CLIMATE CHANGE COMPASS

BETTER CLIMATE FINANCE IMPACTS

HM Government

PE2 Private Finance

Final Report

Compass Portfolio Evaluation 2

Mobilising private finance through demonstration effects

Final Report
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1 Abbreviations

BEIS	Department for Business Energy and Industrial Strategy
Defra	Department for Environment, Food and Rural Affairs
DFI	Development Finance Institution
DFID	Department for International Development
ESG	Environmental, Social, and Governance
GCPF	Global Climate Partnership Fund
GOGLA	Global Off-grid Lighting Association
HMG	Her Majesty's Government
ICF	International Climate Finance
KPI	Key Performance Indicator
LCCR	Low Carbon Climate Resilient
MEL	Monitoring, Evaluation and Learning
MFI	Microfinance Institution
NGO	Non-governmental Organisation
PPA	Power Purchase Agreement
REACT	Renewable Energy and Adaptation Climate Technologies
SDGs	Sustainable Development Goals
SHS	Solar Home System
SNP	Solar Nigeria Programme
SRO	Senior Responsible Officer
StARCK+	Strengthening Adaptation and Resilience to Climate Change in Kenya Plus
UK	United Kingdom

1. Executive Summary

International Climate Finance (ICF) is a core component of the United Kingdom's contribution to developed countries' shared goal of mobilising US$100 billion of public and private climate finance a year by 2020. Significant amounts of private investment will be key to achieving a sustainable, low-carbon climate-resilient (LCCR) transition where the private sector is driving a long-term solution to climate change. ICF therefore focusses its investments upon demonstration which will mobilise private finance, aiming to make catalytic investments that can be scaled up and replicated by private finance.

This evaluation seeks to establish whether private investors are influenced by evidence from ICF-supported projects (i.e. by demonstration effects) into investing in LCCR projects, without or with less development finance, directly and/or through funds.

We focussed on a sample of 20 ICF programmes, 10 of which were investigated in depth, which intended to mobilise private finance through demonstration effects into follow-on projects, outside the ICF programme.

During our evaluation we interviewed 154 individuals, including teams working on ICF supported-programmes, implementing partners, businesses and developers, and a range of investors including development finance institutions. We also interviewed key sector experts, reviewed programmes and other documents, and focussed on two areas where transformational change was indicated.

How ICF has used demonstration effects with the intention of mobilising private finance

Nearly all our sample programmes intended to use demonstration effects to mobilise private finance into follow-on projects. In their business cases, many described plans to communicate the results of their programmes. However, most business cases did not have a clear plan for how they would use demonstration effects to mobilise private finance. Few of the programmes were monitoring mobilisation of private finance through demonstration effects, although some had plans to do so.

We found that programmes are intending to demonstrate that:

- There is a market;
- A financial or investment model works;
- There are favourable enabling conditions; and/or
- Others are investing.

Most programmes are actively communicating the demonstration effects through formal, programme-led communications. Other methods of communication include word of mouth from programme partners, learning and networking through conferences and industry bodies. Market participants are alert to new information and we found evidence of informal communications in all programmes in the final sample.

How much private finance has been mobilised through demonstration effects, by whom and for what purposes

From four of the 10 programmes in our in-depth investigation, we identified US$430 million (£350 million) of private finance that has been mobilised into 21 LCCR projects through demonstration effects. We found five other cases of mobilisation where the amount of the investment was unavailable. Around half of the total amount (US$208 million) was invested in renewable energy projects and a similar amount (US$217 million) was invested in businesses supplying solar systems for homes, businesses and mini-grids. 1% of the overall investment was in resilience and none was in energy efficiency.

In the other six programmes in the in-depth review, we found interim outcomes such as raised ambition and replication with the same level of concessionality. These interim outcomes can be seen as an indication that private finance may be mobilised in the future or that some progress towards that goal has taken place.

How and for whom demonstration effects work to mobilise private finance

We identified six types of demonstration effect, that is, six ways in which a programme can show to potential investors that such investments represent viable propositions:

- **Demand** – giving investors confidence in the scale of the opportunity.
- **Business model** – will be effective in satisfying the demand at a profit.
- **Track record** – of reliable financial and environmental returns.
- **Compliance** – will meet investors' reporting standards.
- **Risk** – can be assessed with acceptable levels of confidence.
- **Trust** – in the judgement of other credible actors already investing.

We identified four types of investor: businesses and developers, direct investors, fund managers, institutional investors. Each uses demonstration evidence for different purposes and in different ways, which we summarise below:

- Where the demand for LCCR products and services is unproven and/or something about the business model for satisfying that demand is uncertain, demonstration effects encourage **businesses and developers** to pursue LCCR opportunities because they give them confidence that their business can succeed and will be able to secure investment.

- Where investors do not have enough information to assess LCCR investment opportunities then demonstration effects provide **direct investors** with confidence in the likely returns and enable them to assess the risk associated with the investment more accurately. As a result, they are more likely to invest.

- Where **fund managers** have no experience of managing LCCR funds, demonstration effects provide fund managers with confidence that the model is viable as they will be able to secure funding and find suitable opportunities for investment. Consequently, they invest time and resources in extending existing or establishing new funds.

- Where **institutional investors** have a mandate for sustainable investment but do not have experience of investing in LCCR funds, evidence from demonstration projects provides them with confidence in fund managers' abilities to secure investment, find opportunities and deliver acceptable returns.

Each effect for each type of investor has been assessed as 'convincing', 'plausible' or 'tentative' depending on the strength of evidence for the contribution of demonstration effects to the mobilisation of private finance. N/A indicates that no evidence was found. This is shown in the table on the next page.

Table 1: Strength of evidence for the contribution of demonstration effects to the mobilisation of private finance by type of demonstration effect and type of investor

	Businesses/ Developers	Direct investors	Fund managers	Institutional investors
Demand	Convincing	N/A	N/A	N/A
Business model	Convincing	Convincing	Plausible	Plausible
Track record	Plausible	Plausible	N/A	Tentative
Compliance	N/A	Convincing	N/A	Tentative
Risk	N/A	Tentative	N/A	Plausible
Trust	N/A	Convincing	N/A	Plausible

Whether, how and in what circumstances demonstration effects support transformational change

We investigated this question through the primary research described above, and a focus on three areas – institutional investors, Uganda and Indonesia. We found evidence that demonstration effects are supporting progress towards transformational change in four markets:

- Solar home systems in East Africa, where ICF-supported businesses have shown they can succeed, so others have entered the market, often financed by local banks.
- Private equity for renewable energy in Southeast Asia, where ICF supported an innovative fund/build/own/operate model, which has been shown to work, and has attracted interest in the market from larger private equity funds.
- Off-grid solar in Nigeria, where bigger players are now entering the market following the success of ICF-supported smaller companies in addressing the challenges.
- Microfinance institutions (MFIs) in Kenya, where larger lenders are now planning to move into the market after ICF-supported MFIs adopted an innovative business model working through aggregators to support agricultural supply chains.

We found no evidence of transformational change amongst institutional investors. Although there is increasing interest in impact investments, information from ICF programmes is not yet reaching this group. We also found evidence that the potential for transformational change in investment in renewable energy in one country was constrained by changes in the political environment and enabling conditions.

Limitations

It is important to bear in mind that this evaluation investigated demonstration effects in a small sample of ICF programmes only, and it is not appropriate to extrapolate from this to estimate total amounts of private finance mobilised by ICF. In addition, there is still potential for some of our sample programmes to generate demonstration effects during and after their lifetime. Investors are not always sure whether the demonstration effect was a critical driver and may not remember correctly what influenced their investment decisions. There are instances where we have been unable to draw conclusions due to lack of information. In the absence of monitoring of demonstration effects, we relied on the information we could obtain, which is necessarily incomplete. The evaluation does not claim to present a complete record, but to use the available evidence to develop an understanding of how, for whom and why investment decisions are being influenced.

1.1. Summary conclusions and recommendations

Table 2: Conclusions and recommendations

Aspect	Conclusion	Recommendations
Approach	The identification and communication of demonstration effects is currently the responsibility of programme teams, but they do not always have the skills and resources to do so. The reliance on programme teams also misses an opportunity to communicate to investors all the relevant evidence from across the ICF which would have more weight.	**1. Adopt a centralised approach:** • Adopt a centralised approach to identifying and communicating demonstration effects across the ICF portfolio. • Maintain a central record of evidence. • Central team to provide guidance to programme teams on how to stimulate demonstration effects when developing business cases (see Appendix 7 for initial outline).
Definition	Programme teams do not always have a clear understanding of what demonstration effects are.	**2. Provide a clear, unambiguous definition of demonstration effects.**
Promotion	Most of the investment where demonstration effects made a contribution was by programme partners or other investors who learned about demonstration evidence from programme partners. We have not identified any examples of demonstration effects influencing the wider market of investors into investing because they saw others moving into a particular sector or country.	**3. Adopt a strategic approach to communication:** • Explicitly identify the demonstration effects across other ICF programmes. • Engage communications specialists to communicate with relevant types of potential investor. • Support formal and informal communication of demonstration evidence through provision of evidence.
Monitoring	None of the programmes in our sample was monitoring demonstration effects through its logframe, though some programmes do address this in their evaluations. Monitoring demonstration effects would provide ongoing understanding of what has been achieved and how, that could allow ICF to mobilise more private finance through demonstration effects. The absence of any programme reporting on demonstration effects also limits the ability to track contributions to potential transformative changes.	**4. Develop a system for recording information and anecdotes about private finance mobilisation, during and after the programme's lifetime.**
Barriers	This evaluation has identified four barriers to demonstration effects: • Crowding out of private investment by concessional finance. • The market being saturated by concessional finance leaving no opportunities for private investment. • No opportunities for scaling up of demonstration projects. • Change in enabling conditions which reduce the attraction of the opportunity to replicate the demonstration project.	**5. Crowding out** Work with other DFIs to reduce investment which competes with private finance. **6. Market saturation** Taper off involvement in saturated markets. **7. Limited scope for scaling up** Support projects in clarifying opportunities and allocate resources for demonstration accordingly. **8. Deterioration in enabling conditions** Work with partner governments to improve conditions or withdraw.

Aspect	Conclusion	Recommendations
Energy efficiency	None of the programmes in our sample has mobilised further private finance for energy efficiency through demonstration effects.	**9. Energy efficiency** Investigate the implications of the crowding out of demonstration effects on mobilising private finance for lending for energy efficiency.
Resilience	Despite the challenges in mobilising private finance for resilience and adaptation purposes, we identified cases where demonstration effects have mobilised further private finance for resilience. This suggests there could be an opportunity to use demonstration evidence to mobilise more private finance.	**10. Resilience** Review other ICF resilience programmes to identify opportunities for mobilising private finance for resilience, drawing on the understanding developed in this evaluation of how demonstration effects operate.
Mainstream institutional investors	Mainstream institutional investors look for demonstration evidence across multiple projects over a period of 5-10 years. In some individual programmes, ICF has withdrawn from a sector before sufficient weight of evidence has been generated to be convincing for this group.	**11. Provide more sustained evidence** This requirement may be satisfied by recommendations above to consolidate evidence from across the ICF and the guidance to programme teams to improve their understanding of the evidence needed by mainstream institutional investors.
Targeting	Different demonstration effects work in different ways for different types of investor. With this understanding, there is scope for ICF to maximise the effectiveness of efforts to mobilise private finance through demonstration effects.	**12. Targeting** • Use the learning in this evaluation to inform communication. • Target the mobilisation of private finance through demonstration effects in new ICF programmes with objectives similar to current programmes which have successfully done so, for example, if they provide investment to: - Fund business start-ups and expansion. - Help fund managers to become established. • Build and communicate a bank of stronger evidence for institutional investors.
Transformation	Demonstration effects support each element of ICF's theory of transformational change.	**13. Cross programme knowledge transfer for transformation.**

2. Introduction and background

2.1. Introduction

The United Kingdom (UK) is firmly committed, alongside other developed countries, to contribute to the mobilisation of US$100 billion of public and private climate finance a year by 2020. International Climate Finance (ICF) is a core component of the UK's contribution to this shared goal. The Prime Minister announced in September 2019 that the UK will more than double its current ICF support to at least £11.6 billion from 2021/22 to 2025/26. ICF, which is managed jointly by Department for International Development (DFID), the Department for Business, Energy and Industrial Strategy (BEIS) and the Department for Environment, Food and Rural Affairs (Defra), works in over 50 developing countries, through diverse channels from private equity funds to small non-governmental organisation (NGO) grants. It aims to:

- Change facts on the ground, delivering results that demonstrate that low-carbon, climate-resilient (LCCR) development is feasible and desirable.
- Improve the international climate architecture and finance system to increase the scale, efficiency and value for money of climate spend.
- Test out new approaches to delivering climate finance that have the potential to achieve bigger and better results in the future.

