



Department  
of Energy &  
Climate Change

# **Business Case and Intervention Summary**

---

*Additional £75 million contribution to the Clean Technology Fund*

December 2012

# Intervention Summary

## What support will the UK provide?

This business case proposes a new contribution of £75m to the Clean Technology Fund (CTF), one of the Climate Investment Funds (CIFs). The CIFs were set up in 2008 to provide learning for the international climate finance architecture and the CTF focuses on delivering large-scale greenhouse gas (GHG) emission reductions in countries with large mitigation potential. It is supporting 20 countries by helping to remove barriers to the uptake of low carbon technologies. Projects are underpinned by developing countries' own plans for development and climate change action.

Since the CTF was set up, the UK has already approved contributions of £535 million to it, whereof £150m has come from the UK's International Climate Fund (ICF). This Business Case builds on a 2011 CIF business case and the proposed contribution will be spent in 2012/13 as part of meeting the UK's international Fast Start targets and Official Development Assistance (ODA) commitments.

The investment will support projects under the country investment plans of Chile, India and Nigeria, all of which are ICF priority countries, and further projects under Turkey's country investment plan following significant progress on early projects. It would not be possible for the UK to directly oversee projects in these countries but by delivering through the implementing agencies of the CTF we use the expertise and financial, social and environmental safeguards of multilateral development banks (MDBs). We are also able to leverage in much greater volumes of funding from the MDBs and other donors. Although we will delegate oversight to the MDBs to a large degree, the UK will retain control over the approval of individual projects. As a member of the governing committee of the CTF we can veto any funding proposal.

The indicative project pipeline includes a wide range of interventions in renewable energy, energy efficiency and low-carbon transport. For example, it is likely to support Concentrating Solar Power (CSP) technologies in India and remove market barriers to clean energy and energy efficiency projects in Nigeria and Chile by providing risk products and debt to financial institutions. The individual projects are not considered in this Business Case; further funding for the CTF is required to allow detailed project design.

Funding will come from the Department for Energy and Climate Change (DECC) budget and will consist of 100% capital expenditure (CDEL). This will go into a blended pot of funding that can be used for, *inter alia*, project preparation grants, equity, concessional loans and guarantee instruments. The CTF investment is expected to leverage a very significant amount of MDB and private sector finance.

## Why is UK support required?

The CTF is currently the main multilateral vehicle for delivering low carbon climate finance at scale. The Green Climate Fund (GCF), which is going to be the finance mechanism of the United Nations Framework Convention on Climate Change (UNFCCC), is not ready to disburse funding yet. In the interim, the CTF continues to play a crucial role in keeping finance flowing to developing countries and delivering action on the ground.

Demand for CIF funding outstrips available resources due to growing interest from developing countries. Under the CTF, there is at present a funding gap of \$949m for the country Investment Plans of Chile, Nigeria and India and the second stage of Turkey's country investment plan. This is holding back the development and approval of projects that could deliver large-scale GHG emission reductions and demonstrate the feasibility of low carbon development within these countries. Although it is possible that some new contributions will be provided by other donors next year, it is unlikely that these alone will be sufficient to fill the gap.

The World Energy Outlook 2012 shows that limiting climate change to 2 degrees is becoming more difficult and costly with each year that passes. Given the urgency for action on climate change, it is important that this funding gap is bridged as soon as possible. Therefore the UK should ensure that Chile, India and Nigeria can move forward with projects as soon as possible.

## What are the expected results?

There are two sets of results that we expect to see through the provision of finance to the CTF. Firstly, real world outputs, outcomes and impacts at the country level, and secondly, contributing to an improved international architecture for climate finance, both through progress in the reforms of the CIFs and through learning lessons for the GCF and improving donor coordination.

Key benefits from the proposed contribution include:

### *GHG emission reductions*

The investment is expected to deliver approximately 7.3 MtCO<sub>2</sub>e<sup>1</sup> in emissions savings that are directly attributable to the UK CTF investment and about another 30.8 MtCO<sub>2</sub>e due to the co-finance that is leveraged from MDBs, the private sector and domestic governments. These estimates are conservative and based on 29 approved projects under country Investment Plans that preceded those of India, Chile and Nigeria, and are therefore only indicative of what the £75m will deliver in terms of GHG emission savings.

### *Leverage of other sources of finance*

Based on the aforementioned 29 projects, the investment is estimated to leverage £570m<sup>2</sup> in co-financing from others, primarily MDBs and other donors (50%), the private sector (30%) and domestic governments (20%). Based on the pipeline of projects that the £75m could fund, the amount of leveraged funding may in fact be significantly higher.

### *Development benefits*

Significant co-benefits are expected to be delivered by the intervention, including increased energy security, improved access to energy, job creation and health benefits due to reduced air pollution. All CTF projects need to demonstrate that they have positive development impacts.

### *Demonstration and learning effects*

The investment will have important demonstration effects in India, Chile, Nigeria and Turkey. This is expected to lead to wider replication and transformation, both in-country and globally.

### *Improving the international finance architecture and donor coordination*

An additional contribution to the CTF is expected to help the UK accelerate reform of the CIFs, including on speeding up disbursement, reporting on results and establishing portfolio-level risk management. The CTF provides important lessons for the design of the GCF and its governance structure supports donor coordination and equal participation from developed and developing countries.

## What are the key risks?

The CTF was assessed as providing good value for money in the 2011 Multilateral Aid Review (MAR) and it provides a means of disbursing large amounts of climate finance in a way that takes account of the limited UK staff resources. However, there are risks and challenges that need to be carefully managed. For example, a DECC/DfID/Defra Internal Audit conducted in early 2012 highlighted weaknesses in the CIFs including, *inter alia*, slow speed of disbursement, lack of a risk management framework at portfolio level, and lack of agreed results framework that ensure robust results reporting. For the UK to make a new contribution to the CIFs as proposed here, we would need to demonstrate significant progress against these weaknesses.

Since the Internal Audit, the UK has taken large steps forward in addressing the weaknesses and risks that have been identified. This is set out below.

Slow implementation of investment plans and projects. While a significant number of the 105 projects in the CTF pipeline are progressing smoothly, around 50% of projects have not been submitted for

---

<sup>1</sup> Consisting of approximate 3.3 MtCO<sub>2</sub>e from leveraged private sources and 4 MtCO<sub>2</sub>e from direct UK investment.

<sup>2</sup> In present value terms.

Trust Fund Committee approval yet. This has led to slow disbursement rates and limited delivery of results. It leaves the UK exposed to criticism in the international climate negotiations that climate finance is not flowing.

*Progress: In November 2012, the UK secured agreement to release earmarked funding from the existing pipeline to support new projects in Chile, Nigeria, India and Turkey. The UK also secured agreement to consider more robust measures to actively manage the pipeline in May 2013 (e.g. "cancellation" policy / over-programming) to prevent slow projects in the pipeline holding up faster moving projects.*

Lessons from the CIFs are not captured and shared. The timing of lesson-learning products from the CIFs is crucial for the ability to provide input to the design of the GCF. There is a risk that the Independent Evaluation of the CIFs, which is due to publish its final report in November 2013 and an interim report in May, will not capture and disseminate lessons on time.

*Progress: By November 2012, the Evaluation Oversight Committee had appointed the evaluation consultants (ICF International) and carried out preliminary interviews with Committee members (including the UK) at the November CIF Partnership Forum.*

The CIFs cannot demonstrate credible results. The CTF results framework was perceived as too complex to implement and has been simplified. This should be approved in November 2012 and is crucial to monitoring progress and demonstrating results.

*Progress: In November 2012, the UK secured agreement to the revised CTF results framework including five core indicators which fit with the ICF KPIs following pro-active engagement by the UK with the CIF Admin Unit M&E leads over the summer. In addition, the CIF Admin Unit will collate and update expected results for CTF projects at a portfolio level following UK engagement.*

Risk that the CTF is not transformational and does not meet ICF objectives. The CIFs were set up to pilot new approaches to deliver climate finance at scale and learn by doing. However CTF investment plans and projects may be lower risk and not sufficiently innovative. A lack of a portfolio approach to risk management makes it difficult to assess whether the CTF is likely to meet ICF objectives.

*Progress: In November 2012, the UK secured agreement to establish a portfolio-level risk management framework and a working group to take forward the exercise. An update report from the working group will be provided in May 2013. This followed considerable input from the UK on the scope and focus of the risk management framework over the summer.*

In light of the progress that has been made and the urgent need for further funding, the UK believes an additional contribution of £75m to the CTF is justified. We will continue to push for further progress against our priority reforms.

## ACRONYMS

ADB	Asian Development Bank
AfDB	African Development Bank
CIFs	Climate Investment Funds
CSO	Civil Society Observer
CSP	Concentrating Solar Power
CTF	Clean Technology Fund
DECC	Department of Energy and Climate Change
DfID	Department for International Development
ETF	Environmental Transformation Fund
FIP	Forest Investment Programme
GCF	Green Climate Fund
ICF	International Climate Fund
IDA	International Development Association
IFC	International Finance Corporation
IP	Investment Plan
KPI	Key Performance Indicator
MDB	Multilateral Development Bank
M&E	Monitoring and Evaluation
MAR	Multilateral Aid Review
ODA	Official Development Assistance
PPCR	Pilot Program for Climate Resilience
SREP	Scaling-Up Renewable Energy Program in Low-Income Countries
SCF	Strategic Climate Fund
TFC	Trust Fund Committee
UNFCCC	United Nations Framework Convention on Climate Change
WBG	World Bank Group

## Business Case Contents

1	Strategic Case .....	8
1.1	Context and need for ICF intervention .....	8
1.1.1	Avoiding dangerous climate change .....	8
1.1.2	The international climate finance architecture .....	8
1.1.3	Background on the CIFs and previous UK contributions to the CIFs .....	9
1.1.4	Fit with UK climate change objectives and priorities .....	13
1.1.5	Need for further financing for CIFs .....	14
1.1.6	UK strategy for the CIFs .....	16
1.2	Impact and Outcome that we expect to achieve .....	18
1.2.1	Outcomes and impacts .....	18
1.2.2	Improving the international climate finance architecture .....	22
2	Appraisal Case .....	24
2.1	Approach and strength of evidence .....	24
2.2	Qualitative appraisal: What are the feasible options that address the need set out in the Strategic Case? .....	24
2.2.1	Options analysis .....	24
2.3	Quantitative appraisal of the preferred option: What measures can be used to assess the Value for Money of the intervention? .....	33
2.3.1	Introduction and methodology .....	33
2.3.2	Results .....	35
2.4	Non-monetised benefits .....	39
2.5	Administration and management fees .....	39
2.6	Summary Value for Money Statement for the preferred option .....	40
3	Commercial Case .....	42
3.1	Background .....	42
3.2	MAR findings on MDB approaches to procurement .....	42
4	Financial case .....	44
4.1	What are the costs, how are they profiled and how will you ensure accurate forecasting? ..	44
4.2	What are the finance products and terms of the CTF .....	44
4.2.1	Public sector operations .....	44
4.2.2	Private sector operations .....	45
4.3	How will funds be paid out? .....	46
4.4	What is the assessment of financial risk and fraud? .....	47
4.5	How will expenditure be monitored, reported, and accounted for? .....	47
5	Management Case .....	49
5.1	What are the Management Arrangements for implementing the intervention? .....	49
5.1.1	CTF project selection process and investment criteria .....	49
5.1.2	Social and environmental safeguards .....	50
5.1.3	CIF Governance and organisational structure .....	50
5.1.4	UK Role .....	51

5.1.5	HMG Management.....	52
5.2	What are the risks and how these will be managed? .....	52
5.2.1	Key risks in the CIFs .....	53
5.2.2	HMG processes for managing risk.....	53
5.2.3	CIF processes for managing risk .....	53
5.3	What conditions apply (for financial aid only)?.....	53
5.4	How will progress and results be monitored, measured and evaluated? .....	54
5.4.1	Monitoring.....	54
5.4.2	Evaluation.....	56

List of associated attachments

Annex A: Risk register

Annex B: Projects used for the economic modelling

# 1 Strategic Case

## 1.1 Context and need for ICF intervention

### 1.1.1 Avoiding dangerous climate change

Global climate models indicate that the world is locked into warming due to past emissions and that the global average temperature rise could exceed 2 degrees by the end of the century, which according to the Intergovernmental Panel on Climate Change (IPCC) would lead to widespread loss of biodiversity, decreasing global agricultural productivity and widespread deglaciation<sup>3</sup>. Climate change is expected to have a disproportionate impact upon the urban and rural poor of developing countries, and there is a growing concern that it could slow, or perhaps even reverse, progress achieved to date on poverty reduction.

In order to tackle climate change, a global transition to low carbon is needed. This requires significant investment into the development and deployment of low-carbon technologies. In the absence of a global carbon price, public finance is needed to tackle the different types of market and political barriers to low carbon development. For example, high capital costs and long timescales for the investment and deployment of renewable energy deter investors. Public funding is needed in order to demonstrate the viability of low carbon technologies both to private investors and to governments. The barriers are often particularly high in developing countries, although the costs of deploying low-carbon technologies can be lower there. The transfer of funding from developed countries is necessary to help developing countries develop in a climate-friendly way and contribute to limiting climate change to 2 degrees.

### 1.1.2 The international climate finance architecture

The United Nations Framework Convention on Climate Change (UNFCCC) was adopted in 1992 to address the threat of climate change. The provision of finance from developed countries to developing countries is enshrined in the UNFCCC and is crucial for delivering a global transition to low-carbon, climate-resilient development that is consistent with a 2 degree pathway. The UNFCCC has established a Green Climate Fund (GCF) to channel finance however the GCF is not operational yet and is unlikely to be fully operational before the end of 2013 at the earliest.

Parties to the UNFCCC have committed to the following targets on climate finance:

- To provide new and additional resources of approaching \$30 billion for the period 2010-12, known as 'Fast Start' finance. The UK committed to provide £1.5bn as its contribution to Fast Start finance.
- A goal to jointly mobilise \$100 billion per year by 2020 (from public and private sources) to address the needs of developing countries, in the context of meaningful mitigation actions.

The \$100bn target is challenging and continued scale-up is required. Therefore it is crucial to avoid a funding gap after the Fast Start period comes to an end post 2012. There is a strong need to scale up climate finance, not just from developed country governments but also from the private sector and the Multilateral Development Banks (MDBs). Indeed, climate finance is key to the success of the international climate negotiations overall. It is viewed by developing countries as a measure of developed countries' credibility and commitment to the climate change agenda, and a prerequisite for pushing for ambitious action from developing countries.

In the absence of an operational GCF, an increasing number of bilateral funding vehicles are being set up to meet urgent funding needs. Although this provides opportunities for learning based on

---

<sup>3</sup> IPCC 4AR, chapter 19, p. 781, available at: <http://www.ipcc.ch/pdf/assessment-report/ar4/wg2/ar4-wg2-chapter19.pdf>



different approaches, it also creates significant risks: the proliferation of funding mechanisms leads to poor donor coordination and makes access to finance for developing country complicated<sup>4</sup>. There is therefore also a need for greater donor coordination on climate finance.

The GCF is likely to improve coordination once it is up and running. However, to design an effective GCF, there is a need to learn and disseminate lessons about what types of structures and governance arrangements work most effectively.

In 2008, the **Climate Investment Funds (CIFs)** were set up as interim global funds to scale up climate finance and learn lessons for the international climate finance architecture. They support both mitigation and adaptation activities in developing countries and are currently the main multilateral vehicle for delivering climate finance at scale. To date, 14 donors have pledged a total of \$7bn<sup>5</sup> to the CIFs; the UK has provided over £1bn and continues to play an influential role in their development and governance.

Due to their design, broad scope and scale of finance, the CIFs can provide lesson-learning and improve donor coordination. They also play a key role in keeping finance flowing at scale to developing countries to help implement national and regional low carbon, climate resilient programmes and to raise ambition in the international climate negotiations. Until the GCF is up and running, the CIFs are the main multilateral vehicle for climate finance. This Business Case proposes a further contribution to one of the funds under the CIFs – the **Clean Technology Fund (CTF)**. The following sections provide background information on the CIFs, with a focus on the CTF, and assess the strategic rationale for an investment and the results it is expected to bring, as well as the reforms of the CIFs that the UK is pushing for.

### 1.1.3 Background on the CIFs and previous UK contributions to the CIFs

The CIFs are administered by the World Bank Group (WBG) and programmes are implemented by MDBs. They consist of two funds – the aforementioned CTF and the Strategic Climate Fund (SCF), which funds forests, adaptation and renewable energy in low-income countries. The objectives of the different programmes under the funds as well as recipient countries are shown in Table 1 below.

**Table 1: Objectives and pilot countries under CIF programmes**

Fund	Programme	Objective	Recipient countries
Clean Technology Fund (CTF)	CTF	The CTF promotes scaled-up financing for demonstration, deployment and transfer of low-carbon technologies with significant potential for long-term greenhouse gas emissions savings. The CTF is technology neutral and supports renewable energy, energy efficiency as well as low-carbon transport projects. It prioritises technologies that are at, or approaching, the 'market take-off' phase.	<u>Country programmes:</u> Chile, Colombia, Egypt, India, Indonesia, Kazakhstan, Mexico, Morocco, Nigeria, Philippines, South Africa, Thailand, Turkey, Ukraine, Vietnam  <u>Regional programmes:</u> Middle East & North Africa (Algeria, Egypt, Jordan, Morocco, Tunisia).
Strategic Climate Fund (SCF)	Pilot Programme for Climate	To help developing countries to mainstream climate resilience	Country programmes: Bangladesh, Bolivia,

<sup>4</sup> See, for example, Climate Finance Fundamentals, Brief 2, The Evolving Climate Finance Architecture, Overseas Development Institute & Heinrich Boll Stiftung North America. Available at: <http://www.odi.org.uk/resources/docs/7468.pdf>

<sup>5</sup> 2011 Annual Report, p. 8. Available at: [http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CIF\\_Annual\\_Report.pdf](http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CIF_Annual_Report.pdf)

	Resilience (PPCR)	and risk in development planning and to encourage scaled-up investment	Cambodia, Mozambique, Nepal, Niger, Tajikistan, Yemen, Zambia.  <u>Regional programmes:</u> Caribbean (Dominica, Grenada, Haiti, Jamaica, St Lucia, St Vincent & the Grenadines) & Pacific (Papua New Guinea, Samoa, Tonga).
	The Forest Investment Programme (FIP)	To reduce deforestation and forest degradation, promote sustainable forest management, reduce emissions and protect carbon reservoirs by piloting and scaling up effective models of forest management.	<u>Country programmes:</u> Brazil, Burkina Faso, DRC, Ghana, Indonesia, Laos, Mexico & Peru.
	Scaling up Renewable Energy Programme in Low-Income Countries (SREP)	Assists low-income countries to pilot and demonstrate the viability of low carbon development in the energy sector in order to initiate energy sector transformation, create economic opportunity, and increase energy access through renewables.	<u>Country programmes:</u> Ethiopia, Honduras, Kenya, Mali, Maldives, Nepal, Tanzania.

