- **Energy efficiency and renewable energy market development:**
Renewables: There has been a rapid spread of renewable energy in the global energy transition towards a low carbon economy. Despite lower fossil fuel prices, renewable power expanded at its fastest-ever rate in 2015, thanks to supportive government policies and sharp cost reductions. Renewables accounted for more than

half of the world's additional electricity capacity last year³⁹. Renewable energy investments have high investment costs and reduced operational cost. However, in terms of overall cost (LCOE) they are already cost competitive in many countries, with wind power often representing the least costly option and utility-scale solar PV being cost-competitive to fossil fuel alternatives⁴⁰, driven by the rapid decrease in technology cost.

Energy efficiency: Global energy intensity (the amount of energy used per unit of gross domestic product (GDP)) improved by 1.8% in 2015. This is good news, surpassing the 1.5% gain seen in 2014, and tripling the annual rate (0.6%) seen in the previous decade. This improvement is particularly noteworthy in the context of lower energy prices, with the price of crude oil falling by as much as 60% since 2014⁴¹. Investments in energy efficiency need to overcome the lack of awareness of efficiency benefits and addressing complex decision-making barriers (which often overvalue up-front costs and undervalue future energy saving)⁴²

- **Climate financing landscape:**

The multi-stakeholder processes started in many countries to define the initial INDCs have helped improve awareness and involvement of stakeholders at all levels and resulted in an increase in available funds. However, this can also bring a number of challenges to concluding investments such as increased market competition from funding from other international financial institutions and development financial institutions. This can lead to lower investor appetite for or interest in GCPF funding as well as difficulties in implementing projects effectively.

The following table summarises the factors and outlines their potential impact on GCPF performance.

Table 1.2 External factors influencing GCPF impact

Factor	Potential impact on GCPF performance
ECONOMIC STABILITY	
<ul style="list-style-type: none"> • Credit rating of countries in which GCPF decides to operate 	<ul style="list-style-type: none"> • Lack of investor interest in GCPF (fund level) • Lack of investment interest in-country
<ul style="list-style-type: none"> • Financial market performance (i.e. depth of liquidity, interest rates, forex) 	<ul style="list-style-type: none"> • Lack of suitable partner institutions • Impacts attractiveness of GCPF conditions and additionality of the fund
<ul style="list-style-type: none"> • Degree of financial regulation 	<ul style="list-style-type: none"> • Regulation will sanction what level of investment is and is not permitted through GCPF
POLITICAL ENVIRONMENT	

³⁹ https://www.iea.org/bookshop/734-Medium-Term_Renewable_Energy_Market_Report_2016

⁴⁰ REN21 (2016) Renewables Global Status Report 2016 and for example the US:

<https://www.lazard.com/media/438038/levelized-cost-of-energy-v100.pdf>

⁴¹ <https://www.iea.org/publications/freepublications/publication/mediumtermenergyefficiency2016.pdf>

⁴² <https://www.iea.org/publications/freepublications/publication/mediumtermenergyefficiency2016.pdf>

<ul style="list-style-type: none"> Level of incentives for RE/EE investment (energy prices, subsidies, political frameworks, etc.) 	<ul style="list-style-type: none"> Influences business case for investments and can increase/decrease interest in GCPF funding
<ul style="list-style-type: none"> Stability of political frameworks 	<ul style="list-style-type: none"> Reduced investor interest GCPF may have to withdraw funding
<ul style="list-style-type: none"> Clear policies and regulation 	<ul style="list-style-type: none"> Policies will drive extent of GCPF investment into RE/EE Regulation will sanction what level of investment is and is not permitted through GCPF
<ul style="list-style-type: none"> Pricing regulation 	<ul style="list-style-type: none"> High subsidies may increase DFI competition
RE/EE MARKET DEVELOPMENT	
<ul style="list-style-type: none"> Availability of local supply chain (RE/EE products) 	<ul style="list-style-type: none"> Limits ability to implement activities, effectively reducing investor interest
<ul style="list-style-type: none"> Technology cost 	<ul style="list-style-type: none"> Influences business case and can make investments interesting for 'regular' financial market
<ul style="list-style-type: none"> Electricity system capability (for EE and RE products) 	<ul style="list-style-type: none"> Limits ability to deliver projects, effectively reducing investor interest
<ul style="list-style-type: none"> Ability to lease/buy equipment (i.e. Energy Supply Company (ESCO) models) 	<ul style="list-style-type: none"> Limits ability to implement activities, effectively reducing investor interest
<ul style="list-style-type: none"> Maintenance of installations 	<ul style="list-style-type: none"> Limits ability to deliver projects, effectively reducing investor interest
<ul style="list-style-type: none"> Impact on carbon emissions (i.e. marginal efficiency gains in EE projects) 	<ul style="list-style-type: none"> GCPF unable to meet its objectives
<ul style="list-style-type: none"> Fluctuation in costs and availability of skills 	<ul style="list-style-type: none"> Limits ability to implement activities, effectively reducing investor interest
CLIMATE FINANCE LANDSCAPE	
<ul style="list-style-type: none"> Availability of concessional funding by other IFIs/DFIs 	<ul style="list-style-type: none"> Lack of PI/DIs interest in GCPF
<ul style="list-style-type: none"> Eligibility standards more permissive with other EE/RE credit lines 	<ul style="list-style-type: none"> Lack of FI interest in GCPF
<ul style="list-style-type: none"> Cost of capital in country 	<ul style="list-style-type: none"> Lack of investment interest in-country
<ul style="list-style-type: none"> Balance of cost versus benefit within business and residential context 	<ul style="list-style-type: none"> Reduced investor interest
<ul style="list-style-type: none"> Monitoring and reporting standards available through other funds 	<ul style="list-style-type: none"> Reduced ability for GCPF to standardise monitoring and reporting requirements globally

Annex 2a: Data collection

Methodology

In this section (annex 2a) we discuss in more detail the methodology used in the data collection phase of the evaluation.

The evaluation included five fieldwork strands:

1. Analysis of secondary evidence
2. Operational benchmarking
3. Market benchmarking
4. Stakeholder consultations
5. Case studies and interviews with financial institutions and direct investments

2.1 Analysis of secondary evidence

A range of documents relating to the management of GCPF and wider benchmarking data sources were consulted as part of this evaluation. This included documents provided by BEIS and the Investment Manager as part of the inception stage of the evaluation to aid understanding of the processes involved. These documents were used to develop the theory of change and process map and referred to during the evaluation to assess where efficiencies are present or improvements could be made:

- Rationale and fund design documents
 - GCPF BEIS Business Case
 - TAF Business Case
 - TAF Business Plan
- Fund process documents
 - TAF Guidelines
 - Investment Guidelines
 - Issue Document
 - ESMS management system guidelines
 - Assessment and Monitoring Framework
- Fund monitoring documents
 - TAF Annual reports
 - GCPF Quarterly and Annual reports
 - responsAbility Quarterly and Annual reports
 - SEMS report
- Investment monitoring documents
 - CO₂ Impact Report

- BEIS KPI Results Reporting

In addition to the information above, we reviewed internal management documentation available, including:

- Up to date investment portfolio
 - Geographic distribution of investments
 - Number of investments made
 - Types of investments made (i.e. EE vs. RE)
 - Number of financial institutions and direct investments partnering with
 - Progress of investments made
- Networking activities
 - Number of leads contacted
 - Number of networking activities carried out
- Investment status, progress and barriers
 - Investment Committee minutes
 - Investment proposals
- Monitoring information
 - responsAbility quarterly reports to the Investment Committee

2.2 Operational and Market Benchmarking

See Annex 3 for further detail

2.3 Stakeholder consultations

Evidence collection was largely qualitative in nature. The table below provides an overview of the stakeholder consultations conducted across four key audiences: shareholders and noteholders; members of the Board, Investment Committee and TA Committee; senior members and members of the delivery team in the Investment Manager; and partner institutions. These consultations were conducted either face-to-face or over the telephone. Discussion guides used to guide these consultations can be found in Annex 4.

Table 2.1 Overview of stakeholder consultations

AUDIENCE	PURPOSE OF CONSULTATIONS	INTERVIEWEES	EVALUATION STAGE
SHAREHOLDERS & NOTEHOLDERS	To seek views on the fund design and delivery model in order to ascertain a donor perspective on the management of the fund and whether its objectives are being met.	Two representatives of ASNbank (joint interview)	Main stage (face-to-face)
		One representative of OeEB	Main stage (telephone)

BOARD & COMMITTEES	<p>To deepen our understanding of the effectiveness of the investment processes, covering the following topics:</p> <ul style="list-style-type: none"> •Context – reviewing any changes that may have occurred within processes or external factors since the inception stage •Rationale for the fund – exploring the extent to which objectives are being met •Understanding effectiveness of processes – exploring how the processes support the objectives and effectiveness and efficiencies of the processes of the fund •Early signs of impact – understanding the perceived impact of the fund at this stage •Successes and improvements – what has worked well and what could be improved 	Investment Board Member	Inception and main stages (telephone)
		Investment Committee Member (IC)	Inception and main stages (telephone)
		TA Committee Member (TAC)	Inception and main stages (telephone)
		Investment Committee Member (IC)	Inception (telephone)
		Board and TAC Member	Inception (telephone)
		Investment Board Member	Inception (telephone)
		Investment Board Member	Inception (telephone)
INVESTMENT MANAGER (responsAbility)	<p>To gather views of those involved in the delivery of the fund and with day to day involvement in sourcing opportunities, working with PIs and co-ordinating technical assistance.</p> <p>To develop an understanding of the extent to which fund processes are meeting their objectives and to identify where efficiencies in the delivery processes could be made.</p>	Head of TA	Inception and main stage (face-to-face)
		Head of Credit Analysis	Main stage (face-to-face)
		Head of FI Debt Financing	Main stage (face-to-face)
		Sales team member	Main stage (telephone)
		CEO for GCPF	Inception (face-to-face)
		Head of Financial Institutions	Inception (face-to-face)
		Head of Direct Investments	Inception (face-to-face)
PARTNER INSTITUTIONS' DELIVERY TEAMS	<p>To explore the perceived effectiveness of the processes as well as the contribution of the fund from the perspective of partner institutions.</p> <p>To provide additional context to case studies to explore why processes may differ as well as to consider different characteristics not covered within the case studies.</p> <p>To inform our understanding of the project portfolio globally and the</p>	Representatives from four financial institutions	Telephone
		Representative from one direct investment	Telephone

experience of the processes undertaken by partner institutions and how these works in practice.