A core strand of the ICF's strategy is to 'make markets work' and create the conditions for private finance to flow. The levels of investment needed to keep temperature increases well below 2 degree Celsius and adapt to the impacts that this temperature increase have already caused and will continue to cause, cannot be met by public finance alone. Significant amounts of private investment will be key to achieving a sustainable LCCR transition where the private sector is driving long-term solutions to climate change. Whilst climate finance is growing across markets in developing countries, it is not doing so fast enough to avoid them becoming locked into a high carbon pathway with insufficient consideration of climate impacts. The rationale for public intervention is therefore to accelerate the growth in the climate finance markets in developing countries.

In order to mobilise private sector investments at scale towards the US$100 billion per annum target, public climate finance must address barriers and create enabling conditions for private investment. ICF therefore focusses upon projects which demonstrate that LCCR business models and investments are commercially viable. It aims to make visible, distinctive and catalytic investments that can be scaled up and replicated by private finance.

Her Majesty's Government (HMG) believes that there is significant potential to improve the delivery and programming of future UK climate finance by improving understanding of what is successfully achieving mobilisation and what barriers to mobilisation persist across ICF programmes, and wider public climate finance initiatives. In particular, it is keen to understand how and in what circumstances the ICF is mobilising private finance through the successful use of the 'demonstration effect' (see section 2.2. for our definition of this) as a critical means of mobilising private sector climate finance.

Purpose of the evaluation

The purpose of this evaluation is to enable the UK government and other donors and development partners to learn about the effectiveness of mobilising private finance, through demonstration effects, to achieve the UK's international objectives on climate change and thus drive wider transformational change. The evaluation focusses on programmes funded by ICF, but also takes into account the experience of other development finance institutions (DFIs).

This evaluation sets out where and in what circumstances demonstration effects have and have not been found. The critical success factors driving demonstration effects have been identified so that they can be succinctly communicated to programme managers for application in the design of future programmes. Thus, the lessons learned can help improve future UK climate finance policies and programmes, and potentially influence the mobilisation strategies of other major international partners.

Evaluation questions

Following discussions with the Evaluation Steering Group, it was agreed to rephrase the overarching evaluation question and to prioritise four of the sub-questions in the terms of reference to focus more closely on the demonstration effect. The final overarching question and priority sub-questions are:

How and in what circumstances is ICF mobilising private finance into LCCR markets through demonstration effects?

1. **How, at what stage of projects, in what countries, sectors, technologies and from what types of investor are ICF programmes attempting to mobilise private finance through demonstration effects?**
2. **In what circumstances, to what extent, for whom and how have demonstration effects contributed or not to private investors' decisions to invest in LCCR markets? Have there been unintended outcomes from demonstration effects, in what circumstances, for whom and why?**
3. **How and in what circumstances do demonstration effects support transformational change, or not?**
4. **What lessons can be identified, for whom (both through the design of ICF programmes and beyond), to increase the future mobilisation of private finance through demonstration effects?**

For the purposes this report, and to maximise the accessibility of the information for policymakers, these questions are addressed in four areas (sections 3–6):

1. How ICF has used evidence from demonstration effects with the intention of mobilising private finance?
2. How much private finance has been mobilised through demonstration effects, by whom and for what purposes?
3. How and for whom demonstration effects work to mobilise private finance?
4. Whether, how and in what circumstances demonstration effects support transformational change?

The original evaluation question 1 is addressed throughout the report, which describes what the sample programmes have attempted to achieve. Lessons identified for mobilisation of private finance (question 4) are addressed in the conclusions and recommendations.

2.2. Background and context

Demonstration effect

For the purposes of this evaluation, the mobilisation of private finance through demonstration effects is defined as:

> *Low-carbon climate-resilient (LCCR) projects are undertaken, or funds established to invest in them, without development finance, with less development finance or with development finance at a lower level of concessionality, as a result of evidence from ICF-supported projects.*

The demonstration effect is a process by which demonstration projects are undertaken and evidence from them communicated to potential investors, altering their perceptions of the attractiveness of similar investments. It is important to emphasise that, while potential investors would be aware of the evidence, they may not be conscious of the process by which the evidence was developed or who was responsible for developing it. The evaluation did not set out to find specific evidence to show whether ICF was recognised to be involved, rather whether evidence from the programmes had stimulated demonstration effects.

Types of investor

The organisations investing in climate change projects include project sponsors and developers, private equity funds, infrastructure funds, impact funds, institutional investors, foundations and charities, commercial banks, utilities, corporations, donors, DFIs, and public bodies. They each have their own particular areas of interest, preferred financial instruments, and preferred level of engagement or size of stake. The investors are looking for different kinds of returns. Some would like to achieve long-term, low-risk and stable yields, while others are looking for high returns at the point of exit. Some organisations may accept a balance of investment with impact, offering a longer-term investment that achieves market, near-market or below-market returns, in exchange for a positive social and/or environmental impact. Some investors, e.g. donors, may not expect a return, or may expect to make a loss on a demonstration project. The stage at which they invest differs, as does the likely duration of the investment. The table below gives a generalised summary of investor characteristics of the main types of investor in our sample programmes.

Table 3: Investor characteristics

Investor	Instrument	Invests in	Size	Objectives	Hold length
Developer	Equity	projects	all sizes	returns + strategic	some divest once operational
Private equity funds	Equity	projects	large to controlling stakes	high returns, often at exit	3-7 years
Impact funds	Equity	projects/funds	small to medium	market or below-market returns	various
Institutional investor	Equity	funds	large	stable, long-term returns	until end of asset's lifetime - 20-30 years
Foundations	Grants	projects/funds	small to medium	impact, potentially no returns	various
Commercial banks	Loans	projects	all sizes	fixed debt return	various
DFIs	Loans, equity	projects/funds	medium-large	below market or market return + impact	various

Types of finance

Finance types targeted by ICF-supported programmes include both debt and equity, with a range of lengths, terms, conditions and structures. Some structures are relatively complex and innovative, requiring a level of sophisticated understanding, whilst others are more straightforward. Examples range from microfinance, through green lending, direct investment into projects by individuals or banks, and investment into funds.

Development finance and concessionality

Development finance is defined as financial flows provided by donors and public institutions to developing countries to support development outcomes. Development finance provided to a project varies in the proportion of concessionality, that is the extent to which it is priced below what would be expected in a market transaction. Most DFIs insist that in order not to crowd out private investment, they only offer debt or equity at market rates. Some development finance, however, take the form of grants, or of loans with a grace period, or a longer term than would be available from commercial providers. DFIs sometimes offer first loss guarantees, or other risk mitigation such as providing equity that absorbs 100% of the commercial losses that a project experiences (typically up to a pre-defined threshold). This therefore protects other equity providers from these losses. They additionally may be willing to wait longer before receiving a commercial return.

Drivers of climate finance investment

Investment into LCCR markets is growing for a variety of reasons. Our interviewees cited these, including pressure on many investors from stakeholders and governments who are keen to see funds being used to achieve environmental, social and governance (ESG) goals, including climate goals. Adherence to ESG standards is now being identified by some bodies as a proxy for good overall corporate performance. Many major investors are also aiming to align their strategies to the Sustainable Development Goals (SDGs). Currently, investment returns in equities are low, so investors are looking for different opportunities. Investment in a number of LCCR opportunities, such as renewables, is becoming more attractive as the costs reduce and technologies are maturing. Investors see a growing market with potentially good returns, and an increasingly acceptable risk level.

2.3. Methodology

The methodology is described in detail in section 5 of the Technical Report and summarised in this section.

The evaluation was conducted using a realist evaluation approach, which uses evidence to develop and refine a 'programme theory' that addresses the evaluation questions. We tested our programme theories through interviews and document reviews[1]. Throughout, we were alert to the influence of other factors on investment behaviour, such as changes in regulations or enabling conditions, and to the fact that investors are not always able to articulate or remember exactly why they made investment decisions.

Using qualitative data analysis software[2], we then aligned our evidence against the theories. This helped us to develop refined programme theories which we could then retest in an iterative process. Our eventual refined theories provide an explanation of the evidence we found.

In each case where private finance had been mobilised, process tracing[3] was used to assess the strength of evidence that demonstration effects contributed to the mobilisation. Investors are not always sure whether demonstration effects were generated by ICF, or by another project or funder, or by something else, or whether the demonstration effect was a critical driver, so process tracing is important in the assessment of direct causality. It was also used to assess the strength of evidence for each of our theories developed.

Sample refinement process

The numbers of programmes in the sample were reduced throughout the evaluation, as we developed our theories and established which programmes were most likely to provide evidence for them. References to the sample throughout this report are named by phase.

Table 4: Sample number by phase of research

Phase of research	Number in sample
Inception	46
Phase 1	20
Phase 2	10

[1] Realist programme theory explains "(some of) how and why, in the 'real world', a programme 'works', for whom, to what extent and in which contexts" (Wong et al. 2016).
[2] MAXQDA 2018 *https://www.maxqda.com*
[3] Process tracing is a qualitative approach for understanding how outcomes are created, through the analysis of causal processes within individual cases.

2.3.1. Inception phase[4]

We carried out initial document review of 46 ICF-funded programmes; 32 programmes that report against KPI 12[5] and a further 14 identified by the Evaluation Steering Group as programmes which may be generating demonstration effects to mobilise private finance. For each programme, where they were available, we looked at the business case, logframe and most recent annual review. We then selected 20 programmes for further investigation based on the availability of evidence, a balance between sectors, and geographical spread. Some programmes are specific to one country (Nigeria, Kenya, Indonesia, Uganda) and some cover a region or whole continent (East Africa, sub-Saharan Africa, Africa or Latin America) whilst others are multi-country.

2.3.2. Phase 1

For each of the 20 programmes in the Phase 1 sample, we conducted a more detailed document review, particularly the business case, logframe, annual reviews, evaluations and websites, and other information provided by the programme team and/or the Evaluation Steering Group. For a list of these programmes, see Appendix 1. For more information on the programmes, see monitoring, evaluation and learning (MEL) from ICF programmes on HMG DevTracker[6]. We also interviewed the senior responsible owners (SRO) and implementing partners wherever possible (see Table 5).

SRO interviews were of most use in confirming our understanding of the programme and its objectives, and in signposting us to implementing partners and/or other contacts. Implementing partners were able to talk in more detail about the extent to which the programme works to create a demonstration effect, for whom, how and why, thus enabling them to contribute to testing our theories.

We also used these interviews to gain contacts with private sector finance partners in the programmes for interview during Phase 2.

In addition, interviews were carried out with members of the evaluation and/or syndication teams at eight DFIs to explore their experience of demonstration effects and to understand whether they consider that their investments have had a demonstration effect, and if so, for whom and how.

