

An International Climate Fund business case for DECC investment in the BioCarbon Fund and the Forest Carbon Partnership Facility – Carbon Fund

# Contents

Exec	cutive summary	3
Busi	iness Case Contents	
1	Strategic Case	14
1.1	Context and need for ICF intervention	14
1.2	Impact and outcome that we expect to achieve	46
2	Appraisal Case	49
2.1	What are the feasible options that address the need set out in the strategic case? Assessing the strength of the evidence base for 60 each feasible option	
2.2	Assessing the strength of the evidence base for each feasible option	75
2.3	Economic Analysis of FCPF-C, the BioCarbon Fund and FIP	77
3	Commercial Case	96
3.1	Why is the proposed funding mechanism/form of arrangement the right one for thi intervention, with this development partner?	
3.2	Value for money through procurement	96
4	Financial Case	98
4.1	What are the costs, how are they profiled and how will you ensure accurate	
	forecasting?	99
4.2	How will funds be paid out?	100
4.3	What is the assessment of financial risk and fraud?	102
4.4	How will expenditure be monitored, reported and accounted for?	103
5	Management Case	104
5.1	What are the Management Arrangements for implementing the intervention?	104
5.2	What are the risks and how will they be managed?	105
5.3	What conditions apply (for financial aid only)?	109
5.4	How with progress and results be monitored, measured and evaluated?	109
5.5	Logframe	112

# **Executive Summary**

# What are we trying to achieve?

- 1. The UK is seeking to address market and governance failures that result in forests being undervalued. These failures drive deforestation and addressing them will deliver strong carbon, biodiversity and livelihood benefits in developing countries. We have already invested heavily in helping forested countries to prepare and gain capacity in this sector; in this business case, we are keen to build on this and support a scaling up of delivery.
- 2. There is no clear consensus on what works in tackling deforestation, and a number of donors, including the multilateral funds, have struggled to deliver finance and results in this sector, owing to the strong underlying governance and market failures. Our strategy under the International Climate Fund (ICF) is to develop a forests finance portfolio which tests different approaches to delivering results at scale; to date, the emphasis has been on capacity building and commodity trade-related measures (e.g. focused around the timber trade); the investments in this Business Case will expand and deepen our portfolio, generating new and complementary financial returns for protecting forests, including using payment for results as a model.
- 3. This will be achieved through ICF investments in 2013 and 2014 in two multilateral forestry funds totalling £95million.
  - BioCarbon Fund (BioCF) £50 million
  - Forest Carbon Partnership Facility Carbon Fund (FCPF- C) £45 million
- 4. These funds are similar in a number of respects. They both target market and governance failures along the route to sustainable land use and forests. Together, the funds help incentivise countries to move forward from essential readiness work towards scaled-up action to reduce the rate of deforestation. As such, the funds are strongly aligned with the UNFCCC process for Reducing Emissions from Deforestation and forest Degradation in developing countries (REDD+). REDD+ is defined in the UNFCCC as a three phase process designed to use market and financial incentives in order to reduce the emissions of greenhouse gases from deforestation and forest degradation.
- 5. However, the two funds allow us to test different approaches. A UK investment of £50 million in the BioCF would contribute towards a new window: Tranche 3, the Sustainable Landscapes and Forests Initiative. Uniquely, this new funding window seeks to pilot programmes at the much larger jurisdictional scale to tackle deforestation, as well as working closely with the private sector to deliver purchase agreements for the sustainable commodities produced on the land supported by the fund. A jurisdictional scale means a landscape-wide area that is governed by a single political jurisdiction. We are recommending a £50 million contribution as this would be sufficient to support investments in two developing countries, which are in the process of being selected. £50 million would strike a balance between the risk of investing in this new fund and the benefit of being able to test the concept in multiple countries. Based on estimated donor contributions, UK burden share would be approximately 40% in Tranche 3, with associated technical support. This would be a new investment for the UK.
- 6. A UK investment of £45 million in the FCPF-C would enable the fund to scale up to include a sixth country. The FCPF-C develops new market instruments for pricing forest carbon emission reductions, and is designed on a classic payment for results model. Existing funds within FCPF-C are expected to support five country programmes, with finance explicitly linked to verifiable emission reductions. Demand for the FCPF-C is thought to be in the region of ten countries, though only Costa Rica has an agreed plan; UK funds would enable the FCPF-C to be expanded to a further country. The proposed investment complements UK investment of £11.5 million in 2011. This would increase the UK burden share from about 5% to approximately 15%.

- 7. Defra are also considering an investment of £25 million in a forest multilateral fund. The business case was originally drafted to consider their investment alongside the DECC investments proposed above. Defra were originally considering an investment in the FIP, and therefore investment in this fund has been considered in more detail in the strategic case (section 1.1.12). However, after the Quality Assurance stage officials altered their position and are now also considering an investment in the BioCF, although they have not yet sought Ministerial approval. It was decided that the Defra investment would therefore be considered separately and that this business case would consider the DECC investments only.
- 8. Deforestation now accounts for about 10% of global GHG emissions<sup>1</sup>, and 80% of this is driven by agriculture<sup>2</sup>. Therefore, there is a strong climate case for action to address these drivers of deforestation. There is also a strong poverty (1.2bn poor people depend on forests for their livelihoods) and biodiversity (tropical forests provide habitat for half or more of the world's known terrestrial plant and animal species) case.
- 9. Deforestation strikes disproportionately at the world's poorest communities and the most marginalised and vulnerable groups. Forest dependence varies from those whose livelihoods are totally reliant on forest resources, to more distant users reliant on the forests for a range of ecosystem services.<sup>3</sup> Forest dependence is higher among indigenous people, the extreme poor and women, and so deforestation often has the greatest impact on these groups in terms of livelihood, culture and health.<sup>4</sup>
- 10. Under the UNFCCC, we have been working to agree rules to Reduce Emissions from Deforestation and forest Degradation in developing countries (REDD+). REDD+ is defined as a three phase process: (1) REDD+ readiness (i.e. capacity-building), (2) demonstration at scale, (3) payment for results.
- 11. So far, actual action has focused primarily on small-scale forests projects or on capacity-building (i.e. phase 1). This is important, but it is essential that we move beyond this if we are to reduce deforestation rates. In contrast to this, Norway in particular has attempted to test payment for results (phase 3) by pledging very large sums to Indonesia (\$1bn), Brazil (\$1bn) and Guyana (\$250m). They have had some successes, but progress has been slower than had been initially expected. It is also the case that a global carbon market for REDD+ credits has not emerged.
- 12. Two examples of success in terms of the forestry agenda are:
  - Brazil. Domestic efforts, primarily through increased monitoring and enforcement, and public pressure to protect the Amazon, have driven an impressive 75% reduction in the rate of deforestation since 2005. There is some evidence that this has delivered economic benefits for Brazil in the form of increased agricultural productivity.
  - Illegal logging. A combination of legislation in the EU, capacity-building with forest nations and forest nation self-interest (i.e. securing tax revenues lost as a result of illegal activity) have significantly reduced this as a cause of deforestation. This has sparked interest in using a similar approach with agricultural commodities such as palm oil and soya.

<sup>&</sup>lt;sup>1</sup> IPCC Fifth Assessment Report (AR5), chapter 6-3 (2013); and Drivers of Deforestation and Forest

<sup>&</sup>lt;sup>2</sup> Degradation: A Synthesis Report for REDD+ Policymakers by Gabrielle Kissinger, Martin Herold, Veronique De Sy (2012) <sup>3</sup> FAO (1997). 'Numbers of Forest 'Dependent' Peoples and Types of People Forest Relationships' in Asia-Pacific Forestry

FAO (1997). 'Numbers of Forest 'Dependent' Peoples and Types of People Forest Relationships' in Asia-Pacific Forestry Sector Outlook study: People and Forests in Asia and the Pacific: Situation and Prospects. FAO, Rome.Available from: http://www.fao.org/docrep/w7732e/w7732e04.htm

World Bank (2008). Poverty and Forest Linkages: A Synthesis and Six Case Studies. World Bank, Washington. Available from: http://www.profor.info/Documents/pdf/livelihoods/PovertyForestsLinkagesCaseStudiesSynthesis.pdf

- 13. There is growing interest from the private sector in shifting their supply chain to sustainably produced commodities. This is driven by consumer demand, wanting to avoid negative publicity and concern over security of supply. The Consumer Goods Forum has committed to zero deforestation supply chains for beef, soy, palm and pulp/paper by 2020, but needs help from governments to achieve this. This is why we are working together with them and other governments in the Tropical Forests Alliance 2020 (TFA2020). Changes in the private sector in line with these commitments could bring alternative revenue streams to REDD+ countries, which is especially important in the absence of a deep market for carbon credits from forests.
- 14. It is also necessary to operate at a meaningful scale. It is clear that we need to operate at a scale beyond capacity-building (i.e. phase 1) in order to incentivise forest nations to progress through the REDD+ phases. But equally, we need to test approaches to REDD+ at a scale that will bring results, not only in the long term. Large-scale bilateral partnerships have been slower to deliver, partly because of their vast geographical scale. Programmes that operate at a subnational or jurisdictional scale could deliver results more quickly, while serving as a demonstration of how to tackle the drivers of deforestation.
- 15. Figure 0.1 shows the six multilateral forest funds, the Phase of the REDD+ process that they support, and the number of participant countries in each fund. It demonstrates that the number of countries supported at each stage falls considerably through the REDD+ process. Experience from these multilateral funds indicates that demand significantly outweighs supply in the latter REDD+ phases, and that support for them is necessary.

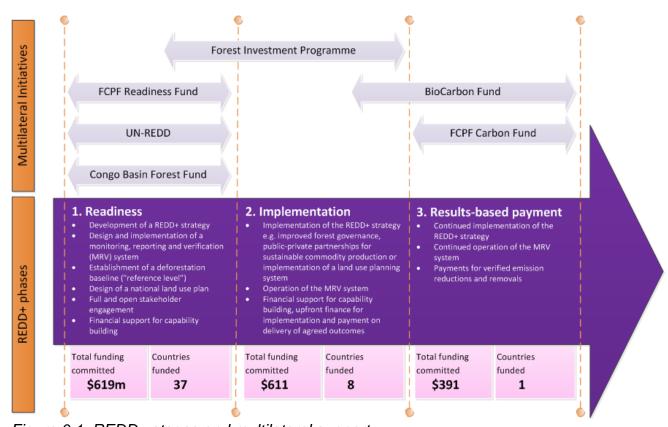


Figure 0.1: REDD+ stages and multilateral support

# BioCarbon Fund (BioCF)

- 16. This fund will mobilise finance to reduce carbon emissions in forest and agricultural ecosystems.
- 17. The Fund would 1) provide technical assistance for REDD+ implementation and measures which improve the enabling environment for private sector investment; 2) offer finance for Verified Emission Reductions associated with avoided deforestation; and 3) secure private sector finance, for example through purchasing commitments for sustainable commodities produced in the jurisdiction (sometimes called 'offtaker agreements').
- 18. This focus on engaging the private sector in country programmes, and in particular on long term supply agreements for commodities produced in the jurisdiction (large multinationals including Mondelez, Unilever and Bunge Environmental Markets have already shown an interest), is particularly interesting to us. Conservative estimates of private sector leverage suggest that between 1:1 and 1:5 is possible at the programme level when including purchase agreements.
- 19. Each programme under the BioCarbon Fund will operate at the jurisdiction-scale i.e. within a landscape-wide area that is governed by a single political jurisdiction. Activities that are likely to be supported include small scale plantation farming, sustainable forest management, afforestation and reforestation, regeneration, National Park designation / no-deforestation zoning, agroforestry and sustainable agricultural practices.
- 20. We are working with other potential donors to consider countries in which to invest. Independent analysis has identified a list of possible countries based on their implementation of early REDD+ activities (and therefore capacity for further finance), political will, and commodity production. Taking into account World Bank and UK capacity in-country, some possible geographies to consider would appear to be a province in Indonesia (possibly east or central Kalimantan), scaling up an existing pilot in the Oromia region of Ethiopia, and the Amazon region of Colombia. Defra is considering its own preferences.
- 21. The BioCarbon Fund has existed since 2004, focusing on smaller scale projects which deliver verified emissions reductions for the Clean Development Mechanism. However, our investment and those of Norway and the US would open a new tranche (or window). Investing at the beginning gives us an opportunity to seek the private sector focus that we want, and to ensure that the scale and geography of the interventions are appropriate.

### Forest Carbon Partnership Fund – Carbon Fund (FCPF-C)

- 22. FCPF-C is designed to provide support to countries to scale up REDD+ implementation to deliver emission reductions at scale. It does this by providing payments on delivery of verified emission reductions ('payment for results') for a number of pilot programmes in countries that have made good progress with implementing phase 1 activities (under the related FCPF Readiness Fund). The fund is designed to close in 2020, when it is envisaged it will be replaced by a wider market for REDD+ credits under the auspices of an international climate agreement for this period.
- 23. The FCPF-C does not provide upfront finance for the implementation of policies and programmes that will be required to deliver the emission reductions. It is envisaged that the promise of finance on delivery of results will provide a sufficient incentive for countries to make the required reforms, either through their own investments, or by leveraging other sources. These policy, market and governance reforms are expected to be valuable in their own right, helping countries to secure wider flows of finance (e.g. by creating a safer investment environment), rather than relying solely on carbon finance.

- 24. The UK pledged finance (£11.5m) to FCPF-C in 2008, and the Fund became fully operational in May 2011 and has a capital of about US\$390m, sufficient for 5 country programmes at about £45m (US\$70m) per country. 10 countries are expected to submit emission reduction plans by early 2014: Costa Rica (the most advanced), DRC, Chile, Ethiopia, Indonesia, Mexico, Ghana, Nepal, Republic of Congo and Vietnam.
- 25. The Fund will pay for emission reductions over a five year period, with a cut-off date of 2020, which means that countries must have been accepted into the programme by 2015. There is a risk that the plans submitted by countries are not sufficiently robust to merit donor finance, and therefore that no more than 5 country plans would be agreed before the cut off in 2015. To avoid additional UK finance being transferred in advance of need, we recommend not committing funds until developing countries have presented their investment plans, at which point we can choose whether to support them or not.

# How these programmes fit with the rest of the forests portfolio

- 26. Investments in these funds would fit well with the existing UK forests portfolio. This includes a balance of bilateral and multilateral programmes that test a range of approaches to reducing deforestation.
- 27. The UK has already invested in a number of multilateral funds, mostly focused on REDD+ readiness activities and beginning to move beyond these. None of these funds require additional resources at this time and, in any case, we are keen to help move at least forest nations well beyond this stage to demonstration at scale and testing payment for results (i.e. REDD+ phases 2 and 3). The two proposed interventions do precisely this.
- 28. The price that countries will be paid per tonne of verified emissions reduction will be established in the development of individual country plans. Indications from FCPF suggest this is likely to be around \$5 per tCO<sub>2</sub>. This does not reflect the true cost of achieving these reductions, but it is not intended to. Instead, the payment is meant to be an incentive for countries to deliver emissions reductions, without obligating donor countries to pay the full price for changes upfront, before they have taken place.
- 29. In our own modelling, we have calculated the costs of the two fund programmes based on the best available data from Costa Rica's existing bid to the FCPF-C and pilot BioCF activities in Ethiopia. The programme activities will be supported by both donor contributions and private sector and forested country government contributions. Our modelling assumes a price of \$5 (£3.26) per tonne for verified emissions reductions, and includes all contributions, including those from the private sector and forested country governments in our calculations of overall cost per tonne of emissions savings for these investments. This is why Our cost per tonne figures for the BioCF and FCPF-C are £11.44 and £13.45 respectively. These figures are within the current range of £7-25 per tonne for ICF investments.

# Who will be implementing the programme?

- 30. BioCF and FCPF-C are implemented by the World Bank. The World Bank, as a trusted partner with a known track record and safeguards, offers UK taxpayers a lower risk way of investing overseas. The investments are attractive in terms of administration costs on account of economies of scale and the efficient use of common mechanisms and safeguards.
- 31. Both the BioCF and FCPF-C require up-front capital in addition to the proposed UK investments. Based on modelling of leverage ratios on an indicative portfolio of projects, it is estimated that to achieve the changes required to lead to emission reduction for a £50m UK BioCF investment, a further £15m of donor finance is required to fully capitalise the two BioCF windows, as well as £51m of up-front public sector investment and £118m of private sector investment. For a £45m FCPF-C investment, a further £72m of up-front public sector investment and £104m of private sector investment will be required to

- achieve the emission reductions. It is expected that these additional sums could be drawn from other REDD+ readiness funds, such as the FIP, as well as from country- and project-specific bilateral or domestic investments.
- 32. For the BioCF governance, the UK is likely to have a high degree of control and for some jurisdictions a veto, although not a majority share. The UK has been heavily involved in and influential over discussions to date around country selection. For FCPF-C, the UK is already involved as a donor and is actively involved in fund management. Our influence will be increased somewhat by a larger investment, but would be broadly equivalent to that of other multi-donor trust funds.

# What are the expected results?

- 33. Both funds demonstrated positive economic benefits and sensitivity testing suggested these are robust to the key assumptions used.
- 34. Tranche three of the BioCarbon Fund is at the stage of selecting potential intervention countries, and no emissions reductions payments have yet been made. A pilot jurisdiction, in Ethiopia, is developing rapidly and is demonstrating strong consensus on the value of a jurisdictional approach. However, Lion's Head Consultants suggest that in terms of cost per tonne of carbon emissions saved, cost savings of around 50% are likely when comparing jurisdiction projects with individual projects<sup>5</sup>.

# Summary of Economic Analysis of a proposed £50m contribution to the BioCarbon Fund<sup>6</sup>

Summary	Benefit/ Cost Ratio	Leverage of private finance	MTCO <sub>2</sub> e	Land (million ha)	Livelihoods	Attributed cost per tonne CO <sub>2</sub> e
Countries not yet selected. Results based on expected CO <sub>2</sub> savings from modelled interventions	4.41	£118m representing 0.93 ratio	11	0.5	24,000	£11.44

1. Ten countries have presented early plans for intervention to FCPF-C, and two have presented full emissions reductions plans (ER-PINs). FCPF-C has signed a funding agreement in principle with one of these, Costa Rica. No payments for emissions reductions have yet been made from the Fund, but are expected from 2015.

<sup>&</sup>lt;sup>5</sup> Lion's Head paper on BioCarbon Fund efficiency savings.

<sup>&</sup>lt;sup>6</sup> Note that apart from the attributed results column, the results in this table are programme results.