2.4 Case studies

The evaluation team conducted five in-country case studies with partner institutions to assess the contribution of the fund and explore process efficiencies. The selection of case studies aimed to answer the evaluation questions - relevance, efficiency and effectiveness of GCPF. Specifically, asking: 'What is working, for whom, and in what context?'.

2.4.1 Case study selection

The case study selection sought to represent the diversity of GCPF's portfolio and assist the evaluation in capturing how different investment characteristics may influence the processes, outcomes and potential impact of the fund. In the selection of case studies, the following characteristics were considered:

1. **Type of intermediary (i.e. FI vs. DI):** to assess levels of impact and process efficiencies for different types of intermediaries
2. **Funds provided by GCPF (outstanding amount):** to ensure both large scale and small scale types of investments were covered
3. **Investment start date:** to assess process efficiencies and potential impact at different stages of investment

The proportion of case studies were broadly matched to the overall GCPF portfolio across these characteristics.:

Table 2.3 Case study characteristics versus GCPF portfolio

	COUNT IN GCPF PORTFOLIO	TARGET NUMBER OF CASE STUDIES	ACTUAL NUMBER OF CASE STUDIES
DI	2	1	1
FI	21	4	4
Committed funding (<\$5m)	6	1	1
Committed funding (>\$5m and <\$15m)	4	1	1
Committed funding (>\$15m and <\$25m)	7	2	2
Committed funding (>\$25m)	6	1	1
2011-2013	11	3	2
2014-2016	12	2	3
Total	23	5	5

The evaluation team then reviewed this against an additional set of secondary characteristics considered important to include in the spread of case studies:

4. **Geographic location** (country and region)
5. **Type of project financing** (RE and EE projects)
6. **Investment performance** (based on recommendations from Investment Manager)
7. **Project-beneficiaries expected to reach** (volume, type)

The evaluation team conducted a review of the project portfolio and developed an initial sampling framework to capture the spread of characteristics and accurately represent the diversity of the fund. The case study selection was then subject to checking the feasibility to include the partner institutions and their willingness to take part. The latter has implications regarding self-selection bias.

The table below outlines the final case study selection:

Table 2.4 Overview of case study selection

PARTNER INSTITUTION	TYPE OF PARTNER INSTITUTION	INVESTMENT START YEAR
1	Financial institution	2011
2	Direct investment	2017
3	Financial institution	2013
4	Financial institution	2014
5	Financial institution	2016

2.4.2 Case study document review

As part of the case studies, the evaluation team reviewed documentation provided by the Investment Manager regarding the investment and any technical assistance provided. This document review was used to provide a foundation prior to the in-county case study visit and to frame the interviews with partner institutions and TA consultants. Details of key case study contacts were provided by the Investment Manager.

2.4.3 Case study interviews

Case studies included interviews with a variety of audiences, including members of the delivery team (both senior and operational), TA consultants, project beneficiaries (varied depending on project type), and other local stakeholders.

The relevant stakeholders across these different groups who were associated with each case-study project were mapped with the help of the Investment Manager and a lead contact from the PI. This process was initiated by the evaluation team setting out the desired range of stakeholder roles to engage in the evaluation. There is potential for bias as interviews were then conducted with stakeholders willing to participate in the evaluation and accessed through information provided by the Investment Manager or by the PI (particularly in the case of beneficiaries of the GCPF supported on-lending).

The case studies in Annex 4 specify interview audiences and discussion guides can be found in Annex 4. A summary of the key topics covered with each audience is provided here:

1. **Partner institution delivery teams:** Interviews with partner institutions focused on ascertaining their views on the effectiveness of GCPF processes and seeking evidence about whether anticipated outcomes (as identified in the theory of change) have been realised. The evaluation team spoke with a variety of levels within the partner institutions, from senior representatives to operational staff. The following topics were explored:
 - Current climate landscape and internal and external barriers to implementation.
 - Effectiveness of process areas:
 - Alignment of assessment criteria and requirements of the fund.
 - Selection processes for investments.
 - Effectiveness of due diligence processes and areas for improvement
 - Partner perceptions of capacity to create sustainable markets and set standards for CO₂ monitoring and reporting.
 - Successes within the processes as well as desired improvements.
 - Relationship between partner institutions and GCPF.
 - Perceived knowledge and awareness of the fund among prospective investors.
 - Early signs of impact of the fund and any indications of transformational change.

2. Technical assistance consultants: Interviews with TA consultants sought to identify how TA works within different contexts and whether the process for TA worked effectively, or not, in terms of assessing need and building capacity. The following topics were explored:

- Support and advice provided to partner institutions in each case (i.e. required improvements and social and environmental management needs).
- Effectiveness of (and any limitations to) guidelines for assessment TAF needs (their quality and improvements).
- Effectiveness of (and any limitations to) formal TA support in building capacity versus informal TA support and differences.
- Perceived improvements in the TA related processes.

3. Project beneficiaries: The case studies sought to identify project beneficiaries wherever possible and speak with them to gain their views on the benefits of the project (and therefore investment). Topics covered varied by the type of project beneficiary (e.g. company, household). Among beneficiaries who direct received the loan, topics included:

- Project details (i.e. type of organisation, type of project, project progress, level of investment)
- Perceived knowledge and awareness of the fund prior to and since receiving the investment.
- Perceived effectiveness of processes and areas for improvement (particularly lending requirements and the selection process, monitoring and reporting requirements)
- Local climate landscape and external barriers to and development of products, and services.
- Perceived early impact of the fund including observed economic and environmental outcomes in countries.

In some cases, the evaluation spoke to beneficiaries further down the line who did not receive the loan but were viewed as benefitting from the RE or EE project in receipt of the loan. For example, local farmers were consulted in India regarding the benefits of a large wind farm financed through GCPF loans.

Annex 2b: Analysis and synthesis

In this section we give more detail about the analysis and synthesis of the data collected during this evaluation. The evaluation then employed several analytic techniques to synthesise the data to generate the evaluation findings in this report. These included Thematic Analysis and Content Analysis and drew on principles of Qualitative Comparative Analysis (QCA) to synthesise case study level data and Contribution Analysis to synthesise data across all data collection tools.

Multiple analytical and synthesis approaches were used to bring together the diverse set of data collected by the evaluation to inform the findings in this report.

2.2.1 Qualitative analysis

Data was mainly collected using qualitative research methods, including stakeholder consultations and case studies. Qualitative data was analysed in two ways:

- **Content analysis:** Content analysis included an analysis of the findings from each stakeholder consultation to identify common content and subject matter.
- **Thematic analysis:** This analysis looked across, rather than within, case studies. For each case study, this involved drawing on the content analysis to develop descriptive and analytical themes to provide greater context and interpretation of the key findings.

This analysis took place over a number of stages for both the content and thematic analysis:

1. Individual write-ups of interviews framed against topic guides (content)
 - each interview was guided by a facilitation guide that was structured according to the key areas of interest in the TOC e.g. key GCPF processes, and types of intermediate outcome being explored (see Annex 4 for interview guides)
 - interview notes (using both fieldnotes and audio-files) were then written up against this structure – providing a framework for analysing the interview content by key process and outcome area as well as additional open-format sections for any additional content (e.g. discussion of any unexpected processes, or areas of impact)
2. A findings summary of the stakeholder interviews (content and thematic)
3. Individual write-ups of case study interviews following agreed upon report structure (content)
4. Analysis group meeting with all case study leads and interviewers to identify key themes and findings (thematic)

2.2.2 Quantitative analysis

No primary quantitative data was collected for this evaluation. The main investigation of quantitative data was conducted through the operational and market benchmarking and the method for this is presented in Annex 3. Basic descriptive analysis is included in the main report where other secondary data is presented – for example, descriptions of the number of loans issued through the fund, but no further analysis has been conducted on this data.

2.2.3 Synthesis

Through **meta-synthesis**, the evaluation brought together the findings from both primary and secondary data collection tools, and across qualitative and quantitative evidence.

The table below sets out the key evaluation questions, the evidence used to answer these and the methods of synthesis used:

Table 2.2.1: Approach to synthesis against each key evaluation question

		Data collection tools						
		Analysis of secondary evidence	Operational benchmarking activities	Market benchmarking activities	Stakeholder consultations with Board & Committee Members	Stakeholder Consultations with Investment Manager	Stakeholder Consultations with Partner institutions	Case studies with Partner institutions (and end-beneficiaries)
Evaluation questions: relevance	To what extent does GCPF meet the criteria or programme goals that have been applied at the time of inception?							
	To what extent, in which ways and in which contexts does the GCPF model meet the needs of the recipients of lending (both financial institutions and end-user)?							
	Are all activities and outputs of the programme consistent with the overall goal and the attainment of its objectives and (donor) intended impacts?							
	Have the problems and bottlenecks which the GCPF seeks to confront been correctly identified and is GCPF’s concept able to remedy these problems?							
	Is financing really the relevant bottleneck for EE/RE investments in the target countries?							
Evaluation questions: efficiency	Is the fund an efficient delivery model to achieve desired outputs compared to alternatives and where can this efficiency be improved?							
	What lessons for efficient delivery can be taken into future funding vehicles?							
	Whether, how and in what contexts has the structure, management and governance of the fund been, or is likely to be, successful in bringing in private capital?							
Evaluation questions: effectiveness	What can we learn about what is working (and not), for whom, and in what contexts, with regards to sub-loans being issued successfully and at scale?							
	What are the major factors influencing the achievement or non-achievement of the objectives?							
	Whether and in what contexts has the design of the fund (on-lending and direct investment), or the Technical Assistance (TA) had an effect on capacity development for local banks?							
Data analysis		Quantitative: descriptive analysis	Quantitative: benchmarking analysis		Qualitative: content analysis`	Qualitative: content analysis	Qualitative: content analysis	Qualitative Thematic analysis (within case)
Data synthesis		Contribution analysis			Qualitative Thematic analysis (across case) Contribution analysis			Contribution analysis Qualitative Comparative Analysis Qualitative Thematic analysis (across case)

The meta-synthesis consisted of three main approaches: (1) Framework Development including development of a strong theory of change, (2) Principles of Qualitative Comparative Analysis (QCA) to synthesise case study level data and (3) Contribution Analysis (CA) to synthesise data across all data collection tools. Below we outline the rationale for using each approach, followed by more detailed sub-sections regarding how QCA and CA have been applied in practice during the evaluation of the GCPF.