At the end of Phase 1, we produced an interim report, setting out our plans for Phase 2, for discussion and agreement by the Evaluation Steering Group.

Table 5: Interviews completed in Phase 1 with different respondent types

Type of respondent	Interviews completed
SROs	11
Implementing partners	15
DFIs	14

2.3.3. Phase 2

For Phase 2, 10 programmes were selected for further in-depth investigation. These programmes were chosen because they provided:

- Evidence of a demonstration intended to mobilise private finance and some intention to communicate the demonstration.

[4] Inception report will be published at: *https://devtracker.dfid.gov.uk/projects/GB-1-203516/documents*
[5] Volume of private finance mobilised for climate change purposes as a result of ICF funding. Available at: *https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/253682/ICF-KPI-summary.pdf*
[6] See *https://devtracker.dfid.gov.uk/projects/GB-1-203516*

- Likely availability of evidence to provide coverage across the priority theories and to enable process-tracing tests.
- A balance of sectors and countries.

Phase 2 investigated three types of demonstration effect through qualitative interviewing:

1. Private sector partners in programmes replicating aspects of those programmes, without or with less development finance.

2. Private finance mobilised by third parties replicating specific aspects of programmes, without or with less development finance.

3. Wider market changes or developments where private finance has been influenced by demonstration effects generated by ICF programmes.

Following discussions with the Evaluation Steering Group on the focus areas, we conducted further interviews to explore wider demonstration effects, beyond the instances where demonstration effects have been explicitly communicated. Findings from this work are incorporated into the relevant sections of this report and are presented in more detail in section 10 of the Technical Report. The three areas of focus agreed were:

- Indonesia where we had expected to find evidence of increased private finance investment in renewable energy. However, key contextual factors have stalled the market for renewable energy project development.
- Uganda where there are early signs of transformation, with the regulatory environment enabling small-scale renewable energy developers to build projects without any top-up tariffs or deemed energy clauses.
- Institutional investors where some sectors and markets appear to have mobilised private finance, and others have not.

For Indonesia, we conducted six remote interviews with sector experts, practitioners and donor government officials who are actively working in, or monitoring, the market for renewable energy in the country. Several of these experts were identified by ICF implementing partners.

For Uganda, we conducted 11 remote interviews with sector experts, industry associations, local renewables companies and other relevant stakeholders. A number of these had been identified during research for the GET FiT Uganda programme, and others were recommended to us by previous interviewees.

We conducted 14 interviews in the institutional investment community. We spoke to pension fund managers, trustees, and heads of responsible or sustainable investment. We also interviewed experts in some of the many bodies which are currently active in encouraging institutional investors to increase their sustainable investment practice. Some of these experts were investors themselves, whilst others spoke from their knowledge of their members, most of whom prioritise financial returns over social or environmental goals. A number of them introduced us to institutional investors active in developing countries and/or in LCCR markets. We also spoke to impact investors and managers, most of whom seek to generate both competitive returns and benefit to society.

Table 6: Interviews completed with different respondent types

Type of respondent	Number approached	Interviews carried out	Response rate
Programme partner	64	52	81%
Potential replicator	44	20	45%
Wider market focus areas	73	31	42%

2.4. Limitations

Table 7 sets out the limitations and risks of this evaluation, alongside our comments, explanations and the mitigation strategies we adopted.

Table 7: Limitations and risks with comments and mitigation strategies

Limitation/risk	Comment
Positivity bias There is a tendency for people to share success stories only, particularly if they have received funding.	Respondents proved to be very willing to talk about what did not go well in addition to successes.
Timing/age of programme We were told that it is too soon for some programmes to have produced demonstration effects.	It does not appear that there is a direct correlation between the age of a programme and private finance mobilisation via demonstration effects. However, some programmes take longer than others to generate demonstration effects. See section 4.1, figure 1.
Response rate Although the response rate to our request for interviews was good, there were not as many replicators as we had hoped.	This was partly because it was too soon after the initial investment to find replicators for a number of the programmes.
Direct causality Investors are not always sure whether demonstration effects were generated by ICF or another project or funder or something else, or whether the demonstration effect was a critical driver.	Our interviews explored this carefully and the process-tracing analysis indicates the level of support for the contribution made by demonstration effects. We were alert to external factors such as changes in regulations or enabling conditions.
Extrapolation It would not be appropriate to extrapolate from reported amount of private finance mobilised to estimate total private finance mobilised through demonstration effects.	The evidence on the amount of private finance mobilised was obtained from a purposive sample of partners and potential replicators, and is not representative of ICF programmes.
Absence of monitoring No programmes track communications or replication of demonstration effects.	We relied on the information we could obtain, which is necessarily incomplete. The evaluation does not claim to present a complete record, but to use the available evidence to develop an understanding of how, for whom and why investment decisions are being influenced.
Non-response bias Those who agree to be interviewed may be more interested in LCCR projects, ICF or associated issues than others and may not represent the full picture.	The response rate is sufficiently high to provide confidence that a full range of views and experiences have been obtained.
Additionality We do not know if the finance mobilised by the demonstration effect would have been invested in other LCCR projects anyway, and so not drawing more investment in to the sector.	Wherever possible, we have asked investors whether their investment was additional, i.e. it would have gone outside LCCR projects if they had not been influenced by the demonstration project, but in many cases we do not know. We cannot be confident that some of the investment identified here would not have been invested in other LCCR projects in the absence of demonstration effects from ICF programmes.
Availability of evidence Despite asking, we were unable to obtain documentary evidence for the rationale for decisions to invest private finance.	This was not surprising as these documents would have been commercially confidential. Sometimes, the rationale may not have been documented anyway.

3. How ICF has used demonstration evidence with the intention of mobilising private finance

19 of the 20 programmes in our Phase 1 sample intended to use demonstration effects to mobilise private finance, and many had plans to communicate the results of their programmes. However, most did not have a clear plan for how they would use evidence from demonstration effects to mobilise private finance. Few of the programmes were monitoring mobilisation of private finance through demonstration effects, although some had plans to do so.

All except one programme in the Phase 1 sample stated an intention to use demonstration effects to mobilise private finance in their business case or in interviews with the SRO or implementing partner. In some cases, they had erroneously defined this as attracting additional private finance into the programme or mobilising private finance into follow-on projects with similar levels of concessionality. These types of mobilisation were not included in the analysis for this evaluation which concentrates on mobilisation of private finance into follow-on projects, without or with less development finance.

3.1. What is being demonstrated?

The demonstration effects used by ICF programmes fell into four groups:

1. **Market:** That there was a market for a particular product or service e.g. solar home systems in East Africa.
2. **Financial or investment model:** That a particular financial model worked e.g. lending to aggregators for agricultural products or insuring energy efficiency savings to reduce risk, or by supporting first-time fund managers to establish LCCR funds.
3. **Enabling conditions:** That the enabling conditions for investment existed e.g. power purchase agreements (PPAs) and reliable contracts for renewable energy in Uganda.
4. **Others investing:** Showing that markets for renewable energy are becoming more mature to give potential investors comfort that others believe the risks are acceptable and returns viable.

Table 8 below shows the demonstration effects intended by each programme:

Table 8: Intended demonstration effects

ICF programme	Market	Financial or investment model	Enabling conditions	Others investing
Carbon Market Finance for Africa (CMF-Africa)				
Climate Investment Fund – Clean Technology Fund (CTF)				
Climate Public Private Partnership Programme (CP3)				
Climatescope				
Comprehensive Programme on Spatial Planning and Low Carbon Development in Papua				
East Africa Geothermal Energy (EA-Geo)				
Eco.Business Fund				
Global Climate Partnership Fund (GCPF)				
Global Innovation Lab for Climate Finance (The Lab)				
Green Africa Power (GAP): Renewable Energy for Africa				
Low Carbon GET FiT Uganda				
Nationally Appropriate Mitigation Actions (NAMA) Facility				
Partnership for Forests (P4F)				
Promoting Low Carbon Development with Returnable Capital in Indonesia				
Renewable Energy and Adaptation Climate Technologies (REACT)				
Renewable Energy Performance Platform (REPP)				
Results Based Financing for Low Carbon Energy Access				
Solar Nigeria Programme (SNP)				
Strengthening Adaptation and Resilience to Climate Change in Kenya Plus (StARCK+)				
UK Climate Investments (UKCI)				

Table 9: Examples of how programmes were intending to use demonstration effects to mobilise private finance

Examples of how programmes intended to use demonstration effects to mobilise private finance
Solar Nigeria The Solar Nigeria Programme (SNP) intended to create demonstration effects by providing grants to de-risk expansion into Nigeria for some of largest solar home system providers in sub-Saharan Africa. SNP grants also encouraged expansion into the north of the country where businesses had been reluctant to go, aiming to show them that there was an untapped demand for their products in those regions. The successful scaling of a group of businesses was intended to attract both private investment from direct investors who might not have previously considered Nigeria an attractive location for investment, and also other businesses, to enter the market.
REACT By supporting innovative solar home businesses with grants in East Africa, the REACT programme aimed to provide those businesses with the capital required to build inventories and prove the market for their products, and the viability of their business models, to direct investors. The repayable nature of the grants was intended to enable the businesses to develop a track record of paying off debt, making them more attractive and creditworthy to private investors.
CP3 By investing into a selection of clean energy funds, the Catalyst Fund intended to show that a closed-end private equity fund structure could successfully develop a portfolio of renewable energy projects in developing markets and make commercial returns on exit. Another element of CP3, the Seed Capital Assistance Facility (SCAF), provided first-time fund managers with the financial resource to reach first close and develop a pipeline of investments, showing institutional investors that they were an investable proposition and demonstrating to other fund managers that the fund/developer model was commercially viable.

3.2. To whom is it being demonstrated?

Programmes are aiming their demonstration effects at a variety of audiences, which we have defined in Table 10 in four groups. They are categorised by their role in follow-on investment rather than by organisation type:

Table 10: Audience for demonstration effects

Audience	Description	Number of Phase 1 programmes targeting
Businesses and developers	**Businesses** – individuals, companies or financial institutions investing in developing LCCR products and services to sell to others. **Developers** – individuals or companies investing their own funds in setting up and/or developing renewable energy projects.	12
Direct investors	Investors providing debt or equity directly to LCCR businesses or projects.	15
Fund managers	Individuals and organisations who design, structure, establish and offer funds which invest in LCCR projects or businesses, into which other individuals or organisations invest.	8
Institutional investors	Individuals and organisations (e.g. pension funds or insurance companies) investing into a fund which, in turn, invests in LCCR projects or businesses.	9

3.3. Monitoring demonstration effects

Nine of the programmes in the Phase 1 sample had included plans in their business case to monitor and report demonstration effects arising from their work. At the time of this evaluation one had done so, and two had plans to. Interviews with DFIs found that none of those had engaged in monitoring of demonstration effects.

We heard anecdotal evidence of demonstration effects from DFIs, but these stories were not the subject of any systematic recording process, so are only those which interviewees remembered.

- One DFI described their investment in the provision of a credit line to finance climate or wind projects, where they found that the demonstration effect was more effective in countries where there were no regulations or no such product currently on the market.
- Another spoke about supporting a bank to introduce loans for industrial energy efficiency, and seeing replication by other banks. Following that, the regulator brought forward guidance for all banks moving into this area.
- A third DFI recounted their experience with one particular private equity fund which is now in its third generation, with the proportion of the funds coming from the private sector increasing significantly over the funding rounds. The interviewee put this down to the demonstration effect which provided investors with confidence in the fund manager's track record.
- We heard from another DFI of an instance when former clients did not come back to them for further investment because they could now secure a better deal on the open market.
- Another DFI spoke of having facilitated the first PPA in a country, which had led, through the demonstration effect, to that renewable energy sector now flourishing in that country.