As mentioned above and shown below in Table 2, the UK has provided over £1bn to the CIFs, whereof £285m has come from the **International Climate Fund (ICF)**, which channels the UK's international climate finance within the present Spending Review period. The ICF was set up to contribute a fair share of the climate finance needed globally and will provide £2.9bn up to 2015, which fully funds the UK's Fast Start finance commitment referred to in section 1.1.2. Previous contributions came from the Environmental Transformation Fund (ETF).

**Table 2: Approved UK contributions to the CIFs**

		UK contribution to CIFs (£m)				Total
		CTF	SCF	FIP	PPCR	
			SREP			
ETF	DECC	192.5	25	37.5	112.5	367.5
	DFID	192.5	25	37.5	112.5	367.5
<b>Sub-total</b>		<b>385</b>	<b>50</b>	<b>75</b>	<b>225</b>	<b>735</b>
ICF	DECC	105.9	25	25	0	155.9
	DFID	44	0	0	85	129
<b>Sub-total</b>		<b>149.9</b>	<b>25</b>	<b>25</b>	<b>85</b>	<b>284.9</b>
<b>Total</b>		<b>534.9</b>	<b>75</b>	<b>100</b>	<b>310</b>	<b>1019.9</b>

Table 2 also shows that out of the different CIF programmes, the UK has provided the largest amount of funding to the CTF. However, notwithstanding the larger share of funding for the CTF, the UK has the smallest burden-share in the CTF compared to the other CIF programmes. This is significant because as part of improving donor coordination, it is important to ensure that there is some balance between different donors' contributions. The UK's burden-share in the different CIF programmes is shown in Table 3, which is based on the Trustee Reports on the financial status of the CTF<sup>6</sup> and

<sup>6</sup> Trustee Report on the Financial Status of the CTF, October 20, 2012. Available at: [https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CTF\\_Inf.2\\_Trustee\\_report.pdf](https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CTF_Inf.2_Trustee_report.pdf)

SCF<sup>7</sup> from October 2012. An additional contribution of £75m (\$119.8m<sup>8</sup>) to the CTF would increase the UK's burden-share to around 19.1% based on pledges and 23.2% based on receipts<sup>9</sup>. This means that even with an additional contribution, the UK's burden-share will remain significantly lower in the CTF than under the other CIF programmes.

**Table 3: UK burden-share in the CIFs as of 31 March 2012**

Programme	Burden-share pledges	<b>Burden-share receipts</b> (based on cash transfers and promissory notes)
CTF	17.1%	20.8%
FIP	25.8%	32.8%
SREP	30.3%	33.3%
PPCR	44%	52.0%

A replenishment of the CIFs under the ICF was approved through a business case in 2011, which considered a £375m contribution. This was preceded by the approval by Ministers in March 2011 of an earmarking of £400m to the CIFs<sup>10</sup>. The options appraisal in the 2011 business case suggested an allocation of £225m to the CTF, however £75m was withheld on the basis that there was potential interest from other donors. It was considered that a smaller UK contribution of £150m may be sufficient.

Since the UK's 2011 contribution, only Canada has provided a loan contribution of \$200m; other donors have not come forward with further contributions yet. As will be further explained in section 1.1.5, sufficient funding is not available for the CTF to meet current needs. Therefore there is a strong rationale, underpinned by the options appraisal in the 2011 business case<sup>11</sup> and justified independently here, to provide this contribution now.

Table 4 overleaf shows current donors to the CTF<sup>12</sup>, their burden share based on pledges and receipts, and which Ministry leads. The UK burden share is currently third highest based on pledges and second highest based on receipts. This is due to slow commitment by the US against their original pledge which they hope to honour by FY16 or 17.

It should be noted that there are also eight Committee members from recipient countries. At present these include China, India, Brazil, South Africa, Egypt, Morocco, Turkey, Nigeria. Based on experiences to date, South Africa, Brazil, China and India are traditionally the most active Committee members from the recipient countries.

The UK's objectives for CTF are overall well aligned with other donors. However, there are indications that some donors have different risk appetites (for example due to the type of finance provided i.e. loan contributors can be more risk-averse), which may have implications for the ability of the CTF to be innovative. This is being addressed through our reform priorities as set out in section 1.1.6.

<sup>7</sup> Trustee Report on the Financial Status of the SCF, October 20, 2012. Available at: [https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/SCF\\_Inf.2\\_Trustee\\_report\\_0.pdf](https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/SCF_Inf.2_Trustee_report_0.pdf)

<sup>8</sup> Based on the exchange rate on 7 November 2012.

<sup>9</sup> An additional \$119.8m contribution would increase the UK's contribution to \$945.8m, total pledges to \$4,945.8m and total receipts to \$4084.8m.

<sup>10</sup> £25m had already been provided to the FIP.

<sup>11</sup> The options appraisal was based on a combination of the need for funding in different CIF programmes, the UK's burden-share and a short-fall in funding for different themes under the ICF.

<sup>12</sup> As of September 30, 2012.

**Table 4: CTF donors and burden shares**

Donor	Contribution Type	Current value of Pledge in USD eq. (\$m)	Receipts in USD eq. (\$m)	Burden Share based on Current value of Pledge in USD eq.	Burden Share based on receipts in USD eq.	Lead Ministry – REDACTED
Australia	Grant	86	86	1.78%	2.17%	AUSAID lead.
Canada	Loan	199	199	4.12%	5.02%	Canadian International Development Agency lead.
France	Loan	262	262	5.43%	6.61%	Ministry of Finance lead.
Germany	Loan	615	615	12.74%	15.51%	Ministry for Economic Cooperation and Development (BMZ) lead.
Japan	Grant	1,157	1,157	23.97%	29.18%	Ministry of Finance lead.
Spain	Capital	109	70	2.26%	1.77%	Ministry of Finance lead.
Sweden	Grant	80	80	1.66%	2.02%	Ministry of Foreign Affairs lead.
United Kingdom	Capital	826	826	17.12%	20.83%	Joint DFID / DECC lead.
United States	Grant	1,492	669	30.92%	16.87%	US Treasury lead.
TOTAL		4,826	3,965			

#### **1.1.4 Fit with UK climate change objectives and priorities**

The ICF provides finance for low carbon development, adaptation and forestry. Funding is provided through both multilateral and bilateral channels. The emphasis is on initiating transformational change and mobilising further funding to achieve the \$100bn goal. Due to limited admin resource, DECC delivers most of its share of the ICF through the MDBs. DECC also has a strategy for low carbon investments under the ICF. This section examines the key ways in which the CTF supports ICF objectives and priorities and DECC's low carbon strategy.

*Developing countries have adopted low carbon development pathways in line with the 2 degree goal*

The CTF funds low carbon programmes and projects that are embedded in national development and climate change strategies. Its focus is on large abatement opportunities at a country, or, to a lesser extent, regional level. It is expected that the CTF will deliver large-scale emission reductions, which is borne out by the expected results (see section 1.2.1 below).

In this respect, an additional investment in the CTF provides a good fit with the ICF objective of developing countries having adopted low carbon development pathways in line with the trajectory to a 2 degree goal.

However, since projects are based on countries' own strategies, the CTF does not have an explicit strategic focus on achieving a 2 degree goal. Global benefits such as benefits from supporting technologies that are key for 2 degrees but not yet at the commercial/deployment stage are not maximised, as individual country strategies focus on what benefits can be directly gained by these countries. This is further reflected in the broad investment criteria of the fund, which is also a result of the intention to allow developing countries a large degree of flexibility. Further reforms to the CIFs are needed to enhance their strategic focus and this is explored further in section 1.1.6.

*Mobilisation of \$100 billion per annum for low carbon, climate resilient development*

One of the key objectives of the CTF is to use the skills and capabilities of the MDBs to raise and deliver new and additional resources for low carbon technologies at scale. Such resources include domestic public and private sector sources, including carbon finance, as well as bilateral and multilateral development partners. This aim is well aligned with the ICF objective of mobilising \$100bn per year for low carbon development.

As explored further in section 1.2.1 below on expected results, the estimated ratio for direct leverage under the CTF is 8.4, meaning the CTF is expected to leverage 8.4 times as much co-finance as is invested by the CTF. The largest share is expected to come from MDBs and to a lesser extent other (non-CTF) donors (50%), followed by the private sector (30%) and domestic governments (20%). Beyond co-financing, many CTF projects are also expected to lower first mover risk, thus allowing much wider replication by the private sector which is crucial to meeting the \$100bn goal.

Although what is considered 'good leverage' will differ from project to project, the average leverage ratio of 8.4 suggests that the CTF is fit for purpose in terms of leveraging other sources of finance and supports the ICF objective of mobilising \$100bn per year.

*Demonstrating that low-carbon, climate resilient growth is feasible and desirable*

The CTF is supporting 20 countries (through 16 country or regional programmes) achieve low-carbon, climate-resilient growth. CTF support is expected to deliver sustainable economic benefits through improved energy security, new employment opportunities and increased private sector investment. This is helping to demonstrate the benefits of a low carbon economy and lay the foundations for a global deal on climate change.

*Building an effective international architecture*

The CTF is also supporting the international climate negotiations by providing lessons for the GCF and enhancing donor coordination. It is the largest existing climate fund and its governing Trust Fund Committee (TFC) has equal representation from developing and developed countries. Civil Society Observers (CSOs) and the private sector also participate as observers to the TFC. CTF documentation and decisions are publicly available to ensure transparency. An additional contribution to the CTF will support the existing climate finance architecture and avoid a finance gap until the GCF is up and running.

### *ICF Low carbon development (LCD) strategy*

An additional CTF contribution is also in line with the LCD strategy, firstly with respect to the improvement of the international architecture for climate finance as discussed above, and secondly because the CTF enhances the capacity of developing countries by supporting them in building supply chains for low carbon technologies and bringing down the costs of learning. The CIFs are also providing specific knowledge and monitoring tools, such as a tool kit on best practice for engaging the private sector. In addition the CIFs facilitate knowledge sharing through *inter alia* Pilot Country Meetings and the Partnership Forum held every 18 months, which is a knowledge-building and lesson-sharing forum for a wide range of stakeholders.

### **1.1.5 Need for further financing for CIFs**

There is need for further funding for existing CTF pilot countries, namely Nigeria, Chile and India, all of which are ICF priority countries. Another \$809m is required before these countries' project pipelines are fully funded. Turkey has also come forward with a request for \$140m for three new projects, which build on the success of its earlier projects. In total, there is need for a further \$949m. Although many CTF projects are moving fairly slowly, the existing funding cannot be used to cover the gap in funding for these countries. This is explained further in the section below on the CTF pipeline.

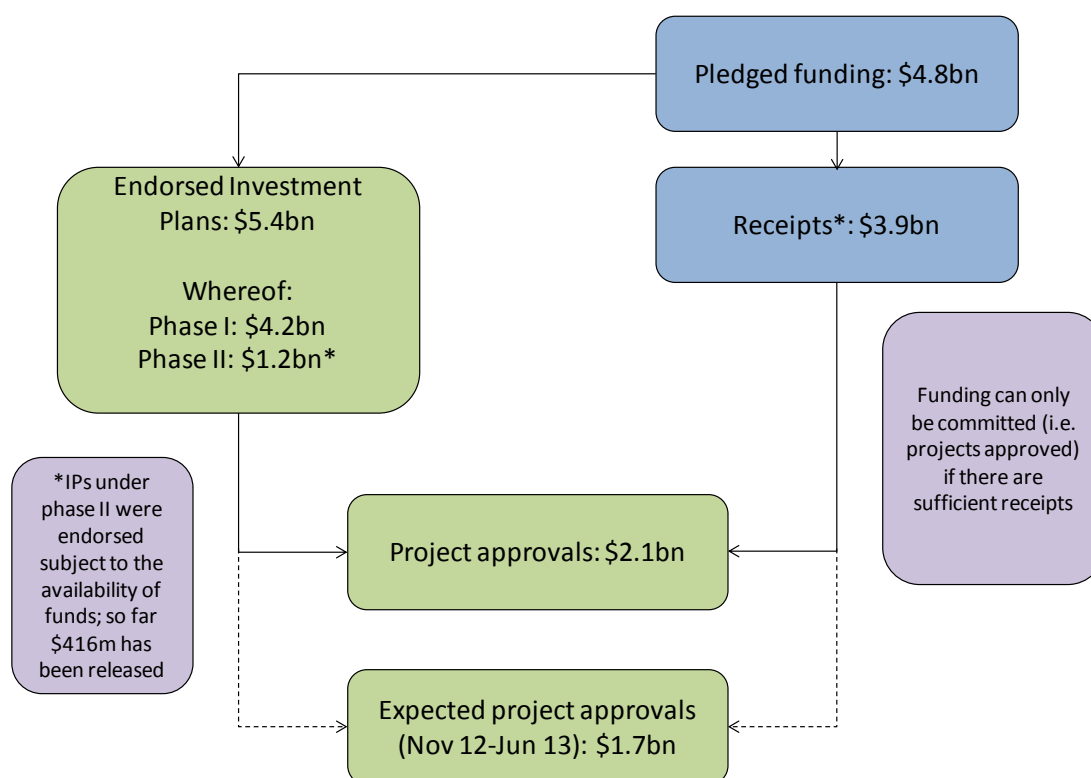
#### *1.1.5.1 Funding needs under the CTF*

Figure 1 provides an overview of the current status of pledges, receipts, endorsed Investment Plans (IPs) and approved projects. It shows that \$3.9bn out of the \$4.8bn of pledged funding has been received<sup>13</sup>; a fairly significant share has not materialised yet, which is mainly due to the US meeting their pledge more slowly than anticipated. It should be noted that our additional contribution would not be used to make up for any US shortfall or delay in meeting pledges due to the phased approach to investment plans, as explained below.

---

<sup>13</sup> Trustee Report on the Financial Status of the CTF [hereinafter 'Trustee Report'], October 30, 2012, p. 4. Available at: [https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CTF\\_Inf.2\\_Trustee\\_report.pdf](https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CTF_Inf.2_Trustee_report.pdf)

**Figure 1: Overview over CTF pledges, allocations and approvals**



As of 30 September 2012, the CTF Trust Fund Committee has endorsed 16 IPs for a total amount of \$5.4 billion<sup>14</sup>. 13 IPs (12 country and 1 regional IP) were endorsed between 2008 and 2010 and these are referred to as 'Phase I' IPs. As of September 2012, around 50 percent of the total allocations for Phase I IPs have translated into project approvals under these IPs. According to the CIF Admin Unit's indicative project approval calendar, project proposals for a total value of \$1.7bn are expected to be submitted for approval between October 2012 and June 2013<sup>15</sup>. If all these projects were submitted within these timeframes, there would only just be sufficient funding available to approve them. It is however fairly unlikely that this will happen based on evidence from tracking previous project approvals against the indicative project approval calendar.

As of 30 June 2012, only 13% of the funding approved by the CTF Committee had been disbursed by MDBs<sup>16</sup>. This, coupled with the long lead time in submitting projects for approval by the CTF Committee, suggests that the CTF is disbursing funding slowly, although further analysis would be required to establish whether they are disbursing more slowly than other climate or development funds. Disbursement varies significantly across different countries; for example, whereas Turkey has disbursed 95% of its funding, Egypt, Indonesia and Morocco have not disbursed any funding yet and revisions of these IPs have been made or are likely to be made. Accelerating the speed of disbursement is one of the UK's key priorities for the CTF, as discussed in section 1.1.6 below.

Three additional IPs were endorsed after 2010 and are referred to as 'Phase II' IPs. These are country IPs for Nigeria, India and Chile and their endorsement was contingent upon the availability of additional resources. What this means in practice is that projects cannot be presented for approval until new funding is provided to the CTF. In August 2012, following CTF contributions from the UK and Canada, a first tranche of funding for the three Phase II IPs was approved, totalling \$416m. As shown

<sup>14</sup> Trustee Report, p. 4.

<sup>15</sup> CTF Semi-Annual Operational Report [hereinafter 'Operational Report'], p. 12-13. Available at: [https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CTF\\_3\\_Semi\\_Annual\\_Operational\\_Report.pdf](https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CTF_3_Semi_Annual_Operational_Report.pdf)

<sup>16</sup> Clean Technology Fund (CTF) Disbursement Report, June 30, 2011. Available at: [http://fiftrustee.worldbank.org/webroot/data/CIF\\_CTF\\_DISB\\_1.pdf](http://fiftrustee.worldbank.org/webroot/data/CIF_CTF_DISB_1.pdf)



in Table 5 below, projects have already been approved for the full amount in one of the countries<sup>17</sup>. Another \$809m is needed to fund remaining 'Phase II' projects.

**Table 5: Allocation of Tranche 1 funds to 'phase II' CIPs (US\$ million)**

Country	Total funding request (\$m)	1st tranche (\$m) based on contributions from the UK (£106m) and Canada (\$200m)	Approved project funding as of 30 Sept 2012 (\$m)	Outstanding funding requests (\$m)
Chile	200	68	68	132
India	775	263	0	512
Nigeria	250	85	0	165
Total	1,225	416	68	809

In November 2012, Turkey also requested \$140m of additional funding for 3 new projects under its existing IP, based on the successful implementation of earlier projects. In total, this means that \$949m is needed to fund all remaining projects.

The only other option for funding these projects is through the release of funding for revised or slow-moving Phase I country IPs. In November 2012, the CTF TFC agreed to release funding immediately for new projects after the Government of Thailand agreed to relinquish \$130m from its envelope of funding under its IP. This is further discussed in section 1.1.6 below on reforms of the CIFs but it should be noted that need for funding (\$949m) by far outweighs the amount of funding released for new projects (\$130m).

#### 1.1.5.2 Investment needs in SCF programmes

By way of comparison, this section briefly sets out what the funding needs of the other CIF programmes are, based on the relationship between pledges and endorsed IPs as of 30 September 2012.

**Table 6: Investment needs in SCF programmes**

Programme	Value of pledges as of September 30, 2012 (\$ million)	Value of IPs endorsed as of September 30, 2012 <sup>18</sup>
SREP	394	210
FIP	612	250
PPCR	1100	901.4

The table shows that pledges to the SCF programmes exceeded the value of endorsed IPs in March 2012. Therefore the need for further funding for the SCF programmes does not appear to be as urgent as under the CTF. As donors specify which programmes they contribute to, funding cannot be re-allocated between programmes.

#### 1.1.6 UK strategy for the CIFs

Since the UK first provided funding to the CIFs in 2008, DFID and DECC have been regularly monitoring, reviewing and auditing their progress. This includes DFID's formal annual review

<sup>17</sup> CTF Operational Report, p. 6.

<sup>18</sup> Progress report on SCF targeted programs, 21 October 2012, p.6. Available at: [https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/SCF\\_3\\_Progress\\_report\\_on\\_SCF\\_targeted\\_programs.pdf](https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/SCF_3_Progress_report_on_SCF_targeted_programs.pdf).

monitoring, DFID's Multilateral Aid Review (MAR)<sup>19</sup>, and two DFID/DECC/DEFRA Internal Audits. The findings of the most recent Internal Audit were published in September 2012.