- **Framework development:** a process and impact framework were developed. The former in order to instruct how the process evaluation would assess the effectiveness with which the GCPF has been implemented and the efficiencies of the processes involved. The impact framework provided a strategy through which to capture evidence on early signs of impact and account for the external factors which may have contributed to the outcomes of the Fund.
- **Qualitative Comparative Analysis (at a case study level):** some key elements and tools from a QCA approach were used to synthesise the qualitative findings across the case studies. These were adopted to aid identification of higher-level findings that applied beyond the specific circumstances of a particular case-study. In particular, adopting tools from QCA allowed the evaluation to identify:
 - any common factors (internal or external to the Fund) which were related to the achievement of (or progress towards) outcomes. This was a key way for the evaluation to assess the means through which impacts were being realised; and
 - the extent to which the achievement of outcomes was within the control of GCPF (as opposed to external influences) and the contexts in which outcomes are (or may) come about.
- **Contribution Analysis:** contribution analysis was used to make inferences about the causal relationship between the GCPF and its targeted outcomes. This analysis was based in the theory of change, alongside consideration of the potential alternative drivers of the Fund's targeted outcomes.
 - Evidence was collected to either confirm or disprove if the causal links of the GCPF theory of change hold true, or those related to alternative drivers. This enabled the evaluation team to infer causality assess to what extent observed results are due to GCPF rather than other factors.
 - Potential 'other' extraneous factors were considered outside of the programme, considered included a variety of political, economic, social and technical elements.

The key steps involved in, and examples of the analytical processes and outputs, from both the QCA- and Contribution Analysis-informed approaches conducted for this evaluation are presented below.

It is important to note that the timeframe of this evaluation is a significant influencer on the extent to which impacts have been realised (as referenced in the Introduction). This necessitates that when considering the contribution of GCPF, the focus is directed solely on

its anticipated early outcomes (up to and including the Intermediate Outcomes set out in the diagrammatic Theory of Change presented in this report). This is evidenced in the structure of the contribution analysis table (table 2.2.3) below.

2.2.4 Applying principles of Qualitative Comparative Analysis (QCA)

This section provides further detail on our use of Qualitative Comparative Analysis (QCA) principles in the synthesis of the evaluation evidence presented in this report. The analysis focused on the case studies conducted during the main stage of the evaluation and was used to identify common factors (both internal and external to the Fund) which were associated with outcomes for partner institutions at a local level.

Applying QCA principles offered a way to compare these factors across cases in order to create a set of generalizable and transferable insights across the fund.

This evaluation has applied QCA principles through the following steps:

- Utilising the tools through which QCA is conducted. This involved developing a ‘truth table’, as outlined in table 2.2.2 below, in order to identify whether the outcomes or outputs have been realised and identifying the factors that have been necessary to obtain the specific outcome or output for each case study (as part of step 4 of the contribution analysis approach described later in this section).
- Incorporating a systematic approach to assessing the strength of the supporting evidence available (from strong to weak evidence) for each of these factors in relation to each specific case-study.
- Identifying the internal and external factors that have led to each outcome being achieved. These have been considered through the content analysis within interviews for each case-study (these are presented in each of the case-study summaries presented in Annex 4) and through a thematic review across these case-study level factors to generate a set of common factors to apply across all case-studies.

The key distinction in the application of QCA tools in this evaluation to more traditional QCA approaches is that the approach used in this evaluation seeks to identify common factors by beginning with the outcomes of interest that are grounded in the theory of change as opposed to taking the reverse approach and beginning with the identification of common factors and then linking this back to the theory of change.

There were several challenges in taking this approach. Notably:

- some projects were in early stages (e.g. Cambodia) so not yet relevant to consider some outcomes
- With only five case-studies in total the sample was small– one was the early-stage one in Cambodia, one had a single sub-loan recipient (India – Wind), and one was a DI. This means different circumstances, challenging to compare evidence of factors. As such in the main body of the report a recommendation for further evaluation work

is to increase number case-studies so there are more common types of project/sub-loan/end-beneficiary to facilitate analysis.

However, coupled with the contribution analysis approach that has been employed, it has been possible to consider additional outcomes of interest and 'factors' which were not part of the original theory of change, which can be seen in the truth table below.

The 'truth table' below (table 2.2.2) highlights the strength of evidence available for each case study from weak evidence to strong evidence to come to a reasoned assessment of the factors which are most likely to have contributed to the outcome. We acknowledge the low number of case studies and therefore have opted to assess early impact qualitatively. The rating system relies on a subjective analysis of the evaluation team; multiple team members have contributed to the analysis to reduce researcher bias and improve internal validity of the findings.

Where rows are greyed out this is because there is no evidence that the outcome has been achieved either due to a lack of evidence or because the project is still at an early point in its delivery and it is too early to say whether the outcome has been realised. Where cells are blank, this is because while the outcome has been achieved, no evidence is available to indicate that the specific factor has contributed to this outcome.

2.2.2 QCA Truth Table used to analyse case-study evidence

Outcome: Increased demand for green lending products from beneficiaries

	Evidence of outcome achieved? (Y/N)	Internal factor A:	Internal factor B:	External factor A:	External factor B:	External factor C:
Case study		<i>Relationship between PI & recipient</i>	<i>Marketing of green lending products/ technology</i>	<i>Word of mouth advocacy</i>	<i>Government or industry incentives</i>	<i>Government or industry marketing</i>
Cambodia	N (too early to say)					
Namibia	N (n/a)					
India - wind	N (n/a)					
India - irrigation	Y	Strong	Medium	Strong	Strong	Medium
Ecuador	Y	Medium	Strong	-	Medium	Medium

Outcome: Increased number of green lending products sold to beneficiaries

	Evidence of outcome achieved? (Y/N)	Internal factor A:	Internal factor B:	Internal factor C:	External factor A:	Further external factors
Case study		<i>Effective reporting requirements</i>	<i>Development of green loan products</i>	<i>TA facility</i>	<i>Well-established networks/ existing relationships with clients</i>	<i>Linked to Outcome above - factors driving demand for green lending products lead on to volume of products sold</i>
Cambodia	N (too early to say)					
Namibia	N (n/a)					
India - wind	N (n/a)					
India - irrigation	Y	Weak	Medium	Medium	Strong	
Ecuador	Y	Medium	Strong	Strong	Medium	

*Additional factor is provision of finance to support development and sub-loans. Not added here as valid for all cases

Outcome: Enhanced capital markets for climate change mitigation

	Evidence of outcome achieved? (Y/N)	Internal factor A:	Internal factor B:	External factor A:	External factor B:	External factor C:
Case study		<i>Innovative financing structure</i>	<i>Working relationship between PI and supply chains</i>	<i>Government commitments/ incentives</i>	<i>Good partnerships with suppliers/ manufacturers</i>	<i>PIs offer green financing at market rates</i>
Cambodia	N (too early to say)					
Namibia	Y	Strong	-	Strong	-	-
India - wind	N (too early to say)					
India - irrigation	Y	-	Medium	Strong	Medium	Medium
Ecuador	Y	-	Weak	-	Medium	Medium

Outcome: In-country energy savings realised and renewable electricity generated

		Internal factor A:	Internal factor B:	Internal factor C:	Internal factor D:	External factor A:
Case study		<i>GCPF eligibility requirements for finance</i>	<i>Green sub-loans issued</i>	<i>TA capacity building for green lending</i>	<i>Effective reporting requirements</i>	<i>User behaviour</i>
Cambodia	N (too early to say)					
Namibia	N (too early to say)					
India - wind	Y	Strong	-	Weak	Medium	-
India - irrigation	Y	Strong	Strong	Medium	Weak	Medium
Ecuador	Y	Strong	Strong	Strong	Medium	Strong

Outcome: Realised CO2 savings

	Evidence of outcome achieved? (Y/N)	Internal factor A:	Internal factor B:	Internal factor C:	Internal factor D:	External factors
Case study		<i>GCPF eligibility requirements for finance</i>	<i>Green loans issued</i>	<i>TA capacity building for green lending</i>	<i>Effective reporting requirements</i>	<i>Linked to Outcome above - factors driving in-country energy savings realised and renewable electricity generated</i>
Cambodia	N (too early to say)					
Namibia	N (too early to say)					
India - wind	Y	Strong	-	Weak	Medium	
India - irrigation	Y	Strong	Strong	Medium	Weak	
Ecuador	Y	Strong	Strong	Strong	Medium	

Outcome: Increased capacity of partner institutions to develop financial products for RE and EE

	Evidence of outcome achieved? (Y/N)	Internal factor A:	Internal factor C:	External factor A:	External factor B:
Case study		<i>Effective technical assistance provided</i>	<i>Engagement with GCPF from PI</i>	<i>Country and government mandates</i>	<i>PI mandate to expand green lending</i>
Cambodia	Y	Medium	Medium	-	Strong
South Africa (Namibia)	Y	Medium	Strong	Medium	-
India - wind	N (too early to say)				
India - irrigation	Y	Strong	Medium	Strong	Strong
Ecuador	Y	Medium	Medium	-	Strong

2.2.5 Contribution Analysis

Contribution analysis involved six iterative steps⁴³. During the inception stage, steps 1, 2 and 3 were carried out, steps 4 onwards took place as part of the main stage of the evaluation. The outcome of all six steps was then captured and assessed in a contribution analysis table as shown in Table 4.1 of the main evaluation report.

1. Set out the attribution problem to be addressed

The evaluation team developed an understanding of the vision for ‘success’ and ‘non-success’ of the fund, the nature and extent of GCPF’s expected contribution to the anticipated outcomes, and of the impacts and key factors that could be influencing the outcomes and their likely contribution to the outcomes and impacts that GCPF aims to influence. This was facilitated through the activities set out in step 2.

2. Develop a theory of change and risks to it

Two theory of change workshops were held, one with the Board and Investment Committee, and another with the Investment Manager. As above, these workshops focused on developing a common vision of success, identifying other key influencing factors (both internal and external), and drafting a theory of change, including the underlying assumptions and risks to this model.