3.4. Communicating demonstration effects

Roughly half of the programmes in the Phase 1 sample which intended to mobilise private finance through demonstration effects, explicitly stated that they would communicate evidence from their programmes. Where formal, programme-led communication of demonstration effects is included in the business plan, relevant indicators are included in logframes and monitored as part of the annual review process.

We identified other ways in which demonstration evidence is being communicated, directly and indirectly: direct communication from a programme partner; targeted communications through conferences and industry bodies; wider dissemination, mainly through the media and on the internet. Table 11 shows the evidence we found of communications by programme and Table 12 lists the programme-led communication channels.

Table 11: Communication methods of demonstration effects found by programme

	Programme-led convening and communication	Direct communication from a programme partner	Industry-body/ conferences	Wider dissemination
CMF				
CP3				
GCPF				
GET FiT				
Eco.business				
REACT				
REPP				
SNP				
StARCK+				
The Lab				

Table 12: Formal programme-led communication channels

	Programme website	Programme twitter page	Sending out newsletters
Number of programmes with this communication channel	7	3	6

For businesses and developers seeking investment, demonstration evidence has most power with direct investors, usually face-to-face, one-to-one at meetings or conferences. Fund managers use evidence from demonstration programmes in their publicity and proposals to help convince institutional investors to invest.

3.4.1. Direct communication from a programme partner

Programme partners are uniquely positioned to pass on demonstration evidence. They are credible sources, having hands-on experience. They are, perhaps surprisingly, very willing to share experiences with potential and actual investors in their market, with few mentioning any difficulties with commercial confidentiality.

> *"We have conversations with competitors coming to the market; as much as our competitors, we also share some information and it gave them the confidence to come into the market, to them, to their stakeholders, to see essentially that a company like [us] is able to deliver results and they could benefit from our successes and failures in that market."* – Programme partner

> *"There's been other banks in [country] that have invested in the [XX] fund and they wanted to talk to us first about our experience. And then half a year later, they invested. So, they definitely knew we had invested and they talked to us about the investment so, yeah, it definitely changed something in the market."* – Programme partner

3.4.2.Programme-led convening and communication

Some programmes, in particular the Lab and Eco.business, are active in organising events and introductions which enable programme partners to spread the word about the work they are doing, with the aim of encouraging others to invest in follow-on projects. Partners in these programmes spoke highly of the effectiveness of these strategies in raising awareness of the evidence from demonstration programmes.

> *"[The programme] basically introduced me to somebody who then recommended we join this confluence network, and then in the confluence network, there's quite a few of these impact investment funds who focus on climate. So, you know indirectly that was [programme] right [...] there were lots of people we've met and introductions have been made, [programme] and that network. So, maybe [...] some of those will result in additional investors coming in and private sector investors even."* – Programme partner

> *"[...] We've had numerous assistance to events in different parts of the world where many employees have learned the importance and seen how in other countries these types of topics develop and how they can use it to speak with their clients and to speak with the employees that work with them [...] and really replicate. So, it's an interesting [...] situation to the point that people in the bank definitely know that we have [programme] funds."* – Programme partner

Some of the programmes we investigated are making other efforts to communicate the learning from their programmes in structured and formal ways, in addition to any informal channels. They have impressive websites and produce glossy publications, hold workshops and learning events. As shown above, programme partners value the opportunities provided by programmes to access investors. But no investors or replicators actually told us that they had learned of demonstration projects through such formal communications. Communication is a two-way process and, if demonstration effects are to work, they need to be both publicised and taken on board.

For all investor types, though, personal contacts and experience are valuable, and a background knowledge of demonstration projects can create a climate in which a specific investment proposal looks more attractive as a result.

3.4.3. Conferences and industry bodies

Events and working groups organised by other bodies are useful forums in which information about demonstration projects is shared. The events which our interviewees attended, addressed or told us about included: international conferences run by investment media such as IJ Global, IPE or Infrastructure Investor; by impact investment associations, for example GIIN (Global Impact Investment Network) and the Investment Association; and by region-based networks, including AVCA (African Venture Capital Association) and EMPEA (Emerging Markets Private Equity Association). We also heard about more local, sector-based initiatives, particularly GOGLA (Global Off-Grid Lighting Association).

> *"There's a lot of informal sharing and a lot of formal sharing at GOGLA conferences - everybody talks to everybody on what's happening. As mentioned, it's a bit of a gossip industry. But, formally, we've got GOGLA as a lovely organisation who tries to get as much data from everybody and analyses it and tries to get learnings to support the whole industry, and become bigger and better as an industry."* – Programme partner

3.4.4. Wider market dissemination

General market intelligence and coverage by the media contribute to communicating demonstration evidence. Most investors make it their business to stay abreast of developments in their market. However, this is beyond the direct control of programme teams, and we did not find any evidence of news about demonstration programmes reaching the intended audiences through these channels.

> *"The development finance community is not necessarily able to pass on learnings or share knowledge or talk about fiscal transactions that can be replicated to the more mainstream news outlets. It's also fantastic when one has whether the Financial Times or other kind of mainstream media as well that is helping to disseminate information about what has been passed and successful transactions."* – Investment sector expert

3.4.5. Other channels

We heard several examples of people moving jobs and taking their experience and knowledge of demonstration projects with them. They are well positioned to communicate demonstration evidence to their new colleagues and contacts.

> *"So, I personally met them through my previous job and one of my colleagues moved to [programme partner] in [country], a regional manager for [country], and that's how we started working together because I had a personal connection, and also I met a few of the C-level executives at my previous job, and the relationship sort of transferred over and we started working with them from there."* – Programme partner

Another unusual means of communicating demonstration effects was described by one programme partner who is now actively participating the due diligence process of replicators:

> *"Even members of the team have gone on to establish, or seek to establish, new investment funds for renewable energy [...]. We are a part of the due diligence process. So, I specifically will go through what we have done and what we have learned with the potential investors for that fund to help them evaluate what is being proposed in that fund. So, we are very much a reference point for, not only individuals, but for the strategy that is being proposed."* – Programme partner

4. How much private finance has been mobilised through demonstration effects, by whom and for what purposes

We have identified US$430 million (£350 million) of private finance that has been mobilised into 21 LCCR projects through demonstration effects from four of the 10 programmes in the Phase 2 investigation. Around half of this finance was invested in renewable energy projects and a similar amount was invested in businesses supplying solar systems for homes, businesses and mini-grids. Only 1% of this investment was in resilience, and none of the private finance we found mobilised as a result of demonstration effects was in energy efficiency, although resilience was in scope for two of the Phase 2 programmes and energy efficiency was in scope for four of the Phase 2 programmes.

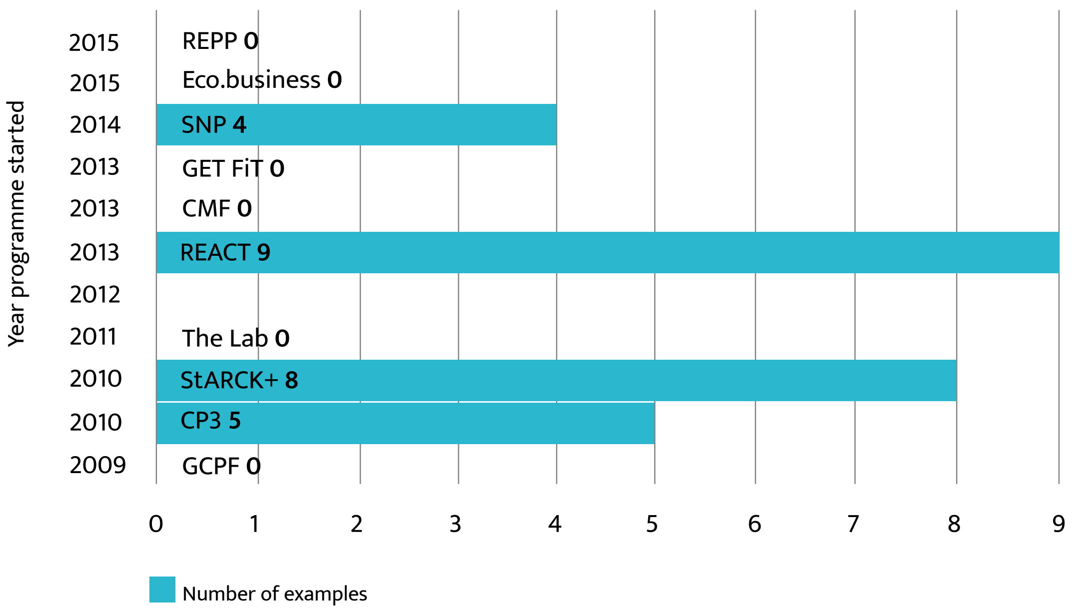
Interim outcomes such as the success of the demonstration projects, raised ambition and replication with the same level of concessionality were seen in the other six programmes in the in-depth review.

4.1. Private finance mobilised

We identified examples of mobilisation of private finance subsequent to ICF programmes through the interviews with programme partners and potential replicators. Process-tracing analysis was used to explore the extent to which demonstration effects had contributed to the mobilisation of that finance. Readers should bear in mind that these results are specific to the programmes and subsequent LCCR projects investigated, and do not tell us anything about wider impacts of ICF programmes.

We identified 26 examples of private finance being mobilised as a result of demonstration effects from four of the 10 programmes we investigated in Phase 2. The 10 sample programmes are shown in Figure 1 below, along with the date the programme started and the number of examples of private finance mobilisation that we identified. We also identified interim outcomes from demonstration effects which could potentially lead to the mobilisation of private finance in future from other programmes.

Figure 1: Number of examples of private finance mobilisation by year programme started



There does not appear to be a clear relationship between the age of a programme and the number of examples of mobilisation. However, the programme partners for REPP and Eco.Business felt that it was too soon for demonstration effects from those programmes to mobilise private finance. It may be that it is unrealistic to expect to find examples of mobilisation until four/five years after the start of a programme, but because of the differences in types of fund and programme, there is no consistent pattern. For the older programmes where demonstration effects are not taking place, there are reasons specific to the programme, so it is not a question of time in these cases.

We were able to identify the amount of private finance invested in 21 of the 26 cases. These involved a total of US$430 million in private finance being mobilised where demonstration effects made a contribution to the investment. There was strong evidence from the process-tracing analysis for the role of demonstration effects in eight cases with a total value of US$100 million and some evidence from the process-tracing analysis for the role of demonstration effects in the remaining 13 cases with a value of US$330 million.

In all the cases where demonstration effects had contributed to the mobilisation of private finance, the investee had used evidence from one or more of the demonstration projects in our sample in developing and presenting the investment case to their investors.

In some cases, investors relied completely on their own due diligence and did not place any particular weight on the demonstration effects. In other cases, the investor valued demonstration evidence and used it in their investment decision. Several investors told us specifically that they placed greater trust in the evidence because it was generated through an ICF programme, funded by DfID. Some said that the implementing partner added weight. In other cases, investors described trusting the evidence because other governments and development bodies were involved.