# Summary of Economic Analysis of a proposed £45m contribution to FCPF-C<sup>7</sup>

Summary	Benefit/ Cost Ratio	Leverage of private finance	MTCO <sub>2</sub> e	Land (million ha)	Livelihoods	Attributed cost per tonne CO <sub>2</sub> e
Countries not yet selected. Results based on expected CO <sub>2</sub> savings from modelled interventions. These come from expectations in Early Ideas Notes.	3.05	£104m represents 0.77 ratio	10	0.7	50,000	£13.44

#### What are the main risks?

- 2. It has proven hard to spend climate finance on forestry projects, and hard also to spend it well. There are few examples of highly performing investments in the sector. This is why it is important that we continue to test new approaches. As with all projects, there are a number of risks associated with this investment. However, the project development team judge these risks are manageable, and also in line with agreed ICF risk appetite. The key risks listed below are all rated as 'red' on the RAG rating scale. Six key risks, and the mitigating actions, are listed below:
  - Difficulty securing private sector leverage. Companies may not be genuinely committed to sustainable sourcing and will do the minimum required to protect their brands, and no more. The programme could struggle to form partnerships with companies as envisaged. The impact of the programme would be significantly diminished as a result.

<u>Mitigation</u>: HMG will seek to influence funds to work only with those companies with explicit and verifiable commitments, transparent supply chains and practices, and assurance processes. Means of spurring further private sector action will be explored through the demand-side measures component. HMG will use its experience of successful intervention in the timber trade to expand influence into the agri commodity sector. There are several potential routes to influence, eg as a leading contributor to the work plan of the Tropical Forest Alliance 2020 to harness synergies in Consumer Goods Forum companies' ambition for zero deforestation supply chains.

Private sector investments supported by the programme are not additional and would have taken
place without public support. The programme provides an unjustified subsidy to private
investments.

<u>Mitigation</u>: Private sector investment in the programme's area of intervention is at present limited. HMG to influence the funds to ensure additionality is a central consideration for private sector funding.

<sup>&</sup>lt;sup>7</sup> Note that apart from the attributed results column, the results in this table are programme results.

• National, jurisdictional and project baselines against which performance is measured are inflated, exaggerating estimates of performance and reducing additionality.

<u>Mitigation</u>: All of the preferred funds either directly support development of accurate baselines or require accurate baselines and monitoring arrangements as a precursor to results-based payments.

Projects fail to create interventions that are sustainable in the long term.

<u>Mitigation</u>: Ensure that long term sustainability of project concepts is written in from the start, and that progress against this aim is checked at regular intervals through the lifetime of the projects.

 Support for sustainable forestry and agriculture displaces unsustainable activities into other locations. Overall rates of deforestation remain high and the credibility of investments to reduce deforestation is impaired.

<u>Mitigation</u>: Leakage is a risk with all investments in climate change mitigation and reducing deforestation. Reducing leakage is part of a long-term transformation. Leakage will be partially managed through working to encourage a broad-based transformation of supply chains. The jurisdictional approach central to the BioCarbon fund may reduce this risk where consistent controls are applied across a landscape.

• Not possible to scale up interventions.

<u>Mitigation</u>: Focus on building jurisdictional level contacts and providing sufficient World Bank resources to manage the wide range of projects that are required.

# **Next steps**

3. This proposed portfolio of multilateral forestry funds, with its diversified approach and strong governance structures and safeguards, is considered an effective way of tackling many of the risks inherent in investing in forestry projects overseas. Moreover the multilaterals offer the potential for transformational action on tackling deforestation whilst also delivering clear carbon, biodiversity and poverty reduction benefits. Subject to approvals and Ministerial agreement, action following this Business Case includes negotiating and signing the necessary participation agreements and memoranda of understanding to support the investments, and making payments by Promissory Note before the end of the calendar year.

# **Acronyms**

AfDB – African Devlopment Bank

BCR - Benefit Cost Ratio
BioCF - BioCarbon Fund

BioCF+ – BioCarbon Fund Plus

BioCF T3 – BioCarbon Fund Tranche Three

CBFF – Congo Basin Forest Fund
CDEL – Capital Delegated Limit
CGF – Consumer Goods Forum
CIF – Climate Investment funds

CRGE – Climate Resilient Green Economy

DECC – Department of Energy and Climate Change

Defra – Department for the Environment, Food and Rural Affairs

DFID – Department for International Development

DRC – Democratic Republic of the Congo

ER – Emissions Reduction

ERPA – Emissions Reductions Payments AgreementsER-PIN – Emissions Reduction Programme Idea Note

FAO – Food and Agriculture Organisation of the United Nations

FCPF-C – Forests Carbon Partnership Fund – Carbon Fund

FCPF-R – Forests Carbon Partnership Fund – Readiness Fund

FIP – Forest Investment Program

FTE – Full Time Equivalent

GAC – Governance and Anti-Corruption

GHG – Greenhouse Gas

HMG – Her Majesty's Government (UK Government)

ICF – International Climate Fund

IDB – Inter-American Development BankIFC – International Finance Corporation

IPCC – International Panel on Climate Change

KPI – Key Performance Indicator

LULUCF – Land Use, Land Use Change, and Forestry

M&E – Monitoring and Evaluation

MDB – Multilateral Development Bank

MFI – Microfinance Institution

MRV – Monitoring, Reporting and Verification

NGO – Non-Governmental Organisation

NPV – Net Present Value

ODA – Official Development Assistance

OECD - Organisation for Economic Co-operation and Development

OFWE - Oromia Forest and Wildlife Enterprise

PwC – PriceWaterhouseCooper

RDEL – Resource Delegated Limit

REDD+ - Reducing Emisssions from Deforestation and Forest Degredation Plus

R-PP – Readiness Preparation ProposalSFM – Sustainable Forest Management

UNDP – United Nations Development Programme

UNEP – United Nations Environment Programme UNFCCC – United Nations Framework

Convention on Climate Change

UN-REDD – United Nations Collaborative Programme on Reducing Emissions from

Deforestation and Forest Degradation in Developing Countries

VER – Verified Emissions Reductions

VFM – Value For Money

# 1 Strategic Case

#### 1.1 Context and need for ICF intervention

#### 1.1.1 Deforestation and the drivers of deforestation

- 1. Forests matter. They matter for climate change, for biodiversity and environmental sustainability, and for livelihoods. Global annual deforestation from 2000-10 was 13m hectares<sup>8</sup>, equivalent to approximately half the area of the United Kingdom every year. Most forest loss was concentrated in tropical regions, with South America, Africa and parts of Tropical Asia recording the largest net losses<sup>9</sup>.
- 2. In 2013, the Intergovernmental Panel on Climate Change (IPCC) estimated that deforestation accounts for 10% of global CO<sub>2</sub> emissions<sup>10</sup>, the second largest source of carbon emissions after the burning of fossil fuels. Given its contribution to climate change, tackling deforestation is widely agreed to be a cost-effective mitigation option<sup>11</sup>. Eliasch estimated that while the finance required to halve emissions from the forest sector to 2030 could be around \$17-33 billion per year, the long-term net mitigation benefits could amount to \$3.7 trillion<sup>12</sup>. As well as the carbon mitigation potential, tackling deforestation provides considerable co-benefits for people and for biodiversity.

Social and environmental impacts of deforestation

- 3. Forests are crucial to the livelihoods of 1.2 billion of the world's poorest people, including 60 million indigenous people who depend on forests for their survival for food, shelter and medicine. Deforestation strikes disproportionately at the world's poorest communities and the most marginalised and vulnerable groups, depriving people of their livelihoods, harming biodiversity, and causing conflict.
- 4. Deforestation results in the loss of biodiversity and in the impairment of vital ecosystem services. Ecosystem services provided by forests include regulation of climate, carbon and water cycles, protection of soils and watersheds, regulation of flows in water courses and air quality benefits. More than three-quarters of the world's accessible fresh water originates from forested catchments<sup>13</sup>. Case studies in Brazil, Indonesia and India found that ecosystem services and non-market goods accounted for between 47% and 90% of the total income of the poor<sup>14</sup>.
- 5. Forests guard against vulnerability and, as a result, deforestation can increase poverty and reduce resilience by removing important sources of livelihoods and subsistence. As

<sup>&</sup>lt;sup>8</sup> FAO. The Global Forest Resources Assessment (2010)

<sup>&</sup>lt;sup>9</sup> FAO, The Global Forest Resources Assessment (2010)

<sup>&</sup>lt;sup>10</sup> IPCC (2013)

<sup>&</sup>lt;sup>11</sup> The Stern Review on the Economics of Climate Change (2006)

<sup>&</sup>lt;sup>12</sup> Eliasch, J., Climate Change: Financing Global Forests (2008)

<sup>&</sup>lt;sup>13</sup> Millenium Ecosystem Assessment (2005)

<sup>&</sup>lt;sup>14</sup> TEEB. (2009) The Economics of Ecosystems and Biodiversity for National and International Policy Makers, UNEP, Nairobi.

well as offering mitigation benefits, forests, therefore, increase countries resilience to extreme weather events (expected to increase under future climate scenarios), and could enable countries to better adapt to new climatic conditions.<sup>15</sup>

#### Agricultural drivers of deforestation

- 6. Agriculture was the greatest contributory factor to deforestation from 2000-10<sup>16</sup>. In Latin America, which has recorded the highest rates of forest loss over the past 30 years, much of the deforestation has been due to the expansion of crop and pasture land<sup>17</sup>. Asia has had some of the highest rates of tropical deforestation, most of it in Indonesia. Much of the natural forest conversion (clearance) has been to establish large-scale agricultural and pulp and paper plantations.<sup>1819</sup> Africa is on the cusp of major new commodity expansion e.g. with ambitious acquisitions in Côte d'Ivoire, Ghana and Liberia world-leading corporate palm-oil companies Sime Darby and Golden Agri Resources have established footholds<sup>20</sup>.
- 7. Demand for the agricultural commodities is expected to rise in the coming years, with rising populations, higher incomes and changing diets. The FAO and OECD estimate that a 70% increase in food production will be required to meet the needs of increased population to 2050<sup>21</sup>. Higher meat and processed food product consumption is expected, both increasing inputs commonly associated with deforestation.

Non-agricultural drivers of deforestation

8. Non-agricultural investment also has an impact on forests. Mining and infrastructure have significant impacts<sup>22</sup>, encouraging people to live in remote forest areas and the clearance of forests. An increase in investment in infrastructure and mining is expected in developing countries. Since 2000 Africa's annual private infrastructure investments have more than tripled.<sup>23</sup>

### 1.1.2 Market failures

9. The primary market failure affecting forests is the lack of value attached to the many social and environmental benefits which they provide. The replacement of large areas of forest by agriculture reflects the fact that forests are greatly undervalued as a resource. While the alternative uses of forested land are worth more than standing forest, current rates of deforestation will continue; investments like the one proposed that address this driver are needed.

<sup>&</sup>lt;sup>15</sup> UNDP, ENEP, World Bank & WRI, World Resources 2008: Roots of Resilience (2008)

<sup>16</sup> FAO

<sup>&</sup>lt;sup>17</sup> Rademaekers et al (2010)

<sup>&</sup>lt;sup>18</sup> Rademaekers et al (2010)

<sup>&</sup>lt;sup>19</sup> Kissinger (2012). Drivers of Deforestation and Forest Degradation: A Synthesis Report for REDD+ Policymakers

<sup>&</sup>lt;sup>20</sup> BBC News, Ivory Coast hopes to squeeze the profits from palm oil, 9 September 2013

<sup>&</sup>lt;sup>21</sup> OECD-FAO Agricultural Outlook (2013)

<sup>&</sup>lt;sup>22</sup> Kissinger (2012). Drivers of Deforestation and Forest Degradation: A Synthesis Report for REDD+ Policymakers

<sup>&</sup>lt;sup>23</sup> McKinsey, What's driving Africa's Growth, 2010

- 10. Where opportunities do exist for investment in sustainable management of forests, investments can be held back by capital market failures that prevent investors accessing the finance required to develop projects. Barriers include:
  - Upfront cost and rate of return investments in sustainable forestry and agriculture require significant upfront financing and assistance, but projects take a long time to reach maturity and generate return<sup>24</sup>. As a result perverse incentives exist to clear forested land to generate capital from timber sales to cover agriculture set up costs.
  - Perception of risk banks lack knowledge and experience of lending to smallholder farmers and forestry projects and view this lending as high risk. Small scale agricultural producers in developing countries have little knowledge or confidence in modern banking institutions and products<sup>25,26</sup>.
- 11. Forest multilateral funds including FCPF-C and BioCF seek to address the market failures by providing reliable and sustainable alternative flows of finance that incentivise countries to keep forest standing, and increase agricultural productivity on non-forested land. They do this by:
  - Providing finance for verified emission reductions (VERs) from forests, against an agreed subnational or national baseline. These 'credits' are written off by donors<sup>27</sup>. However, it is anticipated that countries will eventually be able to access compliance markets, For FCPF-C, this is the only form of finance;
  - Providing technical assistance to enable the shift to more sustainable land uses –
    e.g. capacity support and technical advice to sustainable production, sustainable
    forest management, and certification (BioCF only);
  - Securing alternative flows of finance in the form of purchasing agreements for sustainable commodities (e.g. palm oil, cocoa, soy) produced in a participating region (BioCF only);
  - Facilitating access to loans, equity, and guarantees for private sector projects, e.g. by linking private sector organisations with lenders such as IFC (BioCF only).

#### 1.1.3 Governance failures

12. High levels of forest loss tend to be correlated with lower levels of government effectiveness, based on World Bank governance indicators<sup>28</sup>. In many forest nations, bureaucratic capacity, judicial oversight, market regulation and democratic accountability are weak. Governments have weak incentives to nurture sustainable economic growth and protect livelihoods and public goods. There are multiple stakeholders with competing interests in the control, use and exploitation of forest resources alongside unclear or conflicting provisions for tenure and land use. Those who depend on forests more directly are frequently poor, marginalised and weakly represented politically.

<sup>&</sup>lt;sup>24</sup> Forum for the Future (2009) Forests Investment Review (page 54)

<sup>&</sup>lt;sup>25</sup> Kloeppinger-Todd.R & Sharma M. (2010)

<sup>&</sup>lt;sup>20</sup> Boscolo, M. and Whiteman, A. (2012)

<sup>&</sup>lt;sup>27</sup> Note that Australia and the USA do not write off their credits in this way.

<sup>&</sup>lt;sup>28</sup> Eliasch (2008) p.45

- 13. Insecure rights over forest land are a major driver of poverty, conflict, degradation of land and deforestation<sup>29</sup>. Conflicting claims, as well as the lack of government capacity to provide adequate management of forests under nominal state control, creates uncertainty and discourages a long-term perspective in the management of the resource.
- 14. The multilateral forest funds including FCPF-C and BioCF seek to address these governance failures by providing support, in the 'Readiness Phase', for strengthening of institutions, clarification of land tenure, multi-stakeholder consultation, and design of benefit-sharing mechanisms. The Phase II and III funds require countries to submit clear plans for benefit-sharing, to ensure that finance provided is reinvested in the communities who depend on the forests, and in activities to address deforestation. Experience to date has demonstrated that this is a very challenging process, and progress within existing forest funds has been mixed. However, through the country selection process and finance model, we intend to fund only those that are successful or show good progress in Phase I and II, which is actually a relatively small proportion of the total.

# Reducing Emissions from Deforestation and forest Degradation (REDD+).

REDD is a 3 phase process that leads to payments for reductions in greenhouse gas emissions from deforestation. The phases are (I) the development of national strategies and capacity building; (II) the implementation of policies and measures to reduce deforestation; and (III) direct payments for measured reductions in forest carbon emissions.

Total donor finance pledged for REDD+ was US\$6.1bn between 2010 and 2012. Some of this funding has been put into supporting multilateral investment programmes including The Forest Carbon Partnership Facility (FCPF), the UN-REDD programme and the Forest Investment Programme (FIP).REDD+ activities have huge potential to support global mitigation in the short to medium term, and UK effort and action is clearly focused on supporting countries to move through the three REDD+ phases

# 1.1.4 Why should the UK intervene?

- 15. The UK has a global role to play in climate change mitigation and helping communities internationally to adapt to the impacts of climate change. Given that up to 10% of global greenhouse gas emissions are derived from deforestation and land-use change, securing ambitious national targets to curb deforestation is an important UK goal in climate change negotiations.
- 16. The UK strongly supports progress on REDD+ in the UNFCCC. We are negotiating, alongside EU partners, the scope of a proposed long-term global mechanism to pay for reductions in greenhouse gas emissions from deforestation. The UK will push at the November 2013 UNFCCC Conference of the Parties in Warsaw for agreement on the technical rulebook for this mechanism and for more forest nations to submit BAU

<sup>&</sup>lt;sup>29</sup> Hatcher, J. (2009) Securing Tenure Rights and Reducing Emissions from Deforestation and Degradation (REDD): Costs and Lessons Learned

- deforestation reference levels against which to measure progress. A commitment of new UK (and other donor) finance will be helpful in influencing discussions.
- 17. To achieve the reductions in deforestation required to help to mitigate climate change, a significant escalation in donor finance will be required<sup>3031</sup>. It is critical that donor and forest nations accelerate activity and generate tangible early evidence of success to build the required momentum.
- 18. The UK was a pioneer donor to the multilateral forest funds when they were first established, and has played a significant role to date in shaping them. This multilateral activity sits alongside existing UK bilateral initiatives and bilateral programmes funded by other governments. Norway's large partnerships in Brazil, Guyana and Indonesia play a key role in efforts in these countries to tackle deforestation. The UK is considering further bilateral investments, for example in Colombia. Table 1.1 lists existing UK investments.

# 1.1.4 The UK Investment Landscape

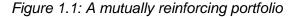
19. The UK has taken a balanced approach to tackling deforestation through a series of multilateral and bilateral investments, as shown in Table 1.1. This is consistent with the findings from the Independent Review commissioned by the UK Government and undertaken in 2011 by PwC and partners. The review looked at options for scaling up the UK's REDD+ portfolio to 2015<sup>32</sup>, and suggested that the UK should manage a 'mutually reinforcing portfolio'<sup>33</sup> in relation to REDD+ forests investments (see Figure 1.1 below). Such an approach would support multilateral, bilateral and private sector investments in parallel to provide an overall package of forest governance and mutual knowledge sharing.