3. Gather the existing evidence on the theory of change

With the theory of change developed, step 3 involved collating evidence (both quantitative and qualitative) for each of the outcomes based on the available monitoring information and the qualitative data collected from familiarisation interviews. Part of this process has also included defining a set of indicators and identifying corresponding data sources. This has had a particular focus on intermediate outcomes as longer-term outcomes and impacts will not have been realised yet.

4. Assemble and assess the influence of internal factors and competing external factors

The groundwork for step 4 was largely in place from the inception stage. The goal of this was to identify and consider internal factors contributing to the outcomes and alternative external factors that could be influencing GCPF’s contribution to the outcomes and impacts. These potentially competing factors were identified through documentation review and stakeholder interviews at the inception stage and categorised into key factors; economic stability, political environment, EE and RE market development and climate financing landscape. This has ensured that confirmatory bias is also avoided as evidence has been sought that offers alternative theories of change. In order to assess the extent to which these competing factors

⁴³ Mayne, 2008. Contribution analysis: An approach to exploring cause and effect.

contribute to the GCPF's outcomes, causal assumptions have been developed articulating the links in the results chain of the theory of change. These assumptions have been tested primarily through stakeholder consultations to better assess the influence of external factors versus the GCPF.

5. Seek out additional evidence

Further evidence to test the contribution story developed was gathered through in-depth case-studies with partner institutions. These took place after the stakeholder interviews (with the Investment Manager, the Board, as well as other partner institutions), and were also conducted sequentially so each could continue to build on the evidence base developing to test the theory of change, and the role of external factors.

6. Revise contribution story

The final step has been to revisit the theory of change and contribution story once all the evidence was gathered and synthesised to test the causal assumptions that have been developed. This identifies whether data supports or does not support the theory of change and confirms where evidence is found of external factors influencing outcomes in spite of the fund. This final assessment of evidence is presented in Table 4.1 in the main body of this report.

Table 2.2.3 below highlights the steps that have been taken to develop and test the casual assumptions against the theory of change. This outlines the extent to which these assumptions have held true, where they had been disproved, or could be further improved and where assumptions have been revised and new causal assumptions required to provide a final contribution story.

Table 2.2.3 Assessment of contribution of the GCPF against causal assumptions

INTERMEDIATE OUTCOMES	ORIGINAL CAUSAL ASSUMPTION	EARLY INDICATION OF CONTRIBUTION OF GCPF (I. E. HYPOTHESES REALISED)	REFINED CAUSAL ASSUMPTION
Fund operation level			
Demonstration of implementing financial products in challenging markets	<i>GCPF has an increased investment pipeline of green financial products in challenging markets which in turn demonstrates that such investments are not as high risk as perceived</i>	The GCPF has supported the increased portfolio of green financial products through lending to Pls. This demonstrates the ability of the Fund to deliver against green mandates to investors. <i>This is due to the design of the GCPF model; combining both financial support and the delivery of technical assistance reliant on close partnerships with Pls.</i>	<i>GCPF generates an increased investment pipeline of green lending, demonstrating success of green mandate</i>
Reduction of risk for other co-investors	<i>GCPF can demonstrate that green lending is lower risk</i>	This has been demonstrated to the GCPF's existing investors through achieving the expected levels of return. However, challenges attracting further (private) investment are related to wider risk perceptions not being shifted. <i>The design of the Fund, with C-class shares to reduce risk, is the key element of the fund by which this is achieved.</i> Communicating the complex structure to potential investors has been a barrier, however.	<i>GCPF can demonstrate and communicate to potential investors that green lending is lower risk</i>
Attraction of other co-investors	<i>GCPF is designed to attract public and private sector investors</i>	The existence of private co-investment into the Fund demonstrates that the GCPF has been able to attract some private co-investors though progress is slow. <i>The demonstration of green impacts, and the location of the Fund in Western Europe, are the key elements of the Fund by which this is achieved (allowing green and/or global investment mandates to be met at lower risk).</i> The rate of public co-investment indicates that there are challenges in attracting additional public co-investment as there has been no new public co-investors since 2013, however, both BMUB and BEIS increased their contributions in 2016. Ongoing perceptions of risk (discussed above) and low financial returns are barriers to attracting additional private investors. This tends to be less of a concern for public investors.	<i>GCPF is designed in a way that attracts public and private sector investors</i>
Shareholder returns generated	<i>GCPF can generate profits and financial returns on investment</i>	The GCPF has generated financial returns and paid shareholder returns in line with expectations. <i>Regular reporting on the GCPF outcomes to shareholders is the key element of the Fund by which this is demonstrated</i>	<i>GCPF can generate profits and financial returns on investment</i>

		Development bank shareholders also consider non-financial returns (i.e. transformational change) such as CO ₂ reductions to be a key measure of success.	
Enhanced capital markets for climate change mitigation	<i>Technical assistance delivered by GCPF will increase knowledge and understanding in green lending practices resulting in increased capacity to develop successful RE and EE projects</i>	The GCPF demonstrates the potential to enhance capital markets for climate change mitigation (and thus increase the Fund's transformational potential). <i>The key element of the fund for doing so is by lending to PIs who are managing to generate margins (albeit limited in some cases due to local currency hedging costs) in their offer of green lending products to support EE and RE technologies with CO₂ emission reduction potential. Where PIs have formed partnerships in the sourcing, distribution and payback of their sub-loans with local supply chains this offers further transformational change potential in local markets.</i>	<i>GCPF successfully lends at market rates to projects which generate in-country energy savings and reduce CO₂ emissions helping to mitigate climate change, demonstrate appeal to co-investors and subsequently enhance capital markets</i>
Standardisation of methodology for CO₂ monitoring and reporting	<i>The methodology for reporting CO₂ reductions will facilitate a new standardisation of measurement approaches amongst partner institutions</i>	While not a primary benefit sought from the GCPF, this is a co-benefit which could be realised in the longer-term. Many of the PIs engaged in this evaluation have reported the benefits to their organisations of standardised reporting and in a few cases, early evidence indicates that PIs are likely to continue to use these, or spread use of them, beyond their GCPF products. <i>The reporting requirements of the GCPF, and TA delivery to support this, are key element of the fund through which this is being achieved.</i>	<i>The methodology for reporting CO₂ reductions will facilitate a new standardisation of measurement approaches amongst partner institutions outside of GCPF funding</i>
Partner Institution level			
Increased demand for green lending products from beneficiaries	<i>Partner institutions must increase awareness of suitable new credit lines and financial products appropriate to the market and beneficiaries</i>	The GCPF has enabled PIs to develop green lending products which, on the whole, are being offered at appropriate rates when compared to other offers on the market in the respective geographies. The evidence is currently mixed, however, as to whether the PIs have successfully increased demand for these products – in one case this evidence is missing as the product is yet to be launched, but in others there are mixed reports around levels of latent demand and awareness of the GCPF-supported products. <i>The marketing of green lending products to prospective clients by PIs is the key element of the fund to achieving this outcome.</i>	<i>Partner institutions must increase awareness of suitable new credit lines and financial products appropriate to the market and beneficiaries</i>
Increased number of green lending products sold to beneficiaries	<i>Partner institutions offer suitable new credit lines and financial products appropriate</i>	PIs engaged in this evaluation had been able to, or were in the process of, developing new credit lines and products earlier to the market than they would have done otherwise. It is too early to see whether this is sustained	<i>Partner institutions offer suitable new credit lines and financial products</i>

	<i>to the market and beneficiaries (net of deadweight and displacement)</i>	<i>(with the same level of energy savings being targeted) through new credit lines drawing on other sources of non-GCPF finance or the PI's own finance. The provision of GCPF finance alongside TA support has been the key element of the fund supporting PIs to increase their green lending portfolios. Reporting requirements have also indirectly contributed by improving the capability of PIs to select the most suitable technologies for sub-loans.</i>	<i>appropriate to the market and beneficiaries (net of deadweight and displacement)</i> <i>TA facility supports PI funding streams to deliver suitable new credit lines</i>
In-country energy savings realised and renewable electricity generated	<i>Technical assistance delivered by GCPF will increase knowledge and understanding in green lending practices resulting in increased capacity to develop successful RE and EE projects.</i> <i>Increase in the number of EE and RE projects funded through GCPF results in 'in-country' energy savings.</i>	<i>The GCPF (and in particular its TAF) has built internal capacity within PIs that has led to the development, marketing and delivery of green on-lending to projects contributing to mitigation of climate change. The requirements placed on GCPF finance, alongside TA support to meet these requirements, has driven green on-lending to projects delivering the required level of energy savings.</i>	<i>Increase in the number of EE and RE projects funded through GCPF results in 'in-country' energy savings.</i> <i>TA delivered by the GCPF will increase knowledge & understanding in green lending practices resulting in increased capacity to develop successful RE and EE projects.</i>
Realised CO₂ savings	<i>Technical assistance delivered by GCPF will increase knowledge and understanding in green lending practices resulting in CO₂ emission reductions</i>	<i>The GCPF (and in particular its TAF) has built internal capacity within PIs that has led to the development, marketing and delivery of green on-lending to projects contributing to mitigation of climate change. The requirements placed on GCPF finance, alongside TA support to meet these requirements, has driven green on-lending to projects delivering the required level of CO₂ savings.</i>	<i>The financing of EE and RE projects through the GCPF, supported in their identification through TA, will deliver the intended CO₂ savings</i>
Technical Assistance level			
Increased capacity of partner institutions to	<i>Technical assistance delivered by GCPF will increase knowledge and understanding</i>	<i>The GCPF has been able to increase the capacity of PIs to provide capital for climate change mitigation. Delivery of TA to support PIs in identifying,</i>	<i>Technical assistance delivered by the GCPF will increase knowledge and</i>

Annex 2b: Analysis and synthesis

develop financial products for RE and EE	<i>in green lending practices resulting in increased capacity to develop successful RE and EE projects.</i>	<i>marketing and reporting on suitable projects has been the key element of the fund for this.</i>	<i>understanding in green lending practices resulting in increased capacity to develop successful RE and EE projects.</i>
-------------------------------------------------	-------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------

GCPF's contribution to each of these intermediate outcomes derived from this approach has been further assessed against the Fund's overarching objectives with each intermediate outcome sitting underneath a broader objective. The final impact assessment as outlined in section 4 of the main body of this report is considered in line with these objectives. The table below shows how the intermediate outcomes have been grouped to align to the Fund's overarching objectives.