Example 1 – the role of demonstration effects in mobilising private investment in a solar home system supplier

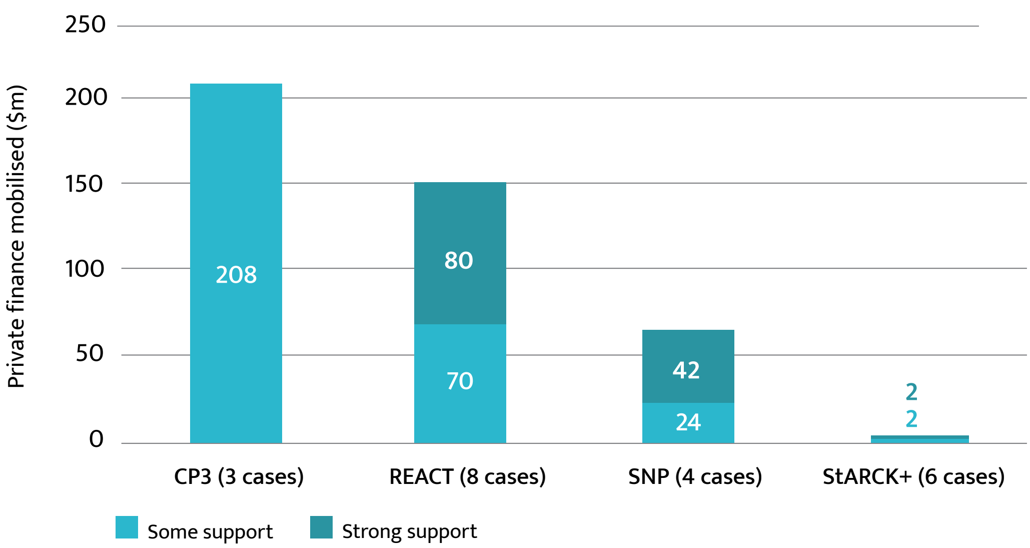
REACT supported a solar home system supplier in Kenya to develop their business; following the programme, the company raised a further US$10 million from an equity investor to finance further growth.

The investor explained that the REACT investment gave them confidence in the investment opportunity: *"It would improve our confidence and trust in the company if they have support from someone like DFID because we know that they've done a due diligence and we know that they have some sort of level of credibility."*

The investee company felt that REACT had helped them to demonstrate that their business model was sound and that they could generate cashflow to repay the REACT loan, and the investor confirmed that these aspects of the investment case were important factors in their decision.

The chart below shows strength of evidence for the value of private finance mobilised by each programme:

Figure 2: Strength of evidence for contribution to private finance mobilised by programme (US$ million)



All the finance mobilised by CP3 was for renewable energy. REACT and SNP mobilised finance for low-carbon businesses mostly providing solar home systems or mini-grids. The programme mobilised US$4 million of private finance for resilience, with strong evidence for the contribution of demonstration effects for US$2 million of that investment. It can be noted that:

- We found evidence for mobilisation in 26 cases. We have figures for the amounts mobilised in 21 of these cases.
- No examples were identified of the mobilisation of private finance for energy efficiency.
- Almost all the mobilisation of private finance was for mitigation. The amount mobilised for resilience represented about 1% of the totals and the average investment in six resilience projects (US$500,000) was much smaller than that for 15 mitigation projects (US$29 million).

Example 2 – the role of demonstration effects in mobilising private finance for renewable energy generation

A renewable energy developer had completed several projects in Southeast Asia with the support of CP3 and subsequently obtained investment for further projects from an industrial conglomerate. They believed that the CP3 project had enabled them to demonstrate a project pipeline and that their track record would have greater credibility with the investor because it was gained with the support of the ICF.

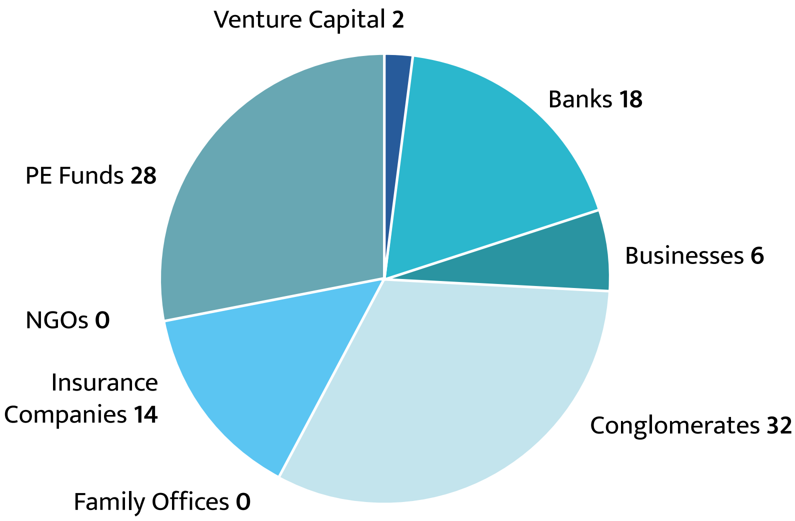
The investor relied on the demonstration of a project pipeline in their investment decision. However, the evidence they used came from SCAF1 which was not funded by ICF.

This investment was classified in the process-tracing analysis as providing some (i.e. not strong) support for the role of demonstration effects in mobilising private finance because, although the developer felt the CP3 investment made a difference, the investor did not.

Table 13: Sources of private finance mobilised by demonstration effects by programme

Sources of private finance mobilised by demonstration effects	Programme			
	CP3	REACT	SNP	StARCK+
Banks				
Businesses				
Conglomerates				
Family offices				
Insurance companies				
NGOs				
Private equity funds				
Venture capital				

Figure 3: Amount mobilised by each source (percentage of total)



4.2. Interim outcomes

In addition to the quantitative evidence for amount of private finance mobilised, we identified a number of 'interim' outcomes. These come from a range of ICF programmes and can be seen as an indication that private finance may be mobilised in the future, or that some progress towards that end-goal has taken place.

Two types of interim outcome were seen:

1. Increased ambition (changing mindsets, will invest in the future).
2. Replication with the same level of concessionality.

Increased ambition

For some ICF programmes, it was too early for demonstration effects to have mobilised private finance because not enough time had elapsed. However, we found evidence from several programme partners that ICF investment had helped to leverage private finance within the programmes, increasing their ambition for developing follow-on projects to attract commercial investment.

One programme partner intends to replicate REPP's 'special purpose vehicle' financing structure in the other regions where they operate, at a larger scale.

Three of Eco.business Fund's private sector investors claim to now have a heightened risk appetite in this market. This appetite has not mobilised private finance as the opportunities have not yet arisen.

One of Eco.business Fund's private sector investors wanted to invest €20 million in the Fund. However, the fund manager could not accept more than €16 million without sacrificing the risk cushion that had been set to provide comfort to other investors.

A fund manager associated with the Lab described having seen buy-in from high-level commercial investors, giving an example of one who saw a model which was incubated in the Lab and, despite it not fitting with their strategy or internal bureaucratic structures, decided to make it happen regardless.

Replication with the same level of concessionality

In some cases where ICF successfully demonstrated that direct investments – or investment into funds – could deliver attractive financial and ESG returns, other DFIs then saw the opportunity to meet their own objectives and establish investments in this new market segment. This led to an increased flow of DFI investment into funds, or credit lines for financial institutions.

GCPF was widely seen to have demonstrated a very innovative approach and other funds have replicated the financial structure. Several banks supported by GCPF have replicated elements of the programme using further funding from DFIs. Financial institutions have:

- Established dedicated sustainable finance teams within their banks and have incorporated green lending into their overall investment mandate.
- Invested in the creation and marketing of new green products (e.g. green buildings/mortgages) and marketing.
- Adopted strict ESG frameworks to measure impact, which they are using as part of the due diligence process when accessing new credit lines from other DFIs.

Some businesses and developers have been able to leverage emissions reduction purchase agreements from the carbon market finance programmes to mobilise further investment. However, the examples that we have identified have development finance with similar levels of concessionality.

Two of the Eco.business Fund's investors have gone on to invest in another of the fund manager's funds. Though the level of concessionality is equal to Eco.business Fund and the new fund is not targeting LCCR markets, the investors talk of watching the fund manager closely for future investments.

One bank has gone on to replicate the environmental and social frameworks used in the project across a number of countries in Latin America with the same level of concessionality. They reported that they have gone from seeing environmental and social concerns as an expense to seeing it as an investment. Another bank has *"the full intention of going ahead with the green products in future years even without the presence of the Eco. business Bank".*

An insurance company who was involved with one project endorsed by The Lab has since gone on to look for other sectors in which they can promote the model.

Interim outcome story

A European-based fund manager has recently launched a new fund to invest in renewable energy in sub-Saharan Africa, based on the same type of fund structure as GCPF and with the same level of concessionality and involvement of DFIs.

They felt that a large fund such as GCPF – in successfully pioneering a financial structure that had not been commonly used before – demonstrated that private investors were willing to invest in these types of fund structures, and that the level of risk, and financial/ESG returns, were acceptable to these larger institutions.

5. How and for whom demonstration effects work to mobilise private finance

Six types of demonstration effect work for different purposes and in different ways for four investor groups. This section explores how each group find out about demonstration evidence, how they use it and how individual elements of evidence interact. We start by giving an explanation of how demonstration effects work in principle to mobilise private finance.

We have observed demonstration effects working to mobilise private finance in three main ways:

- A 'programme partner' (typically a business/developer or fund manager) in an ICF programme goes on to seek additional finance after the programme for a new project or to expand their business/fund. Demonstration evidence from the programme assures them that this makes financial sense and allows investors to appraise the investment.
- 'Other' businesses or fund managers observe evidence from a programme partner and decide to offer a similar product or service. They also use this evidence to help convince investors to support them.
- Investors that have invested in ICF programme partners (either in the ICF programme or in a follow-on project) seek further similar investments based on their experience of those projects.

Figure 4: How demonstration effects work below illustrates investment flows as a result of demonstration effects.

Figure 4: How demonstration effects work

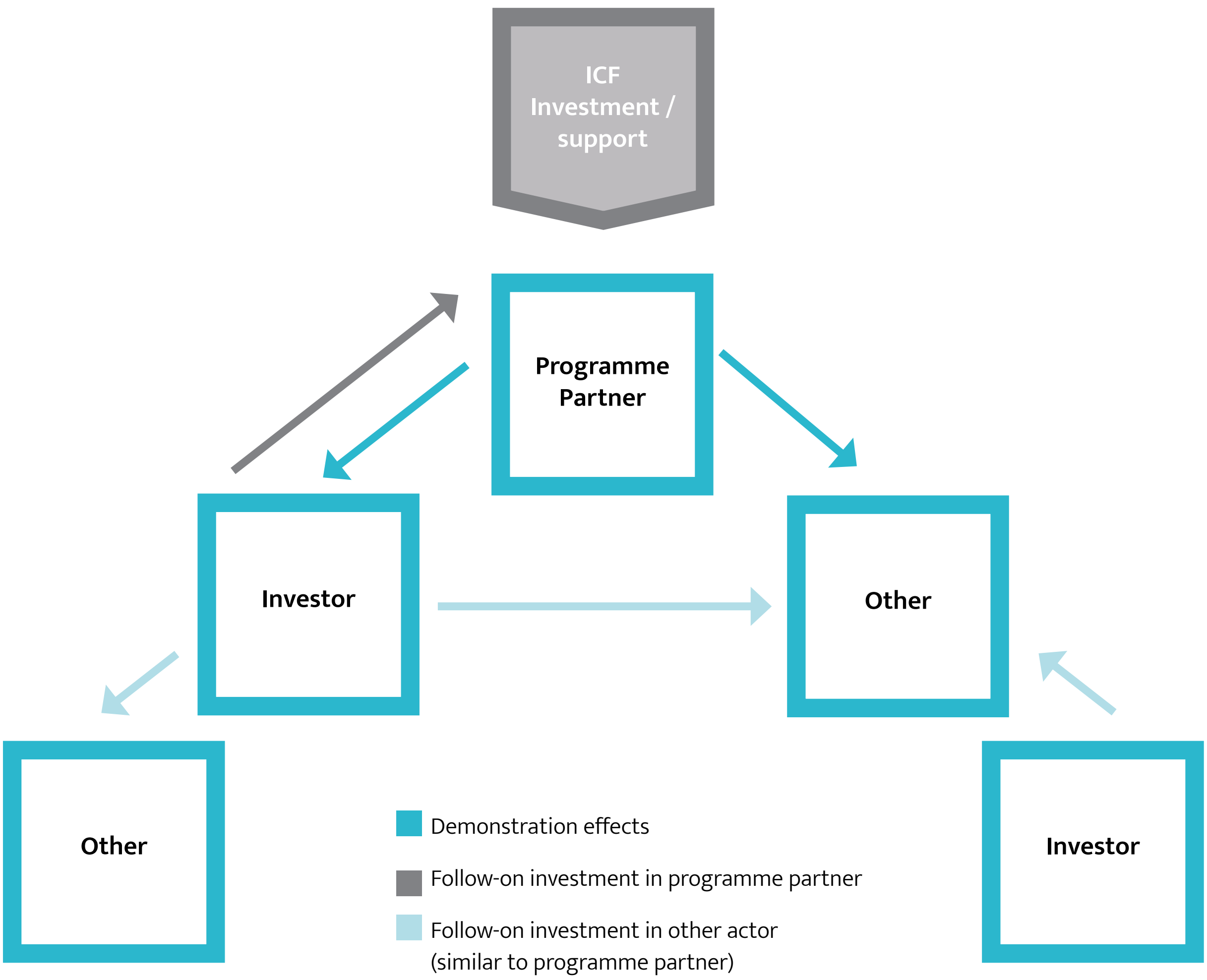


Table 14 below summarises how and for whom demonstration effects have contributed to the mobilisation of private finance along with the strength of the evidence for that contribution. We discuss the six types of demonstration effect in section 5.1. The three levels of strength of evidence are defined in Table 15. N/A indicates no evidence was found for this combination.