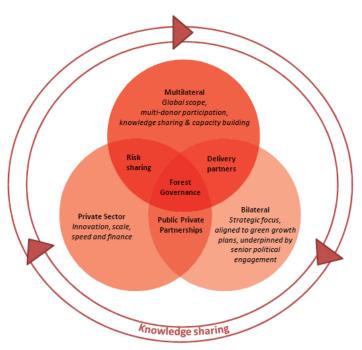
<sup>33</sup> PWC et al (2010) p.9

<sup>&</sup>lt;sup>30</sup> Prince's Charities ISU, Interim REDD+ Finance – current status and ways forward 2013-2020, 2012

<sup>&</sup>lt;sup>31</sup> UNFCCC, Report of the Informal Working Group on Interim Finance for REDD+, 2009

<sup>&</sup>lt;sup>32</sup> PWC et al (2010) 'Funding for Forests: UK Government Support for REDD+'





20. The proposed approach supports the existing UK investment strategy. Whilst this portfolio approach has always been central to the UK Government's investment strategy for forestry (under its principle vehicle, the International Climate Fund), the relative balance has shifted over the years. In the first half of this spending review period, the UK's portfolio was heavily weighted towards multilateral investments. More recently, however, the UK has developed a number of bilateral programmes with committed forest nation governments and jurisdictions. The pipeline of further interventions under consideration includes bilateral work with jurisdictions including the Colombian Amazon region. A number of other donors have since topped up their contributions to the multilateral funds, in light of their expected trajectory of disbursement over the next couple of years, and the UK's burden share has therefore gone down. Additional investment in multilateral funds would help to strengthen our portfolio objectives, return to the slightly higher burden share the UK originally had in the FCPF-C, and ensure a route to influence their alignment with UK objectives. Both bilateral and multilateral investments, if well-managed, can be effective value for money options; a decreasing share in multilateral funds leads to a weakening of UK influence over them, and therefore over global flows of funds for forestry.

Table 1.1: Existing UK investments

		Bilateral	Multilateral				
no	£m	Description	no	£m	Description		
1	£15m	Low carbon agricultural project with Colombia <sup>34</sup> – will help cattle farmers plant trees on cattle-grazing land to reduce greenhouse gas emissions, protect forests, increase biodiversity and improve livelihoods (DECC).	1	£15m	Forest Carbon Partnership Facility <sup>35</sup> (£3.5m to the FCPF Readiness Fund and £11.5m to the FCPF Carbon Fund) – World Bank fund to help 37 countries reduce deforestation GHG emissions. Burden share Readiness: 2.4%, Carbon: 4.7% (DECC).		
2	£79m	Forests Governance Markets and Climate initiative <sup>36</sup> – works in Liberia, Ghana, Indonesia and other countries to help stop illegal logging. Note that much of this funding is channelled through NGOs and so is not purely bilateral (DFID).	2	£100m	Forest Investment Programme <sup>37</sup> (CIFs FIP) – administered by the World Bank <sup>38</sup> to help 8 countries scale up investments in action against deforestation. Burden share 29% (DECC).		
3	£20m	Forestry Knowledge and Tools (KnowFor) initiative – supports good practice forest management by working with leading international think tanks to influence policy and decision makers (DFID).	3	£50m	Congo Basin Forest Fund <sup>39</sup> – administered by the African Development Bank <sup>40</sup> to help the 10 countries of the Congo Basin improve their forest management. Burden share c.45% (DECC).		

http://www.decc.gov.uk/assets/decc/11/tackling-climate-change/international-climate-change/7054-uk-colombia-statement-deforestation.pdf

http://www.forestcarbonpartnership.org/fcp

http://projects.dfid.gov.uk/project.aspx?Project=201724

https://www.climateinvestmentfunds.org/cif/node/5

http://www.worldbank.org/

http://www.cbf-fund.org/

http://www.afdb.org/en/topics-and-sectors/initiatives-partnerships/congo-basin-forest-fund/

4	£20m	Nepal Multi-Stakeholder Forestry Programme <sup>41</sup> – reduces rural poverty and maintains healthy ecosystems by helping local communities manage their forests (DFID).		
5	£25m	Indonesia – to improve accountability for land-use decisions, manage corruption in for issuing plantation and mining permits, and support spatial planning in Papua for sustainable economic development in Indonesia's last undisturbed forest (DFID).		
6	£25m	Brazil - provide financial and technical assistance for small and medium-scale farmers to develop and implement forest restoration and sustainable low carbon agriculture (DFID).		
7	£10m	Brazil - to reduce deforestation in Cerrado, focussing on the registration of land ownership and measures to prevent and deal with forest fires (DFID).		
	£194m	TOTAL BILATERAL	£165 m	TOTAL MULTILATERAL

- 21. This Business Case therefore recommends strengthening its portfolio approach by increasing its investment in two multilateral forest funds.
- 22. Multilateral investments have a number of important core attributes with which benefits are associated:
  - Harmonisation of donor and recipient approaches though shared programmes
  - Institutional strengths of delivery bodies robust governance, established reputation and credit history, and developed policies on safeguards. All of these benefits have the potential to lower investment risks and the costs for the UK and maximise leverage and potential transformational impact
  - Large scale of activity resulting from pooling of resources and effort

<sup>41</sup> http://projects.dfid.gov.uk/project.aspx?Project=200773

- Funding vehicles that support a diversity of different initiatives in different locations and contexts allowing us to deliver results in more places.
- A wide footprint of in-country staff where the UK does not have such staff and which could be used to expand the UK's footprint.

#### 1.1.6 Harmonisation of approaches

- 23. Potential benefits of investment in the proposed multilateral forest funds in this class include:
  - Financial incentive structures that encourage countries to move successfully through the REDD+ forestry support process, from capacity building to direct payments for emissions reductions.
  - Reducing leakage (the process by which deforestation is transferred to a different location as opposed to being reduced) where neighbouring jurisdictions apply a consistent approach.<sup>42</sup>
  - Expert development agency support to broker agreements, bringing together many initiatives under one roof and linking them to large scale programmes. Multilaterals can provide an established and trusted link to local knowledge and stakeholders, critical in successful design of local interventions.<sup>43</sup>

# 1.1.7 Institutional strengths

- 24. Potential benefits in this class include:
  - Multilateral initiatives are attractive to donor countries which may be more likely to engage with a perceived politically neutral organisation over a donor government.<sup>44</sup>
  - Lending legitimacy of large, well-governed implementing organisations can access capital markets and other forms of private sector investment effectively.
  - International standard safeguard policies, to prevent and mitigate undue harm to people and their environment in the development process<sup>45</sup>.

#### 1.1.8 Large scale of activity

- 25. Potential benefits in this class include:
  - Offering the UK the opportunity to influence a much bigger collective flow of money.
  - Working as part of a donor and recipient community can accelerate countries' progress through the stages of "readiness" by pooling of lessons learned and expertise.

<sup>&</sup>lt;sup>42</sup> UNEP, Pathways for Implementing REDD+, 2010

<sup>&</sup>lt;sup>43</sup> Vives, Development, 2004

<sup>&</sup>lt;sup>44</sup> DFID, Multilateral Aid Review, 2011

<sup>&</sup>lt;sup>45</sup>http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/EXTPOLICIES/EXTSAFEPOL/0,,menuPK:584441~pagePK:64168427~piPK:64168435~theSitePK:584435,00.html

- Visibility of support through high-profile multilateral channels which, when taken together, provides the UK with a strong negotiating tool to use for example at the UNFCCC Conferences of the Parties.
- Opportunity for truly transformational investment at this amplified scale.
- Economies associated with multiple donors and recipients working through a common mechanism including e.g. through a shared pool of administrative resource to manage donations and disbursements.
- Reduced transaction costs and host country requirements of channelling more finance through fewer channels.

#### 1.1.9 Diversity of initiatives supported

#### 26. Potential benefits in this class include:

- Being able to test and learn from a range of approaches to addressing the drivers of deforestation including innovative approaches. This investment is likely to make a significant contribution to learning in the field of forest and land-use projects. It could also influence the development of other existing or future funds in the sector.
- Opportunity to test a range of approaches to engage the private sector particularly important for the forests sector where investment conditions are uniquely challenging.
- Offer opportunity to hedge individual project risk. The complexity of interlinked forestry issues means approaches will necessarily have to be innovative and some approaches will invariably therefore be less successful than others.

#### 1.1.10 Private sector

- 27. Securing private sector investment to leverage and complement multilateral forest funding will be critical to achieving scale. The private sector has played an active role in recent forestry investments including through carbon markets<sup>47</sup>. However, with the current low price of carbon and the broader uncertainty surrounding carbon markets, project developers and the private sector are continuing to investigate other avenues for investment.
- 28. A number of multilateral corporations have made commitments to remove deforestation from agricultural commodity and forest product supply chains. Most notably in 2010 the Consumer Goods Forum (CGF), representing over 400 global corporates and £2.1 trillion annual revenue, committed to mobilise resources to help achieve zero net deforestation in key commodity supply chains by 2020. The CGF commitment is impressive, and has

<sup>&</sup>lt;sup>46</sup> Hardcastle et al, REDD+ partnership, 2011

<sup>&</sup>lt;sup>47</sup> For example, see the BioCarbon Fund Tranche One and Two: https://wbcarbonfinance.org/Router.cfm?Page=BioCF&FID=9708&ItemID=9708&ft=About

huge potential to limit deforestation, but it will only be realisable with support from producer and consumer-country governments. The Tropical Forest Alliance (TFA2020) – a public-private partnership composed of a number of consumer and producer-country governments, companies and NGOs – has been established to support this goal, and the UK is playing a significant role in steering its work. Alongside this demand-side incentive from multinational companies, engagement with small and medium private enterprises associated with forestry and agriculture in-country will also be required to generate bottom-up support for sustainable, low-emissions projects<sup>48</sup>.

- 29. Despite clear institutional strengths that lend themselves to private sector investment, experience suggests that multilateral forest funds still have room for improvement in this respect and that other arrangements should be made as part of our portfolio approach to climate finance particularly to achieve medium-term ambitions. However there are interesting multilateral proposals and inroads in this direction e.g. under the BioCarbon Fund and the Forest Investment Programme. A separate ICF business case for investments in Forests and Sustainable Land Use is also being developed with a particular focus on the private sector. Work under this programme, though not at a multilateral level, would complement multilateral efforts to leverage private sector investment.
- 30. The private sector is likely to participate directly in the funds by:
  - Agreeing to purchase credits from participating countries/regions, for use in voluntary carbon markets. These purchases would be consistent with our carbon market principles: all VERs produced from UK investments would be cancelled – those credits purchased by the private sector would come from different parts of the project.
  - Committing to purchase sustainable commodities produced in participating countries/regions.
- 31. These activities provide a direct relationship between the programmes and the private sector, and a direct financial incentive for participating countries. It is expected that private sector behaviour will also be significantly influenced indirectly by the programmes, through an improvement in the enabling environment for investment. Poor forest governance acts as a significant barrier to private sector investment; improved forest governance, clear land tenure, and a clear channel for dialogue with the private sector will help to reduce the risks associated with investing in developing countries.
- 32. 'De-risking' supply chains for timber or agri-commodities could cause activity to shift away from less-developed countries, and supply chains to shorten, at the expense of smallholders. Technical assistance from donors (including through the forest funds) can help to ensure that these social goods are preserved in the reform of forest governance. Adequate controls need to be in place to prevent subsidy to the private sector; the World

23

<sup>&</sup>lt;sup>48</sup> Engagement with private sector organisations in this space is particularly important as deforestation is driven increasingly by private sector investment in agricultural commodities such as palm oil, soya, beef and cocoa. Developing incentive structures that include such actors will be vital. While some of this private sector engagement could be summarised in terms of a leverage ratio, the potential for the private sector to provide technical support to projects should also be considered.

Bank is developing its safeguards to ensure private sector engagement is transparent, impartial and demonstrably additional (see **Annex E**).

- 33. Multilateral funding can be disbursed promptly from the UK government, and so would allow this investment to influence countries REDD+ thinking in the short term. The case for investing in these multilateral funds was also supported by the Multilateral Aid Review (MAR) that DFID carried out in 2011. Amongst low carbon multilateral funds, this highlighted innovation, flexible use of financing instruments and performance as key strengths, while it highlighted less effective country leadership as an issue for improvement.
- 34. Similar issues were also raised in the earlier PwC report which looked at these funds when they were still relatively new and struggling with delays in set up. PwC and partners flagged potential concerns about the ability of these sorts of mechanisms to deliver to the scale expected of them<sup>49</sup>.
- 35. Since 2011 the CIFs have continued on a positive reform trajectory and have made reasonable progress across all reform priorities. Greater transparency has been achieved through signing up to the International Aid Transparency Initiative. Some of the issues that have been raised in relation to the CIFs might also apply to other multilateral forest funds, although there is a considerable degree of variation between these funds. It remains important to scrutinise each fund carefully to get a sense of their respective progress. This is done in the appraisal case (section 2) of this Business Case.
- 36. While there are DFID offices in a number of countries where the ICF is active, the UK does not have appropriate capacity in all countries. It is therefore necessary for the UK to draw on other delivery organisations in order to maximise the coverage of ICF projects. The UK has no DFID presence in a number of the important forestry countries that the funds being considered invest in. Investment through these funds would therefore broaden the range of country access for the ICF.

### 1.1.11 Summaries of funds

37. There are six multilateral funds that invest in REDD+ activities and are within the scope of this business case. They are listed in Table 1.2.

<sup>&</sup>lt;sup>49</sup> PwC et al (2010) p.7

Table 1.2: The six multilateral funds that invest in REDD+ activities

Fund	Implement -ing Agency	Start	Size	UK Contribution to date	Location	Fund Summary	Fund Detail
Congo Basin Forest Fund (CBFF)	African Develop- ment Bank	2008	\$186m	\$82.5m in 2008	Congo Basin	Supports projects that reduce poverty and the rate of deforestation in the Congo Basin.	Projects need to demonstrate they will curb forest destruction, by providing alternative sources of income or energy for example. 50  Additional foci include strengthening institutions, and demonstrating innovations in reducing poverty and GHG emissions.
UN Initiative on Reducing Emissions from Deforestation and forest Degradation (UN-REDD)	UNDP, UNEP & FAO	2008	US\$173.3 <sup>51</sup> m	\$0	16 Countries <sup>52</sup>	Supports national REDD+ readiness efforts	Work includes     direct support to design & implementation of UN-REDD National Programmes;     complementary support to national REDD+ action through common approaches, analyses, methodologies, tools, data and best practices developed through a UN-REDD Global Programme
Forest	World Bank	2007	FCPF_R	\$22.94m in	FCPF-R operates in	FCPF-R & FCPF-C	FCPF-R targets countries in Phase 1 of REDD+.

<sup>&</sup>lt;sup>50</sup> http://www.cbf-fund.org/en

<sup>&</sup>lt;sup>51</sup> http://www.climatefundsupdate.org/listing/un-redd-programme

<sup>&</sup>lt;sup>52</sup> Bolivia, Cambodia, DRC, Ecuador, Indonesia, Nigeria, Pananma, PNG, Paraguay, Solomon Is, Sri Lanka, Tanzania, Vietnam, Zambia

Carbon Partnership Facility (FCPF)  Readiness (FCPF-R)  Carbon (FCPF-C)			\$240m FCPF-C \$391m	2011 to the FCPF Carbon Fund, and \$5.8m to the Readiness Fund	36 countries <sup>53</sup> FCPF-C operates in five countries <sup>54</sup>	provide countries with technical & financial help respectively to support their development through REDD+ phases.	FCPF-C targets countries in Phase 3  Strategic objectives include  • piloting performance-based payment system for REDD+ activities, with a view to ensuring equitable benefit sharing  • promoting future large-scale positive incentives for REDD+;  • testing ways to sustain or enhance livelihoods of local communities  • conserving biodiversity;  • disseminating broadly knowledge gained.
Forest Investment Programme (FIP)	World Bank	2008	\$639m	\$187m in 2009	8 pilot countries <sup>55</sup>	Supports developing country efforts to reduce deforestation and forest degradation  Promotes sustainable	<ul> <li>Focused on Phase 2 of REDD+. Promote forest mitigation by:</li> <li>Providing support outside the forest sector to reduce pressure on forests.</li> <li>Strengthening country institutional capacity, forest governance, and forest-related knowledge.</li> <li>Mainstreaming climate resilience considerations</li> <li>Supporting biodiversity, conservation, and rights of indigenous peoples and local communities, and poverty reduction through rural livelihoods enhancements.</li> </ul>

<sup>&</sup>lt;sup>53</sup> Cameroon Cambodia, Central African Republic, DRC, Rep Congo, Ethiopia, Gabon, Ghana, Kenya, Liberia, Madagascar, Mozambique, Tanzania, Uganda, (Argentina, Bolivia, Chile, Colombia, Costa Rica, El Salvador, Guatemala, Guyana, Honduras, Indonesia, Lao People's Democratic Republic, Mexico, Nepal, Nicaragua, Panama, Papua New Guinea, Paraguay, Peru, Suriname, Thailand, Vanuatu, Vietnam)

<sup>&</sup>lt;sup>54</sup> So far only Costa Rica has been approved for support, however it is expected that around 10 further countries will bid for funding in 2014.

<sup>&</sup>lt;sup>55</sup> DRC, Ghana, Burkina Faso, Brazil, Mexico, Peru, Lao, Indonesia

						forest management that leads to emissions reductions and enhancement of forest carbon stocks.	
Bio-Carbon Fund	World Bank	2004	Tranche 1 \$53.8m (closed) Tranche 2 \$36.6m (closed) Tranche 3 (open)	None [again check what DFID are doing in Ethiopia]	Tranches 1& 2 operated in 14 Countries in Africa, Asia, Latin America and Eastern Europe <sup>56</sup>	Supports projects that sequester or conserve carbon in forest and agro-ecosystems while promoting biodiversity conservation and poverty alleviation.	Tranche 3 will work on a jurisdictional scale <sup>57</sup> to tie up a range of projects within a jurisdiction to reduce "leakage" and produce a greater transformation. Tranche 3 is running a pilot programme (in design phase) in Ethiopia and is expected to run in a further 5 <sup>58</sup> The <b>Funding Avoided Deforestation (FAD)</b> concept has been developed by the USA over the past year and aims to harness public and private sector resources to address the drivers of deforestation and degradation in areas where agriculture is a major cause of land use change. The USA is currently in discussions with the World Bank and other donors over the role FAD might play in the Bio-Carbon Fund.