Table 2.2.4 mapping intermediate outcomes against GCPF objectives

<i>Mobilise and attract more private and donor investment at fund level.</i>	<i>See an increase in the number of energy efficiency or renewable energy investments.</i>	<i>Increase the fund's transformational potential by improving local knowledge and capacity.</i>
Intermediate outcomes		
Demonstration of implementing financial products in challenging markets	Increased demand for green lending products from beneficiaries	Increased capacity of partner institutions to develop financial products for RE and EE
Reduction of risk for other co-investors	Increased number of green lending products sold to beneficiaries	Enhanced capital markets for climate change mitigation
Attraction of other co-investors	Realised CO2 savings	
Shareholder returns generated	In-country energy savings realised and renewable electricity generated	

2.2.6 Weight of evidence

A variety of data has been collected in order to assess impact. One consideration for the synthesis of the outputs from these multiple evidence strands is dealing with any contradiction in the findings produced. A 'weight of evidence' based approach has been adopted where different strands of evidence are given more or less weight in their synthesis with other pieces of evidence based on an assessment of their reliability and validity. The table below outlines the weight given (in a qualitative, rather than quantitative sense) to particular evidence strands against specific topic areas for this evaluation. The greater the number of ticks, the higher the assumed weight of evidence.

A summary of the assessment made about the reliability and validity of each main data source gathered through this evaluation is provided here:

- **Interviews with co-investors:** co-investors are best placed to provide perceptions of GCPF in terms of its ability to attract co-investors as well as to provide an external view on the effectiveness and relevance of the fund design.

- **Interviews with GCPF Board & Committee Members:** unlike co-investors, board and committee members have an investment in the success of GCPF and therefore are more likely to have some biases in their views on the effectiveness of process areas such as assessment criteria as they have a first-hand interaction with this.
- **Interviews with Investment Manager:** the Investment Manager is involved in many aspects of GCPF processes and thus can provide in-depth knowledge of the systems in place. However, the Investment Manager may also have some biases about effectiveness of processes and outcomes realised as this is a key part of their mandate.
- **Interviews with Partner Institutions:** partner institutions will provide potentially more biased opinions than co-investors as they may have an incentive to participate and to benefit from the sustainability of the project. However, they are likely to provide a less biased opinion of awareness of GCPF and of the effectiveness of the process as they are one step removed.
- **Project level case studies:** case studies are able to provide an understanding of outcomes having been realised at a beneficiary level which would not otherwise have been captured. However, it is worth noting that this is still perception based and would ideally be validated with additional monitoring information, some of which is available through the Investment Manager's reporting to the Board.
- **Benchmarking analysis:** this analysis provides an unbiased assessment of how the fund operates compared to other funds in the sector and helps to validate perceptions of stakeholders, particularly in relation to attracting private investors through assessing market rates and the suitability of the fund design.
- **Secondary evidence:** this includes KPI reporting and GCPF reporting, which provide quantitative evidence to verify stakeholder perceptions, for instance, the number of green lending products sold, number of returns generated or number of low carbon technologies supported.

It is acknowledged that the mid-term evaluation did not include other audience groups, such as potential co-investors and the wider investor community, whose perceptions would also provide additional, potentially more unbiased perspectives on the contribution of GCPF.

Table 2.2.5 Weight of evidence against topic area
(overleaf)

Annex 2b: Analysis and synthesis

Topic areas	Evidence						
	Interviews with co-investors	Interviews with GCPF Board & Committee Members	Interviews with Investment Manager	Interviews with Partner Institutions	Project level case studies	Benchmarking analysis	Secondary evidence (e.g. KPI reporting, GCPF reporting)
Process Evaluation							
<i>Relevance of fund design</i>	✓✓✓	✓	✓	✓✓	✓✓	✓✓✓	
<i>Effectiveness of fund design</i>	✓✓	✓✓✓	✓✓	✓✓	✓✓		
<i>Efficiency of fund design</i>	✓	✓✓	✓✓	✓	✓	✓✓✓	
<i>Suitability of investments</i>	✓	✓✓	✓✓	✓✓	✓✓✓		✓✓✓
<i>Building awareness of GCPF</i>	✓✓✓			✓✓	✓✓		
<i>Assessment guideline effectiveness and efficiency</i>		✓✓	✓✓	✓✓	✓✓		
<i>Effectiveness and efficiency of investment selection</i>		✓✓	✓✓	✓✓	✓✓		✓✓✓
<i>Capacity building</i>			✓✓	✓✓✓	✓✓✓		

Topic areas	Evidence						
	Interviews with co-investors	Interviews with GCPF Board & Committee Members	Interviews with Investment Manager	Interviews with Partner Institutions	Project level case studies	Benchmarking analysis	Secondary evidence (e.g. KPI reporting, GCPF reporting)
<i>Effectiveness of monitoring and reporting</i>			✓✓	✓✓✓	✓✓✓		✓✓✓
Impact Evaluation							
<i>Implementing financial products</i>		✓✓	✓✓	✓✓✓	✓✓✓		✓✓✓
<i>Standardising CO₂ reporting and monitoring</i>			✓✓	✓✓	✓✓		✓✓✓
<i>Attraction of investor and reduction of risk</i>	✓✓✓		✓✓				
<i>Increasing demand and sale of green lending products</i>			✓✓	✓✓✓	✓✓✓		✓✓✓
<i>Enhancing capital markets</i>					✓✓✓		
<i>Generating energy savings</i>			✓✓		✓✓✓		✓✓✓

Topic areas	Evidence						
	Interviews with co-investors	Interviews with GCPF Board & Committee Members	Interviews with Investment Manager	Interviews with Partner Institutions	Project level case studies	Benchmarking analysis	Secondary evidence (e.g. KPI reporting, GCPF reporting)
<i>Increasing partner capacity</i>			✓✓	✓✓✓	✓✓✓		
<i>Security of supply</i>					✓✓✓		
<i>Job creation</i>					✓✓✓		
<i>Sustainability and replicability</i>					✓✓✓		

2.2.7 Assessment of additionality

Additionality of the GCPF has been considered by this evaluation at both a fund level and at an investment level. A broad view of the potential additionality has been adopted, taking into account factors such as:

At an investment level (i.e. in relation to loans to partnering institutions):

- The availability of other funding sources (i.e. whether the PI would have found an alternative source of finance to develop their project/product);
- Whether the EE/RE project would have gone ahead in the same way, to the same scale and the same size;
- The level of CO₂ emissions savings that would have been generated (and specifically, whether this would have been at the 20% level targeted by GCPF);
- The level of increased knowledge and capacity building that Partner Institutions would have obtained in the absence of GCPF;
- The additionality of technical assistance provided in supporting RE/EE investments.

At a fund level:

- The availability of other similar funds for co-investors;
- Shareholder returns which would not otherwise have been generated;

These criteria were assessed through the synthesis of qualitative interviews and the application of contribution analysis. As a result, (and given the evaluation did not apply a quasi-experimental approach to the impact assessment), the discussion of additionality in the main report discusses the relative *contribution* made by the GCPF to its targeted outcomes, and considers the extent to which key elements of the Fund can be identified as contributing to progress against outcomes as opposed to other external factors or influences. At a PI level, the assessment of this contribution is particularly reliant on case study evidence to assess how projects/products/portfolios would have developed, if at all, without GCPF funding. It is important to note that evidence is limited to a small number of case studies conducted for this evaluation, making it difficult to determine the extent to which GCPF contributed to the above elements across all of its investments. Partner institutions have supported the evaluation team's assessment of how TA is applied in practice and if its contribution to the project would have occurred without GCPF.

At a fund level, it is more challenging to assess levels of additionality against the criteria above. Currently there are only two private investors who are able to provide a perspective on whether they would have invested their capital in other green funds if GCPF did not exist. As part of the evaluation we were able to speak to only one of these shareholders. Furthermore, the evaluation has not captured the perspective of those that have not invested in the fund and it is therefore more challenging to assess whether the same outcomes would have been possible without GCPF (i.e. via other funds, similar returns generated) as

perceptions are only captured from existing investors. However, an alternative approach has been to implement contribution analysis in order to provide a reasoning based assessment as well as to capture alternative explanations of outcomes realised (please see annex 2.2.3 for more detail on this approach).

Benchmarking activities have also supported the additionality assessment at both a fund and project level and is able to validate stakeholder perceptions making particular inferences regarding the operation of the fund versus other similar funds.

Annex 3: Further information on benchmarking methodology and results

This annex provides further detail on the objectives for, and approach taken to, the operational and marketing benchmarking strand of this evaluation. It also provides the more detailed results of this analysis which have been summarised within the main body of the report. This will allow the evaluation team to develop a summary of the climate finance landscape and underlying economic and political trends and drivers within the market, which may influence the outcomes of the fund

Objectives

This objective is summarised into three questions:

- ▶ How do GCPF Investment Manager fees compare to other similar funds and facilities?
- ▶ How does GCPF loans to PIs compare to other funds available in the case study markets?
- ▶ How do GCPF sub-loans from PIs compare to other available finance in the case study markets?

Operational analysis:

In conducting this benchmarking analysis the following tasks have been completed:

- ▶ Gathered data for comparable funds and Investment Managers and presented their remuneration (where possible) according to fixed and performance related elements. This data has been gathered from Prequin from EY's internal sources.
- ▶ Developed a set of alternate funds for comparison (comparator managers). These are drawn from three sources:
 - ▶ Broad public sector Investment Managers – CDC, FMO, IFC, and SIFEM (examples of DFI's who engage in similar investment structures);
 - ▶ Individual public sector managed funds focusing on experience gained in energy / climate finance funds; and
 - ▶ Private sector Investment Managers focusing on a broader base of funds and then specifically on infrastructure funds. Note that these are presented at an aggregate level not for specific funds.

- ▶ Collected financial data for each of these comparator managers from publically available sources such as available annual reports and financial accounts as published through organisations such as Companies House.
- ▶ Presented data for the proposed similar funds to allow comparison to GCPF manager focusing on the following criteria:
 - ▶ Fees and costs (fixed and performance related where available);
 - ▶ Funds under management; and
 - ▶ Headcount.

In developing benchmarks for fee arrangements, a range of publicly available sources have been drawn on and the intention has been to include benchmarks across a broad range of investment vehicle types. Data has been drawn from:

- ▶ UK government funded infrastructure and climate investment funds and specifically:
 - ▶ The Private Infrastructure Development Group (PIDG) and associated facilities;
 - ▶ Climate funds managed by the IFC, funded through the Asian Development Bank (ADB);
 - ▶ Other Technical Assistance vehicles such as PPIAF etc.
- ▶ Other publicly owned investment vehicles particularly the Development Finance Institutions (DFIs); and
- ▶ Wider commercial fund management benchmarks covering the range of private investment trusts and vehicles for which EY has data cover around 100 such funds.