Table 14: How and for whom demonstration effects mobilise private finance[7]

	Businesses/ Developers	Direct investors	Fund managers	Institutional investors
Demand	Convincing	N/A	N/A	N/A
Business model	Convincing	Convincing	Plausible	Plausible
Track record	Plausible	Plausible	N/A	Tentative
Compliance	N/A	Convincing	N/A	Tentative
Risk	N/A	Tentative	N/A	Plausible
Trust	N/A	Convincing	N/A	Plausible

Table 15: Definitions of levels of strength of evidence

Strength of evidence	Definition
Convincing	The proposition is supported by consistent evidence from a substantial number of different sources, has been tested in different contexts and no evidence has been found that contradicts the proposition AND where the proposition has been tested with different methods - including specific and appropriate tests of causality such as process tracing or quantitative methods - AND the proposition is consistent with formal theory.
Plausible	The proposition is supported by consistent evidence from a substantial number of different sources, has been tested in different contexts and no evidence has been found that contradicts the proposition.
Tentative	The proposition is supported by evidence from a smaller number of sources, has only been tested in some contexts or where there is some evidence that undermines the proposition.

5.1. How demonstration evidence works to mobilise private finance

We have identified six ways in which demonstration evidence works to mobilise private finance: i) demonstrating demand for a product or service; ii) a business model to satisfy that demand at a profit; iii) a track record of delivery; iv) compliance with reporting requirements; v) acceptable levels of risk; vi) and that evidence can be trusted.

We did not find aspects of demonstration effects which were specific to climate finance. Investors considering any investment would require reassurance on the areas outlined above. The difference is that a development programme funded by government or other concessional finance has the opportunity to develop evidence for potential investors within a protected environment – i.e. a funding structure which offers some risk mitigation, the expert knowledge of ICF and the implementing partners, guidance on standards, etc. Potential investors see or learn about the demonstration project working and will make decisions on future investments based on whether they gain confidence that similar investments would be viable, without or with less development finance.

[7] See section 5.10 of the accompanying Technical Report for a full explanation of the approach to assessing strength of evidence.

We discuss below each of the six types of demonstration effect in turn.

5.1.1. Demand

This works because demonstration projects show businesses and developers that there is demand for their products or services. As a result, they are willing to invest their resources in exploiting these opportunities and in seeking investment from others.

> *"One of the unknowns we had was the extent of the marketing activity which would be required to drive the demand to prove essentially that the business is relevant and viable in this context. The programme helped us to run awareness campaigns that helped us prove to our investor our ability to essentially repay our debt and also the potential of this market."* – Programme partner

> *"The [X] company understood there was this market and once they realised that the product was attractive for some industry they started selling their [products] to other sectors and industries that were not part of our programme, and they are working aggressively in trying to see in which other sectors it really makes sense to promote the [model] as a way to create new business."* – Programme partner

5.1.2. Business model

This works because demonstration projects show investors that the business model is effective in satisfying the demand at a profit, proving that elements such as financial structure, supply chain, marketing, fulfilment and payment can work. This gives direct investors and institutional investors confidence in the structure, approach and possible returns of the investment.

Businesses use demonstration programmes to test and confirm their business model. This includes how to reach customers, how to get paid, how to build supply chains. When successful, this gives them confidence to expand their efforts and provides evidence for investors. For example, several solar home companies successfully trialled new customer payment mechanisms, demonstrating a more efficient way to get paid. Another business established a supply chain, demonstrating the ability to scale production.

For developers, demonstration projects show that PPAs can be set up and how they work. These can be replicated in follow-on developments, making future investment potentially cheaper, easier and quicker.

Direct investors use evidence from demonstration programmes when assessing potential investments in LCCR businesses. That evidence provides them with confidence that the business has the capability to supply the demand at a profit and so provide a return on the investment.

> *"Track record is important because otherwise we cannot assess and evaluate whether their business model is correct or not. And then, also, we need to evaluate the valuation of the company by the business model. So, we have to see their track record by using their business model."* – Programme partner

Fund managers use demonstration programmes to establish for themselves that their business model works. This will include contracts and structures and risk mitigation arrangements. They are then able to replicate that business model on future funds, investing their time and resources and providing evidence to institutional investors. Demonstration effects have been particularly important in establishing private equity funds that develop/operate/exit renewable energy projects.

> *"[CP3 programme partner] was a pioneer. You were talking about trying to invest in an industry where there was no precedent model, no precedent contract template, no template of any sort as to how you approach the investment and how you had to do it. […] And I guess [CP3 programme partner] was ahead of their time and spent a lot of that time trying to educate different stakeholders, and we've got a working model now."*
> – Replicator

Institutional investors want to see a fund demonstrating that it can attract sufficient investment to be viable. Support from ICF enables funds to reach first close, providing evidence that they can go on to make investments and giving institutions confidence to invest in the funds.

5.1.3. Track record

This works because it shows investors that the investee can deliver results over time, giving institutional investors confidence in a fund manager's performance, and direct investors confidence that a business can sustain their performance and provide the required return on investment.

Direct investors see that the demonstration project successfully repays a loan, and thus gain confidence both in the business model which delivered that result and in the reliability of the business owner or developer.

For businesses and developers, demonstration projects provide a means of showing they can achieve their goals, perhaps in a new market, supplying a new product or service or operating in a different way. This gives them confidence to seek investment.

> *"For the last three to four years we've been growing roughly 300% year on year. So, we've shown that track record which has enabled us to get the financing that we have now."* – Programme partner

Fund managers need to prove their track record in order to be selected for investment. Demonstration evidence helps them to provide comfort to institutional investors that they can deliver returns and successful exits.

> *"We have closed complex financing of projects and we've closed them at a rate that I would say is double what other people do. A lot of other people do one project at a time, and it takes them a long time and then they do the next one. So, we've got a lot more traction broadly."* – Programme partner

Institutional investors need to feel confident that a fund manager gets consistent returns over a period of years, and demonstration effects can provide this comfort.

> *"[We want to see] typically over the lifetime of at least one of the funds of a particular manager. So, they probably raised several funds and I'm sure they overlap […]. But I think that […] at least one of those funds to have closed fully invested and then sat for a bit to get a sense of what the post investment returns look like."* – Institutional investment sector expert

5.1.4. Compliance

This works because it shows investors that the demonstration project is capable of complying with reporting and/or ESG standards. Direct investors and institutional investors need reassurance that investees can meet their requirements. Businesses and developers and fund managers use evidence from demonstration projects to give investors confidence that they can achieve the standards and provide the required evidence.

There is pressure on and from many investors to ensure that their investments meet ESG standards and provide sufficient robust, transparent data to prove this. Demonstration projects give businesses and developers the means of proving that they are capable both of meeting the standards and of reporting to a level which meets the investors' needs. Investors' due diligence includes ESG compliance, and demonstration effects provide confidence in businesses' capability and reporting processes.

> *"ESG is probably the investors' number one criteria. In that we really made a difference. Not just that we satisfy the criteria to make a difference but that we made a difference on the human impact side."* – Programme partner

Some of the technical assistance provided by ICF programmes is connected with ensuring investees have appropriate environment and social risk management systems in place. For direct investors, evidence from demonstration projects helps them to assess ESG risks in future investments.

> *"[T]he programme has given us enormous capacity development in the area of environmental and social risk management compliance issues. Now, when we finance other projects, we can now assess the environmental and social risk better because of the training."* – Programme partner

Institutional investors seek reassurance from fund managers that the projects they invest in comply with ESG standards and that they have the necessary systems and controls. The demonstration effect works by giving investors the confidence that their investment will not bring them into disrepute.

> *"It's all very well saying these efforts are interesting and we can go investigate and then you find that someone's been up to no good, and the next thing you know you're on the front of the Daily Mail. Yes, there is the investment and there's other allegations of X Y Z. So how did that happen?"* – Institutional investor

For institutional investors, the involvement of ICF or a DFI demonstrates that they have confidence in the ESG standards of the investee, which in turn can reassure the investor.

> *"[H]aving a number of the DFIs and the government organisations involved in setting kind of good standards as it relates to both the social and environmental kind of like outcomes that the funds or the borrowers need to adhere to is really important."*
> – Programme partner

5.1.5. Risk

This works because it shows investors that risks can be assessed with acceptable levels of confidence. Direct investors gain reassurance from the demonstration project that the investee will repay the loan and institutional investors see that a fund is viable and will deliver their desired returns.

The demonstration effect provides direct investors with the confidence to invest because they can be more certain of the accuracy of their perception of risk.

> *"Now, after working with [name of the fund] it became evident to us that these businesses are profitable. And they are businesses that we can put in money and be sure that we will get our money back."* – Programme partner

Fund managers use demonstration effects to illustrate potential returns to institutional investors who may initially believe that the risk is too high, but see from a demonstration fund that the risk/return balance can be acceptable with suitable risk mitigation in place.

> *"It's really about getting the one fund successfully closed [...], that they manage to deploy all their funds, that they manage to get the money back again to the investors. Then the investor becomes comfortable coming into the next fund where you can take a bit further risk or there is a bit less concessional."* – Sector expert

Businesses and developers often believe that demonstration programmes help them to secure investment by giving investors confidence that they will repay loans. When interviewing direct investors, however, we found no evidence that this is an important factor in their investment decisions.

5.1.6. Trust

This works because investors trust credible actors such as ICF, an implementing partner, or another known individual or company who is already investing, to make good investment decisions. This lends weight to the other evidence from demonstration projects. As a result, direct investors and institutional investors are reassured to invest.

When ICF or other government funders are involved in the demonstration project, this provides investors with more confidence in the opportunity because they think that DFIs and other donors make good investment decisions.

> *"I think you know being financed by European governments, and with a UN implementation, was of course a big plus for us. And definitely, I'm sure it impacted the way the investor looked at us at that time."* – Programme partner

> *"I think that unconsciously [private institutional investors] take a brand view - whether they should, or they shouldn't - if [partner DFI] has invested in it, then they can then present that to their private clients that this is good. There's a sort of comfort."*
> – Programme partner

Institutional investors are influenced by demonstration effects when they see investors with similar investment approaches making investments in demonstration projects. This makes them more likely to consider making LCCR investments themselves as they trust the judgement of these investors.