Informed by the findings in these reviews and audits, the UK continues to push for reforms of the CIFs through our engagement with relevant stakeholders and through the formal governance of the CIFs. For example, in June 2011 a UK proposal for ways of strengthening the CIFs was discussed at the TFC meetings in June 2011. The proposals highlighted a wide range of areas for improvement, including, *inter alia*, development impact including gender, country ownership and transparency, innovation and private sector involvement, results, lesson-learning and communications. The Admin Unit regularly reports on progress against the proposals. The UK continues to have significant influence in the governance of the CIFs.

The ICF Board recently approved a strategy for UK engagement of the CIFs in the short, medium and long term. The strategy identifies priority areas for reform. Key short term reforms are highlighted below.

### *Short-term priorities*

One of the key priority areas is agreeing a risk management framework for the CIFs to allow the governing committees to understand what the overall exposure to different kinds of risk is and ensure that investment decisions are taken that are commensurate with the Committees' risk appetite. As highlighted in the 2012 Internal Audit report, it is likely that the CIFs are quite risk averse and may be exposed to quite low levels of risk overall. A better understanding of the overall exposure to risk may enhance the willingness of donors to support innovative projects, including loan contributors who could otherwise be more risk-averse than grant and capital contributors.

Progress: In November 2012, the UK secured agreement at the joint CTF-SCF TFC meeting to establish a risk management framework, building on work done by consultants. A working group will be responsible for taking the risk management framework forward and an update report will be provided in May 2013.

A second key priority is agreeing revised results frameworks for the different CIF programmes. The existing ones, which were agreed in November 2010, were perceived by developing countries and implementing agencies as too complex to implement and it was agreed that they would be simplified.

Progress: In November 2012, the revised results framework for the CTF was agreed, including 5 core outcome level indicators that fit with the ICF Key Performance Indicators (KPIs). The CIF Admin Unit will now circulate methodologies for review and approval via mail, focusing on attribution and leverage in particular.

A third priority is accelerating the speed of disbursement. As discussed in section 1.1.5.1, many phase I IPs are moving slowly and in May 2012 a decision was taken that countries and MDBs needed to provide an explanation if projects are not presented for approval within two years following endorsement of the IP. There is however no obligation to release funds for new projects from existing Investment Plans so it is a relatively weak measure. Therefore the UK needs to maintain pressure to accelerate the flow of funds to projects.

Progress: In November 2012, the UK secured agreement to release available funds immediately for new projects under Phase II IPs to support projects in Chile, India and Nigeria, as well as additional projects in Turkey. This, together with the additional UK contribution proposed in this Business Case, means that new projects from these countries will move forward on the basis of project readiness. The UK also secured agreement to consider more robust measures for active management of the CTF pipeline in May 2013 based on the number of projects that continue to move slowly.

---

<sup>19</sup> The findings of the MAR are available here: <http://www.dfid.gov.uk/What-we-do/Who-we-work-with/Multilateral-agencies/Multilateral-Aid-Review-summary---The-Climate-Investment-Funds-CIFs/>

In addition, value for money is an important issue that we keep pushing the CIFs on. The UK is developing a value for money strategy for the CIFs which covers *inter alia* bearing down on administrative costs and burdens and having a clear CIF investment strategy.

As outlined above, the UK pushed for significant progress against these short-term priorities at the November Trust Fund Committee meetings. The specific decisions we will seek to secure are set out in section 5.3 of the Management Case.

### *Medium- and longer-term priorities*

The medium- and long-term priorities focus on how to avoid a financing gap for climate while the GCF is being set up as well as how to manage the CIF pipeline of projects and lessons once the GCF has been set up (the 'CIF legacy').

In the medium term, it will be crucial to avoid a finance gap before the GCF becomes effective and so in addition to the contribution proposed in this Business Case, further funding may need to be channelled through the CIFs while this remains the largest climate finance vehicle. This may involve supporting the existing country Investment Plan approach or it could involve piloting new approaches with a greater focus on strategic gaps (e.g. private sector window; a technology-specific programme, etc). The UK will consider developing a business case for further funding in 2013.

In parallel, a decision also needs to be taken on the future of the CIFs in the international finance architecture; for example, they could be closed down for new funding ('sunsetting') when the GCF starts to accept contributions or disburse funds, or they could become a sub-fund under the GCF.

In the longer term, there are a number of legacy issues which need to be carefully managed. These will depend on the decisions taken about how the CIFs fit into the emerging global climate finance architecture but are likely to focus on the following issues:

- a. *Lesson learning and evidence*: It will be critical to ensure that as the CIFs are *sunsetting* or integrated into the GCF that these lessons are not lost.
- b. *Due diligence for UK investment in the CIFs*: Given the significant UK investment in the CIFs, due diligence for our spend should continue beyond the approval of UK finance right the way through CIF project approval, implementation and completion.
- c. *Financial re-flows*: It will be important to ensure eventual re-flows to the CIFs are used to meet the initial objectives and purpose of providing finance to the CIFs.
- d. *Admin/management resources*: There needs to be sufficient resources within both HMG, but also with the CIF Admin Unit (or wherever the CIFs end up) to ensure the above legacy issues are managed appropriately.

These are priority issues which the UK is proactively seeking to address both through the ICF Board and the CIF committees.

## **1.2 Impact and Outcome that we expect to achieve**

There are two sets of results that we expect to see through the provision of finance to the CTF. First, real world outputs, outcomes and impacts at the country level, and second, contributing to an improved international architecture for climate finance, both through progress in the reforms of the CIFs and through learning lessons for the GCF and improving donor coordination.

### **1.2.1 Outcomes and impacts**

The sections below look at the 'real world' outcomes and impacts that the CTF is aiming to achieve and some of the new projects that the £75m could support.

#### *1.2.1.1 CTF outcomes and impacts*

### *Large-scale emission savings*

The CTF contributes towards, together with significant levels of co-financing and private financing, overall expected carbon savings of 1.37 billion<sup>20</sup> tCO<sub>2</sub><sup>21</sup> from all projects under Phase I IPs. There is limited data available on GHG emission savings for Phase II IPs.

As set out in the Appraisal Case, a £75m investment is expected to deliver approximately 7 MtCO<sub>2</sub>e<sup>22</sup> in additional emissions savings that are directly attributable to the UK's CTF contribution and another 31 MtCO<sub>2</sub>e due to the co-finance that is leveraged from mainly MDBs, the private sector and domestic governments. It should be noted that these estimates are based on 29 approved projects under Phase I IPs, whereas this investment will support largely Phase II IPs. The estimates are therefore only indicative of what will be delivered under the new projects that the additional contribution will support.

Above and beyond direct emission savings, the CTF is expected to stimulate transformation to a low carbon economy in recipient countries through the demonstration effect of its projects.

### *Leverage of climate finance from other sources*

As mentioned in section 1.1.4, the expected leverage ratio of the CTF is 8.4. Based on this ratio, the current level of pledged funds (\$4.8bn) will leverage \$40.2bn from other sources, including MDBs and other (non-CTF) donors (50%), the private sector (30%) and domestic governments (20%). The Appraisal suggests that in the region of £570m<sup>23</sup> will be leveraged from a £75m investment.

Beyond co-financing, many CTF projects are also expected to lower first mover risk by building track records for low-carbon investments, thus allowing much wider replication by the private sector.

### *Development benefits*

The development benefits of CTF projects will vary from project to project, however many projects will increase job opportunities and energy security and improve energy access, thereby demonstrating the desirability of a low carbon economy. In addition many projects deliver health benefits through reduced pollution.

### *Bringing down the cost of technologies*

The CTF is expected to bring down the cost of low-carbon technologies and thereby improve the viability of investments which are currently not cost-effective. An example of this is Concentrating Solar Power (CSP), which is being supported in, for example, North African countries<sup>24</sup> and in Chile. This will benefit both recipient countries and provide global benefits through wider learning and replication.

The Theory of Change (ToC) diagram below captures the outcomes and impact the CTF is expected to have and how it will do this<sup>25</sup>.

<sup>20</sup> Some of these carbon savings are likely to be sold as carbon credits, which reduces the net carbon emission savings globally. The UK estimates that around 5-20% of GHG emission savings may be 'lost' to the CTF in this way. This is addressed in the sensitivity analysis in the Appraisal Case.

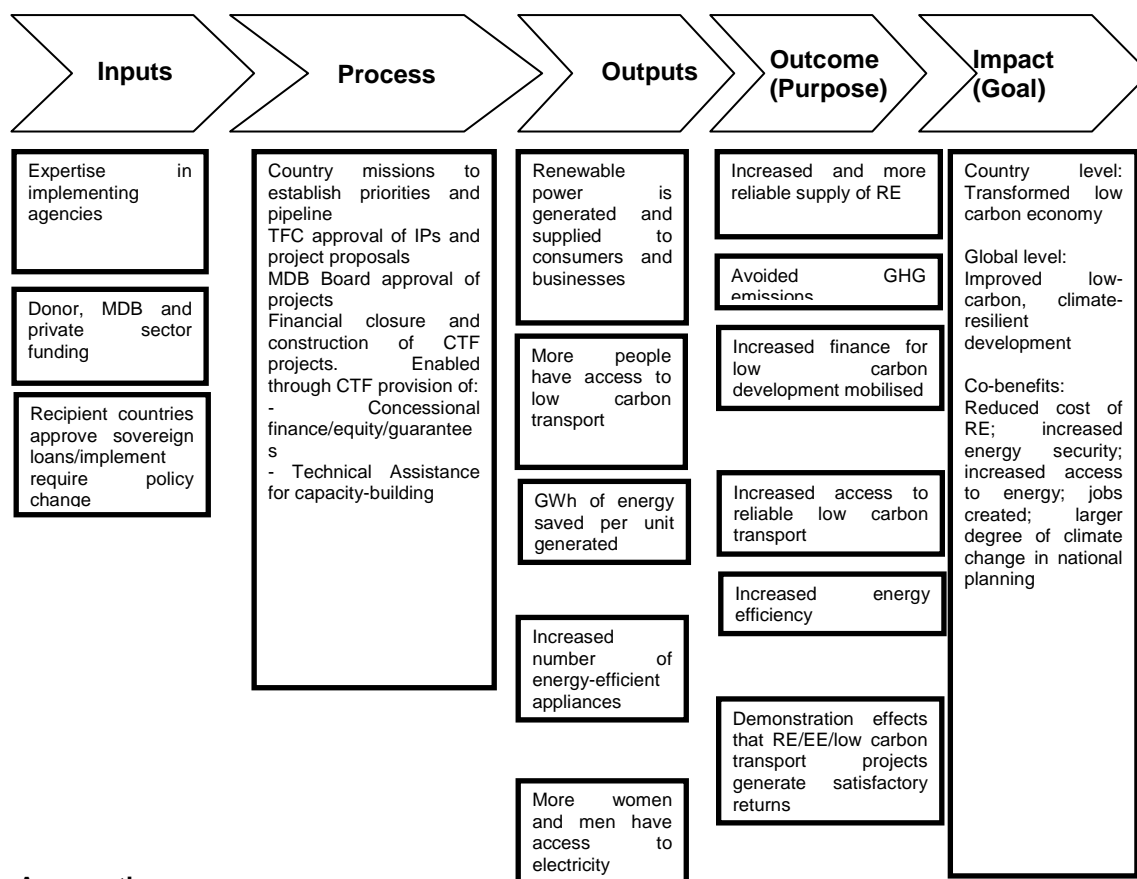
<sup>21</sup> Based on CIF Admin Unit analysis in September 2012. Please note that not all of these savings will be considered additional emission reductions in line with UK appraisal and KPI methodologies for accounting for GHG emission reductions.

<sup>22</sup> Consisting of approximate 3.3 MtCO<sub>2</sub>e from leverage private sources and 4 MtCO<sub>2</sub>e from direct investment.

<sup>23</sup> In present value terms

<sup>24</sup> MENA CTF Investment Plan, para 47 - 51 - [https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/mna\\_csp\\_ctf\\_investment\\_plan\\_kd\\_120809.pdf](https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/mna_csp_ctf_investment_plan_kd_120809.pdf)

<sup>25</sup> This is based on the revised CTF logic framework and results framework that will be considered for approval by the CTF Sub-Committee in November.



### Assumptions

- The policy and regulatory frameworks needed for projects to go ahead are in place or developed
- Accurate work planning and forecasting
- Efficient programme management
- UK oversight through Trust Fund Committees
- Available pipeline or projects or creation of a new pipeline
- There is sufficient financial, political and project development support provided for projects to go ahead
- Projects reach financial close and are built and the infrastructure is built and operational
- GHG emission savings are realised and not undermined by rebound effects
- CTF funding leverages MDB/private sector funding that is additional
- Projects increase economic growth in-country
- The CTF successfully demonstrates the viability of RE/EE/low carbon transport projects
- The costs of technologies are reduced and risk perceptions lowered
- Success stories are communicated and lessons disseminated more widely to allow replication to happen in-country and in other countries

### 1.2.1.2 Examples of new projects in the CTF pipeline

In order to provide a better picture of what our £75m would be used for, this section sets out examples of projects which are currently unfunded in endorsed phase II IPs and in the second phase of Turkey's IP. A selection of these projects would be funded by an additional UK investment.

They include a wide range of technologies and approaches, such as RE and energy efficiency as well as low-carbon transport. Based on the estimates, many projects expect to leverage significant private finance.

**Table 7: Examples of unfunded projects under Phase II IPs**

Country	Project title	Project description
Chile <sup>26</sup>	Renewable Energy Self-Supply and Energy Efficiency (RESSEE) (IDB/IFC)	The project looks to provide debt, guarantees and risk-sharing products as well as capacity-building to local financial institutions to overcome barriers to renewable energy and energy efficiency investments. A \$49m CTF investment is expected to leverage \$373m from other sources, most of which (\$250m) from the private sector.
	Large-Scale Photo-Voltaic Programme (LSPVP) (IDB/IFC)	This project would support solar PV using loans or guarantees and increase familiarity of off-takers, project promoters and financiers with solar projects. A \$50m CTF investment is expected to leverage \$250.6m from other sources, mainly the private sector (\$150m).
Nigeria <sup>27</sup>	Improved Bus Transit Systems: Kano (IDA and AfDF)	This project seeks to develop efficient, bus-based mass transport facilities and services in Kano and ensure early consideration of GHG mitigation in urban transport improvement in this rapidly growing city. Similar projects are being implemented in Lagos and Abuja.
	Financial Intermediation: Clean Energy and Energy Efficiency (IFC, AfDB private sector)	Under this proposal, CTF funding would be used to provide financial incentives, risk products and lines of credit as well as capacity building to financial institutions in order to support clean energy and energy efficiency projects. A CTF investment of \$100m is expected to leverage \$455m, whereof \$205m would come from the private sector. The project expects to deliver emission reduction savings of 10m Mt CO <sub>2</sub> e.
India <sup>28</sup>	Support for National Solar Mission (ADB + WB) – Gujarat Solar Park, Maharashtra Solar Park and Integrated Solar-Hybrid Pilot Project	Through support for the National Solar Mission in India, the CTF will support Concentrating Solar Power (CSP) technologies in three different projects. Cumulatively the projects are expected to provide 2100MW of additional generation capacity through \$350m in CTF financing, which is expected to leverage \$6200m from other sources.
	Implementation Support to National Mission on Enhanced Energy Efficiency (WB)  Other projects under the India IP include: Rajasthan Urban Transformation (ADB); Private Sector	This programme includes a range of initiatives to scale up energy efficiency in India, such as, a market-based mechanism to enhance the cost-effectiveness of energy efficiency improvements in energy-intensive industries through the certification of energy savings that can be traded, and developing fiscal instruments to promote energy efficiency. CTF financing of \$200m would leverage \$3800m from other sources, mostly the private

<sup>26</sup> See Chile's IP, available at: [http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CTF\\_4\\_Chile\\_IP\\_0.pdf](http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CTF_4_Chile_IP_0.pdf)

<sup>27</sup> See Nigeria's IP, available at : [http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/Nigeria\\_CTF\\_IP\\_-\\_REVISED\\_Nov%2010%202010.pdf](http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/Nigeria_CTF_IP_-_REVISED_Nov%2010%202010.pdf)

<sup>28</sup> See India's IP, available at: [http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CTF\\_India\\_investment\\_plan\\_101411.pdf](http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CTF_India_investment_plan_101411.pdf)

	Financial Intermediation (ADB); Private Sector EE and RE Guarantee Facility (ADB); Scaling-Up Renewable Energy and Energy Efficiency Investments in the Private Sector (IFC).	sector.
Turkey <sup>29</sup>	World Bank SME Energy Efficiency Project (Phase II)	This project aims to transform energy efficiency for SMEs in Turkey by providing financing and creating a new ESCO industry. It is estimated to reduce GHG emissions by 1.33 MtCO <sub>2</sub> e/year; and reduce energy consumption by 2,903GWh/year. CTF financing of \$50m is expected to leverage \$257m from other sources.
	EBRD Renewable Energy and Energy Efficiency Facilities Projects (TurSEFF II, ResiSEFF, MunSEFF)	This project aims to transform the EE market by scaling up activity in the residential, buildings and municipal sectors (on and off-balance sheet), in particular support for ESCOs, and expands RE generation by lending to less conventional solar, biogas and biomass technologies. It is estimated to reduce Turkey's CO <sub>2</sub> emissions by 0.7 MtCO <sub>2</sub> /yr. CTF financing of \$70m is expected to leverage \$430m from other sources.

## 1.2.2 Improving the international climate finance architecture

The second set of outcomes and impacts that an additional contribution is expected to deliver relate to progress in the reform of the CIFs and a contribution to the improved international architecture for climate finance. This is set out below.

### *Learning lessons for the GCF and improving donor coordination*

As mentioned in section 1.1.2, financing for the CIFs can improve the international architecture by providing lessons for the GCF and improving the effectiveness of MDB lending for climate change. The CIFs provide valuable lessons for the future shape of GCF, for example on governance, design and operations. An Independent Evaluation of the CIFs will be conducted in 2012-13 and the evidence and conclusions emerging from that can inform the design and principles of the GCF. It is expected that the final evaluation report will be presented in November 2013, however an interim report will be ready by May 2013.<sup>30</sup> The interim report will be important since timing is crucial in order to influence the GCF design. The CIF Admin Unit is engaging with the GCF Secretariat and the UK will keep a close eye on progress.

The CIFs contribute to increased MDB lending for climate change by leveraging MDB finance for climate projects, including by de-risking more innovative investments that the MDBs may otherwise not have been able to make. MDBs are likely to play a role as delivery agencies under the GCF and the CIFs are helping to test how effective MDBs are in channelling climate finance and how they need to improve. In addition, the CIF governance structure provides a forum for MDB collaboration and lesson-learning on climate change.