There are some health warnings associated with these comparisons. Most importantly no one fund does exactly the same activity as another (where there are direct comparators, such as the Green for Growth Fund, there is no publicly available data). As such, it is important to bear in mind whether the fee and associated ratios are broadly consistent with other similar funding mechanisms in the round.

The analysis set out herein is based on understanding of information provided by GCPF, the Investment Manager and from other publicly available data. The data, information and explanations provided in both written and oral form have been relied upon without further independent verification. Accordingly, GCPF and the Investment Manager remain responsible for all such data, information and explanations as may be appropriate.

Summary of assessment of fee data comparison

Analysis and benchmarking of the fees incurred in the management of GCPF suggests the fund is being delivered efficiently, with total fees by headcount broadly comparable to a range of other public and private funding sources.

Summary of Technical Assistance Projects and Efficiencies

A total of 54 TA projects have been delivered since the fund's inception (with six additional projects approved in Q2 2017). The table below shows the latest TA figures from the 2016 Annual TA report. Since this publication there have been four new TA projects approved by TAC in 2017.

The TA projects have taken several forms and include discrete project support such as green lending capacity building, developing SEMS, commissioning baseline studies to help with eligibility assessments, and market and feasibility studies for direct investments among others.

In addition to formal TA projects, this evaluation has also sought evidence on the uptake, quality and impact of informal TA. This is support provided to PIs on a more ad-hoc day-to-day basis by the Investment Manager and local green lending officers. This might include support such as assisting PIs with completing technical aspects of the reporting tool. PIs would not pay for this informal support, rather it formed part of the ongoing relationship between themselves and the Investment Manager. The PIs sometimes use the Investment Manager to get informal feedback on an assessment of new technologies as in some cases PIs don't have this knowledge in-house.

An assessment of the efficiency of the TAF has involved benchmarking of the management costs incurred by this element of GCPF against available comparators such as EIB, IMF and EBRD. This has taken into account that the payment structure for the TAF has recently been changed.

Based on the original management cost model, the TAF under GCPF was charged at a slightly higher rate than the majority of TA facilities. However, the revised approach, in place since the beginning of 2017, benchmarks well against other comparable facilities.

The original fee structure for the TAF is higher than most that are comparable, such as PPIAF, but in line with some facilities like CGAP and the Cities Alliance. While the TA provided through some funds is at a lower cost of the fund value, this is generally in cases where the Technical Assistance is managed on a procured basis. In these instances, Technical Assistance is procured from a third party (i.e. consulting firm) and managed by the procuring entity but without the procurer being involved in implementation. This is the model largely adopted by PPIAF and the PIDG.

At the higher cost end, more of the Technical Assistance is implemented by the procuring agent and / or more time is spent managing processes that support the implementation of the Technical Assistance or in sharing or promoting outputs from it. This is the model largely adopted by the Cities Alliance and CGAP.

On the basis that GCPF is more involved in the procurement and implementation of the Technical Assistance, and based on its cost model from 2017, a comparison of the costs of this element of the fund compare relatively favourably to the most appropriate benchmarks.

8. Annex 4: Research tools

Global Climate Partnership Fund: Interview guide for main stage evaluation with Board, Investment Committee and Investment Manager

Email invitation

Subject: Global Climate Partnership Fund Evaluation – Invitation to Participate

Dear XXX,

We are contacting you regarding your involvement in the Global Climate Partnerships Fund (GCPF) and to ask you to feed into the evaluation of this project. As part of the independent mid-term evaluation for investors, BEIS and BMUB we are conducting interviews to gather lessons learnt and to help feed into decisions about the future direction of the fund.

To date, the evaluation team (Ipsos MORI, alongside EY and SQ Consult) has completed an initial scoping review of the fund but are now beginning the main stage of the evaluation and conducting an initial series of interviews to understand views on how the fund has been performing so far. In particular, we'd like to understand your perceptions of how GCPF's intended processes have been implemented to date, and to what extent these have been fit for purpose, including anything you think has worked particularly well or where lessons have been learned.

The discussion would take around an hour and could be conducted either face to face or over the phone depending on your location.

Please be assured that all comments made during the course of the interview will be treated in the strictest confidence. Your responses will not be attributed to you and will only be reported in aggregate. Please let us know if anything you say could easily be attributed to you or if you mention anything commercially sensitive that you would prefer not to be shared with the investors.

To this end I would be grateful if you could suggest a convenient time for myself or one of my colleagues to arrange a time to speak with you between now and x.

Thank you in anticipation for your help. I do hope you will be able to participate as your views are greatly valued.

With kind regards,

XXX

Introduction

The interview should last about an hour but may be a little shorter or longer, depending on their responses.

If not interviewed previously, explain that investors, BEIS and BMUB, have commissioned an independent mid-term evaluation of the Global Climate Partnerships Fund (GCPF) which is being conducted by Ipsos MORI, alongside EY and SQ Consult. A key aim for the evaluation is to learn lessons, to help feed into decisions about the future direction of the fund.

The purpose of the interview is to assess the progress of the fund to date, what has worked well as well as what barriers there have been in implementing the fund and what processes may have changed as a result (or not been

implemented) and to evaluate whether perceptions and expectations for the success of the fund have changed and if so, in what way.

Please ensure that you are familiar with the role and responsibilities of the individual and if they have been interviewed before, **please familiarise yourself with the notes from their previous interview**, particularly around their expectations and what success looks like for them.

Please assure the interviewee that all comments made during the course of the interview are anonymous and will be treated in the strictest confidence. Their responses will not be attributed and will only be reported in aggregate. Request that they let us know if anything easily be attributed or if they mention anything commercially sensitive that they would prefer not to be shared with the investors.

A. Role and responsibilities (Ask All)

1. (Previously), you said that you were responsible for XX in relation to the fund, has this changed at all?
[IF YES] In what way?
2. Have there been any (other) changes to the key management teams involved in managing and monitoring the fund?
3. Have there been any changes to the processes that have been implemented to deliver the fund since we last spoke to you/earlier this year?

[Use the table to identify which sections B-G to ask which stakeholders. Ask stakeholders and tick relevant boxes in the table and capture a brief description of the interviewee's role.]

Fund and Governance arrangements	Investment sourcing and origination	Assessment stage	Investment selection	Fund delivery, monitoring and reporting

B. Overall perceptions of programme delivery to date (Ask All)

Interviewer note: This question is about overall views on the key areas of strength and weakness of the fund processes – later sections go into more detail around the specifics of each process

4. What has been your experience of the delivery of the fund to date?
 - a) What has worked well? What do you think are the key strengths of the delivery model?
 - b) What has worked less well?

[Use information from Sections A and B to guide question routing and use of probes.]

We'd now like to discuss your views on the specific processes involved in delivering the fund.

C. Fund design and governance arrangements (Ask All)

5. To what extent do you think the design of the fund aligns with the objective of leveraging private sector funding to facilitate EE and RE investments in developing countries?
 - a) In what way, if at all, do you think the model could be improved in order to better reflect the requirements of the fund?
6. To what extent do you think the design of the fund reflect the needs of the lending recipient? PROBE ON: Does this vary in different countries? Among different types of investments?

7. How effective would you say is the internal communication between yourselves and other parties involved with delivering GCPF in enabling project investments to be made?
PROBE ON: Board, Committees, Shareholders - clarity and transparency, Consultants for TA
8. What have been the key governance challenges encountered in the delivery of GCPF?
 - a) What difficulties or barriers, if any, has the governance structure faced in delivering the fund as planned?
 - a) Have improvements in the governance structure been made? In what ways?
9. Overall, to what extent do you think the decision making process across GCPF parties is effective in making project investments?
 - a) To what extent do you think this process is transparent? PROBE for transparency to different stakeholders
 - b) To what extent is the time and costs involved with making investment decisions reasonable? PROBE ON: time taken to review investment proposals, amends to guidelines
 - c) How do you think decision making processes could be improved?

D. Investment sourcing and origination (Ask responsAbility)

10. How effective are market assessments, both undertaken internally and purchased in identifying suitable locations to target prospective investment opportunities?
 - a) To what extent do country level investment criteria align with the requirements to increase the green lending portfolio for financial institutions or make direct investments in RE/EE in Developing countries
 - b) To what extent are [you / responsAbility] able to identify suitable specific investments which align with GCPF objectives?
 - c) What barriers or difficulties have there been in identifying potential investments? PROBE ON: regulatory, financial and institutional factors? Where has competition come from?
11. To what extent do you think prospective investors are aware of GCPF? **(ask all)**
 - a) To what extent do you think prospective investors have detailed knowledge of GCPF? PROBE on donor govs, DFIs, private sector
12. To what extent do prospective investments align with the requirements for the fund in the first stages of contact? PROBE ON: Both DIs and FIs PROBE ON:
 - a) How does this ensure that investments could not have sought funding elsewhere?⁴⁴
 - b) How effective are networking activities in identifying investments?
 - c) How effective are networking activities in bringing in private capital?
 - d) Are these funds additional and (in relation to DIS) transformational?
 - e) What lessons have been learned from the investment sourcing process? How might this process be improved?
13. How much time is spent engaging with prospective PIs?
 - a) To what extent do you think the time and costs spent on engaging with prospective PIs are reasonable?
14. To what extent are prospective PIs communicating with the fund?
PROBE ON: Frequency of new enquiries, type of communication, topics covered

⁴⁴ NOTE interviewers to be briefed on the notion of transformational change and additionality]

15. [ASK RA ONLY] To what extent are communications clear to potential Partner Institutions regarding investment requirements?
16. [ASK RA ONLY] To what extent are communications clear to investors from the outset regarding the TAF?
17. What lessons have been learned from the engagement process? How might this process be improved?