> *"Ultimately, investors will make decisions. It's always hard to pinpoint exactly what it is that tips them over. But I think looking at others and what they did is definitely one of those items."* – Institutional investment manager

5.2. For whom do demonstration effects help to mobilise private finance and how?

Each investor type makes decisions in different situations, and with different results, but we found that some of the six types of demonstration effect can play a significant part for each of them in varying ways. The table at the start of each section below summarises the demonstration effects which we found working for each type of investor. In each case, there is a range of overall conditions which need to be in place, before private finance can be mobilised as a result of a demonstration effect.

Section 9 of the Technical Report gives further detail on the levels of evidence found for each investor type.

5.2.1. Businesses and developers

Strength of evidence	Businesses/Developers
Demand	Convincing
Business model	Convincing
Track record	Plausible

Where the demand for LCCR products and services is unproven and/or something about the business model for satisfying that demand is uncertain, demonstration effects encourage businesses and developers to pursue LCCR opportunities because they give them confidence they can succeed and will be able to secure investment.

Businesses and developers are alert to opportunities in markets that are of interest to them, learning about these in a variety of ways, including demonstration evidence from ICF programmes. We have identified several examples of programme partners raising investment to expand their businesses as a result of demonstration effects, and several examples of businesses unconnected with ICF programmes entering new markets as a result of demonstration effects.

Businesses and developers use evidence from demonstration projects principally to determine whether there is a demand for a product or service that they could offer. This could be a new product or service or an existing one being offered in a new market. They can also see from that evidence that they will be able to mitigate the perceived risks, for example the profit margin, supply chain, marketing, payment mechanisms or customer creditworthiness, and satisfy that demand at a profit.

They also use the evidence in their pitches to investors, pointing to examples of successful projects. As well as convincing investors of the level of demand and the business model they also use demonstration evidence to present their own track record of successful operation, e.g. of repaying loans.

> *"I think everybody agrees that the market is huge. But it's harder to reach the market to show that you can actually set up a last mile distribution chain where you knock on doors, sell products, install them, and show that everything runs fluidly. I think this loan helped us to show that we execute well."* – Programme partner

In addition to ICF demonstration effects, businesses and developers are influenced by their own emotional commitment, ambitions and/or personal links to a particular sector or country, and/or desire to make a difference. They may also respond to incentives or initiatives supported by other DFIs or governments.

Success story

A REACT grant provided a solar home company in East Africa with the resources to build an inventory, enabling them to prove the demand for their product in their home market, as well as demonstrating profitability and a track record of being able to scale their business model. The company has now expanded across sub-Saharan Africa, but they continue to use their home market as a showcase for potential investors to come and visit to see the successful operation in action. In 2019, an international conglomerate invested over US$20 million in the company, citing the company's track record and proven business model as influential factors in their investment.


Image: 214739671 / Adobe Stock

5.2.2. Direct investors

	Direct investors
Business model	Convincing
Track record	Plausible
Compliance	Convincing
Risk	Tentative
Trust	Convincing

Where investors do not have enough information to assess LCCR investment opportunities then demonstration effects provide direct investors with confidence in the likely returns and enable them to assess the risk associated with the investment more accurately. As a result, they are more likely to invest.

Direct investors rely principally on their own due diligence in deciding whether or not to make an investment. Their perception of risk is also influenced by the level of control they have over the investee's business as part of any investment agreement. These two factors will influence the role of demonstration effects.

Those investing directly in LCCR projects mainly learn about demonstration projects from potential investees who use evidence from them to support their investment case. In other cases, direct investors have been involved in demonstration programmes and seek out further similar LCCR investments following the demonstration programme.

Direct investors use the evidence to obtain a better understanding of the investment opportunity in particular whether the investee's business model is sound: is there demand for their product or service and can they supply at a profit?

> *"They [network providers] used to facilitate payments and that was a very unique proposition in Nigeria. The market was extremely difficult to penetrate, even though the market is 90 million plus people. So, they were able to crack it."* – SNP replicator

Direct investors are interested in the ability of a business or developer to meet and report on their specific ESG criteria, and demonstration projects provide evidence of this.

> *"We are particular about ESG and you can see that the values are aligned. The goals are aligned, the values are aligned because I understand [the investee] has systems in place to make sure they meet the ICF standards."* – Replicator

Some investors expressed more confidence in evidence about the potential performance of an investment because it has come from an ICF programme. The evidence can encourage them to invest time and money in conducting their own due diligence.

> *"For you to be funded to DFID, there are those rigorous due diligence processes that you have to go through. So, that also gave us the minimum comfort or assurance to invest in that company."* – Replicator

In addition to ICF demonstration effects, direct investors are aware of evidence from DFIs. They also look for investments that fit with their strategies or align with other businesses they are invested in, whilst some investors have a commitment to work in a particular sector or country, or to deliver social and/or environmental impacts.

5.2.3. Fund managers

	Fund managers
Business model	Plausible

Where fund managers have no experience of managing LCCR funds, demonstration effects provide them with confidence that the model is viable as they will be able to secure funding and find suitable opportunities for investment. Consequently, they invest time and resources in extending existing or establishing new funds.

Fund managers use evidence from demonstration programmes to establish that there is a potential business model for an LCCR fund. For example, ICF support has helped several funds to reach first close, the stage at which the main conditions have been satisfied and documents executed, so that investments become permissible. It then allows them to establish and test their processes and procedures.

Demonstration projects can also encourage fund managers that it is worth putting time and effort into developing further funds with less concessionality. Other fund managers also replicate this type of fund.

> *"There are a lot of institutions out there who are in a wait and see position until a fund has reached first close because then it means, okay, these guys are serious, they have enough backing to be at least financially eligible and they have a reasonable budget to actually run the operation. I think that was important for quite a few investors who came after first close."* – Programme partner

In addition to ICF demonstration effects, fund managers use evidence from other initiatives by donors and governments. They also establish funds in countries and/or sectors based on their personal or company mandate or their own personal commitments and passions.

Success story

A first-time fund manager was supported by CP3 to close their private equity fund, focussing on renewable energy development in Southeast Asia. They felt that the support enabled them to prove their private equity structure, in terms of early stage project financing, construction, operation and ultimately, achieving a commercial return on exit, whilst having a significant ESG impact. Another fund manager is now replicating that same structure, with a similar geographical focus, for a new fund. The CP3-supported fund manager forms part of the due diligence process for potential investors into the replicator fund, acting as a reference point for the strategy that is being proposed.

Image: 297251158 / Adobe Stock

5.2.4.Institutional investors

	Institutional investors
Business model	Plausible
Track record	Tentative
Compliance	Tentative
Risk	Plausible
Trust	Plausible

Where institutional investors have a mandate for sustainable investment but do not have experience of investing in LCCR funds, evidence from demonstration projects provides them with confidence in fund managers' abilities to secure investment, find opportunities and deliver acceptable returns.

Pension funds, insurance companies, foundations and other institutional investors investing into funds which are designed to fund LCCR projects learn about demonstration projects mainly from fund managers who approach them with investment opportunities, and use evidence from demonstration funds to support their investment case. They also hear of opportunities and demonstration projects, through market intelligence and from fellow investors, at conferences and through the media, where impact investing and aligning investments to SDGs is an increasingly hot topic.

Institutional investors use evidence from demonstration programmes to improve their ability to assess investment opportunities, in particular their confidence in the forecasted returns and risk profile. Where a demonstration fund can show an acceptable risk/return balance and a structure which provides adequate risk mitigation, this helps investors to feel confident in making a future investment and to consider lower levels of concessionality.

> *"It can be quite difficult and quite challenging to get the data and to make sure that you are able to earn this kind of commercial returns that you're looking for."* – Institutional investment sector expert

Where ICF, DFIs or implementing partners or other credible investors have invested in the demonstration project, institutional investors gain confidence because they trust those investors' ability to make good investment decisions. This makes them willing to allocate resources to investigating the opportunity.

The track record of the fund manager is a key part of institutional investors' decision making. If they do not have previous experience of that fund manager, institutional investors use evidence from demonstration programmes to gain confidence that the fund manager has the skills they require, and has delivered their objectives in terms of returns and exits over a period. Institutional investors place a high level of reliance on track record as, once they have invested in a fund, they have little control over the actual investments or how they are managed.

With increasing interest in impact investing, institutional investors are seeking both ESG reporting compliance and impact measurement. Evidence from demonstration programmes can give them confidence that a fund manager and the investment itself has the capacity to meet their needs on delivering results and reporting against ESG criteria.

> *"We think there is a need to show that you can earn a market return and have a positive impact. And this brings about a lot of good consequences when you start doing that at an institution, you start thinking more about your impact. Particularly in climate, because in climate there's so much that you can do which is absolutely proven market return, pretty mainstream."* – Investment manager

Demonstration effects could result in institutional investors broadening their mandates to allow investments beyond their mainstream remit, for example, into emerging markets and/or LCCR projects.

Ticket size is another factor which limits institutional investors' capacity to be influenced by demonstration effects – if the demonstration project or fund is not of sufficient scale, it is not relevant. Several investors told us that they could not consider investments below double figure £ millions as the cost of the due diligence and administration/management would be too high in proportion to the likely gain.

6. Whether, how and in what circumstances demonstration effects support transformational change

Where there is evidence that capacity and capability, innovation, effectiveness, incentives, replicability and scalability are in place in a sector, demonstration effects give investors confidence to enter the market, which in turn results in private investment at scale.

ICF aims to make visible, distinctive and catalytic investments that can be scaled up and replicated by private finance. Transformational change that could result from demonstration effects is where private finance is mobilised and continues to be mobilised in a self-sustaining way, without the need for further intervention or subsidies. We have identified a settled and widespread shift in private investors' attitudes to investment in four specific country/sector markets, described in detail below.

Solar home systems (SHS) in East Africa

The SHS industry in East Africa continues to grow, with all of the major ICF-supported businesses having received private follow-on investment after demonstrating innovative business models, the capacity to deliver product at a profit and the potential to scale. Now the sector is continuing to evolve with more products and services being offered.

From the perspective of the local commercial banks in the region, we have evidence from one replicator bank in Uganda that, due to the success of their debt investment into a REACT-supported business (the first of its kind by a commercial bank in local currency), they are now in the process of negotiating several deals with other SHS businesses to raise funding on their behalf.

Other commercial banks in the region, who also lend on the basis of leverage multiples, are now also looking to invest in these same businesses. For the banks, businesses who are processing thousands of customer payment transactions on a daily basis provide an attractive source of cheap liquidity. Their growing understanding of the sector and the knowledge of how to structure an appropriate deal, as demonstrated by the first replicator bank, has now led to these commercial banks competing with each other to sign deals with SHS companies (using similar term sheets) across the region.

Private equity for renewable energy in Southeast Asia

Over the last nine years, ICF has supported a number of first-time fund managers to establish private equity funds to invest in renewable energy projects across Southeast Asia. Many of these fund managers pioneered a new innovative business model, directly managing the entire process of development from funding, right through PPA negotiations, construction, operation and then sale of the assets.

This approach showed it would be possible to replicate this model in some Southeast Asian markets such as Vietnam and Thailand, where there are similar opportunities and favourable conditions to encourage investment. In these regions, we discovered evidence of other fund managers beginning to use this model for their own funds. We also found that larger private equity funds see the risk/return profile in these regions as attractive markets they now wish to enter. These developments will allow increased activity of private finance by institutional investors as the market grows towards critical mass.

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Off-grid solar in Nigeria

The Nigerian market for off-grid solar is showing some early signs of transformation. A major local commercial bank has recently approved a significant loan facility to be dispersed in tranches to an SNP-supported off-grid solar business, the first time a local bank is providing funding directly off its balance sheet for a solar developer.

By supporting several businesses to develop innovative solutions to address the challenges of providing off-grid energy in Nigeria, the Solar Nigeria programme has demonstrated the capacity to establish profitable and scalable businesses.