### *Accelerating reform of the CIFs*

<sup>29</sup> See update on Turkey's Investment Plan, available at: [https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CTF\\_6\\_Turkey.pdf](https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CTF_6_Turkey.pdf)

<sup>30</sup> Independent Evaluation of the Climate Investment Funds: Approach Paper, August 21, 2012. Available at: [https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/Independent\\_Eval.pdf](https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/Independent_Eval.pdf)

An additional contribution to the CIFs helps the UK to accelerate UK priority reforms of the CIFs. As indicated in section 1.1.6, the UK is driving a broad range of reforms to improve the effectiveness of the CIFs, including speeding up disbursement and managing risks and results at a portfolio level. At the November CTF Sub-Committee meetings, the potential of additional UK financing was used to secure significant progress towards addressing the concerns raised in the 2012 Internal Audit report on the above issues. Section 5.3 in the Management Case sets out the conditions for providing an additional contribution, i.e. the specific decisions we needed to secure at the November TFC meetings.



## **2 Appraisal Case**

### **2.1 Approach and strength of evidence**

In order to achieve the outcomes stated in the Strategic Case (section 1.2), a range of options were considered. The appraisal of these options is presented in the qualitative appraisal, which draws on strategic criteria such as the need for finance, the ability to be transformational and the level of readiness to disburse. This assessment is largely based on reports from the CIF Admin Unit and Trustee regarding disbursement, pledges and receipts and draws on the background information provided in the Strategic Case. The strength of evidence is generally assessed as high; one exception, however, is the ability to be transformational, which is difficult to assess given the early stage of implementation that many programmes are at. The appraisal does not assess the individual projects that may be funded; detailed project proposals under the CTF are considered by the UK and other TFC members at a later stage.

The qualitative appraisal is followed by a quantitative appraisal to assess the Value for Money (VfM) case of the preferred option relative to the 'Do nothing' counterfactual. The key VfM indicators are cost per tonne of carbon abated, leverage ratio and benefit-cost ratio. The analysis is tested under a range of sensitivities to assess the robustness of the expected result and conclusions. The strength of evidence in the quantitative appraisal is considered moderately high. It is based on estimates in project proposals that have been approved by the Trust Fund Committee. Although these are not necessarily an exact representation of the projects the £75m will fund, they provide a reasonable indication.

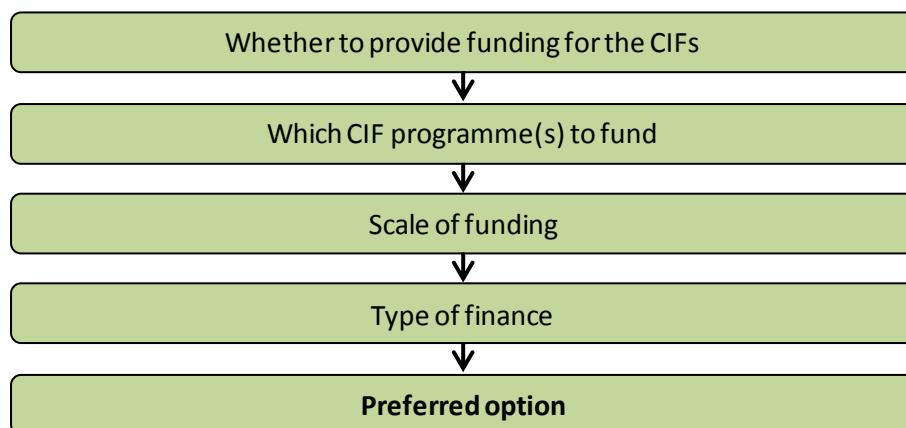
### **2.2 Qualitative appraisal: What are the feasible options that address the need set out in the Strategic Case?**

#### **2.2.1 Options analysis**

The options analysis is done in four stages, as shown below in

Figure 1. Every level is assessed in turn and different criteria are applied at different levels.

**Figure 2: Five level options analysis**



### 2.2.1.1 Stage 1: Whether to provide funding for CTF

At this stage, a contribution to the CIFs is assessed against a contribution to other funds that aim to do similar things (the NAMA Implementation Facility and the GCF) as well as against a Do Nothing counterfactual.

Table 8 provides a RAG rating in terms of how the options meet the criteria. The following criteria are applied:

- I. Ability to channel finance at scale
- II. Ability to improve the international climate finance architecture
- III. Ability to be transformational
- IV. Ability to coordinate large number of donors
- V. Ability to disburse funding quickly

These criteria were selected on the basis that they respond to some of needs identified in the Strategic Case (see 1.1.2).

Three options were identified: Do nothing; provide an additional contribution to the CIFs; and provide a contribution to the NAMA Implementation Facility.

#### Option 1: Do Nothing (the counterfactual)

Under a 'Do nothing' scenario, the CIFs would continue to operate as they are with the current level of pledges and committed funding. Other donors may choose to provide new contributions. CIF donor coordination and lesson learning would continue but the UK would have somewhat less leverage to scale this up.

As explained above in section 1.1.5.1, the need for funding is the most acute in the CTF, so it worth considering what impact the 'Do nothing' option may have on the CTF. The UK CIF team has had conversations with the CIF Admin Unit to assess whether other donors may make further contributions to the CTF in this financial year. Based on these conversations, only Germany may provide an additional €180m CTF loan early next year. Others, like Canada and Japan, may be open to providing additional funding but this is uncertain. It is thus likely that further projects under the IPs of Chile, Nigeria and India could not be developed in the near future without UK funding.

#### Option 2: Provide an additional contribution to the CIFs

Under this option, we provide another contribution to the CIFs in 2012/13. The CIFs are currently the main vehicle for delivering climate finance at scale and further UK funding would allow more lessons to be learnt both in terms of project and programme design and governance, fund structures and operational arrangements. A number of concerns were raised around the CIFs in the recent Internal Audit and an additional contribution therefore entails some degree of risk to the UK. A contribution should thus only be made subject to significant progress against the UK's reform priorities. Further analysis of the fit against the selected criteria is provided in Table 8: Rating of options (Stage 1)

#### Option 3: A contribution to the NAMA Implementation Facility

The NAMA Implementation Facility has been developed by DECC and the German Environment Ministry (BMU) and its aim is to fund the implementation of the most transformational parts of Nationally Appropriate Mitigating Action (NAMA) plans. DECC is considering a £50m grant to the NAMA Implementation Facility to support 8-16 projects, which will be selected through an open competitive process. Co-financing will be provided by the German development bank KfW, the private sector and national governments. The target size for UK and BMU grant is £81m and the UK and Germany will be the only donors (at least during the pilot phase). A separate business case on the NAMA Implementation Facility will be considered by the Approvals Panel on 16 November, so this option would essentially top up that contribution (if approved).

#### Option 4: Reserve UK funding for initial Green Climate Fund (GCF) capitalisation

The GCF is expected to be the main climate finance vehicle in the future and will play a key role in scaling up climate finance towards the goal of mobilising \$100bn per year by 2020. At present, the GCF Board is working on the detailed design of the fund and the UK anticipates that the GCF will be operational by the end of 2013 at the earliest. Under this option, the UK would avoid making contributions to large-scale financing vehicles, including the CIFs, in the interim until the GCF is operationalised.

**Table 8: Rating of options (Stage 1)**

Criteria	Do nothing	Additional CIF contribution in 2012/13	Additional UK funding to NAMA Implementation Facility	Reserve UK funding for Green Climate Fund capitalisation
<b>Channelling large-scale funding</b>	<p>Financing gap for large scale interventions is likely to continue at least in near term. Decisions to release funding from slow moving projects could be secured but this would still leave same amount of projects unfunded.</p> <p>Probability of Germans making additional contribution is assessed as moderate, given uneasiness around exposing their loan contributions to local currency lending.</p>	<p>The CIFs mobilise large volumes of finance, especially from MDBs. Large UK contribution may catalyse additional financing from other contributors who may be preserving budget allocations for GCF contributions.</p>	<p>The NAMA Implementation Facility will leverage KfW and private sector finance but no MDB finance</p>	<p>The GCF has the potential to be the main instrument to channel climate finance at scale when it is operational. It is expected to be operational at the end of 2013 at the earliest. It is uncertain whether the UK will be able to make an initial capitalization at this point. In the interim, there are significant funding gaps in existing climate finance vehicles.</p>
<b>Improving the international climate finance architecture</b>	<p>The CIFs provide lessons for the future international finance architecture both in terms of the types of projects that work and multilateral governance structures and operational arrangements that are effective.</p> <p>The UK has significant influence due regular replenishments timed to coincide with particular reforms to improve the existing architecture. Not making an additional contribution to the CIFs will diminish our influence somewhat.</p>	<p>The CIFs provide lessons for the future international finance architecture both in terms of the types of projects that work and multilateral governance structures and operational arrangements that are effective.</p> <p>An additional contribution would help to maintain the UK's significant influence on key reforms.</p>	<p>The NAMA Implementation Facility can provide lessons on what type of projects work and allow for comparison between multilateral channels of funding and partnerships between fewer donors.</p> <p>However it is unlikely to drive significant improvements in the existing multilateral climate finance architecture as it is a bilateral funding vehicle.</p>	<p>The ambition is to improve the international climate finance architecture through the GCF, building on the lessons from existing climate finance vehicles.</p> <p>As the GCF is in its design phase, it is unclear at this stage what the business model for the GCF looks like.</p>
<b>Coordinating large number of donors</b>	<p>The CIFs have a large number of donors who make decisions by consensus along with recipient countries in committees. This helps to enhance donor coordination, country ownership, and reduces transaction costs at a country level with coordinating multiple financing streams.</p> <p>No new contributions to the CIFs may mean that there is an increase in bilateral funding vehicles in the near term. This will make it more complicated for recipient countries to access climate finance due to multiple funding streams.</p>	<p>The CIFs have a large number of donors who make decisions by consensus along with recipient countries in committees. This helps to enhance donor coordination, country ownership, and reduces transaction costs at a country level with coordinating multiple financing streams.</p> <p>Continuing to make additional contributions to the CIFs may attract new donors such as New Zealand and Iceland and catalyse existing donors who may be preserving budget allocations for GCF contributions.</p>	<p>The NAMA Implementation Facility only has two donors (at least for the time being) so there is limited donor coordination.</p>	<p>As the UNFCCC has established the GCF, it is likely to have broad representation and strong donor participation. Like the CIFs, there is a similar approach to representation between developed and developing countries on the GCF Board.</p> <p>This is likely to support country ownership and donor harmonisation, however there is a risk that a poorly designed fund could reduce donor coordination.</p>
<b>Potential to be transformational</b>	<p>The CIFs have fairly high potential to be transformational, primarily through the scale of funding, however they may not always opt for the most innovative approaches that attract high levels of private sector co-financing.</p>	<p>The CIFs have fairly high potential to be transformational, primarily through the scale of funding, however they may not always opt for the most innovative approaches that attract high levels of private sector co-financing.</p> <p>An additional contribution may not make the CTF more innovative, however it will enable new Phase II countries to finance new projects under their IPs. This is likely to enhance their ability to transform to a low carbon economy.</p>	<p>The NAMA Implementation Facility aims to target the highly transformational projects and the competitive selection process, if it generates high quality projects, could facilitate this. However, it is significantly smaller in scale than the CTF which may limit its ability to achieve sectoral reform.</p>	<p>The UK ambition of the GCF is to support transformational investments. However the GCF is still in design and does not have a pipeline of projects therefore it is difficult to assess to what extent it will be transformational, though it is intended to support a 'paradigm shift'.</p>
<b>Ability to disburse funding quickly</b>	<p>The CIFs have been criticised by Internal Audit for disbursing funds slowly. It is unclear how slowly the CTF is disbursing compared to other climate funds however the need for donor coordination and different incentives means that measures to speed up disbursement can be difficult to implement quickly.</p>	<p>The CIFs have been criticised by Internal Audit for disbursing funds slowly. It is unclear how slowly the CTF is disbursing compared to other climate funds however the need for donor coordination and different incentives means that measures to speed up disbursement can be difficult to implement quickly.</p> <p>An additional contribution will give the UK greater influence on additional measures to actively manage the CTF pipeline in May 2013.</p>	<p>The NAMA Implementation Facility could target projects that are near implementation readiness.</p>	<p>While the design of the GCF is in progress, it is unlikely to be operational until the end of 2013 at the earliest. Depending on financing modalities, there will then be a period in which the GCF builds a pipeline which may add at least 12+ months before funding starts to be disbursed to projects. We also expect the scale of funding to be modest at the outset.</p>

## *Analysis of options*

The Do Nothing option above has been given a mixed rating on the basis that there is weaker potential to secure additional benefits, both in terms of results on the ground and improving the existing architecture, beyond what the CIFs are currently doing. There is limited scope for other large contributions to the CIFs in the near term to address the acute funding gap.

The option to provide a top-up to the NAMA Implementation Facility has been given a higher score on the speed of disbursement due to its nimbler governance structure and the competitive bidding process that it will use, which are likely to increase value for money and speed up disbursement. Since it has not been established and tested yet, assessments of how effective it will be are more uncertain and have therefore been scored as amber.

The option to reserve UK funding for a GCF capitalisation at the end of 2013 has been assessed as the weakest. This is due to the uncertainty associated with the design of the GCF, the timescale for operationalisation, and the expectation that the scale of funding will be modest at the outset.

An additional contribution to the CIFs has been assessed as strongest. This will support new projects that are currently unfunded and provide greater leverage for key reforms to the CIFs. It may help to catalyse new and existing donors to continue to use the CIFs as a channel for scaled up climate financing in the near term to avoid a financing gap.

### *2.2.1.2 Stage 2: Which CIF programme(s) to fund*

It is likely that the different CIF programmes would get similar scores on the criteria used above and in deciding which programme to fund a different set of criteria are used. The criteria for which CIF programmes/approaches to fund are:

- I) The need for funding
- II) UK burden-share (i.e. the UK's share of donor funding)
- III) Readiness to disburse funds

Three options were identified: Funding the CTF; funding SCF programmes; or funding new approaches under the CIFs. These are set out below.

#### *1. Funding for the CTF*

Funding could be provided to the CTF to enable new projects under the IPs for Chile, Nigeria, India and Turkey to be developed. This would help address an acute funding need; improve disbursement rates under the CTF by supporting those projects ready to move forward; as well as provide large-scale emission reductions.

This would increase the UK's burden-share in the CTF, although it would remain lower than our burden share in other CIF programmes (see section 1.1.3).

#### *2. Funding for one or more SCF programmes*

Funding to the PPCR, FIP or SREP could be provided to allow new IPs to be developed under these programmes or alternatively for a reserve pot that countries could access through a competitive process.

#### *3. Funding for new approaches under the CIFs*

Funding could be allocated to new approaches mentioned in the Strategic Case (section 1.2.2), such as a technology-focussed fund under the CTF or a dedicated private sector window.

**Table 9: Rating of options (Stage 2)**

	Options		
Criteria	Funding for the CTF	Funding for one or more SCF programmes	Funding for new approaches under the CIFs
The need for funding	Urgent need for funding for Phase II IPs; there is currently a \$809m gap which is unlikely to be fully met by other donors in the short term. New projects under Turkey's IP increase this gap by \$140m.	There is significant interest from additional countries to access CIF funding (see section 1.1.5.2), however there are no endorsed IPs for which funding is currently not available.	There is likely to be large interest but the approaches have not been developed or set up yet so there is no funding gap as such.
UK burden-share	Out of the CIFs, the UK has the lowest burden share in the CTF. Even with an additional contribution of £75m to the CTF, the UK's burden-share in the CTF would remain significantly lower than under the other programmes (see section 1.1.5 in the Strategic Case).	The UK has a significantly higher burden share in the SCF programmes, in particular the PPCR.	It is unclear whether the new approaches would be set up under the CTF or SCF programmes, or whether they would be separate. Therefore it is not possible to determine how the UK's burden-share would be impacted, except that our burden share in the CIFs overall would increase.
Readiness to disburse funds	An additional contribution would, alongside released funds from Phase I IPs, support those new projects ready to move forward immediately.	An additional contribution is likely to go into a reserve pot which would allow new projects to be developed quickly.	As new approaches have not been agreed yet, it would not be possible to disburse funds through such approaches in the near term.

### *Analysis of options*

The option that is considered most appropriate in the near term is option 1, i.e. a contribution to the CTF. This is because there is an immediate need for funding for new projects under the Chile, Nigeria, India and Turkey IPs, as set out in section 1.1.5.1. A similar need does not exist under the other programmes, as shown in section 1.1.5.2. In addition, amongst the four CIF programmes, the UK has the lowest burden share under the CTF.

The option to use our funding to pilot new approaches is an interesting one but these new programmes have not yet been set up and are therefore not ready to disburse funds, whereas new CTF projects are likely to be developed quickly. There is also not sufficient detail on what these approaches will look like. Finally, there is uncertainty around whether it will be politically feasible to set up new programmes as politically this may be seen as marginalising the GCF.

The sections below explore further details around a possible contribution to the CTF, including what the scale of the funding should be and what type of funding is most appropriate.

#### *2.2.1.3 Stage 3: The scale of funding*

Two options are proposed for the scale of funding: a £75m contribution and a £40m contribution.

Option 1: £75m contribution (circa \$116m)

This would allocate the remainder of the £400m agreed by Ministers in a way that is consistent with the options appraisal in the 2011 CIF business case. By potentially offering a relatively large amount of new funding, the UK has greater leverage to secure the decisions needed to make progress in our priority areas as it provides us with greater negotiating capital in the margins of meetings and encourages other Committee members to be more accommodating of UK interests.

In addition, a relatively significant contribution to the CTF could help to catalyse other large contributions from existing contributors to address the current funding gap instead of withholding contributions until the GCF becomes operational.

Although there is clear evidence of need, a larger contribution than £75m has not been considered in this Business Case as it would fall outside of the £400m approved by Ministers in March 2011.

Option 2: £40m contribution (circa \$62m)

Providing a smaller contribution to the CTF in 2012/13 would have similar benefits as a larger contribution but would give us somewhat less leverage in securing our priority reforms. A smaller contribution may also not be sufficient to give all Phase II countries (Chile, Nigeria and India) and Turkey the opportunity to come forward with new projects, even when combined with the released funding of \$130m from Thailand. As shown in

Table 7 on page 21, the typical CTF financing requirement for new projects in Phase II countries (Chile, Nigeria and India) and Turkey is between \$50m - \$100m. This could mean that project sizes are scaled downwards to match available funds<sup>31</sup>, which may reduce the transformational impact of these projects and the scale of results delivered.

#### Analysis of options

Given the size of the funding gap in the CTF (\$949m or circa £612m), there is a clear rationale for providing a significant amount of new funding for the CTF. The UK is also driving ambitious reforms of the CIFs and a larger contribution would help us achieve our reform objectives. In addition, a larger contribution is more likely to catalyse further contributions by existing contributors in the near term.

A smaller contribution is likely to give us less leverage on our reforms. It could also mean that projects ready for preparation in some Phase II countries cannot be supported at this stage. Alternatively, MDBs and countries may decide to reduce their project sizes to accommodate the smaller funding envelope which may reduce the transformational impact of these projects. On that basis, the preferred option for the scale of funding is £75m.

#### 2.2.1.4 Stage 4: Type of finance

Two options are proposed for making a contribution with regard to the type to finance, namely a capital contribution or a loan contribution. These options are set out below and their respective strengths and weaknesses are analysed.