<sup>&</sup>lt;sup>56</sup> DRC, Kenya, Ethiopia, Madagascar, Niger (Brazil, Chile, Moldova, Albania, China, Colombia, Costa Rica, India, Nicaragua,

<sup>&</sup>lt;sup>57</sup> 'Jurisdictional scale' means a landscape-wide area that is governed by one jurisdictional unit. See also <a href="http://www.cquestcapital.com/wp-content/uploads/2013/05/Presentation-for-partners">http://www.cquestcapital.com/wp-content/uploads/2013/05/Presentation-for-partners</a> April-11.pdf at page 6

<sup>&</sup>lt;sup>58</sup> These countries are still being selected

# 1.1.12 Three lead options - FIP, FCPF-C, and the BioCarbon Fund

37. Three funds were considered the most likely investment options. Note that this business case proposes investing in two of these only – FCPF-C and the BioCarbon Fund. These funds are all managed through the World Bank, and there is a considerable degree of complementarity in what they do. It is worth noting that there is not enough quantitative data to assess the funds on this basis alone. Quantitative factors have therefore also been taken into account. However, the World Bank paper at **Annex C** gives more detail on the interrelationships between the funds, while Table 1.3 below summarises the key information for comparison.

Table 1.3: Comparison between FIP, FCPF-C and BioCF

	FIP	FCPF	BioCF
Landscape design	<b>√</b>	✓	<b>√</b> 59
Jurisdictional accounting	×	<b>x</b> <sup>60</sup>	✓
Results Based Payments (Carbon Fund)	×	✓ REDD+ only	✓
Technical Assistance / Readiness Fund	×	✓	✓
Upfront Capital	√ (for 8 countries)	<b>★</b> 61	<b>x</b> <sup>62</sup>
Private Sector Integration	✓	√/ <b>x</b> <sup>63</sup>	✓
Multi-stakeholder decision making / governance	✓	✓	√/ <b>x</b> <sup>64</sup>

<sup>&</sup>lt;sup>59</sup> A particular focus of this fund.

<sup>&</sup>lt;sup>60</sup> Although accounting is completed at the country level.

<sup>&</sup>lt;sup>61</sup> Although being investigated by the FCPF Secretariat.

<sup>&</sup>lt;sup>62</sup> Upfront capital is envisaged to come from other sources, however this could be considered further as the project develops.

<sup>&</sup>lt;sup>63</sup> Although BP and one or two other companies are partners / investors in the Carbon Fund.

<sup>&</sup>lt;sup>64</sup> Governance model includes multi-stakeholder methods for the smaller number of stakeholders involved in this fund in relation to FIP / FCPF-C. Therefore not as relevant at this stage.

- 38. Both the FCPF and the BioCF are housed in the same unit at the World Bank and share team members. Between them, these two funds contain all current multilateral funding for Phase III REDD+ activities. Investing in them would mean a stronger role for the UK in influencing the late Phase REDD+ agenda.
- 39. Both BioCF and FCPF are payment-for-carbon (REDD+ Phase III) funds. Given that FCPF-C will target 5 countries, or 6 with our additional funding, there is not expected to be a large degree of overlap between BioCF and FCPF-C fund countries. In the few countries where implementation of national REDD+ strategies may be supported by both BioCF and FCPF-C, there will be clear jurisdictional separation to ensure additionality. Although expected to be rare, where this may occur it will provide a unique opportunity to account for carbon at the project or program level within a single national framework and inventory, thus providing important lessons for the design of future climate finance.
- 40. Both funds offer access to technical assistance 'readiness' finance. These differ in their objectives. The FCPF-R, which would not form part of this investment, has been a major contributor to raising country capacity around REDD+, helping 36 participating countries in the development of REDD+ strategies and policies, building institutional capacity to manage REDD+, including environmental and social safeguards, and fostering domestic policy dialogue. Only a small number of countries are expected to progress from FCPF-R to FCPF-C by 2015. By contrast, the BioCF readiness fund (or BioCF+) will focus on the specific jurisdictions being supported through BioCF Tranche 3 and often on an implementing entity within that jurisdiction. Their emphasis will also be much more focused: on creating the right enabling environment for private sector investment at scale, rather than on all REDD+ planning and readiness activities, as with FCPF-R. The World Bank overseas both funds, and the World Bank team in participating countries will be able to ensure that funded activities are not overlapping in the event both Funds are active in the same country.

#### 1.1.13 FIP

What does the fund do and how does it work?

- 41. The FIP is a targeted program within the Climate Investment Funds (CIF), which supports developing country efforts to reduce deforestation and forest degradation. It also promotes sustainable forest management that leads to emissions reductions and enhancement of forest carbon stocks (REDD+). It is the only fund to focus on the Phase II REDD space. Its work is strongly aligned to other multilateral funds that focus on Phase I, such as FCPF-R. FIP works to:
  - Promote forest mitigation efforts, including protection of forest ecosystem services;
  - Provide support outside the forest sector to reduce pressure on forests;
  - Help countries strengthen institutional capacity, forest governance, and forest-related knowledge;

- Mainstream climate resilience considerations and contribute to biodiversity conservation, protection of the rights of indigenous peoples and local communities, and poverty reduction through rural livelihoods enhancements.
- 42. Existing FIP countries are Brazil, Burkina Faso, Democratic Republic of Congo, Ghana, Indonesia, Lao People's Democratic Republic, Mexico and Peru. The Fund managers are considering expanding into new countries, subject to further financing. The FIP also runs a dedicated fund to support indigenous people and local community REDD+ engagement at the local and government levels, and a fund for private sector organisations<sup>65</sup>.

#### Narrative on demand

43. At its launch, FIP allowed for countries to place expressions of interest to become pilot countries. 45 national governments, two regions and one subnational region<sup>66</sup> came forward, showing high demand. 35 were prioritised for consideration and ultimately five were selected and three further held in reserve as prospective additional pilots<sup>67</sup>. All eight are now FIP countries and FIP are seeking to expand into a ninth country, subject to receiving enough capital. Countries which initially submitted expressions of interest remain keen to join FIP.

# Ghana's Forest Investment Program: Engaging local communities in REDD+ and enhancing carbon stocks

Ghana's forest resources are being depleted at an alarming rate due to agricultural land expansion driven by the cocoa sector. Land Use, Land Use Change and Forestry (LULUCF) represents 25% of total GHG emissions in the country, whilst 70% of the Ghanaian population depend on natural resources for their basic food, water and energy requirements.

To address this problem, the FIP invested \$9.75 million in Ghana's High Forest Zone, where cocoa farming has caused major deforestation and degradation. The FIP investment focuses on four areas: coordinating activities (such as landscape planning; inter-agency dialogue and enforcement); enabling activities (policy and legal reform on tree tenure and private investment); piloting activities (alternative forest reserves management, benefit-sharing schemes, and incentives to retain trees); and direct investments in the private sector in sustainable forest and agriculture.

Part of the plan focused on the conservation and management of sacred groves which have traditionally been protected for hundreds of years due to their high conservation and cultural value, but which are now being encroached by forest communities and other users. To prevent further encroachment the scheme will change the status of these sacred groves to become dedicated forest, thus replacing the cultural taboo used in managing them to bye- laws sanctioned by the District assemblies, and aims to rehabilitate the degraded areas and promote the establishment of plantations around the groves.

The case of the sacred groves is an example of the transformative impact of FIP investment, where government policy is being influenced by the landscape approach. This project uses the active participation of local communities and other stakeholders to influence FIP's planning and implementation.

44. Given that FIP is designed to work with other REDD+ activities, those countries currently undertaking readiness activities under other programmes can graduate to become more suited for on the ground projects such as those funded by FIP, as well as other funds like FCPF-C. As more and more countries pass through the readiness process it is expected that more countries will aspire to receive FIP funding.

#### Narrative on results

- 45. Expected outcomes to date can be shown from Investment Plans from Lao, where 8.2 million tonnes of CO<sub>2</sub> is expected to be avoided and sequestered over 8 years, and Mexico, where 90,750 hectares of forest are predicted to be sustainably managed over 10 years<sup>68</sup>.
- 46. There are currently 20 projects in the FIP pipeline, drawn from seven endorsed investment plans from the pilot countries. The expected results from these seven projects over the next few years are: 17,418 net jobs supported; 426 Mt of CO<sub>2</sub> equivalent reduced or avoided (exclusively forestry); over 19m hectares where deforestation and degradation are avoided; \$821m of public finance mobilised for climate change purposes; and \$66m of private finance mobilised for climate change purposes as a result of ICF funding<sup>69</sup>.
- 47. FIP is discussing with donors and recipients criteria for the selection of new pilot countries. The focus to date has been on prioritising those countries that are well advanced with their readiness activities supported by the FCPF and/or UN-REDD Programme. This will help demonstrate potential for consistency in the level of results predicted from the pilot countries.

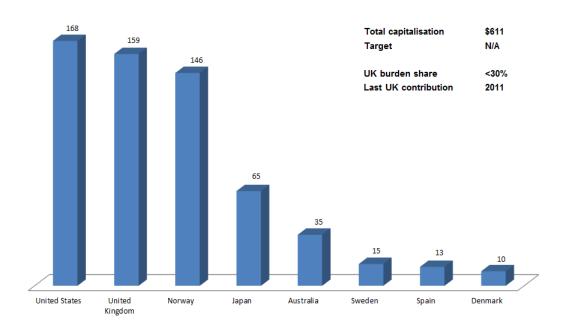
#### Burden share and expected disbursal over the next 5 years

48. The UK's burden share for FIP is currently 29%, and the UK's last contribution was \$187m in 2011 (see Figure 1.2, where the UK contribution is the second largest). If the UK were to make an additional £25 million contribution (c\$40 million), it would become the largest donor until further investment from other countries. The UK would need therefore to ensure that its increased influence in the fund delivered positive outcomes aligned to UK priorities.

<sup>68</sup> https://www.climateinvestmentfunds.org/cif/node/5

<sup>&</sup>lt;sup>69</sup> CIF Administration Unit

# 49. Figure 1.2: Burden share in the FIP by country (US\$m)



Correct on 26 April 2013. Amounts may vary due to exchange rate fluctuations.

50. Figure 1.3 maps actual and estimated FIP projects disbursements<sup>70</sup>. This shows that the World Bank expects to begin large scale disbursements from 2014. To date FIP has disbursed \$1.8 million to one of its eight pilot projects. However the individual project details within six of the remaining investment plans are now largely completed, and are predicted to begin to receive funding from 2014 onwards.

<sup>&</sup>lt;sup>70</sup> World Bank presentation, December 2012

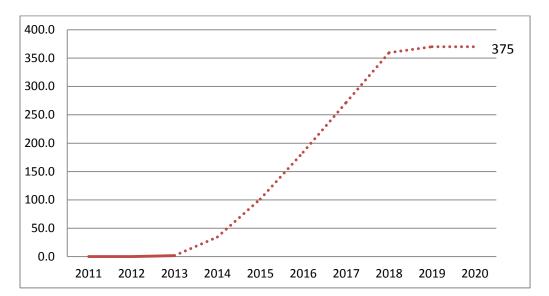


Figure 1.3: FIP project disbursements (US\$m)

#### 1.1.14 FCPF Carbon Fund

What does the Fund do and how does it work?

- 51. The Fund will provide performance-based payments to five or more countries that have made significant progress in REDD+ readiness. These payments will play an essential part in valuing forests more while they are standing than when they are cut. The fund has a cut-off date of 2020 when it is envisaged that it will be replaced by a global agreement which incorporates REDD payments and will include many aspects of FCPF-C, for example its methodological framework. It is designed to fund emissions reductions over a five year period, which means that countries must have been accepted into the programme by 2015. The Carbon Fund became fully operational in May 2011 and has a capital of about US\$390 million. It is likely that there will be about US\$70 million available to directly buy emissions reductions in each of the five countries. Payments will be made by the World Bank directly to the country, usually to the Ministry responsible for the emissions reduction programme. Independent verification organisations will verify emissions for the purposes of payments. The rate of payment per tonne of carbon will be set independently of carbon market prices for each country plan. The process is therefore not reliant on the market price of carbon.
- 52. These payments are intended to: demonstrate large-scale performance-based payments; provide early lessons through piloting a variety of approaches; and channel incentive payments where they are needed. These are intended to lead to long-term sustainability, that is, a situation where payments are not necessary to ensure drivers of deforestation are controlled, because incentives to preserve forests remain without aid finance. Upfront capital is not essential for these payments to take place, but there is a possibility of this, and of interim payments, which if they do take place will be built into emissions reductions design documents.

53. To receive funding, countries must complete an 'early idea note', giving an outline of their plans for projects using the FCPF-C. They must then develop this outline into an 'emissions reduction programme idea note' (ER-PIN), which is then used by the Fund managers to decide whether to sign an agreement in principle to fund the country. Programme idea notes must include an MRV framework and baseline data, as well as a proposed price to be paid by the Fund per tonne of carbon under their plan. After signing an agreement, the country has 12 months in which to develop a full programme document. Additionally, successful countries will need to have completed REDD+ readiness processes through the FCPF-R.

#### Narrative on demand

- 54. There appears to be a strong demand for this fund, beyond what the existing capital can meet. Donors have asked for about five countries to be supported through the fund, in order to maintain the size of each country investment. Costa Rica and the Democratic Republic of Congo have both presented ER-PINs, and the Fund has signed an agreement in principle with Costa Rica.
- 55. Eight additional countries have submitted 'early idea notes': Chile, Ethiopia, Indonesia, Mexico, Ghana, Nepal, Republic of Congo and Vietnam<sup>71</sup>. The Fund managers expect the majority of these to present ER-PINs by the Carbon Fund meeting in March 2014, so up to 10 countries could be competing for the funds. Donors will choose which countries to support based on these documents. However, there is a risk that not all of these will reach the point of signing an agreement.

#### **Costa Rica's FCPF-C Emissions Reduction Programme**

In September 2012, Costa Rica presented their ER-PIN at a meeting of the Carbon Fund management. This was subsequently accepted by the Fund, and an agreement in principle has now been signed to support the plan.

The plan targets an area of approximately 342,000 ha of mixed-use private land across the whole country. This will be made up of parcels of land, mostly less than 50 hectares each. Costa Rica's plan is to reduce emissions by 12-13 million tonnes  $CO_2$  over the lifetime of the programme. The payment per unit of emissions saved is still to be agreed by the World Bank, but early estimates suggest that the fund could be c.\$.60-65 million. The emission reduction plans run until December 2020.

It is intended that emissions savings payments will reduce the deforestation rate in regenerated and old or ancient growth forest, regeneration and reforestation and the promotion of sustainable production and consumption of wood.

<sup>71</sup> http://www.forestcarbonpartnership.org/er-pins-and-early-ideas-presented

56. Because of the amount of funding available, donor countries have previously agreed to continue limiting the number of country slots to about five. However, if the UK were to provide sufficient funds to support another country slot, it would be possible to propose that the number of participants be increased, to reward and incentivise those countries that are developing ER-PINs. All donors would need to agree this change; a proposal could be put to the next Carbon Fund meeting on December 8 and 9. The early discussions with the Fund manager and other donors suggest that they would be likely to agree.

#### Narrative on results

- 57. No payments for emissions reductions have yet been made. However, Costa Rica and DRC's ER-PINs demonstrate the potential results that might be expected from the Fund (see text box above for further details of Costa Rica's plans). The DRC presented a plan to reduce emissions by 91.8 million tonnes of CO<sub>2</sub> up to December 2020. It would not be possible to buy all of these savings at c.US\$5 per tonne with the funds currently available, so the Fund managers are working to secure other bilateral, multilateral or private sector purchasers of some of these emissions<sup>72</sup>. While further work still needs to be done to agree a baseline for the DRC to calculate savings against, these plans are promising developments. Prices in the voluntary carbon market are currently around \$5.9 per tonne of CO<sub>2</sub>e, down from the 2011 high of \$6.2 per tonne of CO<sub>2</sub>e<sup>73</sup>.
- 58. To ensure that claimed emissions reductions are additional, countries need to propose an approved reference level against which their savings are judged. The FCPF-C methodological framework states that countries must present new or enhanced 'emissions reductions programme measures<sup>74</sup>'; both fund managers and the Fund's technical advisory panel will consider carefully whether this criterion has been met to ensure additionality. The methodological framework also insists that payments for emissions reductions are recorded on an official registry, to 'offer assurance against double counting and provide transparency to the public that there is no double claiming of benefit'. The fund is aligned with REDD+ in terms of its approach on this issue.
- 59. Future payments from the Fund to participating countries will only be made if a benefit sharing plan has been proposed and agreed by donors. Basic criteria for these plans have been agreed by donors. The plan must indicate that sufficient resources are to be distributed to those living in the forests, and must demonstrate that the use of all the funds is transparent. The plan must also describe the scale of both monetary and non-monetary payments to all stakeholders. These payments must align with a strategy to address the drivers of deforestation, and must be designed in an appropriate, consultative manner with broad community support. Ultimately, it is the donors who will decide whether or not to fund a particular ER-PIN.

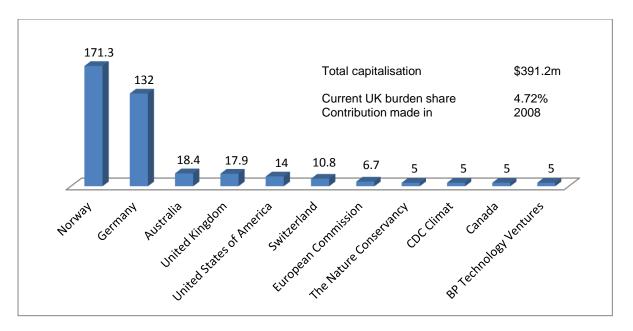
<sup>&</sup>lt;sup>72</sup> The BioCarbon Fund Tranches 1 and 2 used a price of US\$3.5-5.5 per tonne of carbon, and it is expected that Trache 3 will use a price of around US\$5 per tonne. While the US\$5 per tonne figure is still to be agreed with the FCPF-C secretariat, it is in line with the figure used for other funds.

<sup>&</sup>lt;sup>73</sup> State of the Voluntary Carbon Markets 2013

<sup>&</sup>lt;sup>74</sup> These are defined as 'policies measures or projects to reduce deforestation'

60. Figure 1.4 shows donors' burden shares in the FCPF-C, in US\$. If the UK were to make an additional £45 million contribution (c.\$72 million), it would have the third largest burden share of c.19.4% and a total contribution of c.\$90 million.