E. Assessment stage (Ask responsAbility, Board and committees)

18. To what extent do the assessment criteria (i.e. the eligibility checks, due diligence check and SEMS assessment) support making investments?
19. To what extent do the assessment criteria (i.e. the eligibility checks, due diligence check and SEMS assessment) support the need to leverage private sector funding in Developing countries to use EE/deploy RE?
 - a) How does this differ between FIs and DIs?
20. [ASK RA ONLY] How much time is spent assessing investments? To what extent is the time and costs spent on assessing suitability of investments considered reasonable?
 - a) How does this differ between FIs and DIs?
21. [ASK RA ONLY] And, to what extent is the time spent on assessing TAF requirements considered reasonable?
 - a) How does this differ between FIs and DIs?
22. How effective are the due diligence processes in assessing whether these loans would have been disbursed regardless of GCPF funding? PROBE ON: eligibility check, SEMS assessment and DD, DI due diligence,
 - a) How does this differ between FIs and DIs?
23. Does the due diligence effectively account for potential risk?
 - a) To what extent does the risk assessment effectively identify risky projects? PROBE on investment risk, reputational risk for GCPF, risk of FI disbursing the funds effectively
 - b) Have there been any risks identified or missed that have impacted investments?
24. What lessons have been learned from the due diligence process? How might this process be improved?

F. Investment selection (Ask responsAbility and committees)

25. To what extent do you consider the process by which investments are selected (i.e. development of term sheet, concept note and proposal) to be impartial and cost-effective?
 - a) To what extent is the investment criteria adhered to when selecting successful investments? Have there been some areas of the investment criteria that have had to be softened/amended to ensure investments can be made?
26. What additionality processes are in place to ensure suitable investments are selected?
 - a) How does this differ for DIs and FIs?
27. How effectively are TA plans developed to maximise additionality and minimise duplication with other planned activity?
28. What barriers or difficulties have there been in selecting investments? Have improvements been made to overcome these?

- a) What lessons have been learned from the investment selection process? How might this process be improved?

29. To what extent are the time and costs spent on selecting investments considered reasonable?

G. Fund delivery, monitoring and reporting (Ask All)

30. To what extent do you think that engagement with GCPF helps to build the capacity of partner institutions?

- a) How effective is formal TA support in building capacity versus the informal support advice and guidance provided by responsAbility? How does this differ?
- b) How does the TA support ensure that the investment is additional, and would not have happened otherwise?
- c) What lessons have been learned from the TA process? How might this process be improved?

31. What barriers or difficulties are there in monitoring investment outcomes? Have improvements been made to overcome these? PROBE: Which investment outcomes are easier / more difficult to monitor?

32. How effective are the monitoring and reporting processes for ensuring that sub-loans are delivered successfully and at scale?

- a) To what extent do you think they accurately characterise delivery on the ground?
- b) What feedback have you received on these processes from Partner Institutions?
- c) What lessons have been learned from monitoring and reporting processes in order to improve future investments? How might these processes be improved?

33. [ASK BOARD, RA & IC ONLY] To what extent are the monitoring and reporting processes considered transparent? PROBE ON TRANSPARENCY TO DIFFERENT STAKEHOLDERS

34. [ASK RA ONLY] To what extent do you think PIs understand the reporting requirements? What are the challenges for PIs? How do you overcome these challenges?

35. [ASK RA ONLY] To what extent is time taken to complete and review reporting requirements considered acceptable?

H. Early signs of impact of the fund (Ask All)

[Overarching causal pathway question]

36. To what extent, if at all, do you think Partner Institutions have increased or decreased the scale of their green lending activities outside of GCPF fund activity since engaging with GCPF?

- a) Is this in line with expectations?
- b) If not, why not?

37. [IF CHANGED] In your view, what has been the impact of GCPF on Partner Institutions' green lending activities?

- a) What elements of GCPF do you think have contributed to this increase/decrease?
- b) Are there any other factors, separate from GCPF, that are likely to have had an effect on why this increased/decreased?
- c) To what extent do you think that this change would have occurred in the absence of engagement with GCPF?

[Outcome 2: Standardisation of methodology for CO₂ monitoring and reporting]

38. [ASK IC AND RA ONLY] To what extent do you think that the standardisation of CO₂ monitoring and reporting by Partner Institutions has improved? PROBE ON EXAMPLES
- a) Is this in line with expectations?
 - b) If not, why not?
39. [IF CHANGED] In your view, what has been the impact of changing the standardised methodology among investments?
- a) What elements of GCPF do you think have contributed to standardising this methodology?
 - b) Are there any other factors, separate from GCPF, that are likely to have had an effect on why this has occurred?
 - a) To what extent have in-country political or regulatory factors played a role? Are there any incentives for partner institutions to report on CO₂?
 - c) To what extent do you think that this standardisation would have occurred in the absence of any GCPF funding?

[Outcome 3: Reduction of risk for and attraction of other investors]

40. To what extent, if at all, do you think that perceptions of the risk associated with green lending have reduced among investors since the fund became operational? PROBE ON EXAMPLES
- a) Is this in line with expectations?
 - b) If not, why not?
41. [IF REDUCED] In your view, what has been the impact of this reduction in risk among investors?
- a) What elements of GCPF do you think have contributed to this reduction in risk? PROBE ON: networking activity
 - b) Are there any other factors, separate from GCPF, that are likely to have had an effect on why this has occurred?
 - a) To what extent have in-country economic factors such as investor interest and financial market performance played a role?
 - b) To what extent has there been competition with other DFI funding?
 - c) To what extent do you think that this would have occurred in the absence of any GCPF funding? PROBE ON: Other funds available e.g. PIDG, FMO, ADB, IFC, FMO

[Outcome 4: Shareholder returns generated]

42. To what extent have returns been generated for shareholders in line with expectations?
- a) If not, why not?
43. In your view, what has been the result of demonstrating this level of returns on the local (i.e. specific project investments) markets and globally (number of EE/RE investments, appetite)?
- a) What components of GCPF do you think have contributed to this? PROBE ON: networking activity
 - b) Are there any other external factors that are likely to have had an effect on why this has occurred?
 - a) To what extent has there been investor interest in green lending?
 - b) Are you aware of any other drivers in local financial markets? i.e. government incentives
 - c) To what extent do you think that this would have occurred in the absence of any GCPF funding? PROBE ON: Other sources of funding available

[Outcome 5: Enhanced capital markets for climate change mitigation]

44. To what extent do you think RE and EE capital markets have changed since GCPF began operating, if at all? PROBE ON IF CHANGED SINCE RA BECAME INVESTMENT MANAGERS
- a) In what way? In which markets?
 - b) Is this in line with expectations?
 - c) If not, why not?

45. [IF CHANGED] In your view, how has this change in capital markets influenced EE and RE projects funded by GCPF?
- a) And, what about those projects not funded by GCPF?
 - b) What components of GCPF do you think have contributed to this?
 - c) Are there any other external factors that are likely to have had an effect on why this has occurred?
PROBE ON: institutional or political regulation
 - a) To what extent do you think local supply chains are able to implement activities effectively?
 - b) How have costs of technology influenced RE and EE capital markets, if at all?

[Outcome 6 & 7: Increased demand for green lending products from beneficiaries; Increased number of green lending products sold to beneficiaries]

46. [ASK RA ONLY] Before 2011, what in your view, was the level of demand for green lending in middle-income countries? PROBE ON: Countries in which GCPF is operating
- a) To what extent, if at all, are you aware of an increase in demand for green lending from beneficiaries since 2011?
 - b) Has this varied in specific markets? Or specific sectors?
 - c) If not, why not?
47. [IF CHANGED] In your view, what has been the impact of this increased demand on investments in EE and RE projects in local markets?
- a) PROBE ON: Has this resulted in an increase in the number of green lending products sold?
 - b) What elements of GCPF do you think have contributed to this demand?
 - c) Are there any other external factors that are likely to have had an effect on why this has occurred?
PROBE ON: local country context including political environment/stability
 - d) To what extent do you think any increased lending by GCPF PI's may have displaced sales of others in these markets?
 - e) Do you think this would have occurred in the absence of any GCPF funding?

[Outcome 8 & 9: In-country energy savings realised and renewable electricity generated; Realised CO₂ savings]

48. [ASK RA ONLY] To what extent do you think more energy savings have been realised or renewable electricity generated through sub-loans provided by GCPF than would have been delivered by Partner Institutions in the absence of GCPF? PROBE ON: EXAMPLE INVESTMENTS
- a) At an overall level, what evidence is there that CO₂ savings have been realised through sub-loans?
 - b) Has this varied in specific markets? Or specific sectors?
 - c) Is this in line with expectations?
 - d) If not, why not?
49. [IF CHANGED] In your view, what has been the impact of energy savings realised/renewable energy generated on the local market?
- a) Do you think this would have occurred in the absence of any GCPF funding? Why/Why not?
 - b) What elements of GCPF do you think have contributed to these savings?
 - c) Are there any other external factors that are likely to have had an effect on why this has occurred?
 - a) To what extent do you think local supply chains are able to implement activities effectively?
 - b) To what extent do you think the costs of technology have enabled RE and EE investments, if at all?

[Outcome 1: Demonstration of implementing green lending products]

50. To what extent do you think GCPF has enabled the use of green lending products and offerings in challenging markets? PROBE ON EXAMPLES guarantees, co-financing structures, or other risk-sharing mechanisms
- a) Is this in line with expectations?

- b) If not, why not?
- c) [IF CHANGED] What do you think, if any, has been the role of GCPF in this change?
- d) What components of GCPF do you think have contributed to the implementation of these innovative products?
- e) Are there any other external factors that are likely to have had an effect on investment in innovative products? PROBE ON: availability of suitable PIs, investor interest
- f) To what extent do you think that these types of products would have been implemented in the absence of any GCPF funding?

[Outcome 10: Increased capacity of partner institutions to develop financial products for RE and EE]

- 51. [ASK RA ONLY AND TAF COMMITTEE] In what ways has the technical assistance provided by GCPF influenced partner institutions? PROBE ON EXAMPLE INVESTMENTS; ROLE OF TAF
 - a) In what ways?
 - b) Has this varied in specific markets? Or specific sectors?
 - c) How does this differ for formal TA versus informal TA?
 - d) Is this in line with expectations?
 - e) If not, why not?
- 52. [IF INCREASED CAPACITY FOR GREEN LENDING] In your view, what has been the impact of the increased capacity?
 - a) What do you think has contributed to increased capacity?
 - b) Are there any other factors that are likely to have had an effect on why this has occurred? PROBE ON: financial market performance
 - c) Do you think this would have occurred in the absence of any GCPF funding? Why/Why not?