##### Option 1: Making a capital contribution

To date, all UK contributions to the CTF have been capital contributions. Capital contributions can be used to finance concessional loans and other financial products such as guarantees. This means that a pro-rata share of principal repayments and interest payments on outgoing loans or guarantee fees from the CTF are returned to the UK when the Trust Fund is closed. At present, the final transfer date is 2052.

This means that the UK's investment is likely to gain a modest amount of interest over the next 40 years, however it will depreciate significantly in real terms adjusted for inflation. Using the capital contribution terms with an annual discount rate of 2.5%<sup>32</sup> applied to a £75m contribution, the NPV of a UK capital contribution from a purely financial perspective is -£40m<sup>33</sup>.

The strengths and weakness of making a capital contribution are considered in Table 10.

**Table 10: Strengths and weaknesses of a capital contribution**

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• <i>Risk appetite:</i> By providing capital contributions, this theoretically enables MDBs and countries to pilot new and innovative interventions with greater levels of risk.</li> <li>• <i>Transferring CTF funds to the GCF:</i> In principle, it is simpler legally, practically and financially to transfer capital contributions to the GCF once this becomes operational. Thus a</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Political / Reputational:</i> UK ODA is used to finance economic development in middle-income countries.</li> <li>• <i>Contradictory contributions:</i> Recent major CTF donors (e.g. Germany, France and Canada) have provided financing as loan contributions instead of grant or capital contributions. Continued UK capital contributions may appear unwarranted.</li> <li>• <i>Potential market distortion:</i> Highly concessional lending may mean that on-lending is provided significantly below</li> </ul>

<sup>31</sup> This scenario already occurred following the allocation of the first tranche of project funding to Phase II countries as Chile reduced the size of its CSP project significantly.

<sup>32</sup> This is consistent with longer term HMT projected growth figures.

<sup>33</sup> From an economic perspective, a discount rate of 10% would be used instead.



CTF contribution today could evolve into an “advance” from the UK to the GCF in the future.	market rates (despite the principle of least concessionality) which may inadvertently crowd out the private sector.
---	---

#### Option 2: Making a loan contribution

A number of recent donors have provided loan contributions to the CTF. These are Germany, France and most recently Canada. There is currently nearly \$1 billion of loan contributions in the CTF. Loan contributions may be used to finance loans and other financial products, such as guarantees, on terms no more concessional than the terms of the contributions. The current loan contributor terms under the CTF are:

- loans are made to the CTF at 0.75% interest;
- loans have a 20 years maturity period;
- loans have 10 years grace period on principal repayments.

The CTF make interest and principal payments to loan contributors in accordance with the terms of the loan agreement. Such loan agreements provide for a reduction in the principal payments in case of defaults on outgoing CTF loans. Using the loan terms above with an annual discount rate of 2.5%<sup>34</sup> applied to a £75m contribution, the NPV of a UK loan contribution from a purely financial perspective is -£14m<sup>35</sup>.

The strengths and weakness of making a capital contribution is considered in Table 11.

**Table 11: Strengths and weaknesses of a loan contribution**

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• <i>Reflows</i>: Loan repayments can be used to support other HMG (climate finance) investments.</li> <li>• <i>Political / presentational</i>: Providing climate ODA to middle income countries may be more attractive politically where it is provided as low interest loans.</li> <li>• <i>Minimal market distortion</i>: Providing loans reduces the level of concessionality to the end user which may minimise the risk of market distortion.</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Risk aversion</i>: Loan contributors tend to be conservative and risk averse towards novel or untested approaches<sup>36</sup> as they want to avoid the CTF defaulting on their loan repayments. This makes piloting new and innovative approaches (which is one of the aims of the CIFs) more challenging.</li> <li>• <i>Concessional lending rates</i>: The current six month Libor is about 0.5%. Once the 0.75% service fee is included, CTF interest rates are extremely close to market rates. This reduces the attractiveness of CTF loans to recipient countries and private sector clients and therefore incentives to take action on a global public good.</li> <li>• <i>ODA accounting</i>: Any loan repayments on ODA must be treated as negative ODA. This means that additional ODA contributions will have to be made to offset loan repayments as well as increasing the complexity / transaction costs of UK ODA accounting.</li> <li>• <i>CTF financial viability</i>: Further increases in loan contributions could push the CTF towards a tipping point where the trustee is unable to ensure repayments to current contributors (i.e. Germany, France and Canada). As a result, existing contributors may not accept the new contribution.</li> </ul>

#### Analysis of options

Despite the NPV for a loan contribution being more attractive from a purely financial perspective, the analysis above suggests that a capital contribution to the CTF is the preferable option. In particular, a loan contribution would limit the CTF’s ability to provide highly concessional loans and there is a risk that providing loan contributions would make the UK more risk averse and thereby undermine UK

<sup>34</sup> This is consistent with longer term HMT projected growth figures.

<sup>35</sup> From an economic perspective, a discount rate of 10% would be applied instead.

<sup>36</sup> A good example of this is the recent joint CTF/SCF Committee discussions around the CTF providing local currency loans which may help to unlock stalled projects in the pipeline.

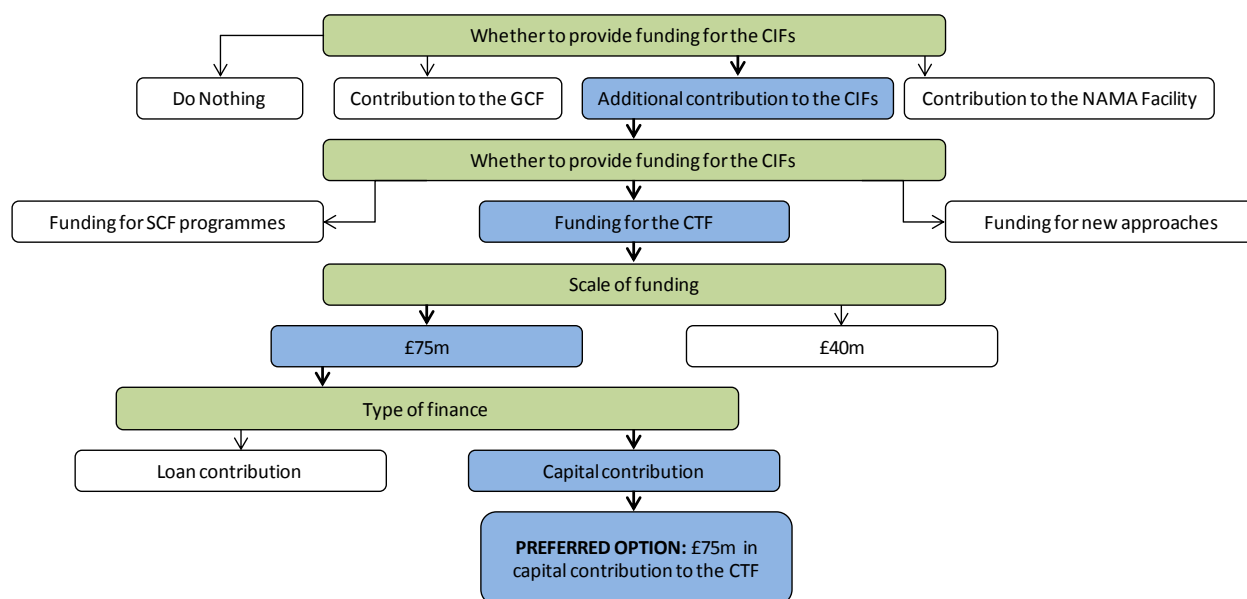
efforts to make the CTF more innovative. In addition, the management of loan contributions is more complex and would require more DECC resource to manage, which is not currently available.

### Conclusion of options appraisal

In conclusion, the above qualitative options appraisal has identified an additional **capital contribution of £75m to CTF** as the preferred option.

The flow chart in Figure 3 below summarises the decisions taken at different stages and how these lead to the preferred option.

**Figure 3: Overview over feasible options**



## 2.3 Quantitative appraisal of the preferred option: What measures can be used to assess the Value for Money of the intervention?

### 2.3.1 Introduction and methodology

This cost-benefit analysis aims to provide an indicative assessment of the value for money of investing an additional £75m in the CTF as a capital contribution. The analysis is based on the latest information which DECC holds on the current project portfolio in the CTF approved by the Trust Fund Committee (TFC). This appraisal considers the additional contribution to the CTF and the additional money leveraged due to this additional funding alone.

The analysis uses the best available evidence to assess the investment, it is however indicative and as such has a number of uncertainties. The significant assumptions are based on a pipeline of up to 29 approved projects in the current CTF portfolio on which sufficiently robust information and data is held. We are not using the estimates from the possible pipeline as there is insufficient information on these projects. Whilst the chosen projects provide a good indication of the type of projects that may be funded under the CTF, we do not know what the mix of projects will be in the future. Particularly important are the assumptions associated with the leverage ratio and cost-effectiveness as this drives the UK net present value (NPV) and benefit-cost ratios (BCR).

The total co-financing leverage ratio ranges between 0.61 and 32.56, the central estimate being 8.37. This ratio is based on information from all 29 projects. The ratio indicates the additional finance

mobilised from other sources as a result of the additional £75m contribution to the CTF. MDBs and other (non-CTF) donors account for 50%, national governments 20% and the private sector 30%.

The central cost-effectiveness estimate is based on a sub-set of the 29 projects. It is calculated by donor cost divided by the tonnes of CO<sub>2</sub> abated. Out of the 29 projects, the least cost-effective scenario is reported as £466.7/tCO<sub>2</sub>e. The CTF investment criteria state that 'CTF co-financing will ordinarily not be available for investments in which the marginal cost of reducing a ton of CO<sub>2</sub>-equivalent exceeds US\$200'<sup>37</sup>, i.e. £126/tCO<sub>2</sub>e<sup>38</sup>. We will ensure through our due diligence of project proposals that this does not happen in the future<sup>39</sup>. Equally, a number of the projects report cost-effectiveness rates below £5/tCO<sub>2</sub>e, which seem low. As such we have removed the projects which are considered outliers or less likely to be reporting accurate cost-effectiveness rates (those projects <£5/tCO<sub>2</sub>e and >£126/tCO<sub>2</sub>e). This means that 22 projects are used to calculate the central cost-effectiveness value of £8.29/tCO<sub>2</sub>e<sup>40</sup>. The graph in

---

<sup>37</sup> Clean Technology Fund Investment Criteria for Public Sector Operations, February 9, 2009, p. 6. Available at: [https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CTF\\_Investment\\_Criteria\\_Public\\_Sector\\_final.pdf](https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CTF_Investment_Criteria_Public_Sector_final.pdf)

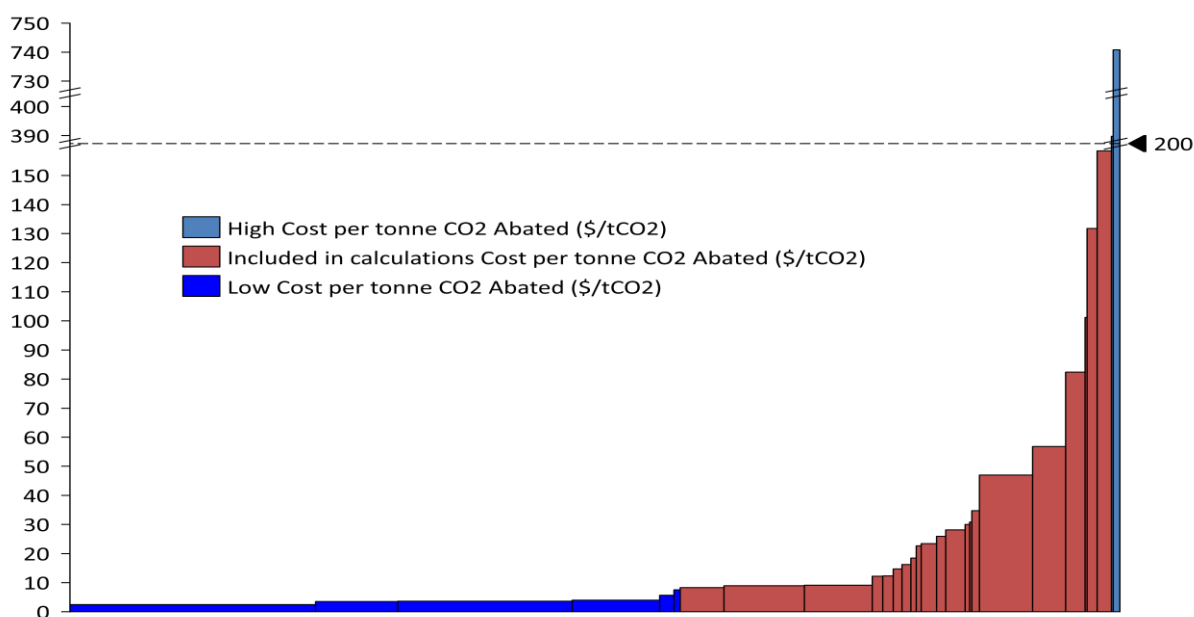
<sup>38</sup> Exchange rate assumed as \$1=£0.63

<sup>39</sup> It is likely that this had not been picked up on because of the way in which emission savings have been attributed in project proposals as well as the way in which leverage has been calculated. These have been recalculated in this Business Case in line with the ICF methodology and the UK is working with the CIF Admin Unit to ensure a consistent methodology is adopted.

<sup>40</sup> When including all finance this increases to £13.70/tCO<sub>2</sub>e

Figure 4 shows the cost-effectiveness of all 29 projects, including outliers. The red bars show the projects included in the cost per tonne analysis. The blue low and high bars and those projects considered to be over- or underreporting cost per tonne values in respect of future CTF interventions.

**Figure 4: Cost-effectiveness of 29 projects used in modelling**



The analysis should be viewed as **partial** in so far as it only accounts for GHG emission benefits and limited other benefits. Total GHG savings are calculated by using the leverage ratio discussed above to assess the amount of additional finance invested and this is divided by the cost-effectiveness rate of the investment. GHG emission savings attributable to the UK investment are calculated by assuming the private sector finance leveraged is due to the UK investment and calculating the total emission reductions using the cost-effectiveness ratio.

Other benefits valued are those associated with the saving in resources from more efficient use of energy and the value which individuals place on consuming energy including the impact of the rebound effect<sup>41</sup>. It is expected that renewable technologies will replace more carbon-intensive energy production which will lead to a saving in resources. For energy efficient schemes and renewable technologies, the welfare benefit of consuming more energy (rebound effect), supplying unmet demand, as well as a resource saving are valued. Other important co-benefits as a result of the possible projects funded by the investment, such as demonstration and learning, are not monetised.

The **counterfactual** assumes that without the additional investment of £75m, the current funding gap in the CTF would not be closed and thus projects would remain unfunded. It is acknowledged that CTF funding may be provided by other CTF donors or through the release of earmarked funding from slow-moving projects, however it is unlikely that this will suffice to close the gap. This means that finance leveraged from other sources (both donors and the private sector) would also not be made available; it is conditional on the UK investing the £75m in the CTF. It would be misleading to directly attribute all benefits of this additional finance to the UK investment – but UK funding can claim to have mobilised a share of the private finance leveraged.

As mentioned in section 1.1.3, the CTF is technology neutral and supports renewable energy as well as energy efficiency and low carbon transport projects. In the case of transport projects, the counterfactual assumes that under the business as usual (BAU) scenario, some improvements in fuel efficiency is achieved and also that a rebound effect may occur. As such the appraisal only claims 50% of the benefits from transport projects as additional. This is common for energy efficiency projects due to similar reasoning.

The 50% additionality rule is also applied to renewable projects. This is due to an assumption that there is likely to be unmet demand for power generation in the target countries and therefore only half

<sup>41</sup> The rebound effect is where individuals increase their use of energy due to efficiency measures effectively making energy cheaper.

of the project actually displaces old carbon-intensive power plants. The other half meets the previously unmet demand.

The 50% additionality rule across all projects is a crude assumption and is not based on direct evidence. It is likely to be a conservative assumption which is tested in section 2.3.2.5.

#### Modelling Assumptions

A number of further assumptions are made in the modelling and these are listed below.

- For modelling purposes it is assumed that the £75m investment is split equally between 2012 and 2013.
- Based on knowledge of the CTF pipeline and standard construction times in appraisal guidance, projects are expected to have a two year planning phase and 3 year construction phase, as such benefits begin to accrue from 2018 onwards.
- All costs and benefits are valued in 2012 prices.
- UK pays a capital contribution of £75m which is returned in 2052 with total interest of 22.23% (discounted at 10%).
- GHG emission savings valued based on DECC carbon prices<sup>42</sup>. Future carbon prices are uncertain; this section reflects the DECC traded carbon central prices assumptions<sup>43</sup>, other than the extreme scenario which use high or low prices as relevant.
- The 50% additionality rule (explained above) is applied throughout.
- Benefits are valued only over the lifetime of the projects' carbon saving weighted average of 20 years.
- An attribution rule is applied, whereby the UK only claims benefits from the share of emissions that the £75m investment has avoided (based on share of funding).
- It is assumed that 10% of the additional carbon savings are sold onto carbon markets.
- As described above limited welfare and resource benefits are valued, no sensitivity on prices has been tested.
- As a proxy, it is assumed that the resource cost of energy represents 80% of the retail energy price<sup>44</sup>.
- No additional administration costs have been presumed. Project administration costs are implicitly included in the £75m contribution.
- Discount rates of 3.5% for carbon and 10% for spend and welfare benefits (in line with HMT and DfID guidance).
- Based on the current CTF projects it is expected that 20% of the co-funding will come from national governments, 30% from the private sector and 50% from other donors. In line with attribution rules only emissions from leveraged private sector finance emissions are counted towards the UK GHG reduction numbers.

### 2.3.2 Results

Tables 12 to 14 below detail the results from the modelling. They include scenarios testing the cost-effectiveness, leverage and carbon price assumptions.

<sup>42</sup> Pre-October 26<sup>th</sup> 2012 prices are used as considered best proxy for the global carbon price.

<sup>43</sup> These can be found at [http://www.decc.gov.uk/en/content/cms/about/ec\\_social\\_res/iag\\_guidance/iag\\_guidance.aspx#](http://www.decc.gov.uk/en/content/cms/about/ec_social_res/iag_guidance/iag_guidance.aspx#)

<sup>44</sup> Source: 2012 Polos Data on national/regional energy prices, linear extrapolation between five year intervals.