Figure 1.4: Burden share in the FCPF-C by country (US\$m)



61. It is expected that all funds will be disbursed by 2020, and that emissions reductions payments will commence around 2015. Disbursal before 2015 is likely to be minimal. The distribution of disbursals between 2015 and 2020 is not known at this stage; however it is likely that payments are likely to be weighted towards the later years of the period.

#### 1.1.15 BioCarbon Fund

What does the Fund do and how does it work?

62. The Fund is a public-private sector initiative mobilising finance to help develop projects that sequester or conserve carbon in forest and agro-ecosystems. It will combine a technical assistance facility (BioCF+) with a series of country-focused windows (BioCF Tranche three (T3)) in order to achieve this. BioCF+ will support project development and implementation with capacity building and training, while the country-focused windows will primarily provide payments for verified emissions reductions, although some upfront finance will be available, and will be deducted from later payments. The need for up-front payments will be assessed on a country-by-country basis as jurisdictional windows are opened; up to 30% of technical assistance finance may be available for participating countries. A pilot project is in progress in the Oromia region of

Ethiopia to trial the Fund model. Activities that are likely to be supported by T3 include small scale plantation farming, sustainable forest management, and afforestation and reforestation. DFID Ethiopia secured a small amount of ICF funding (c.£900k) to invest in BioCF+ and BioCF. However, this investment would be in additional jurisdictions as opposed to in Ethiopia.

- 63. BioCF T3 will be implemented at the jurisdictional scale to transform large rural areas by restoring degraded lands, enhancing agricultural productivity, and improving livelihoods and local environments. While the minimum scale for on-the-ground interventions in the Fund is currently proposed to be 100,000 ha, policy measures are expected to impact on much larger areas. The Fund managers estimate that if the forest regions that are influenced by on-the-ground interventions were included, the area impacted could be in the order of 500,000 ha. T3 could also target much larger jurisdictions from the outset; in the Ethiopia pilot, the Oromia region is planned to reach close to 3 million ha, and policy interventions for this pilot are expected to have impacts the whole region. Conversations with the other major donors suggest that there is an appetite to push for the higher end of the scale of ambition in terms of size of jurisdiction. It is intended that the jurisdictional approach will allow for an integrated approach to project development within the jurisdictions. New sustainable land management practices will be pioneered, including on agricultural land, grasslands, pastures, rice paddies, and in wetlands. An integrated jurisdictional approach will also be explored for the purpose of carbon accounting.
- 64. A key objective of the BioCF is to integrate sustainable land use practices that generate emissions reductions with activities and investment by the private sector, including offtaker agreements where possible. T3 will pursue innovative public-private partnerships and will incentivise sustainable emissions reductions investments in the targeted jurisdictions.
- 65. Large corporations in the agricultural and food sectors are increasingly prioritising sustainability within their operations. Within the last 5 years, the investment resulting from this prioritisation has shifted from largely green branding campaigns to more fundamental characteristics of how companies do business, especially for companies that source inputs or operate directly in emerging markets. Many companies are focused on improving their supply chains, recognising that consumers are becoming more concerned about origin and production method, and security of supply is uncertain with growing demand for food and pressure on land. The Tropical Forest Alliance (TFA2020), to which the UK is a partner, was established to support the Consumer Goods Forum to manifest its commitment to zero deforestation supply chains for palm, soy, beef, and pulp and paper by 2020. Large corporations are keen to have a more structured dialogue with the regional and national producer-country governments to fulfil their Social Licence to Operate establishing corporate commitment to social, environmental objective in local communities and to reduce political risk of investment in emerging (and often high-risk) markets.
- 66. BioCF can harness this increase in private sector interest by developing public-private partnerships which:
  - Secure long term supply agreements for commodities produced in the jurisdiction.
  - Attract capital for upfront project investment
  - Harness expertise on various stages in the value chain

- Leverage private sector's innovation capabilities
- Ensure the long term financial sustainability of projects
- Enable scalability of programmes
- 67. Estimating private sector impact is demanding, but conservative estimates of leverage suggest that between 1:1 and 1:5 is possible at the programme level, taking into account upfront investment and potential leverage from commodity offtake agreements (Annex D).
- 68. It is intended that the Fund will provide approximately \$50 million to each jurisdiction 'window' under T3, and that each window will be supported by an investment in BioCF+. Norway, USA, and the EC are considering investments alongside the UK. The consultancy PwC has completed early stage analysis into possible investment options. The World Bank has described BioCarbon Fund as a 'fund of funds', with donors having the ability to select which countries they wish to invest in, and then having the option of a direct role in the governance of each of these windows. It is not expected that donor finance will be spread evenly across all windows. The resource requirements for donors are potentially higher than for other Funds by having a direct role in the country-level governance and it will be important for the UK to consider what number of windows, in which geographies, it wishes to support.

#### Narrative on demand

- 69. This fund focuses on providing Phase III REDD+ support. There is good evidence that more countries are going to reach a REDD 'readiness' state soon and will want to progress into the later stages of REDD+ than there is available funding to support. 36 countries are progressing through FCPF-R's Phase I readiness process. 10 countries are expected to present ER-PINs to the FCPF-C by March 2014 in search of Phase III funding. However, there is currently only capacity to support about five countries in Phase III through FCPF-C.
- 70. By leveraging private sector commitments and therefore a more diverse range of finance sources longer term, BioCF provides an added and different incentive for countries to continue to progress through the REDD+ Phases. It could therefore act to stimulate demand for Phase III support further, by speeding up the movement of countries through the earlier REDD+ phases.

#### Narrative on results

71. BioCF T3 is in the process of being capitalised now, and no payments from it have yet been made. Also, this new tranche is more complex and ambitious than earlier BioCF work, and so results from this work are less relevant than might otherwise be the case. However, the Ethiopia pilot does demonstrate that there is considerable potential in the jurisdictional working model and consensus about its value. Work so far has resulted in:

- Appointment of a trusted implementing agency and a programme office with a strong existing institutional track record and extensive experience (The Oromia Forest and Wildlife Enterprise (OFWE) has been appointed as lead implementing agency. A programme office has been appointed under the Oromia State Presidency. OFWE has a strong track record of successfully delivering local participatory forest management initiatives, and will be the lead partner for the pilot);
- Effective consultation processes producing agreements on: drivers of deforestation to be addressed; safeguards and consultation mechanisms that will be employed; proposed institutional arrangements to manage the initiative; and an early proposal for benefits sharing arrangements;
- An agreed outline implementation plan including steps to engage commodity supply chain players.
- 72. It is expected that the methodology for emissions payments for results will remain largely in line with that of the FCPF-C. It will also be necessary to align the prices paid per tonne of carbon with the FCPF-C, to avoid one Fund undermining the other.
- 73. The Fund managers are currently developing the benefit sharing criteria for the fund. They are undertaking a review of existing tranche one and two projects and the benefit sharing agreements that are in place for these. This constitutes a good base of information to work from. It will be necessary for the Fund managers to ensure that the benefit sharing:
  - is equitable and fair, with a good on-going consultation process throughout the program design and implementation;
  - is pragmatic and simple;
  - reflects and builds on existing incentive structures, and includes an effective reward mechanism; and
  - that sustainability is sufficiently accounted for in the criteria.

#### Burden share

- 74. Norway (up to \$135m) and the USA (\$25m) also plan to support the BioCF, and the EC is also interested in providing some support. If the UK were to invest £50 million (\$US 80 million) and assuming these other donor investments, this would equate to an overall burden share of about 33%.
- 75. It is envisaged that this fund will be a nimble fund that is able to respond quickly to changing circumstances. The Fund managers intend to open T3 windows during 2014, and to commence disbursal of funds in 2015.

#### **REDD+** in Ethiopia

Ethiopia has been actively engaged in REDD+ since 2008 when it was selected as a country participant in the Forest Carbon Partnership Facility. The Country's Readiness Preparation Proposal (R-PP) was approved in March 2011 and lays out a \$14m roadmap to REDD+ readiness. This REDD+ strategy is one of several pillars in Ethiopia's integrated Climate Resilient Green Economy (CRGE) initiative. DFID and Norway are supporting this national-scale activity in a number of ways including providing:

- US\$10m funding for additional readiness activities in line with the country R-PP.
- US\$5m in Technical Assistance through the BioCF+ to support capacity building and integration in Climate Resilient Green Economy initiative institutions.
- US\$3m to support design of proposed pilot jurisdictional-level results based financing project in Oromia through the BioCF+.
- Implementation funding and payments for verified emission reductions in the Oromia region through the BioCarbon Fund.

BioCarbon Fund supported Oromia regional REDD+ programme

The state of Oromia contains the majority of Ethiopia's two great forest habitats – 60% of high forests and the vast majority of its woodlands. The Government of Ethiopia has determined that the state should develop 'landscape-scale' programme targeting 11.7m ha of avoided deforestation. The BioCF will pay for \$50 million of emission reductions from this programme. This programme is now in its development phase and has made notable progress since development began at the start of 2013.

- Appointment of the Oromia Forest and Wildlife Enterprise (OFWE) as lead implementing agency and a programme office under the Oromia State Presidency. OFWE offers a strong existing institutional track record in this area with extensive experience of successfully delivering local participatory forest management initiatives.
- Broad ranging consultation has produced agreement on: drivers to be addressed, safeguards and consultation mechanisms that will be employed, proposed institutional arrangements to manage the initiative, and an early proposal for benefits sharing arrangements.
- Agreement to begin with a simple MRV approach based on historic deforestation rates and elaborate as capacity is built in implementing agencies over time and established initial performance targets.
- An agreed outline implementation plan including steps to engage commodity supply chain players.

Modelling by Lion's Head Consultants suggests that in terms of cost per ton of carbon emissions saved, cost savings of around 50% are likely when comparing jurisdiction projects with individual projects in the BioCF model.

# 1.1.16 Strategic fit with the International Climate Fund

75. In general multilateral forest initiatives fit well with the objectives of the ICF. Transformational impact is a critical objective and multilateral funds, through their scope, scale, partner arrangements, recipient country engagement, and private sector

- approaches are strong in this respect. A more detailed analysis of each fund against strategic and transformational criteria is provided in the appraisal case (section 2.1.3).
- 76. The multilateral funds are also in theory well positioned to satisfy ICF's three-fold climate, poverty and biodiversity objectives. The strategic fit of each fund is scrutinised in much greater detail in the appraisal case (section 2). The FCPF-C and BioCF have been assessed as aligning most strongly with these objectives.
- 77. The balance of two funds proposed here would work in a complementary way to wider climate finance initiatives, both across UK HMG and with respect to the donor community more widely. Not only do we believe that both funds are inherently good at delivering ambitions for climate finance, they also allow us to test a wider range of approaches to climate finance in this sector.

#### 1.1.17 Environmental and social safeguards

- 78. The issue of environmental and social safeguards is important to the UK and is an area where we would seek to influence. The development of safeguards arose as a result of concerns that REDD+ systems could result in unintended negative impacts, such as displacement of indigenous people, loss of biodiversity or damage to provision of ecosystem services. In this context the term safeguards does not only refer to application of minimum standards to prevent damage to biodiversity, but also to the development of national policies, incentives and monitoring that help maximise benefits, including the provision of ecosystem services and poverty reduction.
- 79. Working through multilateral fora, particularly through World Bank mechanisms, can strengthen the alignment of safeguards policies and help to widen country buy-in to a harmonised approach to REDD+. Such safeguards will need to be both effective in terms of mitigating risk and enhancing opportunity; and accessible and practical, in terms of not constructing additional barriers to investment or slowing down disbursement. The World Bank forest funds have a well-established set of safeguards for REDD+. In general, these balance the need for rigour with pragmatism to ensure effective delivery, but in some cases, the safeguards have been criticised for not being sufficiently comprehensive for the country context. It will be important, therefore, to ensure that nationally-appropriate safeguard systems are defined as part of the Fund activities; independent observers to the Funds will be able to support donors to ensure that these are sufficiently robust.
- 80. The World Bank provides oversight in line with UNFCCC recommended processes. As part of the application process for funding from the FCPF-C and also the BioCF, countries are required to write a benefit sharing plan, which describes how they are going to share funds from these programmes amongst the actors in forest regions. This plan is supported by a Grievance Redress Process, through which end recipients can complain if they do not receive the funds that are due to them.

## 1.2 Impact and Outcome that we expect to achieve

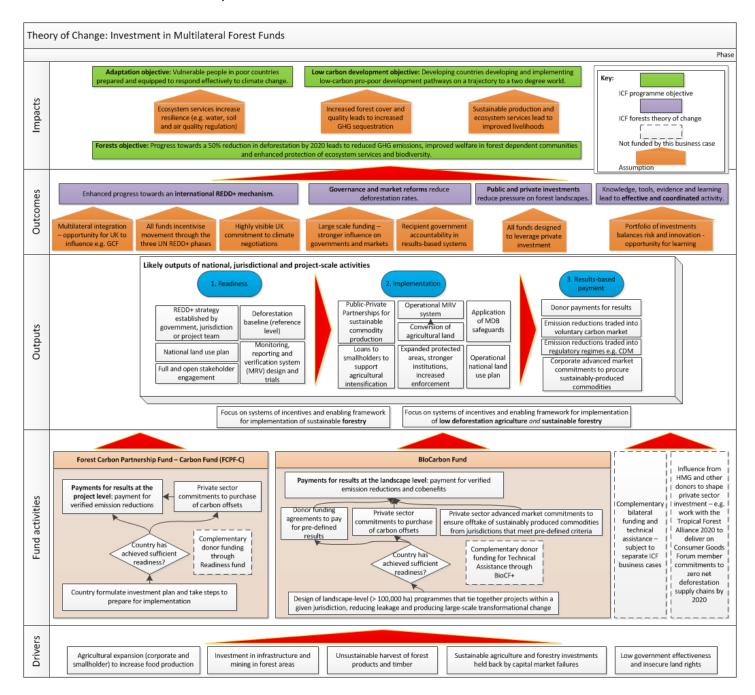
80. Evidence suggests that at this stage, it is the later REDD+ Phases II and III where the greatest constraints on finance lie. There is a bottleneck in the provision of finance, with more countries likely to complete REDD+ readiness activities in the coming years than there will be finance available. This bottleneck is likely to act as a disincentive to

progress. Furthermore, the Phase I funds seem to have sufficient finance to meet current demand – FCPF-R has committed to increase the finance available to a number of existing participants, and to extend the fund to a small number of new entrants. The existing finance in FCPF-R is sufficient for these activities. Phase I activities are relatively cheap in comparison to Phase II and III. It is possible for funds to support many more countries at the first stage with the same amount of finance as at the later stages. For example, FCPF-R is supporting 37 countries at Phase I with c.\$240 million, while FCPF-C plans to support about 5 countries at Phase III with c.\$390 million. The ambition of this business case is therefore to maximise impact by focusing finance on Phase II and III funds.

# 1.2.1 Theory of change

- 81. The interventions being funded by this project involve multiple donors contributing to funds that support a wide range of interventions. There still remains a degree of uncertainty over what results on the ground will flow from these funds; this uncertainty requires careful handling in the theory of change to avoid providing an ambiguous model. Despite this uncertainty, it is possible to make assumptions with confidence, by drawing on the experiences from other ICF and forestry projects. This theory of change reflects this process.
- 82. The theory of change tracks the relationships between the key drivers of deforestation, through to the activities of the two preferred funds, example outputs, and finally to links to the high-level ICF theory of change for forests, and the high-level ICF objectives.
- 83. For countries to be selected, they will need to have already completed readiness activities to demonstrate passing through REDD+ Phase I. Implementation of the two funds' activities will require the application of a range of projects that might include loans, private/public sector partnerships, or the strengthening of institutional protections for forests, amongst others. Safeguards and M&E frameworks will need to be developed where they have not been already.
- 84. FCPF-C will deliver carbon emission reductions in defined countries by paying for the results of emission reduction activities. The BioCarbon Fund will also make results-based payments, although in this case the areas targeted will be defined at the jurisdictional level. Emissions savings in FCPF-C and the BioCarbon Fund can be traded in the voluntary market (although most donor funded VERs, including all UK-funded ones, will be written off, in line with the UK carbon market principles) and it is anticipated that countries will eventually be able to access compliance carbon markets. In the BioCarbon Fund, private sector organisations are expected to commit to off-taker purchase agreements for sustainable commodities produced in the participating region.
- 85. Expected outcomes from these funds include enhanced progress towards an international REDD+ mechanism, governance and market reforms reducing deforestation, public and private investments reducing pressure on forest landscapes, and knowledge, tools, evidence and learning leading to effective and co-ordinated activity. These outcomes will contribute to the UK forestry objective of progress towards a 50% reduction in deforestation by 2020, improved welfare in forest dependent

communities and enhanced protection of ecosystem services and biodiversity, which in turn will contribute to adaptation and low carbon objectives. The majority of this finance should be scored as mitigation, but up to 10% could be scored as adaptation, given the role of the BioCarbon Fund in supporting climate-smart agriculture and similar sustainable landscape interventions.



# 2 Appraisal Case

- 1. The appraisal case evaluates the options for investment. It considers nine options two options around a further bilateral investment, the range of six forest funds, and a do nothing option (see Table 2.1). All options were tested against two sets of criteria<sup>75</sup> one based on their strategic fit, the other looking at their operational effectiveness. Where it was difficult to evaluate quantitatively their operational effectiveness (either because they have not yet delivered results, or there is limited evidence of their delivery effectiveness), a qualitative evaluation has taken place. This has drawn on input from a range of experts in the UK Government, other donor governments, and the Funds themselves.
- 2. Two options, investing in FCPF-C and the BioCarbon Fund, passed this first stage multicriteria analysis review and were subject to a full economic appraisal, which included a high-level cost benefit analysis to provide an indication of the value for money of these options.

# 2.1 What are the feasible options that address the need set out in the strategic case?

3. The following criteria were used to assess the options:

#### 2.1.1 Strategic criteria

- 1) To align with ICF strategic objectives on forestry<sup>76</sup> and potential for transformational impact<sup>77</sup>.
- 2) To provide an additional incentive for countries to move from early stage (Phase I) REDD+ activities to Phase II and Phase III activities, while supporting the harmonisation of forestry funding streams<sup>78</sup>.
- 3) To engage the private sector further in REDD+ activities<sup>79</sup>.

 $<sup>^{75}</sup>$  DECC, Defra and DFID forestry experts inputted into this.

<sup>&</sup>lt;sup>76</sup> It is worth noting that that the ICF has objectives and a strategy that are distinct from those of DFID, DECC and DEFRA. This includes a different set of priority countries, specific low-carbon development, adaptation and forestry objectives, and wider considerations.