THANK AND CLOSE

Case study briefing note

Overarching objectives of the case studies

The overall purpose of these case studies is to understand what works for whom and why. We would like to learn about the following aspects for the evaluation:

Relevance

1. To what extent, in which ways and in which contexts does GCPF model meet the needs of the recipients of lending (both financial institutions and end-user)?
2. Are most of (?) activities and outputs of the programme consistent with the overall goal and the attainment of its objectives and (donor) intended impacts?

The primary objectives of the fund can therefore be divided into three key categories:

1. Mobilise and attract more private and donor investment at fund level.
2. See an increase in number of energy efficiency or renewable energy investments.
3. Increase the fund's transformational potential by improving local knowledge and capacity.

Efficiency

3. Is the fund an efficient delivery model to achieve desired outputs compared to alternatives and where can this efficiency be improved?
4. What lessons for efficient delivery can be taken into future funding vehicles?

Effectiveness

5. What can we learn about what is working (and not), for whom, and in what contexts, with regards to sub-loans being issued successfully and at scale? (this is key for case studies)
6. What are the major factors influencing the achievement or non-achievement of the objectives?
7. Whether and in what contexts has the design of the fund (on-lending and direct investment), or the Technical Assistance (TA) had an effect on capacity development for local banks?

We would also like to explore the intermediate outcomes and the factors that may affect these outcomes. Specific questions relating to each of these can be found in the PI topic guide.

OUTCOMES / IMPACTS	CAUSAL HYPOTHESES TO BE TESTED	LIKELY COMPETING EXTERNAL FACTORS
INTERMEDIATE OUTCOMES		
Demonstration of developing a pipeline of green lending.	GCPF has an increased investment pipeline of green lending which in turn demonstrates that such investments are not as high risk as perceived (see outcome 'Reduction of risk for and attraction of other co-investors')	Economic stability: suitable partner institutions Economic stability: investor interest at fund and country level
Reduction of risk on-lending risk	GCPF can demonstrate that green lending is lower risk	Economic stability: investor interest at fund and country level Economic stability: financial market performance Climate finance landscape: available funding from other DFIs

Shareholder returns generated	GCPF can generate profits and financial returns on investment (interest rates paid by Pls to GCPF is what drives returns)	Economic stability: investor interest at fund and country level Economic stability: financial market performance
Enhanced capital markets for climate change mitigation	Technical assistance delivered by GCPF will increase knowledge and understanding in green lending practices resulting in increased capacity to develop successful RE and EE projects (this is particularly important) Increase in the number of EE and RE projects funded through GCPF results in 'in-country' energy savings.	RE/EE market Development: availability of local supply chain to implement activities effectively RE/EE market Development: technology cost influence on business case to make investments interesting
Increased demand for green lending products from beneficiaries	Partner institutions must increase awareness of suitable new credit lines and financial products appropriate to the market and beneficiaries	Political environment: political influence on business case for investments
Increased number of green lending products sold to beneficiaries	Partner institutions offer suitable new credit lines and financial products appropriate to the market and beneficiaries (net of deadweight and displacement)	Political environment: political influence on business case for investments
Enhanced capital markets for climate change mitigation (long term debt available)	Increase in the number of EE and RE projects funded through GCPF results in more long term debt available	Political environment: political influence on business case for investments Economic stability: financial market performance
In-country energy savings realised and renewable electricity generated	Technical assistance delivered by GCPF will increase knowledge and understanding in green lending practices resulting in increased capacity to develop successful RE and EE projects. Increase in the number of EE and RE projects funded through GCPF results in 'in-country' energy savings.	RE/EE market Development: availability of local supply chain to implement activities effectively RE/EE market Development: technology cost influence on business case to make investments interesting
Realised CO₂ savings	Technical assistance delivered by GCPF will increase knowledge and understanding in green lending practices resulting Partner institutions offer suitable new credit lines and financial products appropriate to the market and beneficiaries Increase in the number of EE and RE projects funded through GCPF results in 'in-country' energy savings.	RE/EE market Development: availability of local supply chain to implement activities effectively RE/EE market Development: technology cost influence on business case to make investments interesting
Increased capacity of partner institutions to	Technical assistance delivered by GCPF will increase knowledge and understanding in green lending practices resulting	Economic stability: financial market performance

develop financial products for RE and EE		
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PI interviews

We should aim to interview a mix of individuals within the PIs who have experience of GCPF from an operational and management perspective. It would be particularly interesting for us to speak with senior management about their perceptions of the fund so please push for this if they are not initially suggested for interviews.

The PI topic guide can be used as a basis for discussion, but conversations will have to be tailored according to the individual's role. The **key areas** to cover are:

- Current climate landscape and internal and external barriers to implementation.
- Effectiveness of process areas
 - Alignment of assessment criteria and requirements of the fund.
 - Selection processes for PI on-lending
 - Effectiveness of due diligence processes and areas for improvement.
 - Partner perceptions of capacity to create sustainable markets and meet standards for CO₂ monitoring and reporting.
 - Successes within the processes as well as desired improvements.
- Relationship between partner institutions and GCPF.
- Views on the TA support received and impact of TA support
- Perceived knowledge and awareness of the fund among prospective investors.
- Early signs of impact of the fund and any indications of transformational change (please note PIs are unlikely to understand transformational change but this should be investigated through knock on effects? Increased climate for green lending? Demand being met that couldn't otherwise?)
-) Any other feedback PIs would like to share on their experience of GCPF

TAF interviews

The TAF activities are highly varied for each case study so please make sure to review the notes saved on the server. Some consultants delivering TAF will be in country and so may be available for face to face interviews however, to capture the full coverage of TAF activities in some cases we will also be speaking to the responsibility team via phone. Through the interviews with Technical Assistance Delivery Partners/ Consultants we would expect to cover:

- Support and advice provided to partner institutions in each case (i.e. required improvements and social and environmental management needs).
- Effectiveness of guidelines for assessment TAF needs (their quality and improvements).
- Effectiveness of formal TA support in building capacity versus informal TA support and differences.
- Perceived improvements in the TA related processes.

The questions below can be used as a starting point for discussion:

I. Role and background

53. What is your role outside of GCPF? How long have you been in that role?

54. How did you first become involved in GCPF?

55. What has your role been in relation TA support provided to partner institutions? PROBE Type of TA-market studies and baseline studies (even before financing) as well as involvement in their investment strategy, management, products and training

- a) What support have you delivered? Over what time period?

J. TAF assessment

- 56. What was your first contact with XX (PI)?
- 57. How did you identify their TA needs? Was your role clear?
- 58. What were the PIs TA needs? PROBE for areas of improvement, social and environmental management needs
- 59. How effective were the assessment guidelines in terms of steering your initial assessment of projects? Could these be improved in any way?
- 60. Were there any difficulties/barriers you encountered in effectively engaging and assessing XX's (PI) TA needs?

K. Selection and Procurement

- 61. (IF INVOLVED IN SELECTION) To what extent do you consider the process by which investments are selected to be fit for purpose?
 - a. To what extent is the guidance adhered to when selecting projects to receive TAF? Have there been some areas of the criteria that have had to be softened/amended to ensure TA support can be given?
- 62. How effectively are TA plans developed to maximise additionality and minimise duplication with other planned activity?
- 63. What barriers or difficulties have there been in selecting investments for TAF? Have improvements been made to overcome these?
 - a) What lessons have been learned from the selection process? How might this process be improved?

L. Fund delivery

- 64. To what extent do you think that engagement with GCPF helps to build the capacity of partner institutions?
 - a) How effective is formal TA support in building capacity versus the informal support advice and guidance? How does this differ?
 - b) How does the TA support ensure that the investment is additional, and would not have happened otherwise?
 - c) What lessons have been learned from the TA process? How might this process be improved?
- 65. What if any changes have there been to TAF delivery since the project started? What were the reasons for these changes? Are there any changes you could envisage going forward?
- 66. To what extent do PIs understand the monitoring and reporting requirements? What are the challenges for PIs? How do you overcome these challenges?

M. Early signs of impact of the fund

It is likely that consultants will have limited knowledge of the impact of the fund however, responsAbilty staff are more likely to be able to comment. Please use the outcomes questions at the end of the PI topic guide to stimulate conversation where appropriate.

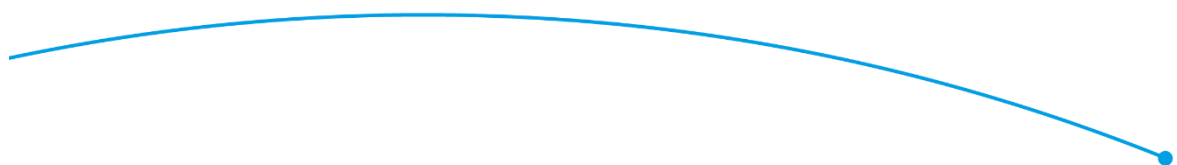
End beneficiary interviews

Please investigate the level of knowledge/awareness of GCPF the end beneficiaries are likely to have through PI staff before your interviews.
Purpose and coverage to be explored

Topics we envisage covering with end beneficiaries are:

- Project details (i.e. type of organisation/ role of individual, type of project, project progress, level of investment)
 - What kind of organisation are they? What kind of work do they do and where?
 - What is the status of the project with the PI?
 - How is communication/their relationship with the PI? Have they worked together before? What kinds of projects has this been on and have they been different to GCPF?
- Perceived knowledge and awareness of the fund prior to and since receiving the investment.
 - How they became involved in GCPF? Do they have any awareness of GCPF as a fund?
 - Is there anything different about this project compared to their other work?
- Perceived effectiveness of processes and areas for improvement (particularly lending requirements and selection process, monitoring and reporting requirements)
 - What have the strengths of the project been? Are there any areas that could be improved?
 - How suitable were the lending requirements? How do they compare to other funds?
 - Have they been involved in the monitoring processes? Were these fit for purpose? Burdensome?
- Local climate landscape and external barriers to and development of products, and services (for those who have received on-lending).
 - What is the local climate? What are the key barriers to investment in that area? What kinds of products/services are generally invested in?
- Perceived early impact of the fund including observed economic and environmental outcomes in countries.
 - Would the project have gone ahead without GCPF investments? Tell me what this project might have looked like without the funding? Would it have taken the same form? In what ways would it have been similar/different?

What do they feel the impact of the fund is so far? What might increase the impact? (this is key: Probe on: cost savings, jobs, business opportunities)



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