**Table 12: GHG Savings and UK Share**

	Central Case	Range of Cost-effectiveness		Range of Finance Mobilised		Extreme Scenarios	
	Central	Low Cost-Effectiveness	High Cost-Effectiveness	Low Leverage	High Leverage	Low Cost Eff., Low Lev, Low Carbon Price	High Cost Eff., High Lev, High Carbon Price
Cost-effectiveness (£/tCO <sub>2</sub> e)	8.3	126.0	5.0	8.3	8.3	126.0	5.0
Leverage Ratio <sup>45</sup>	8.4	8.4	8.4	0.6	32.7	0.6	32.6
Total GHG emission Savings (MtCO <sub>2</sub> e) <sup>46</sup>	38.2	2.5	63.2	6.6	136.7	0.4	226.4
UK Share GHG emission Savings (MtCO <sub>2</sub> e) <sup>47</sup>	7.3	0.5	12.1	4.7	8.4	0.3	13.9
UK Share (%)	19%	19%	19%	72%	6%	72%	6%

**Table 13: Benefits and Cost Attributable to the UK Investment**

	Central Case	Range of Cost-effectiveness		Range of Finance Mobilised		Extreme Scenarios	
	Central (£8.3, 1:8.4)	Low Cost-Effectiveness (£126/t, 1:8.4)	High Cost-Effectiveness (£5/t, 1:8.4)	Low Leverage (£8.3, 1:0.6)	High Leverage (£8.3, 1:32.7)	Low Cost Eff., Low Lev, Low Carbon Price (£126/t, 1:0.6)	High Cost Eff., High Lev, High Carbon Price (£5/t, 1:32.7)
UK GHG emission Savings (MtCO <sub>2</sub> e)	7.3	0.5	12.1	4.7	8.4	0.3	13.9
UK GHG Benefits (£m, PV)	271.8	17.9	450.3	173.9	311.9	6.1	749.5
UK Other Benefits (£m, PV) <sup>48</sup>	84.1	5.5	139.3	53.8	96.5	3.5	159.8

<sup>45</sup> Ratio of CTF finance to all other sources of finance for projects.

<sup>46</sup> Central scenario emission reduction split by funding source: CTF (£75m) = 3.3 MtCO<sub>2</sub>e, Private sector investment = 9.7 MtCO<sub>2</sub>e, MDB/Donor = 18 MtCO<sub>2</sub>e and national government = 6.5 MtCO<sub>2</sub>e.

<sup>47</sup> Based on the attribution rule which suggests that only the emission savings from the private finance leveraged from an investment can be directly attributable to that investment.

<sup>48</sup> Limited to only resource and welfare benefits.

UK Costs (£m, PV) <sup>49</sup>	70.6	70.6	70.6	70.6	70.6	70.6	70.6
UK Net Present Value (£m, NPV)	285.3	-47.2	519.0	157.1	337.8	-60.9	838.8
UK Benefit to Cost Ratio (BCR)	5.0	0.3	8.4	3.2	5.8	0.1	12.9

**Table 14: Additional Benefits from Other Finance Leveraged**

	Central Case	Range of Cost-effectiveness		Range of Finance Mobilised		Extreme Scenarios	
	Central (£8.3, 1:8.4)	Low Cost-Effectiveness (£126/t, 1:8.4)	High Cost-Effectiveness (£5/t, 1:8.4)	Low Leverage (£8.3, 1:0.6)	High Leverage (£8.3, 1:32.7)	Low Cost Eff., Low Lev., Low Carbon Price (£126/t, 1:0.6)	High Cost Eff., High Lev., High Carbon Price (£5/t, 1:32.7)
Wider GHG emission Savings to which the UK contributes (MtCO <sub>2</sub> e)	30.8	2.0	51.1	1.9	128.3	0.1	212.5
Additional non-attributable Finance Mobilised (£m, PV)	570.9	570.9	570.9	41.5	2,220.0	41.5	2,220.0

### 2.3.2.1 Central forecast

The central forecast is based on a leverage ratio of 8.37 and a cost-effectiveness rate of £8.3 per tonne of CO<sub>2</sub>e. The central scenario returns UK attributable emission savings of around 7.3MtCO<sub>2</sub>e (see Table 12), a UK benefit-cost ratio of 5.0 and a positive UK NPV of approximately £285m (see Table 13). The NPV also includes other benefits; £21m of which are direct resource savings from energy efficiency measures (valued at the resource cost) and £60m account for the consumer benefit from the increased energy use valued at the willingness to pay for energy from transport and renewable energy technologies. Resource costs are not valued as these can be considered a transfer of resources associated with the private sector investment and also may be used to repay the loan. As private sector costs are not directly included in the analysis these resource benefits are also not valued. The CTF investment contributes to total emission savings of approximately 38.2 MtCO<sub>2</sub>e from the UK investment and MDB, donor, private and government contributions and thus the UK accounts for about a fifth of the GHG savings. Additional investment in the projects is expected to be in the order of £570m (see Table 14).

<sup>49</sup> Discounted £75m investment and return value.



As discussed above these results are heavily dependent on the assumptions and particularly those surrounding the cost-effectiveness of the investment and the amount of other finance leveraged. The upper and lower bounds of the two key assumptions are presented in the three tables above where the NPV varies between -£47m (low cost effective scenario) to £519m (high cost effective scenario)<sup>50</sup>.

### 2.3.2.2 *Extreme scenarios*

To model the uncertainty inherent in this type of analysis, two extreme scenarios have been modelled. These are unlikely to occur but represent the possible extremes and provide an indicative assessment of the maximum uncertainty range. The low scenario uses low cost-effectiveness rates (£126.0/tCO<sub>2</sub>e), a low leverage ratio (0.6) and low future carbon prices. The high scenario uses the best case for cost-effectiveness (£5.0/tCO<sub>2</sub>e), leverage ratio (32.7) and high future carbon prices. For these scenarios to occur all the projects funded would have to return the cost-effectiveness rates described. It is highly unlikely that this would occur and therefore these can be expected to represent the extremes of the projects funded in the future.

The low-low-low scenario provides very small total emission savings of 0.5MtCO<sub>2</sub>e, with the UK investment claiming 72% of the emission savings due to the low level of other finance leveraged. This represents a BCR of 0.1 and a UK NPV of -£61m.

The high-high-high scenario assumes that highly cost-effective investments are made, based on the most cost-effective project in the defined sub-set of the CTF, costing £5.0/tCO<sub>2</sub>e. It further assumes high leverage rates of 32.6 are achieved. This returns a large total GHG saving of 226.4MtCO<sub>2</sub>e. The UK attributable share of emission savings is 6%, with an NPV of £838.8m and a BCR of 12.9.

### 2.3.2.3 *Cost-effectiveness breakeven*

The cost-effective **breakeven point is £41.8/tCO<sub>2</sub>e**<sup>51</sup>, below which the £75m returns a positive NPV and BCR above 1 to the UK investment under the partial analysis carried out here. This is approximately £66/tCO<sub>2</sub>e which is below the new CTF limit of \$200/tCO<sub>2</sub>e. A number of the current CTF projects have a cost per tonne of CO<sub>2</sub> above the \$66/tCO<sub>2</sub>e breakeven point. This however should not be taken as these projects are not cost-effective or that the limit should be reduced. The analysis carried out here is partial and as discussed previously has been unable to quantify a number of wider technological, demonstration, learning and welfare impacts.

### 2.3.2.4 *Value for Money*

An additional UK investment of £75m in the CTF is expected to provide a reasonable return in terms of the key VfM indicators (cost per tonne of carbon abated, leverage ratio and benefit-cost ratio). As stated above the cost-effective break-even point is £41.8/tCO<sub>2</sub>e; the investment is also expected to provide significant amounts of private co-finance and donor co-funding. The welfare benefits that could be valued provide approximately a quarter of the benefits from the investment. Maximising the leverage achieved and additional co-benefits that have not been quantified in this partial analysis will ensure best value for money.

The numbers should not be taken as a definitive picture of the return on investment. They provide only those benefits directly attributable to the UK investment and also do not account for a number of benefits that could not be monetised in a robust manner.

### 2.3.2.5 *Assumption testing*

---

<sup>50</sup> For low cost-effective scenario the leverage ratio is the same as used for the central forecast and the high leverage ratio uses the same cost-effective rate as the central scenario.

<sup>51</sup> Based on the central leverage estimate of 8.4 and central carbon prices.

As discussed above in section 2.3.1 on methodology, there are a number of key assumptions that underpin this analysis. Two of them – additionality and trading – are briefly tested here.

The 50% additionality rule applied to all the CTF projects only allow the claiming of the GHG benefits from half of the project savings (before the attribution rule is applied). This is acknowledged as a conservative assumption. Assuming that this is reduced from 50% to 25% the total emission savings from the project is approximately 57.3 MtCO<sub>2</sub>e compared to 38.2 MtCO<sub>2</sub>e in the central scenario and the UK NPV increases to £404m and BCR increases to 6.7. The breakeven point is where only 6% of the emission savings are attributable to the CTF investment.

It is possible that some of the carbon saved may be sold into carbon markets and therefore will displace carbon savings elsewhere. We have included a factor for carbon sold on the carbon markets in the central scenario of 10%. If this is increased to 50% of the additional carbon benefits the total emissions saving is approximately 21.2 MtCO<sub>2</sub>e compared to 38.2 MtCO<sub>2</sub>e in the central scenario. As expected, the NPV falls from nearly £300m to £160m and BCR to 3.3. Breakeven analysis shows that up to 90% of the additional emission savings could be sold to carbon markets and the NPV would remain positive.

## 2.4 Non-monetised benefits

As mentioned above, a number of benefits have not been monetised. These include:

### Learning and demonstration effects

CTF investments are likely to remove first-mover risk and other market and information barriers to the investment in low carbon technologies. By removing the barriers they are likely to lead to wider replication in-country and regionally. They can also increase political will to transition to low carbon by demonstrating the feasibility of low carbon projects and programmes.

### Development benefits

Development benefits include employment opportunities, increased energy security and improved energy access, as well as health benefits through reduced air pollution. The CTF supports projects that are aligned with countries' own strategies for development and CTF investments should contribute to achieving the Millennium Development Goals (MDGs).

### Bringing down the cost of technologies

The CTF is expected to bring down the cost of low-carbon technologies and thereby improve the viability of investments which are currently not cost-effective.

It is difficult to monetise these benefits but they are a very important part of what the CTF was set up to do and the value that it delivers.

### Improving the international climate finance architecture

The investment will also help the UK in our efforts to improve the CIFs and provide lessons for the GCF as well as strengthen donor coordination.

## 2.5 Administration and management fees

Admin & management fees are considered as a separate indicator of value for money here. As mentioned in section 4.1 below, an additional £75m will not incur any additional admin resource requirements for HMG and in that respect the investment provides good value for money in terms of admin resource. This section instead looks at administration and management fees paid by the CTF Trust Fund. It should be noted that a balance needs to be struck between keeping costs down and ensuring sufficient due diligence in setting up and managing projects and programmes.

As shows in Table 15, as of 30 September 2012, fees amounted to \$11.9m and administration costs to \$31.5m<sup>52</sup>. The combination of these constitutes 2.1% of total funding decisions or 8.0% of

---

<sup>52</sup> Trustee Report, p. 6.

cumulative cash transfers. Only about a quarter of approved funding has been transferred to MDBs as this is done on the basis of need (on a six-monthly basis), in order to meet projected disbursement requirements. Therefore admin costs and fees are frontloaded and appear high relative to cash transfers.

Admin costs and fees make up 1.1% of total received funding but since fees are not approved until the project approval stage this figure is less relevant.

**Table 15: CTF funding approvals and transfers as of 30 September 2012**

	Total (US\$m)	% of Total funding decisions	% of Cumulative cash transfers
Projects and project preparation	2069	97.90%	N/A
Fees <sup>53</sup>	11.9	0.60%	2.2%
Administrative budgets <sup>54</sup>	32.5	1.50%	6.0%
Fees + Admin	44.4	2.10%	8.20%
Total funding decisions	2113.4	100%	N/A
Cumulative cash transfers	544	N/A	100%

It should be noted that the administrative budgets and fees do not include project preparation grants; these are generally recipient-executed and thus the grant is provided to recipient countries. MDBs have a supervisory role to ensure compliance with MDB operational policies and procedures.

Table 16 provides a comparison with a selection of other World Bank Financial Intermediary Funds (FIFs) for which comparable data is available. They include the Global Environment Facility (GEF)<sup>55</sup>, the Global Agriculture and Food Security Program (GAFSP)<sup>56</sup> and the Haiti Reconstruction Fund (HRF)<sup>57</sup>.

Caution should be exercised in drawing conclusions from the below numbers, as the sample is very small, the funds to some extent face different management challenges, and the processes and timing for approving may differ. However, the number suggests that admin costs and fees are considerably lower in the CTF than in the other Trust Funds.

**Table 16: Comparison with other World Bank Trust Funds**

Trust Fund	Cumulative funding approvals (\$m)	% fees	% administration budget	% fees + admin
CTF	2,100	0.6%	1.5%	2.1%
GEF	12,019	5%	5%	10%
GAFSP	514	4.6%	1.9%	6.5%
HRF	277.9	3.4%	1.4%	4.8%

## 2.6 Summary Value for Money Statement for the preferred option

<sup>53</sup> Fees include fees levied by MDBs for the management of grants and private sector loans. As mentioned in the Financial Case in section 4.2, MDB management fees for public sector loans are paid by the recipient governments.

<sup>54</sup> The administrative budget covers CTF's share of the budget for the CIF Administrative Unit, the Trustee and MDB representatives, whose respective roles are set out in the Management Case 5.1.3.

<sup>55</sup> Global Environment Facility Trust Fund Financial Report, May 9, 2012, p.14. Available at: [http://fiftrustee.worldbank.org/webroot/data/GEF\\_TR\\_1.pdf](http://fiftrustee.worldbank.org/webroot/data/GEF_TR_1.pdf)

<sup>56</sup> Global Agriculture and Food Security Program Trust Fund: Public Sector Window. Financial Report as of March 31, 2012, p. 5. Available at: [http://fiftrustee.worldbank.org/webroot/data/GAFSP\\_TR\\_1.pdf](http://fiftrustee.worldbank.org/webroot/data/GAFSP_TR_1.pdf)

<sup>57</sup> Haiti Reconstruction Fund Financial Report as of 30 June 2012, p. 5. Available at: [http://fiftrustee.worldbank.org/webroot/data/HRF\\_TR\\_1.pdf](http://fiftrustee.worldbank.org/webroot/data/HRF_TR_1.pdf)

The cost-benefit analysis above suggests a positive UK NPV of approximately £600m. Due to the difficulty in comparing data, this has not been benchmarked against other projects outside of the CTF. Whilst the monetised benefits and costs suggest that the proposed contribution is cost-effective from a GHG emission perspective, the non-monetised benefits are equally important. These include increased demonstration effects, energy security, employment opportunities and health benefits amongst other things. In addition, learning will be provided for the GCF.

The benchmarking of admin & management costs shows these are considerably lower in the CTF than in the small sample of other World Bank Trust Funds used here for comparison. Admin costs and fees are fairly high relative to funding transferred to MDBs for project implementation. However this should change fairly rapidly as more funding is disbursed. Nevertheless it will be important to continue to monitor these costs and continue to put pressure to ensure that they are appropriate.

## 3 Commercial Case

### 3.1 Background

CTF projects are implemented by MDBs, which increases efficiency and reduces costs by using MDBs' established infrastructure, policies and procedures. The implementing agencies include the World Bank Group (WBG), the African Development Bank (AfDB), the Asian Development Bank (ADB), the European Bank for Reconstruction and Development (EBRD) and the Inter-American Development Bank (IADB). These MDBs were selected as partners of the CIFs due to their involvement in the Clean Energy Investment Framework (CEIF), an initiative that responded to a G8 request in 2005 for an Investment Framework on climate change, clean energy and sustainable development.

As CIF programmes are implemented by MDBs, they follow MDB procurement policies and procedures. Multilateral Aid Review (MAR) findings in 2011 related to the relevant MDBs' approach to procurement, in terms of whether procurement is driven by cost control, targets for procurement savings, and monitoring and reporting on prices. Findings are summarised below.

Overall, the MDB approach to procurement aims to ensure open and fair competition in all tenders, and to procure high quality goods and services at the lowest cost. Procurement of goods and services goes through International Competitive Bidding (with limited exceptions). The MAR, however, notes that these procurement procedures are criticised by recipients and donors for their imposition of high transaction costs, delays, and uncompetitive prices.

Measures are being taken by the MDBs to address concerns; for example, the World Bank has begun a review of its procurement policies and practices to address these concerns and better align procurement with the World Bank's development objectives. It is expected that it will take another 18 months for new policies to be agreed and start to be implemented. Some of the CTF projects under the Indian, Chilean, Nigerian and Turkey Investment Plans are likely to be subject to the new policies. However, if projects are developed and approved quickly the existing standards are more likely to apply.

The UK is engaging fully with the World Bank to ensure that this review addresses the issues about which we are concerned. This includes the possibility of using country systems to lower transactions costs and avoid duplication, which is dependent upon robust, rigorous systems that meet international standards being in place.

The MDBs work together on procurement rules and standards, and use systems in similar ways. Therefore the recommendations from the World Bank study will be adopted by all the banks.

### 3.2 MAR findings on MDB approaches to procurement

#### *African Development Bank (AfDB)*

AfDB procurement rules use International Competitive Bidding, but there are no targets for procurement savings. Prices are monitored where there have been concerns about high unit costs, and this is fed into guidance for staff on contract negotiation. Annual reports on corporate and operational procurement, including data on savings, are produced for the Board of Directors and published on the AfDB website.

#### *Asian Development Bank (AsDB)*

AsDB has restrictions on procurement from non-member countries; this constrains its ability somewhat to pursue economy and efficiency. Procurement procedures are criticised by recipients and donors for imposing high transaction costs, delays and uncompetitive prices.

#### *European Bank for Reconstruction and Development (EBRD)*

The EBRD's approach to procurement is driven by VfM. It has procurement policies and rules consistent with its objectives of appropriate use of funds and efficiency of operations. The EBRD places no restriction on the procurement of goods and services from any country, and generally requires the use of international competitive tendering for public contracts. Private sector operations may follow other established commercial practices in addition to formal open tendering.

*Inter American Development Bank (IADB)*

The IADB also has restrictions on procurement from non-member countries which constrain its ability to pursue economy and efficiency. Procurement rules use International Competitive Bidding. IADB is criticised by recipients and donors for high transaction costs, delays and elevated contract prices for Bank projects. However, in June 2010, the Executive Board approved a Strategy for Strengthening the Use of Country Procurement Systems. This creates the possibility to use country systems or sub-systems for the procurement of goods and services which should increase the scope for cost-efficiency gains from local procurement.

*World Bank Group*

World Bank procurement policy is driven by "economy and efficiency" as outlined by their Articles of Agreement.

The International Development Association (IDA), which is one of the WB agencies and provides interest-free loans and grants to the poorest countries, uses international competitive bidding for all contracts. Exceptions are made only if the nature of the procured goods or services, or the size of the country, justifies them. There is anecdotal evidence that IDA contract prices are higher than contracts elsewhere, but IDA does not monitor the impact of its procurement on local market prices.

In the International Finance Corporation (IFC), the private arm of the WB, competitive procurement is mandatory for all operational procurement above \$50K and must be advertised.

## 4 Financial case

### 4.1 What are the costs, how are they profiled and how will you ensure accurate forecasting?

The UK will provide £75 million in 2012/13 from the ICF. It will be 100% capital resource (CDEL), enabling the CIFs to provide highly concessional loans and other instruments, such as guarantees, to developing countries.