<sup>&</sup>lt;sup>77</sup> Transformational Change, which is defined as: "bringing about a change in incentives either among key actors or enough actors to shift from one state to another (e.g. from conventional to lower carbon or climate-resilient patterns of development) or to speed up the pace of change (e.g. leading to a much more rapid fall in the rate of deforestation)". This would be reflected in the fact that the fund contributes to sustainability, political will and local ownership, increased capacity and capability to act, and that its evidence of effectiveness is credible and shared widely. Each option has been evaluated on a scale weak: moderate: strong by forestry investment experts in DECC, DEFRA and DfID against four elements of a transformational project: scale, innovation, leverage and replication. See **Annex A** for further detail.

<sup>78</sup> The purpose of Phase One REDD+ is to prepare countries for Phase Two and Three activities; however, a number of existing funds and projects do not pay sufficient attention to this element of forestry investment, instead focusing solely on Phase One activity.

Phase One activity.

79 Because of the current low carbon price, this engagement could be though a focus on potential off-taker and supply chain benefits for the private sector associated with public sector investments.

## 2.1.2 Operational criteria

- 1) Delivers, or has the potential to deliver, real outcomes on the ground.
- 2) Has a good governance structure<sup>80</sup>;
- 3) Delivers funding in a timely manner<sup>81</sup>;
- 4) Is ready and able to accept funding<sup>82</sup>;

# ICF strategic objective on forestry

The high level objective is that interventions supported by the UK (through bilateral and multilateral channels) deliver reduced greenhouse gas emissions, improved welfare in forest-dependent communities, and enhanced protection of ecosystem services and biodiversity. The full ICF forestry theory of change is at **Annex B**.

4. While these four operational issues were considered to be critical to any investment decision, a number of additional issues were taken into account in the appraisal process. First, consideration was taken of the administrative impact in terms of UK government resources required for the additional investment. Second, in relation to the multilateral funds considered here, the level of UK contribution as a portion of the whole fund was considered. If the UK contribution becomes too large, the independence and objectivity of the fund could be perceived to be compromised. Conversely, where the UK contribution level was higher in the past and has fallen as a result of other countries increasing their investments, it could be that further UK investment would increase level of influence for the UK.

<sup>80</sup> A good governance structure is one that is efficient, transparent and effective and achieving the goals of a project or fund. Also, one that includes sufficient safeguards to protect against potential unintended negative consequences. Where safeguards are in place, it is important that they are implemented in practice and evaluated effectively.

<sup>&</sup>lt;sup>81</sup> This criterion is to help grasp how effective the fund is at actually disbursing the funds that it receives and at having an impact on the ground. This will depend in large part on its management structure, expertise, experience and institutional capability.

<sup>82</sup> Some funds are simply not accepting additional contributions, for example the Congo Basin Forest Fund.

### 2.1.3 Long list options appraisal

Table 2.1: Long list of options

	Option	Short listed or rejected at long list stage?
1	Additional funds to a bilateral investment currently under development	Rejected after long list
2	New bilateral investment	Rejected after long list
3	Invest in Congo Basin Forest Fund	Rejected after long list
4	Invest in UN-REDD	Rejected after long list
5	Invest in Forest Carbon Partnership Facility – Readiness Fund	Rejected after long list
6	Invest in Forest Investment Programme	Rejected after long list
7	Invest in Forest Carbon Partnership Facility – Carbon Fund	Short listed
8	Invest in Bio-Carbon Fund	Short listed
9	Do nothing	Rejected after long list

# (1 and 2) Invest additional funds to a bilateral investment currently under development and/or a new bilateral investment

5. These options were ruled out at an early stage. As described in the strategic case, these options are not ready and able to accept funds. Additionally, existing projects are all still in the development stage, with disbursal not expected until at least mid-2014. A completely new bilateral investment would require significant administrative costs, creating a burden that is not considered realistic within the current resources. Any new bilateral investment would take a long time to set up and to disburse finance, and will mean delaying existing bilateral projects as some of the finite administrative resource in DECC would need to be redirected. Additionally, further investment in bilateral projects in addition to those already existing or planned within the ICF would risk tipping the portfolio's balance too far away from multilaterals and diluting further our international influence over these large leveraged investment pots.

6. Following is an analysis of the potential forest fund investment options.

## (3) Invest in the Congo Basin Forest Fund (CBFF)

Fund overview

7. The fund has a strong focus on slowing and reversing the rate of deforestation in the Congo Basin region by supporting Phase I REDD+ readiness projects that help to manage and protect the forests. Poverty reduction is also a focus of the fund. Financing is focused on paying grants to civil society and governments, with grant sizes ranging from €110,000 to €7.6 million <sup>83</sup>. At the start of 2013, 41 projects valued at c.\$84 million had been endorsed by the Fund's Governing Council. Approximately half of all the money contributed that has been allocated has been directed to projects in the Democratic Republic of Congo. The UK contributed £50million to the CBFF in 2008. Today this represents a 44% burden share.

#### Conclusion

8. This fund does <u>not</u> match the criteria for further investment well.

#### Strategic criteria

Alignment with ICF strategic objectives.

- 9. Low.
- 10. Whilst the fund offers a specific focus on a range of forestry interventions across an important region, there are other countries that would produce a stronger fit with the strategic aims of the ICF portfolio.
- 11. In addition, whilst the thematic areas covered by CBFF are important (and include sustainable forest management; livelihoods and economic development; monitoring, reporting and verification (MRV); payment for ecosystem services and REDD+; and capacity building) they do not address the wider drivers of deforestation.
- 12. In relation to the ICF definition of 'transformational', internal evaluators have judged the CBFF accordingly:

Scale – weak/moderate

Innovation – moderate

Leverage – weak

Replication - moderate

13. Elements of the fund's design have the potential to be transformational. This is most particularly the case in the Democratic Republic of Congo, where the most money has been spent and where there is a good focus on community resource management. However, in reality the scale of work that has actually been delivered through the Fund is relatively small, and this is often dependent on grant aid. Projects have not yet shown a transformational element. There is only limited potential to scale up existing work within

<sup>83</sup> http://cbf-fund.org/en/node/347/Key-Performance-Indicators

the fund, and so it is unlikely that a shift towards more transformational projects is likely to emerge.

Incentive to move from readiness to implementation at scale

- 14. Weak.
- 15. While this fund was established before REDD+ was widely recognised, and so has no explicit focus on particular REDD+ stages. Some of the grants it funds are piloting payments for ecosystems services, which is more akin to REDD+ Phase III payments, however overall the fund is focused on REDD+ Readiness (Phase I), and therefore is not well aligned with the desire for this investment to provide an incentive for countries to move into later REDD+ phases. While there is a continued demand for further Phase I work, there is a clear bottleneck in the provision of funding for the later REDD+ phases, which this fund does not provide for.

Private sector engagement

- 16. Weak.
- 17. The Fund focuses on providing grants to a range of government ministries, NGOs and other related parties to deliver the aims of the Fund. While the Fund's aims include a desire to engage with the private sector, there is little evidence of this from the range of projects that it supports.

#### **Operational Criteria**

Delivers, or has the potential to deliver, real outcomes on the ground.

- 18. Uncertain.
- 19. Governance and disbursement of this fund have been criticised by some in the international community as less effective than that of other forest funds. There is little evidence that the projects the fund has supported have contributed to a transformational impact, and to a broad and long-lasting impact on the ground.

The African Development Bank (AfDB) manages the fund; there has been little evidence of their performance being of the highest standard, and in particular the rate at which funds have been disbursed through projects has been slow. In some cases, difficulties in relation to the relationships with local partner communities have caused further delays.

#### Good governance

- 20. Inconsistent.
- 21. Governance processes have not shown evidence of as high a standard of delivery as other forest funds.

22. Regarding Safeguards, the AfDB's 2004 Policy on the Environment has no specific guidance on REDD+ but it does highlight the need to integrate social and environmental concerns into economic development policies to reduce negative externalities. In addition, the AfDB have recently developed Indigenous People standards, and the strong focus on poverty reduction and implementation through NGOs and civil society ensures safeguards are met. A number of projects also specifically support civil society to participate in national policy processes. CBFF REDD+ projects will adhere to social and environmental safeguards set up for REDD+.

Timely disbursement

23. Weak.

24. The Fund has disbursed c.US\$20 million of c.US\$186 million since its inception in 2008<sup>84</sup>, around 10.7% of all funds at programme level. This is relatively poor. However, of those projects that are receiving funding, 67% have a superior or satisfactory level of disbursement. This is in line with other similar funds.

Ready and able to accept funding

25. No.

26. It has a considerable tranche of funds from previous donations still to disburse (c.US\$166 million) and they are not currently accepting a new round of projects and investments. In addition the majority of funds accepted by CBFF are RDEL and not CDEL, so would require an internal CDEL/RDEL swap, which could be problematic given the size of potential investment.

#### (4) Invest in UN-REDD

Fund overview

- 27. The UN-REDD programme works closely with UN agencies engaged in climate change and environmental issues. It supports national Phase I REDD+ readiness via the design and implementation of UN-REDD National Programmes<sup>85</sup>. It provides an alternative means of support for countries that for political or economic reasons do not want to engage with the World Bank and it provides considerable resources per country.
- 28. There is currently no UK contribution to this fund.

Conclusion

29. This fund does not match the criteria for further investment well.

<sup>84</sup> http://cbf-fund.org/en/node/347/Key-Performance-Indicators

<sup>&</sup>lt;sup>85</sup> UNREDD Work focuses in the following seven areas: i) improving Guidance on Measurement, Reporting, Verification (MRV) and Monitoring ii) Increasing Engagement of Indigenous Peoples and other Forest Dependent Communities iii) Promoting the Multiple Benefits of REDD+ iv)Increasing Transparency in National REDD+ Governance v) Strengthening Equitable, Transparent, Accountable Management of REDD+ Funds vi) Catalysing Shifts to a Green Economy vii) sharing knowledge nationally, regionally and internationally.

#### Strategic criteria

Alignment with ICF strategic objectives.

- 30. Moderate.
- 31. The UN-REDD programme is mostly aligned with the headline ICF objectives. However its programmes have been criticised for their potential negative effect on poverty reduction by reducing poor communities' access to forest land and forest products<sup>86</sup>; there is weak alignment with ICF priorities and guiding principles for expenditure<sup>87</sup>; and only four of the 16 countries with UN-REDD National Programmes are ICF priority countries. The first two of these issues are also applicable to other REDD+ programmes to some extent.
- 32. In relation to the ICF definition of 'transformational', internal evaluators have judged UN-REDD accordingly:

Scale - weak/moderate

Innovation - weak

Leverage - weak (but could be significant if it influences wider UN approach)

Replication - weak/moderate, with limited funds

33. The programme has limited influence over policy making due to its focus on the process and planning phases of UN-REDD, and because it largely does not seek to implement activities on the ground at a scale required to have a transformational impact.

Incentive to move from readiness to implementation at scale

- 34. Weak.
- 35. So far, the fund has focused on planning and preparatory work in the forestry space, which while essential are REDD+ Phase I activities. This fund would therefore be a poor tool for encouraging countries to move to later Phases of the REDD+ process.

Private sector engagement

- 36. Weak.
- 37. UN-REDD has a very limited focus on the private sector and is strongly focused on process.

<sup>&</sup>lt;sup>86</sup> Springate-Baginski, O. and Wollenberg, E. (eds.) (2010) REDD, forest governance and rural livelihoods: the emerging agenda. CIFOR, Bogor, Indonesia.

<sup>&</sup>lt;sup>87</sup> UK government and UN-REDD officials

#### **Operational Criteria**

Delivers, or has the potential to deliver, real outcomes on the ground.

38. Uncertain.

39. In terms of delivery, the fund works through the coordination of three participating UN agencies; this co-ordination carries high transaction costs that could slow down delivery processes. So far there is limited evidence that the outputs from the UN-REDD Global Programme have been taken up by national audiences.

#### Good governance

40. Inconsistent.

- 41. The policy board is very complex and inefficient, comprising 17 members and 100 observers. In 2012, UN-REDD commissioned an independent evaluation of the effectiveness of its governance structure which found that although there has been improvement in some areas, significant room for improvement remains in much of its operating procedures<sup>88</sup>. However, one benefit of the relatively unwieldy governance structure is a strong record on transparency.
- 42. Safeguards have been a major focus of UN-REDD's work, though conflict has not always been successfully avoided. The UN-REDD programme's Social and Environmental Principles and Criteria outline seven overarching principles<sup>89</sup> and 24 specific criteria for safeguarding against unintended negative impacts of REDD+ implementation. In addition UN-REDD, FCPF and FIP are working together to harmonise their safeguards so that REDD+ implementation is as efficient as possible in countries where multiple programmes are active.

#### Timely disbursement

- 43. Improving/Strong.
- 44. The Programme's disbursement rates have improved and this could indicate that the fund's ability to deliver is also improving. As of August 2013, 78% of the \$123,679,692 allocated budget had technically been disbursed to the participating UN Agencies, and \$65,719,977 has been spent through the programmes (annual delivery rate 53.2%)<sup>90</sup>.
- 45. However, the three UN agencies assume full programmatic and financial accountability for all funds received, meaning that most programme funds are disbursed through projects executed by these UN agencies in partnership with their host delivery partners.

<sup>&</sup>lt;sup>88</sup> Review of UN-REDD Programme Policy Board Structure, Baastel, 2013: Accessed at http://www.unredd.net/index.php?option=com\_docman&task=cat\_view&gid=3026&Itemid=53

<sup>&</sup>lt;sup>89</sup> The principles encompass a number of UN policies and declarations. They cover: democratic governance; stakeholder rights; sustainable livelihoods; compatibility with low-carbon development strategies and national commitments; protection of natural forest from degradation and conversion; maintenance/enhancement of forest functions; and the avoidance of adverse impacts of non-forest ecosystem services.

<sup>&</sup>lt;sup>90</sup> Figure for August 2013. Taken from UN Multi-Partner Trust Fund: http://mptf.undp.org/factsheet/fund/CCF00?fund\_status\_month\_to=8&fund\_status\_year\_to=2013

This means that the challenges of disbursement are not directly comparable with those in other funds, where recipient countries are more directly involved in the implementation of the programmes, and where project finance is spent on implementation in-country. UN-REDD's planning activities in comparison largely take place at a degree removed from recipient countries.

Ready and able to accept funding

46. Yes.

- 47. The UN-REDD Programme is now actively looking for more donors to meet the increasing demand from countries seeking support from the Programme.
- 48. The majority of funds accepted by UN-REDD are RDEL and not CDEL. This would require an internal CDEL/RDEL swap, which could be problematic given the size of any potential investment.

## (5) Invest in the Forest Carbon Partnership Fund – Readiness Fund

Fund overview

- 49. The FCPF Readiness Fund (FCPF-R) supports REDD+ Phase I activities the planning and development of strategies to reduce emissions from forest degradation. It provides a small amount of funding (US\$0.2m) to help countries to formulate a Readiness Preparation Proposal (RPP). This plan, if approved, enables further money to be released in the form of a Preparation Grant of \$3.6m-\$3.8m. This enables countries to implement their proposal and support the development of an Emissions Reductions Program Idea Note (ER-PIN). ER-PINs are integral to development of an Emission Reductions Payment Agreement (ERPA) in Phase III of REDD.
- 50. The UK invested £3.5m (US\$5.8) in 2008, which represents today a 2.4% burden share.

#### Conclusion

51. This fund does not match the criteria for further investment well.

#### Strategic criteria

Alignment with ICF strategic objectives

- 52. Medium.
- 53. This FCPF-R is focused on providing a process, with the support required, to allow countries to achieve 'Readiness' and access future REDD+ finance, including the FCPF-C. This fits with the ICF strategic aims, although it only it focuses on Phase I REDD+ activity, supporting participating countries as they progress to REDD+ Phases II and III.

54. In relation to the ICF definition of 'transformational', internal evaluators have judged the FCPF-R accordingly:

Scale - moderate

Innovation - moderate

Leverage - weak/moderate

Replication - weak/moderate

- 55. FCPF-R has proved fertile ground for developing ideas that inform international REDD+ negotiations. However, its impact on the ground has been more limited in terms of innovative solutions to forest governance and deforestation challenges. In addition, there is not consistent evidence at this stage that the readiness activities supported by the fund in-country have had traction and impact. The activities are relatively small-scale, and there is little appetite within the fund to provide support for a sector-wide planning process in the forest sector. While there has not been any private investment into the FCPF-R, both public and private funds have been leveraged to support implementation, but at varying degrees depending on country.
- 56. Nine of the thirty-seven countries participating in the FCPF-R are ICF priority countries.
- 57. An additional 17 countries have expressed an interest to engage with this fund, and in this sense FCPF-R has the potential for a strong increase in scale, though it is only funded at present to accept an additional three countries.

Incentive to move from readiness to implementation at scale

- 58. Medium/Weak.
- 59. By supporting participating countries as they prepare for REDD+, FCPF-R helps to provide the enabling conditions for countries to progress to Phases II and III. Because it is aligned with FCPF-C and to some extent FIP, this fund provides the first stages in a path for proactive countries to access these funds. However, this incentive is tempered by the current plan to only pilot 5 countries ER-PINS in the Carbon Fund.
- 60. FCPF-R has been criticised for not providing sufficient funding to implement participant country RPPs necessary to achieve 'Readiness', the end goal of the fund's process. However, the FCPF-R preparation grants, and comprehensive process, have allowed participating countries to leverage funds from additional bilateral and multilateral sources.

Private sector engagement

- 61. Weak.
- 62. There are currently no private sector investors in the FCPF-R.

#### **Operational Criteria**

Delivers, or has the potential to deliver, real outcomes on the ground

- 63. Medium.
- 64. While the fund has been slow to produce results due to a number of challenges in the project design, there have been some successes. Furthermore, developments in the project design appear to be improving the Fund's effectiveness.
- 65. The Fund has been criticised for having high transaction costs, as the funding it grants is provided in stages and is relatively small in scale<sup>91</sup>. The quantities of finance have been criticised as being too small for the task in hand and it has been criticised by some for not exploring innovative methods to address this issue.
- 66. Originally, only the World Bank could deliver projects in this fund. However, some countries that joined could not or would not work with the Bank this caused delays. However, it was agreed this year that countries unable to use the World Bank could use alternative delivery partners, the IDB and UNDP. As a result 10 countries have agreed to work with these alternative delivery partners to progress their Phase I planning, and 5 FCPF-R preparation grants are scheduled to be signed through them by February 2014.
- 67. 36 forest developing countries (13 in Africa, 15 in Latin America and the Caribbean, and eight in the Asia-pacific region) are currently included in the FCPF. 33 have prepared Readiness Preparation Proposals (R-PPs), nine have signed Readiness Preparation Grant Agreements, and one—the Democratic Republic of Congo—has advanced to the mid-point of its readiness preparations. The trajectory for development of these Grant Agreements for next year looks good, and it is expected that all countries engaging will have signed preparation grants by May 2014, a Fund deadline for guaranteed funding.
- 68. Costa Rica was the first country to complete the FCPF-R process it has now been accepted into the FCPF-C pipeline. This demonstrates that the fund can help countries complete their Phase I readiness activities and make the transition to access funds focused on Phases II and III.