This opportunity has encouraged a critical mass of the biggest solar providers in sub-Saharan Africa to enter the market, and some purely commercial investors are now investing in these businesses where only impact investors and DFIs were previously.

Microfinance institutions (MFIs) in Kenya

ICF supported MFIs in Kenya to adopt an innovative business model working through aggregators to support agricultural supply chains. This demonstrated the potential for profitable lending and the potential to replicate the model.

Some recipients of MFI loans have gone on to scale up their businesses and required funding on a larger scale than could be supplied by MFIs, so approached bigger banks for funding for these purposes.

Some of the country's biggest lenders are now planning to adopt the business model of lending through an aggregator which will mobilise significant amounts of private finance and consolidate the approach.

7. Unintended outcomes

We found evidence of some unintended outcomes from demonstration effects. We discuss here the two most commonly described by our interviewees, namely crowding out and reduced ESG standards. The less frequently cited unintended outcomes are described in the Technical Report (section 11.3).

Crowding out

The most common was crowding out of private finance by development finance, which was described as happening by at least six separate interviewees, and referred to in programme documentation. Demonstration effects attract more players into the market, and this includes DFIs as well as other investors. Crowding out was attributed by interviewees to two causes, which compound each other:

- DFIs have large sums of money to invest in LCCR projects.
- DFIs are prepared to accept lower rates of return or easier terms than private finance.

Some examples of this from respondents include:

> *"So, all the DFIs we have a relationship with most of them, they all want green. Everyone wants the green stuff and to keep everyone happy we have to give small parts of the pie. Because it's easier to get the money than it is to on-lend."* – Bank

> *"Why would we go to a local bank when we can get 700-800 basis point margin on a variable rate, 10-year financing when we could go to a DFI and get 15-year financing at 500 basis points fixed?"* – Developer

> *"If you speak to a bank like [XX] they would certainly say that they go heads on with the development banks and would wish to see them more generously giving away more volume of a certain transaction."* – Institutional investor

Reduced ESG standards

The second most commonly cited unintended consequence is reduced ESG standards. Three respondents from three programmes reported follow-on projects with lower environmental standards than would have been required by ICF investment, though the standards may be no lower than would have existed prior to the ICF programme. Lower standards may have occurred because the demonstration project attracted new entrants to a market, but those new entrants did not enforce the same level of environmental protection as the ICF programme. For example:

> *"But we find that other banks are not asking for the same. They don't have the same requirements. In consequence, we have already lost a couple of clients which did not want to follow our demands and they moved to other banks that are not requesting these things. They couldn't care about the environment; they couldn't care less."* – Bank

Several other instances of unintended consequences were mentioned, but only by one or two individuals. These are discussed in more detail in the Technical Report in section 11.3.

8. Conclusions and recommendations

Conclusions and recommendations are given below under the four question areas outlined in section 2.1. They are not listed in order of priority.

8.1. How ICF has used demonstration effects with the intention of mobilising private finance

This section sets out the conclusions and recommendations relating to ICF's approach to identifying opportunities for demonstration effects, communicating demonstration effects, monitoring the mobilisation of private finance through demonstration effects, and addressing barriers to demonstration effects.

8.1.1. Approach to demonstration effects

The creation and communication of demonstration effects is currently the responsibility of programme teams. Section 3 of this report describes how they do not always have a clear understanding of what demonstration effects are, or have the skills and resources to identify and communicate the evidence that would trigger demonstration effects. The reliance on programme teams also misses an opportunity to communicate to investors all the relevant evidence from across the ICF which would have more weight.

Recommendations

1. Centralised approach

- Adopt a centralised approach to identifying and communicating demonstration effects across the ICF portfolio. This could be handled by the ICF secretariat or a separate programme could be established to take the lead.
- Maintain a central record of evidence showing demonstration effects working well and instances where they do not work, drawing on information and data provided by programme teams.
- Provide guidance to programme teams when they are developing business cases on how to stimulate demonstration effects. This would take the form of a simple document based on the findings of this report, outlining which strategies work in which circumstances and for whom. See initial outline guidance for programme teams at Appendix 7 and the resource columns in the diagrams in section 9 of the Technical Report.

2. Definition

- Communicate a clear typology of demonstration effects and the evidence that is effective in triggering them to programme teams. This will enable them to set effective targets in business cases, and feed useful evidence provided by their programmes into the centralised effort.

8.1.2. Promoting demonstration effects more widely

Most of the investment where demonstration effects made a contribution was by programme partners or other investors who learned about demonstration evidence from programme partners. We have not identified any examples of demonstration effects from ICF programmes influencing the wider market of investors (who have not been involved with an ICF programme) into moving into a particular sector or country because they saw others doing so. ICF could do more to communicate demonstration evidence more effectively.

Recommendations

3. Strategic approach to communication

- Explicitly identify the demonstration effects which have emerged from across other ICF programmes that align with the effects identified in this evaluation.
- Engage communications specialists to communicate these demonstration effects to relevant types of potential investor.
- Support formal communication of demonstration effects through use of evidence collected by a centralised approach.
- Support informal communication of demonstration effects through provision of evidence to be used during attendance at conferences and through networks.

8.1.3. Monitoring and tracking demonstration effects

None of the programmes in our sample was monitoring demonstration effects through its logframe, though some programmes do address this in their evaluations (see section 3.3). Monitoring demonstration effects would provide ongoing understanding of what has been achieved and in what circumstances, which would support ICF in mobilising more private finance through demonstration effects. The absence of any programme reporting on demonstration effects also limits the ability to track contributions to potential transformative changes as a result of ICF investments.

Our own work in tracing and contacting potential replicators has demonstrated how challenging it is to keep track of networks and who is influencing whom in the wider investment community. No other DFIs are yet achieving this. Attempting full and accurate data capture may be unrealistic, but programmes could adopt a more formal and systematic approach to recording what they hear about. Having this information readily accessible would enable SROs and others to share the success stories with potential future investors.

This report describes lessons which can be identified to increase the future mobilisation of private finance through demonstration effects. One of the original evaluation questions was: How can these lessons help to develop a framework for ongoing monitoring of demonstration effects across the ICF portfolio? This question was removed from the scope as it would not have been possible to develop an approach until the evaluation had been completed.

Recommendations

4. Recording system

- Develop an approach to recording information on the mobilisation of private finance as a result of demonstration effects. This may need to continue after project completion as demonstration effects take some time to mobilise private finance, and so it could be best implemented centrally rather than only by the programme team.
- Given the anecdotal nature of much of the information which is and will be available, it is unrealistic at this stage to incorporate milestones and targets for mobilisation into programme KPIs which measure performance. But a KPI could be developed around a requirement for data capture. This KPI would monitor the effective use of a system for recording such information and anecdotes to feed into a central framework as described above, both during and after the programme's lifetime.
- After a trial period using this recording system, it may be possible to reconsider developing a more formal monitoring framework.

- Where demonstration effects are an objective of a programme, we recommend that programme teams have a brief to record whether, for example:
  - Businesses, developers or fund managers involved in programmes seek further investment from private investors and, if so:
    - Do they use demonstration evidence to support their pitch?
    - Was investment obtained with a lower level of concessionality?
    - Did the investors use demonstration evidence in making their decision?
  - Private investors involved in programmes seek LCCR opportunities similar to those in the programme based on their experience of the programme and, if so, whether they are successful in doing so.
  - Programme partners communicate evidence from demonstration projects to others who were not involved in the programme and, if so, whether recipients of that communication are influenced to invest in LCCR projects.
  - Demonstration evidence is communicated more widely, e.g. through specialist investment channels.

8.1.4. Addressing barriers to demonstration effects

This evaluation has identified four barriers to demonstration effects. ICF could do more to address the barriers in these areas:

- Crowding out of private investment by concessional finance.
- The market being saturated by concessional finance leaving no opportunities for private investment.
- No opportunities for scaling up of demonstration projects.
- Change in enabling conditions which reduce the attraction of the opportunity to replicate the demonstration project.

Recommendations

5. Crowding out

- Use relationships with other DFIs to encourage a reduction in investment which competes with private finance where ICF is already aware of examples of crowding out.

6. Market saturation

- Be alert to the risk that ICF investment could saturate markets and taper off involvement accordingly.

7. Limited scope for scaling up

- Provide support (see recommendation 1 above) to programmes to clarify opportunities for mobilisation of private finance and how demonstration effects could help.

8. Deterioration in enabling conditions

- Programme teams to work with partner governments to re-establish favourable enabling conditions or, if this is not possible, it may be better to stop working in that environment.

8.2. How much private finance has been mobilised through demonstration effects, by whom and for what purposes

Demonstration effects have contributed towards the mobilisation of private finance for LCCR businesses, LCCR funds and renewable energy projects. However, relatively small amounts of finance have been mobilised for resilience and none for energy efficiency. See section 4 for more detail.

Private finance has been mobilised by businesses and developers, direct investors, fund managers and by some institutional investors with mandates for sustainable or responsible investments, who aim to achieve environmental impact and/or ESG goals. However, we have found little evidence of private finance being mobilised by mainstream institutional investors.

Mainstream institutional investors are open to the principle of investing in LCCR projects in developing countries if they can achieve an acceptable risk and return balance. However, they need stronger evidence than is currently available from individual ICF programmes, particularly the track record of funds in multiple projects over one or more project cycles (5-10 years). In addition, where the investment chain is long, evidence of demonstration effects is unlikely to reach them.

Recommendations

9. Energy efficiency

- Investigate the implications of the crowding-out of demonstration effects on mobilising private finance for lending for low-carbon purposes such as energy efficiency.

10. Resilience

- Review other ICF programmes where climate finance has been provided for resilience projects and use the learning from this evaluation to identify where demonstration effects could be used to mobilise private finance.

11. Provide more sustained evidence

- This requirement may be satisfied by recommendations above to consolidate evidence from across the ICF and the guidance to programme teams to improve their understanding of the evidence needed by mainstream institutional investors.

8.3. How and for whom demonstration effects work to mobilise private finance

This evaluation has shown that different demonstration effects work in different ways for different types of investor. See section 5 for more detail. Armed with this understanding, ICF can maximise the effectiveness of efforts to mobilise private finance through demonstration effects.

Recommendations

12. Targeting

- Use the learning in this evaluation to inform what information is communicated to potential investors and how that information is communicated.
- Encourage new ICF programmes to target the mobilisation of private finance through demonstration effects if they have objectives similar to current programmes which have successfully done so, for example, if the investment:
  - Funds business start-ups and expansion.
  - Helps fund managers to become established.
- Consider whether evidence from other programmes in other sectors and countries exists to support the mobilisation of demonstration effects.
- Build a bank of stronger evidence for institutional investors and engage communications specialists to help disseminate this evidence to institutional investors.

8.4. Whether, how and in what circumstances demonstration effects support transformational change

Demonstration effects support each element of ICF's theory of transformational change (see section 6). We have identified four examples of transformational change in specific sectors and geographies.

We have also identified two examples of transformational change being blocked by changes in enabling conditions in specific countries.

Recommendations

13. Cross programme knowledge transfer for transformation

- Identify opportunities for demonstration effects from one programme to support transformational change for another, from the cross-ICF consideration of demonstration effects proposed in recommendation 1. For example, there could be opportunities to deploy demonstration evidence relating to the successful mobilisation of private equity for renewable energy in Southeast Asia to accelerate transformation in Latin America.

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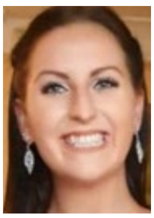

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Disclaimer

The views expressed in this report are those of the evaluators. They do not represent those of BEIS, DFID, DEFRA or of any of the individuals and organisations referred to in the report. The Evaluation team was able to work freely and without interference. There were no conflicts of interest between evaluators and programme implementation. Information sources and their contributions were independent of other parties with an interest in the evaluation.