Indirectly, management of our CIFs contribution, and participation in Trust Fund Committees will require administrative resource from both DECC and DFID. The current UK resource for the management of the CIFs is set out in the Management Case, section 5.1.5. The administrative cost of managing a further contribution to the CIFs can be absorbed within existing administrative budgets. The administrative resource per year required for DFID is £173,520. The administrative resource required for DECC is £46,399.45<sup>58</sup>.

The contribution to the CIFs is a fixed contribution. The nature of the arrangement with the Trustee will ensure that no additional finance is required, and our contribution will not involve contingent liabilities. Any future additional contributions would be considered separately and on their merits.

DECC and DFID have funded the CIFs previously and the CIFs performed well in DFID's Multilateral Aid Review (MAR)<sup>59</sup>. From this perspective the additional contributions are not considered novel.

### 4.2 What are the finance products and terms of the CTF

To give an idea of how CTF funding is used, the sections below describe the finance products and terms available for public and private sector operations under the CTF, including what level of fees are charged by the implementing agencies for the most commonly used products. Administrative costs and fees are also addressed in the Appraisal Case in section 2.5.

#### 4.2.1 Public sector operations

The sections below are based on the CTF financing products and terms for public sector operations<sup>60</sup>. These include projects where finance is provided to recipient country governments through the public sector arms of MDBs. Each operation follows the investment lending policies and procedures of the MDB, including its fiduciary standards and environmental and social safeguards.

Donors can provide funding to the CTF as grants, capital contributions or concessional loans on 'IDA-like terms', i.e. terms that are consistent with the terms of the International Development Agency of the World Bank. Outgoing financing from the CTF can be no more concessional than incoming funding, which guides what the above-mentioned types of contributions can be used for.

A number of financing products are available under the CTF, all of which include a grant element tailored to the identifiable additional cost of the investment or the risk premium required to make the investment viable. Examples include grants and concessional loans with a significant grant element as well as guarantees. Concessional forms of finance need to be designed to minimise market distortions and potential disincentives to private investment.

Grants. CTF grants can be used for the preparation of investment plans and projects. The maximum total CTF preparation grant for investment plans or projects is \$1m. The CTF Trust Fund Committee

<sup>58</sup> Based on the DECC admin resource outlined in section 5.1.5 in the Management Case.

<sup>59</sup> The MAR is available at: <http://www.dfid.gov.uk/Documents/publications1/mar/cifs.pdf>

<sup>60</sup> Clean Technology Fund Financing Products, Terms and Review Procedures for Public Sector Operations, December 15, 2011 (Revised document), hereinafter 'CTF Public Sector Financing Terms' p. 1. Available at: [https://climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CTF\\_Financing\\_Products\\_Terms\\_rev\\_final\\_0.pdf](https://climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CTF_Financing_Products_Terms_rev_final_0.pdf)

has approved an MDB fee of 5% from the CTF trust fund for the MDB's costs of administering and supervising individual preparation grants. In addition, grants can be considered for project components with very high additional costs or with significant risks and innovative financing mechanisms to soften commercial and/or MDB lending terms. This would be considered on a case-by-case basis and would need to be justified to the Trust Fund Committee in advance.

Concessional loans. Concessional loans can be used to improve the rate of return of projects. The CTF offers two loan products on the basis of an analysis in each project of its internal rate of return without CTF co-financing. These products are:

- (a) Harder concessional loans, for projects with:
  - (i) Rates of return near or above normal market threshold, but below risk premium for project type, technology or country.
  - (ii) Rates of return near or above market threshold, but acceleration in deployment the low carbon technology will have higher opportunity costs.
- (b) Softer concessional loans, for project with:
  - (i) Negative rates of return
  - (ii) Rates of return below normal market threshold

In order to simplify loan administration procedures and streamline project processing, the CTF has uniform financing terms rather than terms that vary by country/project/MDB. The terms of the two CTF loan products are set out in Table 17 below. These have not changed since the CTF was set up, but there are plans to revisit them.

**Table 17: CTF loan terms**

CTF Loans	Maturity	Grace period	Principal repayments year 11-20	Principal repayments year 20-40	MDB fee <sup>61</sup>	Service charge	Grant element <sup>62</sup>
Harder concessional	20	10	10%	N/A	0.18%	0.75%	~45%
Softer concessional	40	10	2%	4%	0.18%	0.25%	~75%

The implementing MDB is responsible for returning any interest and principal payments on the CTF loan received by it from the borrower.

Guarantees. The CTF also provide guarantee instruments to mitigate risks in order to facilitate the mobilisation of debt capital to finance projects. These include both loans guarantees covering loss resulting from debt service default, and contingent finance which is provided if the low carbon technology underperforms<sup>63</sup>.

#### 4.2.2 Private sector operations

Unless indicated otherwise, the sections below are based on the CTF financing products and terms for private sector operations<sup>64</sup>, which include projects that are financed either through the private sector arms of the MDBs or through public-private initiatives where the public sector arms of the MDBs engage with the private sector.

<sup>61</sup> The MDB fee is for MDBs' lending and supervision costs. The borrower can choose between paying 0.18% of the undisbursed balance of the loan semi-annually after loan signing or paying 0.45% of the total loan amount in a single lump amount.

<sup>62</sup> Calculated using the IDA methodology (assumptions: 6.33% discount rate for harder loans; 6.43% discount rate for softer loans; semi-annual repayments, 8-year disbursement period).

<sup>63</sup> CTF Public Sector Financing Terms, p.7-9.

<sup>64</sup> CTF Financing Products, Terms and Review Procedures for Private Sector Operations, October 24, 2012 (Revised document), available at: [https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/Financing\\_Products\\_Terms\\_and\\_Review\\_Procedures\\_for\\_Private\\_Sector\\_Operations\\_revised\\_OCT2012.pdf](https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/Financing_Products_Terms_and_Review_Procedures_for_Private_Sector_Operations_revised_OCT2012.pdf)



Private sector products include instruments like concessional interest rate loans, subordinated debt and mezzanine finance, guarantees and insurance, equity and quasi-equity. So far, concessional loans have dominated; as of April 2012 two out of 17 approved CTF private sector investment proposals were structured using guarantees and the remainder were structured to provide concessional loans. Equity and quasi-equity had not been used at all<sup>65</sup>.

Private sector investments need to adhere to the principle of minimum concessionality and CTF funds are structured on a case-by-case basis to address the specific barriers identified in each project and the level of concessionality has to be justified in each CTF proposal that is submitted to the CTF Trust Fund Committee. Proposals need to demonstrate how they are minimising or avoiding market distortions and displacing private sector investment, and show that the projects are financially sustainable in the long term.

CTF finance can be subordinated to MDB investments where this is required to mitigate risk and enable MDBs to undertake projects they would otherwise not be able to consider due to a lack of track record. However, in all cases CTF funds must be applied prudently such that the CTF component is not expected to experience a foreseeable loss, and the finance structure needs to be justified in the project proposal that is submitted to the CTF Trust Fund Committee.

CTF project proposals also need to indicate and justify the range of financing terms for CTF funds that will be offered to clients, including a range for price, tenor, subordination and security. Once final terms are agreed, the MDB will inform the Trust Fund Committee.

There is no standard percentage budget allocation for implementation and supervision costs; instead customised budget requests to cover supervision costs over the life of projects are submitted to the CTF Trust Fund Committee for approval<sup>66</sup>.

### **4.3 How will funds be paid out?**

The contribution will be paid out before the end of December by Promissory Note. A Promissory Note is an irrevocable undertaking by HM Government to provide to the named beneficiary any amount up to the specified limit that the beneficiary may demand, at any time. The department lodges the promissory note with a depository (The Bank of England) who is instructed to make payment of any such amount demanded by the beneficiary from the department's Bank of England Promissory Note Account.

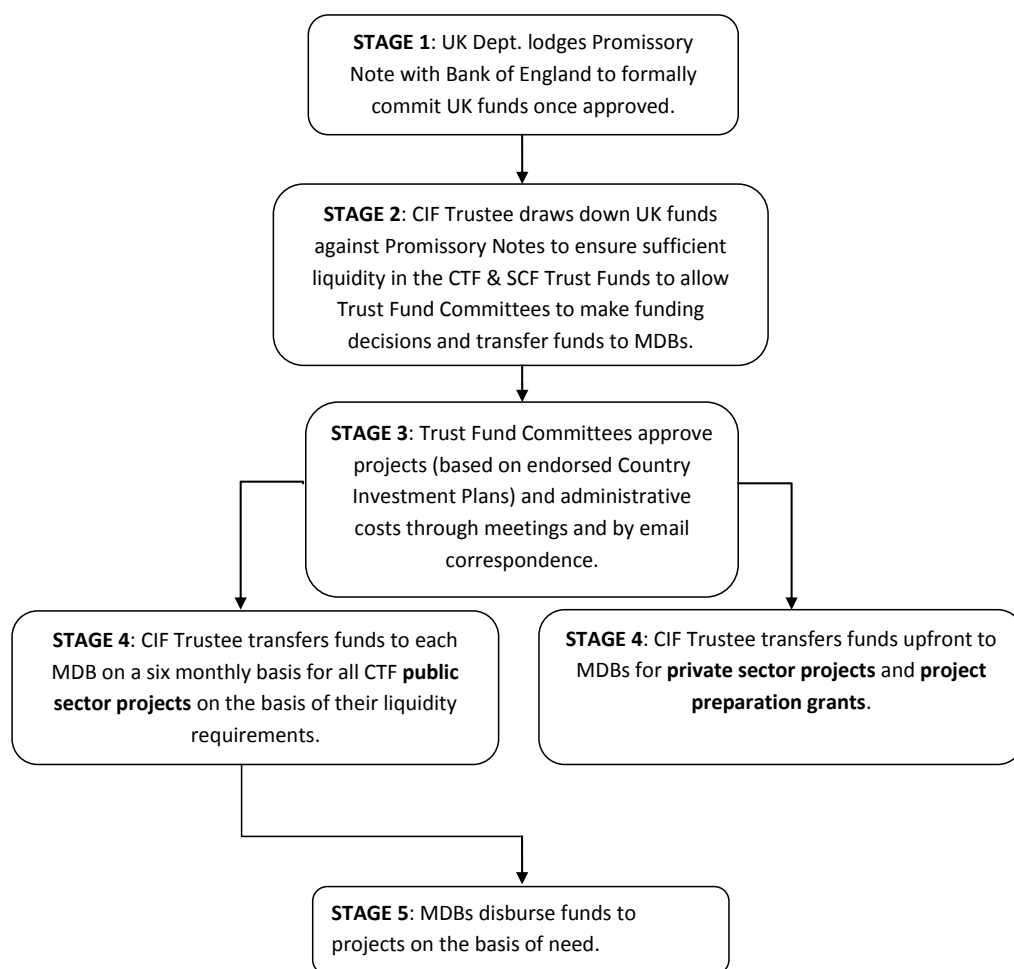
---

<sup>65</sup> Proposal for Additional Tool and Instruments to Enhance Private Sector Investments in the CIF, April 13, 2012. Available at: [https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CTF\\_SCF\\_8\\_Proposal\\_for\\_Additional\\_Tools\\_and\\_instruments\\_for\\_private\\_sector.pdf](https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CTF_SCF_8_Proposal_for_Additional_Tools_and_instruments_for_private_sector.pdf)

<sup>66</sup> CTF Private Sector Operations Guidelines, October 24, 2012 (Revised document), para 19, p 6. Available at: [https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/Private\\_sector\\_operational\\_guidelines\\_revised\\_OCT2012.pdf](https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/Private_sector_operational_guidelines_revised_OCT2012.pdf)

Figure 5 show the flow of CIF funds once a Promissory Note is lodged

**Figure 5: CIF Flow of funds**



Although promissory notes stipulate that the amount concerned, or any part of it, is payable on demand, prior to issuing the promissory note we will sign a contribution arrangement, agreeing a payment schedule with the CIFs in writing. The schedule sets out the amounts and dates of the payments that the beneficiary will request.

Paying funds via a contribution arrangement and promissory note is the standard means for Government to fund multilateral institutions. It is the system used for our previous contributions to the CIFs. It enables us to deliver finance on the basis of need, provide certainty for the recipient, while also enabling a manageable accounting process for large volumes of funds. The promissory note is non-interest bearing and non-negotiable.

#### **4.4 What is the assessment of financial risk and fraud?**

The CIFs, including the CTF, operate in some countries where corruption and fraud pose significant risks. CIFs operations follow the investment policies and procedures of the relevant MDB, including its fiduciary standards. By delivering through the MDBs, financial and fraud risk is significantly reduced and considered low. The CIFs are also audited annually by a reputable auditor.

#### **4.5 How will expenditure be monitored, reported, and accounted for?**

The CTF expenditure is monitored through the UK's engagement at the biannual CTF Sub-Committee meetings, through UK official representation on the committees and in advance of the meetings. In relation to expenditure, Committee members:

- Approve programming and pipeline priorities, operational criteria and financing modalities;
- Approve allocation of CTF resources for programmes and projects;
- Approve allocation of CTF resources for administrative budgets;
- Ensure monitoring and periodic independent evaluation of performance and financial accountability of the MDBs;
- Approve annual reports of the CTF;
- Review reports from the Trustee on the financial status of the CTF.

The Trustee maintains separate records and accounts in respect of the contributions deposited in the CTF Trust Fund and disbursement made. The Trust reports to the Trust Fund Committees annually unless otherwise agreed. This report sets out funding allocations, commitments, transfers, use of funds, and receipt of funds in the Trust Fund. Upon request by a donor, the Trustee will also provide such information quarterly.

The annual financial statement, prepared by the Trustee, is audited annually by the World Bank's external auditors. Copies of the audited financial statement and auditor's report are provided to donors.

In terms of Government Accounting for our contribution to the CTF, the treatment for budgets is therefore to recognise the amount of the deposit as a charge to operating costs at the time that the note is deposited. The balances due on notes at 31 March each year are included as liabilities in department's accounts. Teams make a return to Treasury annually which identifies promissory notes issued and drawn down in respect of Consolidated Fund assets and liabilities. This information also informs the annual resource accounts balance sheet and operating statement.

## 5 Management Case

### 5.1 What are the Management Arrangements for implementing the intervention?

#### 5.1.1 CTF project selection process and investment criteria

All CTF projects are implemented by an MDB (public or private sector arm). The decision by the CTF Trust Fund Committee to channel CTF funds through the MDBs was made in order to leverage and scale up MDB funding, increase efficiency and reduce costs by utilising the MDBs' established infrastructure, policies and procedures, and in order to tap into MDBs' well-established network and project development ability.

To be eligible to access CTF, countries must be ODA-eligible and have an active MDB programme<sup>67</sup>. The selection of countries currently supported was based on their GHG emissions profiles and countries were identified through a process of consultation with the eligible recipient countries and MDBs. Countries which were not among the largest emitters but were interested in participating in the CTF/CIFs, e.g. Kenya, were invited to join SREP (see section 1.1.3 in the Strategic Case for information on this CIF programme) instead, which was deemed a better fit.

The selection of projects is country-led and based on the country Investment Plans that are developed under the leadership of the recipient countries and MDBs and are integrated into countries' own development strategies. The 'country mission' that informs the development of the Investment Plan involves the government, private industry and other stakeholders in-country.

Once completed, the Investment Plan is submitted to the CTF Trust Fund Committee (TFC), where endorsement is decided on a consensus basis. A pipeline of projects is included and once the Investment Plan is endorsed countries can come forward with project proposals (with the expected of Phase II Investment Plans, the endorsement of which was conditional on additional funding being made available as explained in section 1.1.5.1).

Project proposals are submitted to the TFC for approval by mail. If approval is given, the further development of projects follows MDB policies and procedures for appraisal and MDB Board approval and supervision.

All Investment Plans and project proposals need to meet the CTF investment criteria<sup>68</sup>. These are broad in order to give countries flexibility to take forward projects that are aligned with their development priorities. The criteria include:

Potential for GHG emissions savings. The CTF's objective is to invest in projects with high GHG abatement opportunities at the country, regional or sub-regional levels. Each proposal for CTF funding contains an assessment of direct emission savings over the lifetime of the proposed project.

Cost-effectiveness. Each project proposal should include a calculation of the cost per tonne of CO<sub>2</sub>e reduced. CTF financing is ordinarily not available for investments in which the marginal cost per tonne exceeds \$200<sup>69</sup>, based on an assessment the International Energy Agency's BLUE Map scenario.

Demonstration potential at scale. In prioritising investments, the potential for significant reductions in GHG emissions growth as the result of broader demonstration, deployment and transfer of low carbon

---

<sup>67</sup> The Clean Technology Fund, p. 7 para. 17. Available at: [https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/Clean\\_Technology\\_Fund\\_paper\\_June\\_9\\_final.pdf](https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/Clean_Technology_Fund_paper_June_9_final.pdf)

<sup>68</sup> Clean Technology Fund: Investment Criteria for Public Sector Operations, February 9, 2009. Available at: [https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CTF\\_Investment\\_Criteria\\_Public\\_Sector\\_final.pdf](https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CTF_Investment_Criteria_Public_Sector_final.pdf)

<sup>69</sup> Though as discussed in the Appraisal Case, projects with higher cost per tonne have been approved.

technologies financed by the CTF is assessed. Project proposals shall demonstrate that they constitute a strategic effort to stimulate lasting changes in the structure or function of a sub-sector, sector or market.

Development impact. A key objective of the CTF is to demonstrate the potential for low-carbon technologies to contribute to sustainable development and the achievement of the Millennium Development Goals. The potential development impacts of projects are assessed consistent with standard MDB appraisal criteria, and every project has to include at least one development indicator that is reported against on an annual basis.

Implementation potential. The implementation potential of projects is assessed based on, *inter alia*, whether key policy and institutional issues are addressed, the capacity of the institutions responsible for implementation and evidence of commitment to and ownership of the project and relevant policies and arrangements for long-term operations and maintenance.

Additional costs and risk premium. CTF finance provides a grant element tailored to cover the identifiable additional cost of an investment, or the risk premium required, in order to make the investment viable. Each project proposal should clearly identify the additional costs of risk premium that affect the rate of return of the investment and outline how the grant element in the CTF financing covers such additional costs or risk premium. Social and environmental safeguards

### **5.1.2 Social and environmental safeguards**

The CIFs were designed to use the existing systems of the MDBs, including their social and environmental safeguard policies. In the project documentation that is submitted to the relevant MDB Board (which happens after CTF finance has been approved by the CTF TFC), the environmental and social safeguards that are triggered are set out. If a violation of the safeguards occurs, sanctions are available to the UK through the MDB's respective governance mechanisms and approved procedures. The MDBs work collaboratively to harmonise their procedures and policies whenever possible.

The UK engages and influences the MDBs through active participation as a shareholder. The WBG has just launched a review on their social and environmental safeguards, which will take two years to complete.

### **5.1.3 CIF Governance and organisational structure**

The governance and organisational structure of CIFs include:

- a Trust Fund Committee
- a Partnership Forum
- an MDB Committee
- an Administrative Unit
- a Trustee

The Administrative Unit, MDB Committee and Trustee are shared by both the CTF and the SCF, while each Fund has its own Trust Fund Committee.