## Good governance

69. Strong.

70. The Participants Committee is made up of an equal number of forest (REDD+) countries (14) and financial contributors (14), and is also comprised of observers representing

<sup>&</sup>lt;sup>91</sup> Under FCPF-R, countries receive \$200,000 upfront to support the development of their strategies. When these are approved, an additional \$3.6-3.8m is provided so long as countries have approved their plans by May 2014. After this date, funding is not guaranteed, but can be allocated if available at the discretion of the PC. Countries can bid for further funding tranches of \$5m if they can demonstrate significant progress in the implementation of their RPPs, and subject to availability.

indigenous peoples, civil society, international organizations, the UN-REDD Programme, the UNFCCC Secretariat and the private sector. The Committee, which meets twice a year, is the main decision-making body of the FCPF-R. It reviews country submissions, decides on grant resource allocation, and approves budgets *inter alia*. By including a balance of recipient and donor countries in its governance structure, the Fund has created a mechanism that supports transparent decision-making.

- 71. The FCPF-R's delivery partners are expected to follow the World Bank's overarching safeguard policies on environmental assessments; natural habitats; forests; physical cultural resources, involuntary resettlement; and indigenous peoples. It has built a highly consensual and democratic steering organisation that has established a platform for civil society and Indigenous Peoples. In practice though, the fund has attracted significant criticism from national civil society organisations in some countries, who argue that planning processes have not been sufficiently participatory. A particular criticism of the process is that the FCPF Draft Charter fails to include any safeguards for indigenous rights and implies that all control of forest lands rests with governments.
- 72. UN-REDD, FCPF and FIP are working together to harmonise their safeguards so that REDD+ implementation is as efficient as possible in countries where multiple programmes are active.

#### Timely disbursement

- 73. Slow/Improving.
- 74. An independent evaluation in 2012<sup>92</sup> confirmed that it had made significant progress, but was critical of the pace of financial commitments and disbursements, although there are signs that it is improving; of the US\$259 million committed to the fund, US\$42.5m of grants have been signed with countries, and the deadline by which all participating countries to have their RPPs approved and preparation grants signed is May 2014, which is expected to lead to a significant uptick in disbursements in the run up to that date. In addition to this, additional grants of US\$5m are available to countries that have made significant progress in the implementation of their RPPs; there are currently three applications under consideration.

## Ready and able to accept funding

75. Yes.

- 76. The World Bank is open to further contributions to allow it to both deepen its interaction in existing countries, and to extend to new countries. It was agreed by the Participants Committee in March that unallocated and additional funds would by split with 1/3 used to fund new countries to join the process, and 2/3 to fund additional grants for countries already engaged.
- 77. However, it is already capitalised beyond what is needed for programmed work in the short to medium term, including incorporating some additional countries in the fund.

<sup>&</sup>lt;sup>92</sup> Global Program Review of the FCPF by the World Bank's Independent Evaluation Group, 2012.

Further investment might be considered appropriate to provide additional finance to countries that are making significant progress in implementing their RPPs.

78. The majority of funds accepted by FCPF-R are RDEL and not CDEL. This would require an internal CDEL/RDEL swap, which could be problematic given the size of any potential investment.

## (6) Invest in the Forest Investment Program

#### Fund overview

- 79. The FIP supports developing country efforts to reduce deforestation and forest degradation and promote sustainable forest management that leads to emissions reductions and enhancement of forest carbon stocks (REDD+). Support is in the form of grants and near-zero interest credits. FIP financing seeks to leverage in additional private sector resources, by developing projects that the private sector is willing to co-invest in. It currently operates in 8 pilot countries. The fund is part of the suite of Climate Investment Funds (CIFs), which is the largest and most influential of the multilateral climate finance instruments. Experience with the CIFs will have a significant direct influence on the development of the Green Climate Fund. The Green Climate Fund is a multilateral UNFCCC mechanism (it is intended that this will be operational towards the end of 2014) that will similarly support developing countries to limit or reduce their emissions and to adapt to the impacts of climate change.
- 80. The UK has contributed £100m to the FIP, £25m of which was under the current International Climate Fund (£75m from predecessor Environmental Transformation Fund in 2009). Today this represents a 29% burden share.

#### Conclusion

81. This fund <u>does</u> match the strategic criteria for further investment well. However, it is not ready and able to accept further funding now. Our analysis suggests that an investment in this fund in 2014 could be justified.

## Strategic criteria

Alignment with ICF strategic objectives

- 82. Strong.
- 83. The FIP is closely aligned with the ICF strategy, including through a focus on delivering results on the ground, developing scalable and replicable models, and working with the private sector both through national investment plans and through a dedicated private sector mechanism. Moreover, this diverse approach to financing mixing public funding

- with grants for indigenous people is innovative. Innovation also exists at a national level with some country investment plans being highly innovative, though not all.
- 84. FIP core objectives are also strongly aligned with ICF poverty and ecosystem/biodiversity objectives and the FIP also includes a mechanism unique in the Climate Investment Funds a dedicated grant mechanism for indigenous and forest dependent people
- 85. In relation to the ICF definition of 'transformational', internal evaluators have judged the FIP accordingly:

Scale – strong
Innovation - moderate /strong
Leverage - strong

Replication – moderate

86. In terms of transformational impact, the FIP has strong transformational potential in terms of scale, as it provides significant finance for national investment plans and therefore has the potential to influence national policies and practices. At the present moment, this influence is limited to the 8 pilot countries that have currently been selected (and it is mainly focused on the forestry sector) but the FIP is keen to expand into new countries. The criteria for selecting new countries will be agreed at the FIP Board meeting in November 2013. Although FIP pilot countries and work to date has focussed primarily on the complexities of the forestry sector itself, agricultural drivers clearly impact dramatically on the forest sector and are important in the FIP approach. FIP is strengthening its work here and some projects, for example, in Lao, Mexico and Ghana, are working on jurisdiction approaches, with agriculture. The Ghanaian project, for example, focuses on the cocoa sector and its role in deforestation. Hence, the FIP has the potential to be even more transformational in the future as its scope broadens to address, in more depth, the agricultural and extractive drivers that have an effect on forests.

Incentive to move from readiness to implementation at scale

- 87. Medium/Strong.
- 88. The FIP is focused on providing REDD+ Phase II support. This is important because it moves countries much further forward to Phase III payment for emissions reductions, and it acts as a financial incentive for continued action to those countries developing or thinking about developing Phase I planning.

Private sector engagement

- 89. Medium.
- 90. The FIP is designed to leverage additional private sector investment and a specific private sector "set aside" window was set up in 2013 to stimulate increased private sector activity. 11 proposals for the \$51.5m pot were submitted to the Board in August by private sector entities in the pilot countries ahead of a decision in November. The proposals need to complement the national FIP investment plans and a review of them

indicates they are primarily focussed on Phase III type activities. The Board endorsed 5 of the proposals worth \$35.3m (2 in Brazil, 1 in Burkina Faso, 1 in Ghana and 1 in Mexico). An additional 3 proposals worth \$16.2m will be resubmitted following revisions (2 in DRC and 1 in Burkina Faso).

#### **Operational Criteria**

Delivers, or has the potential to deliver, real outcomes on the ground.

- 91. Medium/Strong.
- 92. Countries with the most potential for real impacts on the ground are prioritised in the FIP process; they are countries which are well advanced with their readiness activities supported by the FCPF and/or UN-REDD Programme. If funds are available for initiating transformational change in the REDD+ context in a country, the FIP Sub-Committee can agree on one or more new FIP countries and the programming process can start relatively quickly.
- 93. An argument exists questioning whether the FIP provides additional benefits by enabling additional investments or whether it is substituting existing Multilateral Development Bank support. The CIF Admin Unit is undertaking analysis on this. The picture on leveraging private sector finance is at a very early stage, although indications are that it has potential for growth as a dedicated private sector window has recently been launched to increase private sector focus. Of 20 FIP proposals, 6 were private sector; and the private sector set-aside attracted 11 private sector proposals.
- 94. An assessment of the investment plans has shown that biodiversity conservation in forest jurisdictions and farms as they relate to REDD+ is not well addressed. Additional resources could be used to further enhance biodiversity conservation in the context of the agreed FIP investments.

#### Good governance

- 95. Moderate / strong.
- 96. Governance and decision-making is good. In addition to the safeguard provisions of the MDB, all investment plans and projects are checked against the CIF investment criteria and the consistency of the investment plan with the objectives of the FIP. Since livelihoods and biodiversity conservation are listed as a co-benefit in the FIP objective, the Sub-Committee applies a rigorous review process to each investment plan. In addition, each investment plan is reviewed by two independent experts selected from the FCPF roster of experts. The reviews also use the FIP objective and principles as well as the investment criteria to review the plan. All reviews are publically available. This process provides a good level of transparency.
- 97. Multilateral development bank safeguards apply and are in place. Application of these safeguards depends on the quality of the multilateral development bank oversight and steer and there has been some variation in the quality of consultation across multilateral

- development banks. Overall, though there is strong civil society participation in the Programme.
- 98. UN-REDD, FCPF and FIP are working together to harmonise their safeguards so that REDD+ implementation is as efficient as possible in countries where multiple programmes are active.

Timely disbursement

- 99. Slow/Improving.
- 100. Although some have suggested FIP has a slow disbursement rate to date, given six projects have so far been approved, FIP is actually no slower than other forest funds, which in general are also slow to disburse. However, many of the issues regarding disbursal are as a result of the investment plans taking longer than anticipated. The investment plans are now largely completed and, having successfully tackled difficult issues in a complex forestry environment, now offer a strong foundation from which successful projects can be built. The effectiveness of the FIP process should also be emphasised where a lot of emphasis is put on consultation. 6 projects have been approved so far, and a further 12 are due to be in train before the end of 2013. 13 projects are now scheduled for approval over the next 9 months<sup>93</sup>. In addition, the FIP Board, after a lessons learning exercise, are now looking to accelerate further or streamline planning and project design stages of the programme.

Ready and able to accept funding

- 101. No.
- 102. The FIP currently is adequately funded for its current programme of work. It is actively seeking to expand into new pilot countries and operate further niche 'set aside' mechanisms should more funding become available; expansion and the criteria for selecting any new countries will be discussed at the next FIP subcommittee meeting in November 2013. There needs to be alignment between country proposals and 'set aside' mechanism planning at the country level.
- 103. While it is expected that there is likely to be high demand from recipient countries for additional FIP funding, at this stage it is not possible to say which countries might be in a position to take up such funding. We are encouraging the FIP Secretariat to adopt a joined-up approach to exploring options for further countries for funding, including by assessing progress made on readiness as a way of accessing further finance through the FIP, in line with our wider policy objectives. We will have a better idea of the particular countries that might be able to take up further FIP support early next year. It may be possible to invest further in this fund at that stage.
- 104. The FIP is able to accept CDEL (and RDEL).

<sup>&</sup>lt;sup>93</sup> FIP Semi Annual Operational Report p.26. Table showing Board approvals up until July 2014

## (7) Invest in the Forest Carbon Partnership Fund – Carbon Fund (FCPF-C)

Fund overview

- 105. The FCPF-C provides incentives to reduce emissions while protecting forests, conserving biodiversity, and enhancing the livelihoods of forest-dependent indigenous peoples and local communities. The fund develops new market instruments for pricing forest carbon emission reductions, for valuing social and biodiversity co-benefits and for blending private and public funds. This is an innovative approach using new methodologies which has high potential to drive change but likewise also carries high risks with it. It is currently programmed to operate in 5 pilot countries.
- 106. The UK contributed £11.5m to the FCPF-C in 2008, which today represents a 4.72% burden share. Currently, 0.2 FTE in DECC is allocated to managing these investments.

#### Conclusion

107. This fund does match the criteria for further investment well.

## Strategic criteria

Alignment with ICF strategic objectives

- 108. High.
- 109. The FCPF-C aligns well with ICF objectives. It provides an effective mechanism to work together with the private sector in a limited capacity (as a buyer of carbon offsets) to develop and test emission reduction investment programmes linked to results based payments and market instruments. It focuses on providing Phase III support through payment for verified emissions reductions.
- 110. The FCPF-C is likely to have influence (along with the CIFs) on the future climate finance architecture, in particular the use of R-PPs and its Methodological Framework, which if successful, could be incorporated into a REDD crediting system as part of a global deal in 2015.
- 111. There is strong demand from FCPF partner countries. Other alignments include conserving biodiversity, and enhancing the livelihoods of forest-dependent indigenous peoples and local communities. The five pilot countries, which apart from Costa Rica are yet to be chosen, offer the possibility for a transformational impact in those countries. In relation to the ICF definition of 'transformational', internal evaluators have judged the FCPF-C accordingly:

112. Scale - High in the countries it operates in, but limited in country scope by the availability of current funds. The potential exists to scale up with the fund, and the fund is currently investigating the possibility of investing in two further countries. Demand for inclusion is running high.

Innovation - High

Leverage - Unclear

Replication - Potentially strong

113. The fund has the potential to become a market leader in the delivery of Phase III interventions. It is expected by the FCPF facility management team that large scale payments for results will begin in 2015, and that from that point, the fund could have a significant impact in the countries in which it is investing. Ultimately leverage is dependent on external factors relating to UNFCCC negotiations around a global deal in 2015 and to some extent on the healthy functioning of the carbon markets, as 12% of investments (including 100% of private sector investments) are by donors who trade the carbon credits earned from their investments on the carbon market. These private organisations that do trade their carbon credits are in a small minority (although they are also joined by the USA and Australia) – the UK will not make such trades as they would not comply with our carbon market principles. The complexity of the underlying methodology for investment will make replication harder.

Incentive to move from readiness to implementation at scale

- 114. Medium / High.
- 115. Countries are only eligible for FCPF-C funding if they have already passed through the FCPF-R process, so this fund also provides a strong incentive for countries to progress through the REDD+ Phases. For example, Costa Rica has recently completed the FCPF-R process and entered the FCPF-C pipeline. However, this is somewhat tempered by the limited quantity of FCPF-C funding available.
- 116. If successful, many aspects of the FCPF-C are expected to be incorporated into a global REDD crediting system from 2020, including the requirement for countries to achieve 'readiness' providing a potential further incentive for countries to move through the framework.

Private sector engagement

- 117. Medium.
- 118. Two private sector actors, BP and CDC Climat, have invested in the Carbon Fund the minimum amount permitted (UD\$5m).

#### **Operational Criteria**

Delivers, or has the potential to deliver, real outcomes on the ground

119. Medium/High in principle.

120. The fund has not yet begun to deliver large scale payments for results, so it is difficult to demonstrate clear outcomes on the ground now. However, the Facility Management Team predict that payments for results begin in 2015 and the fund has a strong potential to produce results that are transformational and at a large scale. Additional funds now will incentivise more countries to move through the REDD+ phases in advance of these payments. The FCPF-C is the only multilateral fund that pays exclusively for verified emission reductions at the scale proposed and so there is considerable scope for the fund to lead the market in this regard. Such innovation and market-leading potential is inherently more risky than other more tested approaches but the ICF Board has a high appetite for risk over its whole portfolio. The UK's approach to forestry investment is intentionally designed to test new approaches within a diverse and therefore lower risk, overall portfolio.

# Good governance

- 121. Strong in principle.
- 122. The fund operates a 'double 2/3 vote' system for decision-making amongst donors. This provides for two sets of votes. In the first, each donor receives one vote. In the second, each donor receives one vote for every \$1 million they invest in the fund. For a motion to be passed a 2/3 majority must be won in both votes. This system means that, while a greater contribution provides donors with a greater voting share, the Fund cannot be dominated by those providing the most funds, and is therefore more equitable amongst donors than under a voting system based on size of donation.
- 123. The fund follows the World Bank's stringent access to information guidelines, which are internationally recognised. FCPF-C even goes beyond these; one of its main objectives is learning and disseminating knowledge, which often requires going beyond the policy. The fund publishes much of its governance information on its open-access website, including all decisions, chair and co-chair summaries of all meetings, all resolutions, and all documents submitted by potential recipient countries.
- 124. The fund is governed by the World Bank's safeguard policies. In theory safeguards should therefore be strong, but as operational modalities for investment have not yet been established, there is still some uncertainly on this point.

## Timely disbursement

- 125. The fund fully opened in May 2011. Disbursement is untested, as the fund is not expecting to disburse until 2015, once Emissions Reductions Payments Agreements (ERPAs) have been signed. It therefore remains untested against this criterion.
- 126. Progress through the pre-qualification stage, which is through Phase I via the FCPF-R, has been slow and impacted on overall implementation of FCPF-C. However, whilst time consuming, the lengthy discussions that have taken place and continue to take place under FCPF-R are critical to setting strong foundations for FCFP-C's latter work and are necessary for later success. Given the ground-breaking work that FCPF-C is undertaking, time has also been spent ensuring that the methodology and development

- of pilots are robust. While it is not yet possible to tell whether these measures have been successful, early indications are positive and it is not expected that there will be delays to the 2015 disbursal date.
- 127. The exact shape of the disbursal curve from 2015 is yet to be determined. While it seems likely that payments will peak in the later years, following MRV, there is also the possibility of advance and interim payments made subject to progress, to ensure that funding is spaced out.

#### Ready and able to accept funding

- 128. At present, FCPF-C is capitalised to US\$391m. After 8-10% costs are deducted, this leaves \$350m to fund 5 programmes at approx. US\$70m each. This is the current programme; however there is considerable scope to expand this.
- 129. A UK contribution of £45m (US\$70m) would be enough to fund an additional country pilot. Current finance is expected to support 5 country pilots, but 10 countries have submitted Early Idea Notes, and the majority of these are expected to be translated into ER-PIN proposals. To commit additional finance to a new country, the UK would need to raise a motion at the FCPF-C steering committee; the secretariat and other donors have informally indicated that this approach would be likely to be greeted positively.
- 130. It would be possible to make this investment in this calendar year, to influence the development of ER-PINs and to provide an incentive to countries to raise their ambition. However, a pledge this year could be followed by commitment next year, once we have seen the plans from participant countries. This gives us more certainty that our finance will be used to support a high-ambition value-for-money plan, and fits well with our policy objective of incentivising countries to move to later phases of REDD+.
- 131. The FCPF-C is able to accept CDEL.