#### *CTF Trust Fund Committee*

The CTF Trust Fund Committee oversees the fund's operations, provides strategic direction, and also approves and oversees its programming and projects. The Trust Fund Committee is composed of equal representation by contributor countries and recipient countries.

Active observers from the United Nations (UN), Global Environment Facility (GEF), UNFCCC, civil society, and the private sector are invited to participate in meetings of the Trust Fund Committee.

Decisions of the Trust Fund Committee are made by consensus.

### *Partnership Forum*

To enable the CIFs to contribute to an effective global solution to climate change, it is crucial for their lessons and experiences to be shared in an inclusive, transparent and strategic manner. To facilitate this, a Partnership Forum is incorporated into the CIF to serve as a regular venue where stakeholders can share CIF-related ideas and experiences and engage in dialogue on the CIFs' strategic directions, results and impacts.

The Forum is designed as a regular gathering of stakeholders engaged in the CIF, and is co-chaired by the World Bank's Vice President for Sustainable Development and a country representative elected by countries participating in the Partnership Forum. At the Partnership Forum, donor and recipient countries will agree, within their respective caucuses, on their representation on the Trust Fund Committee.

### *MDB Committee*

The Multilateral Development Banks (MDB) Committee facilitates collaboration, coordination and the exchange of information, knowledge, and experience among MDB partners.

### *Administrative Unit*

A small Administrative Unit supports the work of the CIF, the Trust Fund Committees and other committees. It is housed in the World Bank Group's Washington DC offices and is comprised of 14 professional staff, 5 administrative staff and 5 long-term consultants. The latter category are all "junior professional associates" who are recruited at the same level as administrative staff and whose terms are limited to a maximum of two years. The Admin Unit is intentionally not responsible for quality assurance of projects, in contrast to the GEF Secretariat. This is designed to keep administrative costs to a minimum. The quality assurance is the responsibility of the MDB processes, such as joint missions, and ultimately the Trust Fund Committees.

### *Trustee*

The International Bank of Reconstruction and Development (IBRD) serves as the Trustee for the CTF. It holds in trust, as a legal owner and administrator, the funds, assets and receipts that constitute the Trust Fund, pursuant to the terms entered into with the contributors.

In accordance with the terms of the contribution agreements and the availability of funds, the Trustee will make commitments and transfers of CTF resources, with the approval of the Trust Fund Committees. Commitments and transfers of CTF resources to MDBs are made in the manner agreed on by the Trustee and MDBs.

Each MDB is responsible for the use of funds transferred by the Trustee in accordance with its own policies, guidelines and procedures and the decisions of the Trust Fund Committees. The Trustee requires periodic financial reports from the MDBs, as agreed to by the Trustee and the Trust Fund Committees.

Regular reports on the financial status of the Trust Funds are provided by the Trustee to the CTF and SCF Trust Fund Committees. The Trustee is accountable to these Committees for its performance.

## **5.1.4 UK Role**

The UK has a seat on the CTF Trust Fund Committee. The G6 Head of the Low Carbon Development Team in DFID is the board member for the CTF Trust Fund Committee.

Officials in DFID's Climate and Environment Department, and DECC's International Climate Change Department perform a due diligence role to ensure corporate compliance and best practice in relation to UK government funds allocated to the CTF, both during six monthly committee meetings, but also in taking intersessional decisions by mail on project approvals.

As a Trust Fund Committee member the UK has the ability to endorse or veto Investment Plans, project preparation grant proposals as well as project proposals. For example, if the UK is not satisfied that a proposed project meets the CTF investment criteria or represents value for money, or

we are not satisfied that social and environmental safeguards are adequate, the UK can request further information, raise questions for clarification, request more time for a decision to be made, or, if not satisfied, reject the request for funding.

UK officials also attend the CIF Partnership Forum and have conversations with other donors, the CIF Admin Unit and the Trustee as and when needed in order to drive reforms and perform due diligence of investment proposals. In addition, the UK has the possibility of requesting information from and putting pressure on MDBs through our Executive Directors to the MDBs.

As set out in the Strategic Case, section 1.1.3, the UK objectives for the CTF are well aligned with other donors, in particular the US, Canada and Japan. We have large influence in the Trust Fund Committee and have been successful in driving progress against our priority reforms, although progress has been relatively slow.

### **5.1.5 HMG Management**

A CIF Management and Accountability Arrangement agreed between DECC and DFID sets out Departmental responsibility and management arrangements, including roles and resources. A brief summary is provided below.

#### *5.1.5.1 Roles*

A DFID programme manager (G7) is the lead on the CIFs across Whitehall, ensuring effective coordination on programme management, inputting to CIF governance and implementation of UK funding to the CIFs. The programme manager is supported by:

- 4 G7 programme leads that coordinate cross-Whitehall clearance on Investment Plans and project proposals and lead analysis of their individual programmes; and
- 2 HEO policy officers that coordinate briefing for Committee meetings and monitor financial and technical progress on the CIFs.

DECC contribute to the management of the CIFs. This includes contributing relevant expertise to Investment Plans and project proposals and inputting views on the overall management of the CIFs.

#### *5.1.5.2 Resourcing*

DFID staff resources for the CIFs are based in the DFID Climate and Environment Department (FTEs): G7 70%; 2xHEO 50% each; 4xG7/SEO 25% each; G6 10%; SCS 5%; EO 10%; AO 10%.

DECC staff resources for the CIFs are based in the International Climate Policy and Finance Team (FTEs): HEO 43%; G7 15%; AE/E 10%; G6 10%; SCS 5%.

The costs for these are set out in the Financial Case in section 4.1; it should be noted that no additional resource costs will be incurred by the proposed £75m investment.

#### *5.1.5.3 HMG Governance*

There are monthly cross-Whitehall CIF meetings, chaired by the DFID CIF programme manager, to consider ongoing CIF governance and management. This includes reviewing the risk register.

There are quarterly cross-Whitehall senior CIF meetings, with DFID and DECC SCS representation, to review working level progress and key risks.

The ICF Board has line of sight to the CIFs through regular reporting in the ICF Board Dashboard and through more detailed updates.

## **5.2 What are the risks and how these will be managed?**



### 5.2.1 Key risks in the CIFs

A risk register setting out a comprehensive list of risks and mitigating actions is provided at Annex A. Top risks to highlight include:

1. Slow implementation of IPs and projects. There has been significant delay in project development compared to what was envisaged under the country IPs, which has led to slow disbursement rates and limited delivery of results. This could limit learning for the GCF and leaves us exposed to criticism in the international climate negotiations that climate finance is not flowing.
2. Lessons from the CIFs are not captured and shared. The timing of lesson-learning products from the CIFs is crucial for the ability to provide input to the design of the GCF. There is a risk that the Independent Evaluation of the CIFs will not capture and disseminate lessons on time. The CIFs were set up with the explicit objective of providing lessons for the future climate finance architecture and without these lessons there is a risk that the GCF will be hampered by similar issues as the CIFs, for example on the speed of disbursement and difficulty in engaging the private sector.
3. The CIFs cannot demonstrate credible results. The CTF results framework is being simplified and there are currently neither satisfactory results frameworks in place nor interim reporting arrangements that allow the CIFs to monitor progress and demonstrate results. This poses reputational risks to the CIFs and the UK Government, as we are unable to report results of spend and value for money to Parliament, the public and NGOs.
4. Risk that the CTF is not transformational and does not meet ICF objectives. The CIFs were set up to pilot new approaches to deliver climate finance at scale and learn by doing. However CTF investment plans and projects may be lower risk and less innovative due to lower risk appetites and misaligned incentives. A lack of a portfolio approach to risk management makes it difficult to assess whether the CTF is likely to be transformational and meet ICF objectives.

### 5.2.2 HMG processes for managing risk

The cross-Whitehall CIF team update the risk register for the CIFs every month. Risks which exceed the ICF Board's agreed risk appetite are escalated to the ICF Board at their regular meetings. In addition, DECC escalate risks to the SRO through monthly meetings covering the DECC ICF portfolio.

DECC also recently conducted a Risk Potential Assessment (RPA) on the Climate Investment Funds in conjunction with DECC Planning & Performance. The CIFs were assessed as moderate / high risk on the overall consequential impact of failure, driven in particular by the very large budget size and the high profile of the CIFs internationally. They were assessed as moderate / high risk on overall complexity, driven in particular by their focus on large scale implementation in challenging political and economic environments and the complexity of the governance arrangements.

### 5.2.3 CIF processes for managing risk

A CIF risk management framework is being developed in order to monitor and manage risk at a portfolio level. The UK has been instrumental in the development of the framework; for example, we hosted a meeting in London in the spring of 2012 with the CIF Trustee, the consultants developing the framework and Germany to discuss the aims and scope of the framework. Subsequently the UK inputted into drafts and the final version was submitted for approval at the November 2012 CIF Trust Fund Committee meetings. At the November 2012 joint CTF/SCF Committee meeting, it was agreed to establish a risk management framework and a working group - made up of the Trustee, Admin Unit, risk management specialists and MDBs - will be set up to develop the detail of the framework. An update report will be prepared for May 2013.

## 5.3 What conditions apply (for financial aid only)?

The UK's priority areas for reform are set out in the Strategic Case in section 1.1.6. In order to make the investment proposed in this Business Case, we need to see significant progress against these in the short term. Specifically, we need to secure the following outcomes from the November Trust Fund Committee meetings:

- Agreement to advance the work done by consultants on a portfolio-level CIF risk management framework

*Progress: At the November 2012 joint CTF/SCF Committee meeting, the UK secured agreement to establish an enterprise risk management framework based on the work of the consultants. A working group – made up of the Trustee, Admin Unit, risk management specialists and MDBs – will be set up to develop the detail of the framework. An update report will be prepared for May 2013.*

- Approval of the revised CTF results framework

*Progress: At the November 2012 CTF Committee meeting, the UK secured agreement in principle to the revised CTF results framework, including five core indicators at outcome level. The MDBs and countries will now implement the results framework. The CIF Admin Unit will prepare methodologies for the indicators, focusing in particular on attribution and leverage, for review and approval via mail.*

- Approval of a decision that allows funding to be quickly released from Phase I to Phase II Investment Plans where these are revised due to projects stalling

*Progress: At the November 2012 CTF Committee meeting, the UK secured agreement to immediately release \$130m from the revised Thailand IP (together with any additional finance provided before May 2013) for new projects under Phase II IPs as well as a second phase of projects under Turkey's IP on the basis of project readiness. In May 2013, the Committee will discuss longer term solutions to manage the pipeline. This will allow us to consider over-programming the pipeline.*

On the basis of the progress achieved at the November 2012 CIF Committee meetings and over the summer, the UK believes that a further contribution to the CTF is warranted.

## **5.4 How will progress and results be monitored, measured and evaluated?**

The sections below set out the CTF's approach to monitoring and evaluation.

### **5.4.1 Monitoring**

In order to enable the CTF to report overall results, all CTF projects need to report against a set of core indicators at the outcome level that are aggregated across countries. These core indicators are set out in the CTF revised results framework<sup>70</sup>, which is shown in Table 18 and was agreed in principle at the November 2012 CTF Trust Fund Committee meeting. A previous results framework with 31 indicators was been agreed in 2010 but was perceived by MDBs and recipient countries as overly complex and therefore a decision was made to revise it.

The UK was heavily involved in the revision process and as a result the core indicators in the simplified results framework are closely aligned with the UK's Key Performance Indicators (KPIs) and thematic indicators for Low Carbon Development (LCD). To allow comparison these are also shown in the below table. The core outcome indicators will be applied to new and existing Investment Plan result frameworks and baselines and targets will be established by April 20, 2013. It should be noted that the transformation impact level indicator is optional; in order to understand the transformational impact of the CTF impact evaluations will also be carried out.

---

<sup>70</sup> Revised CTF Results Framework, October 19, 2012. Available at: [https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CTF\\_8\\_Revised\\_results\\_framework.pdf](https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CTF_8_Revised_results_framework.pdf)

**Table 18: CTF revised results framework**

Results	CTF indicator	Relevant KPI/LCD thematic indicator	Baseline	Targets	Means of verification
TRANSFORMATIONAL IMPACT LEVEL					
A. Transformed low carbon economy	Country level GHG/unit of GDP	Country level GHG emissions / GDP			Key World Energy Statistics (IEA)
CTF PROGRAMME OUTCOME LEVEL					
B1. Avoided GHG emissions	Tonnes of GHG emissions reduced or avoided	Change in Greenhouse Gas (GHG) emissions as a result of ICF support			National M&E systems and M&E framework of the implementing agency
B2. Increased finance for low carbon development mobilised	Volume of direct finance leveraged through CTF funding – disaggregated by public and private finance	Volume of public finance mobilised for climate change purposes as a result of ICF funding; Volume of private finance mobilised for climate change purposes as a result of ICF funding			National M&E systems and M&E framework of the implementing agency
B3. Increased supply of renewable energy (RE)	Installed capacity (MW) as a result of CTF interventions	Level of installed capacity of clean energy as a result of ICF support			National M&E systems and M&E framework of the implementing agency
B4. Increased access to public transport	Number of additional passengers (men-women) using low carbon public transport as a result of CTF intervention	Number of poor people serviced by new low carbon public transport, due to ICF project			National M&E systems and M&E framework of the implementing agency
B5. Increased energy efficiency	Annual energy savings as a result of CTF interventions (GWh)	Amount of energy saved by ICF project/yr			National M&E systems and M&E framework of the implementing agency

The results framework does not include project outputs, which are often more sector-specific, however each CTF project needs to have a detailed results framework. Every project is required to have at least one indicator for development co-benefits.

The MDBs in consultations with the government and/or private sector counterparts will report on the progress against the core indicators and portfolio implementation annually by 30 July through annual country reports. More detailed reporting is also provided biannually and feeds into the CTF operational reports. The CIF Admin Unit will prepare a synthesis report based on the country reports, which will be included in the CIF Annual Report. Recipient countries are responsible for reporting at the impact level, i.e. on progress in achieving transformation.

The UK will monitor progress through the reports mentioned above and through its seat on the CTF Sub-Committee.

The budget for monitoring will be financed through CTF project funding.

## 5.4.2 Evaluation

Evaluation is a very important part of the CTF as one of its objectives is to provide learning for the international climate finance architecture. This is also one dimension of expected results of the contribution proposed in this Business Case.

### 5.4.2.1 Fund level evaluation

As mentioned in section 1.2.2 above, an Independent Evaluation of the CIFs<sup>71</sup> has started. The Independent Evaluation will be conducted by the Evaluation Oversight Committee of the MDBs. An International Reference Group will provide additional technical expertise and challenge and to further enhance the credibility of the Independent Evaluation. The scope of the evaluation, some of the evaluation questions and the main evaluation products and their respective timing are summarised below.

The Independent Evaluation will primarily be formative as opposed to results-based; it will look at how CTF programmes are being implemented and – where possible – assess more advanced activities. In addition it will assess organisational effectiveness, i.e. how the CTF's governance and management structures, functions and processes facilitate the achievement of the objectives in an efficient and transparent way. This is done at project, country and Fund level.

To ensure broad stakeholder engagement, the Evaluation Oversight Committee has conducted a consultation process on a draft Approach Paper and International Reference Group<sup>72</sup>. There were 20 submissions from developed countries (including the UK), 23 from developing countries, and one representing 12 Non-Governmental Organisations from diverse locations.

The Independent Evaluation will be comprehensive and seek to consider a large number of questions. A few of these, which are considered particularly relevant for DECC's objectives, are listed below.

Evaluation questions:

- The extent to which the CIFs are complementing or competing with other climate-related funds, and their consistency with the UN-led climate process.
- The extent to which the design, strategic approaches and investment priorities of the CIFs are appropriate for achieving their objectives.
- The extent to which the CIF actions or plans are designed to bring about sectoral, market or behavioural transformation.
- The impact of the CIFs on enabling environment and incentives for private sector investment in climate-resilient, low-carbon development.
- How effectively, and on what issues, the CIFs are fostering and disseminating learning from the activities that they are supporting.
- The extent to which national investment plans and projects have been cost-effective in design (and where observed, in execution).

---

<sup>71</sup> Independent Evaluation of the Climate Investment Funds: Approach Paper, August 21, 2012. Available at: [https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/Independent\\_Eval.pdf](https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/Independent_Eval.pdf)

<sup>72</sup> <http://www.cifevaluation.org/news.html>

- The extent to which CIF funding mobilises additional funds (donor and otherwise, at the international or country levels).
- The extent to which MDB capabilities contributed to the mobilisation and delivery of concessional climate financing at significant scale.
- The extent to which the CIF programmes governance and management arrangements have facilitated efficient decision-making.
- How the preparation, approval time and thoroughness of the review of national investment plans and projects has compared with ex-ante CIF expectations and with the experience of comparator organisations.
- The quality of the design, implementation and utilisation of M&E in assessing results, facilitating decision making and learning at the project, country and Fund level.

The different independent evaluation products and the timeline for their completion are set out in Table 19.

**Table 19: CIF Independent Evaluation products and timeline**

Product	Timeline
<u>Inception report</u> delivered, reviewing and approved	December 2012
<u>Interim report</u> discussed at May CIF Trust Fund Committee meetings	May 2013
<u>Final evaluation</u> report presented to the Trust Fund Committees.	November 2013

The proposed budget of \$1.8m for the Independent Evaluation of the CIFs will be drawn in equal share from the CTF and SCF Trust Funds.

As the Independent Evaluation is formative, the quality of the design, implementation and utilisation of M&E will be assessed. It is expected that the successful consultants (IFC International) will make recommendations about subsequent evaluations at a later stage.

#### 5.4.2.2 Project level / thematic evaluations

At present, project level evaluations of CTF funded projects will take place either through randomised samples of MDB projects by the respective Independent Evaluation Groups, or through formal evaluations integrated into country Investment Plans (as is the case in Turkey<sup>73</sup> and Mexico) using grants from CTF funds. This is currently done on an *ad hoc* basis; there is no strategic evaluation plan for the CIFs at present. As a result, the UK has requested a paper from the CIF Admin Unit at the joint CTF/SCF Committee meeting in May 2013, setting out:

- The current practice within the MDBs on evaluation;
- Whether there are any gaps to realise the lesson-learning objectives of the CIFs; and
- The costs of addressing these gaps.

It is expected that these costs will be drawn from existing funds within the CTF and SCF Trust Funds.

<sup>73</sup> Impact Assessment of Clean Technology Fund in Renewable Energy and Energy Efficiency Market in Turkey: [http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/Approval\\_by\\_mail\\_Impact\\_Assessment\\_of\\_Clean\\_Technology\\_Fund\\_in\\_Renewable\\_Energy\\_and\\_Energy\\_Efficiency\\_Market\\_in\\_Turkey\\_EBRD,IBRD,IFC\\_project\\_proposal.pdf](http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/Approval_by_mail_Impact_Assessment_of_Clean_Technology_Fund_in_Renewable_Energy_and_Energy_Efficiency_Market_in_Turkey_EBRD,IBRD,IFC_project_proposal.pdf)