## (8) Invest in the Bio Carbon Fund (BioCF)

#### Fund overview

- 132. The fund seeks to redress market failures in the forestry sector by providing sustainable income streams for well-managed standing forests, by guaranteeing ex-post payments for verified emission reductions, and sustainable commodity purchasing commitments from the private sector. The fund was established in 2004, and has disbursed two 'tranches' of funding to small-scale forestry projects generating credits for compliance and voluntary carbon markets. The World Bank is currently seeking donors for a new Tranche 3, which aims to provide finance to jurisdictional scale programmes in a small number of countries. While a small project might reduce carbon emissions in the project area, often the causes of carbon emissions and deforestation are simply shifted to neighbouring areas of forest. By supporting a jurisdiction-scale approach, it is hoped that the "leakage" of benefits from smaller scale forestry projects that has been observed elsewhere will be reduced.
- 133. The BioCarbon Fund also aims to secure private sector commitments in each jurisdiction that increase and diversify the sources of finance and incentive for the

jurisdiction to shift to sustainable land-use practices. For example, this might include a large commitment from a multinational agri-business to preferentially purchase sustainable commodity from a specific region, if sustainable production can be achieved. The World Bank has been running a pilot programme in Ethiopia under T3, and is expecting to launch around five further jurisdiction scale programs.

134. The UK has not contributed to this fund in the past, although c.£1 million of ICF funding is already approved to contribute to the Ethiopia pilot under Tranche three, when details are agreed.

#### Conclusion

135. This fund matches the criteria for further investment.

#### Strategic criteria

Alignment with ICF strategic objectives

136. Strong.

- 137. This option is well aligned with ICF objectives, strategy and priority countries. It aspires to work at a greater scale (jurisdictions minimum 100,000 ha, and likely to be much larger), building on a track record of project-level support; working closely with farmers and private companies; and includes both agriculture and forests within the scope of its interventions. It offers a potentially good fit with the ICF private sector strategy and has potential to fit with the ICF priority countries as donors have the ability to define where money is spent. The UK's draft Investments in Forests and Sustainable Land Use programme contains a component that focused on jurisdictional level activities which engage the private sector, to increase the sustainability of the supply chains of the major commodities driving deforestation. The BioCarbon Fund would be a possible delivery route for this component. It is also aligned to some degree with other broader UK objectives including sustainability, and partnering and collaborating.
- 138. In relation to the ICF definition of 'transformational', internal evaluators have judged the BioCF accordingly:

Scale - moderate (potential)

Innovation - strong

Leverage - moderate

Replication - weak / moderate

139. It is challenging to assess the transformational potential of the BioCF because it is still under design. The fund aspires to work at a jurisdictional scale. While this carries the risk of trialling a new approach to investment, it also has the potential to be hugely innovative, by scaling up implementation, capitalising on opportunities where there is

significant political will (such as at state or regional level), and offering potential to deliver medium-term results. Additionally, it adopts a further innovative approach as it aims to directly tackle a range of drivers of deforestation, including those relating to agriculture and forestry. The leverage potential of the fund is untested and will depend greatly on the efficacy of the pilots. A recent roundtable discussion of forestry investments revealed mixed views about the potential to use this approach to leverage private capital, however conversations between the UK and a number of multinationals has indicated a strong willingness to be involved in the fund. There is no potential for replication without BioCF support at this stage, as the fund is an early stage attempt to pilot test a jurisdiction approach. Each jurisdiction program is intended to be in the range of \$30m-\$50m, plus the value of demand-side commitments. This size would be significant enough to potentially facilitate transformational change.

Incentive to move from readiness to implementation at scale

140. High.

141. This fund will support countries that have already passed through the REDD+ Phase I process, demonstrated by an independent assessment of readiness. These countries will be eligible for further support and therefore will be strongly incentivised to continue moving through the Phases.

Private sector engagement

- 142. Potentially high.
- 143. The consultancy Lion's Head has been working closely with the World Bank to develop a private sector engagement strategy through the Ethiopia pilot for BioCF. It is a stated aim of the fund to engage the private sector, either through off-taker agreements or through other support mechanisms in the fund's activities. Negotiations between the private sector organisations, the World Bank and producers over the value and nature of these agreements have yet to take place. Private companies have already shown interest in engaging with the project through off-taker agreements, and demand is likely to be high from companies who have made public commitments to remove deforestation from their supply chains, such as those within the Consumer Goods Forum. For example, Mondelez, Unilever and Bunge Environmental Markets have shown interest in engaging in jurisdictional programmes. It should be noted that because it is still relatively early in the process of developing the Fund, no private sector agreements have yet been signed, and therefore the potentially high engagement in this scenario reflects a high level of ambition.
- 144. There is a long term vision for how to engage the private sector. Lion's Head and the World Bank have agreed a set of principles for private sector engagement for the third tranche of the BioCarbon Fund (see **Annex E**). These will be used to guide the Fund's engagement with the private sector. Private sector organisations are motivated to develop sustainable supply chains for forest-related raw materials and products, and to

<sup>&</sup>lt;sup>94</sup>Personal communication

develop effective dialogues with regional and national governments to mitigate risks associated with operating in emerging markets. It is clear that there could be significant benefits in engaging the private sector, including corralling private sector efforts to limit and reverse the drivers of deforestation and land degradation, involving the private sector in the design stage of project work, and developing private sector opportunities that fit best with the fund's aims and development. Engagement with the private sector will be centrally co-ordinated by the World Bank, who will develop an engagement strategy that ensures that all potential private sector opportunities are considered in an impartial manner, and that they complement each other where possible.

145. Lion's Head has also modelled potential private sector leverage at **Annex D**. This modelling suggests that up-front private sector leverage of c.0.9 could be possible, although with the information available at this stage is ambitious. It is worth noting that this figure does not include the potential for private sector offtaker agreements or other indirect private sector engagement, which could increase the leverage significantly.

## **Operational Criteria**

Delivers, or has the potential to deliver, real outcomes on the ground

- 146. Medium / high in principle.
- 147. Only one pilot project, in Ethiopia, has been announced so far. Project work is still on-going for this jurisdiction investment and there are as yet no results from this. UK government staff in-country report that the management of BioCF has been effective so far, although World Bank resources in-country are limited. Possible geographies to support under the fund will be determined by the World Bank and donors on the basis of transparent criteria; the presence of committed World Bank teams to deliver a country programme is a key criterion. The World Bank will build these teams over time, but initially this capacity constraint will have to be considered in selecting jurisdictions to support.
- Ensuring that the fund pays for benefits that are demonstrably additional, and that 148. countries do not seek funds from multiple sources to pay for the same activities on the ground are two key issues on which we have pressed the World Bank (see Annex F for their paper on this). The BioCF team in the World Bank are well-placed to maintain a cross-sector view of what funding is flowing into a particular jurisdiction, and links with other World Bank forestry funds such as FCPF-R, FCPF-C and FIP are particularly strong. There is good complementarity between these funds, which with the good management that we expect from the World Bank could provide well-aligned funding for countries to advance through the REDD+ Phases (see Annex C). The Fund team will ensure that a cross-sector analysis of where funds are flowing is made before committing BioCF funds. Additionally, country plans developed under T3 will need to clearly demonstrate ambition (in the form of an ambitious reference level) and additionality; therefore this is a risk that will be managed by the Fund team through the development of the project. BioCF+ and BioCF T3 funding will be used for different purposes to avoid any internal overlap, and any upfront finance under T3 will be

deducted from later emissions reduction payments. BioCF+ is a readiness fund that will provide supporting technical assistance in the T3 targeted geographies only (further detail in **Annex C**).

- 149. Selection of the countries where jurisdiction windows for T3 funding could be opened is in process. PwC has completed an early stage analysis into possible options, considered agricultural drivers to deforestation, REDD+ readiness, and more general investment conditions.
- 150. Donors now must work together and with the World Bank to prioritise further. The likely process is as follows:
  - <u>DECC Ministers</u> to advise on preferred jurisdictions from long-list, based on advice from policy officials;
  - Consultation with DFID country offices and embassies as appropriate, to identify where the appetite exists to support a BioCarbon Fund programme;
  - Consultation with other donors to identify areas of overlap;
  - <u>Outreach to national/subnational governments</u> to discuss opportunities and assess interest in participating;
  - <u>Proposal from possible short list countries</u> to identify the possible scope of a jurisdictional programme.

## Good governance

- 153. Medium in principle.
- 154. The BioCarbon Fund has been effective in managing previous (project-scale) tranches (tranches one and two) of the fund. The third tranche is not yet fully operational and is considerably different in scope and objectives to the first two tranches. Therefore while this track record gives an indication of the possible effectiveness of the fund and its management, it is only partially relevant.
- 155. The structure of the BioCF allows for streamlined governance arrangements, whereby individual donors engage in the governance in the countries in which they are providing support, but not across the entire fund. This reduces the burdens on donors, but also helps to ensure that programmes are country led. Donor countries do have a strong role in selecting jurisdiction windows and in managing these once they are open. The World Bank intends to work positively to ensure that the governance process is transparent, and will ensure that lesson learning across the whole fund takes place.
- 156. World Bank safeguards apply to this fund.

Timely disbursement

157. Unknown.

158. Funds are currently being sought for Tranche 3, and no significant disbursements have yet been made. Beyond Ethiopia, the pilot project, countries and projects have yet to be selected. Tranches 1 and 2 have disbursed 48.9% of funds, which is on target<sup>95</sup>.

Ready and able to accept funding

159. Yes.

160. The BioCarbon Fund is actively seeking donors to make investments into tranche 3; both the USA (potentially c.US\$25 million) and Norway (potentially c.US\$50 million) are strongly considering investments.

#### (9) Do Nothing

- 161. This option was ruled out at an early stage.
- 162. As set out in the strategic case, market failures in the forestry arena are wide reaching, complex and interlinked. The impact of these failures is also significant with profound implications for climate change adaptation and mitigation, biodiversity and long term sustainable development. This affects the UK both directly and indirectly. The UK takes seriously its responsibility to take action to address these market failures. Doing nothing undermines this clear objective.
- 163. In addition, the International Climate Fund, where this money comes from, has an explicit objective to support transformational investments aimed at tackling deforestation. Under the ICF, forestry investments have to pass a high threshold test of demonstrating reduced emissions, improved livelihoods and enhanced ecosystems and biodiversity. Doing nothing is therefore at odds with the founding objectives of the ICF and its explicit prioritisation of action on forestry.
- 164. A bilateral investment has already been ruled out because this would not fit with the rationale for investment, it would not fit with the shape of the UK's overall investment portfolio, because of the impracticalities and financial risks associated with putting together a large scale bilateral investment at this stage (see strategic case, section one).
- 165. The only alternative to investing now would be to return the investment to the ICF and forgo forestry investment this year. As ring fenced Official Development Assistance (ODA) the money would not be transferred to UK domestic priorities. It would continue instead to be used to support other overseas assistance projects but the explicit forestry focus would be lost. This could constitute a significant political risk to the UK government's ICF forestry objectives. Additionally, this would create a reputational risk as the UK has made public its intention to support these objectives; the potential for leveraging other donors would also be missed.

<sup>&</sup>lt;sup>95</sup> BioCarbon Fund managers: email communication dated 26/09/13

# Summary

166. In summary, of the nine options considered, donating additional funds to the FCPF-C and BioCarbon Fund were the preferred funding delivery methods. These were carried forwards to give a value for money assessment of investing in these funds.

# 2.2 Assessing the strength of the evidence base for each feasible option

- 167. In Table 2.2, the overall quality of evidence for each option is assessed. This draws on the description of barriers in the Strategic Case, and the alignment of options with the strategic and operational criteria.
- 168. There is strong evidence from the development of projects through the ICF pipeline that an additional investment in one of them would result in operational criteria not being fulfilled, which is Option 1.
- 169. There is strong evidence to support the consideration of Option 2; there is considerable experience within the ICF team on the amount of time and resource that is necessary to develop a bilateral project from scratch.
- 170. The Congo Basin Forest Fund, Option 3, has been in operation since 2008; a strong evidence base on its performance has been built up since then.
- 171. Evidence relating to UN-REDD, Option 4, is moderate; there is evidence of disbursal rates through the Fund but it has been challenging to discover detailed information on the fund's workings.
- 172. Evidence relating to FCPF-R and FIP (Options 5 and 6) is moderate-strong. We have been able to cross-refer publically available data sources with detailed discussions with the secretariats for the three funds, and in addition we have had an on-going role in these funds because of our investments in them that have given us access to further evidence.
- 173. Option 7, FCPF-C, has not yet produced any results as it is in the pre-delivery stage, so the evidence has been evaluated as moderate despite our good engagement with the secretariat and engagement through our existing investment in the fund. This evidence base is built on expected results as opposed to actual results.
- 174. Evidence relating to the BioCarbon Fund, Option 8, is moderate. There is evidence from pilot work and previous rounds of funding, but because the tranche of funding the UK would invest in has not yet been set up beyond a pilot in Ethiopia, evidence is more limited than from other World Bank funds. This evidence base is built on expected results as opposed to actual results.
- 175. The evidence to support the do nothing option, Option 9, is strong as we have considerable evidence built up through previous ICF projects of the impact of climate finance interventions that is relevant to this option.

Table 2.2: Strength of the evidence base for each of the feasible options

Option	Strength of Evidence Base
Option 1 – Existing bilateral	Strong
Option 2 – New bilateral	Strong
Option 3 – Congo Basin Forest Fund	Strong

Option 4 – UN-REDD	Moderate
Option 5 – FCPF-R	Moderate-strong
Option 6 – FIP	Moderate-strong
Option 7 – FCPF-C	Moderate
Option 8 – BioCarbon Fund	Moderate
Option 9 – Do nothing	Strong

# 2.3 Economic Analysis of FCPF-C and the BioCarbon Fund

Nine options for multilateral investments were considered in the preceding sections 176. of the appraisal case. Two funds were identified for investments by DECC, each tackling carbon emissions from forests, protecting biodiversity and livelihoods using subtly different approaches. The analysis presented here provides an indicative assessment of the value for money of investing in the FCPF-C and BioCF as a capital contribution of £45m and £50m respectively. It is assumed that the UK investment will allow two new windows in the BioCF<sup>96</sup> to be opened and a further country to join the FCPF-C<sup>97</sup>. The analysis is based on the best available data gathered from the funds central administrative units, published documents and country idea notes, academic literature on the impact of interventions and experienced forestry experts and officials. There remains however a number of non-monetised benefits, including poverty reductions benefits, learning and network effects, international MRV and carbon market access, and institutional strengthening and capacity building, that it is not possible to monetise and therefore are not included in this analysis. The portfolio of activities under each fund is indicative and does not directly reflect any one (or more) country(s) that are developing their detailed plans, as such the modelling assess a wide country spread as currently there are a number of possible countries or jurisdictions that may pass the bar. Each of the funds are similar in the modelling and therefore the results cannot be used to choose between the funds rather they should be viewed individually.

#### Market failures

- 177. The true social and environmental value of land and land use are not reflected in the price paid by private individuals. Forests are often associated with various government and regulatory failures which do not allow the true value of the land to be reflected in private returns. Forests create positive benefits including storing and sequestering carbon, supporting plants and animals, and having positive impacts on the livelihoods of those who depend on the land. The FCPF-C and the BioCF add economic value for standing forests and carbon beneficial methods of land management and agricultural production; thus addressing the key market failure associated with forests and land management, internalising to the private returns some of the social value of each activity<sup>98</sup>.
- 178. The FCPF-C and BioCF address the value of land market failure via buying carbon credits from approved projects where governance is sufficiently strong, albeit via slightly

<sup>&</sup>lt;sup>96</sup> A number of possible jurisdictions are possible targets for new BioCF windows. Currently these are not sufficiently well defined to determine exactly where the windows will be and therefore the modelling is generic.

<sup>&</sup>lt;sup>97</sup> There is a significant pipeline of proposals coming through from FCPF countries which have completed the readiness process and it is expected good quality plans submitted will outstrip the funding available. UK funding would be pooled with other funders and allow a sixth country to join the FCPF-C.

<sup>&</sup>lt;sup>98</sup> Although the value paid by these funds often only internalises part of the social value.

different mechanisms the principle is the same. The UK contribution to these funds is expected to enable the funds to *de facto* buy credits or proxy credits and then cancel these, therefore the UK contribution has no interactions with the carbon market during the programme period<sup>99</sup>. Once the projects are up and running they will be able to demonstrate carbon savings via robust monitoring reporting and verification (MRV) systems. The future post-2020 carbon markets should therefore support these projects long term sustainability.

179. In addition to the value market failure, activities such as sustainable agriculture, forestry management, plantation farming or afforestation are not undertaken due to the high upfront costs acting as a disincentive to change. Further due to the long maturities associated with loans and lack of guaranteed income streams which are unacceptable for lenders when financing the implementation of these schemes<sup>100</sup> farmers' incentives are misaligned with those of the social good. Whilst the BioCF and FCPF-C do not directly tackle upfront cost issues. The BioCF and the FCPF-C provide an income stream to secure loans against, thus realigning the structure of these investments. Further the BioCF includes agreements with companies further up the value chain to buy produce from the project area, although the need for some upfront financing is likely to remain.

#### Model outline

180. The modelling assumes that under each fund countries<sup>101</sup> will undertake a portfolio of activities for which a stylised representation of seven activities is used in the model. These activities are described further below. It is assumed that each of these activities generate carbon savings. The impact of these programmes is based on the amount of carbon saving that can be realised by each activity, limited by the percentage share of the funding allocated to each activity<sup>102</sup>. For the FCPF-C and BioCF, the number of hectares impacted and the number of livelihoods affected can be calculated from the amount of carbon credits bought<sup>103</sup> (see the text box below for illustrative example of logic).

<sup>&</sup>lt;sup>99</sup> FCPF-C contributing countries can decide if they want credits cancelled or 'resold', therefore there is likely to be some interaction with the international carbon markets and an estimated 12% of credits sold countries such as USA and Australia.

<sup>&</sup>lt;sup>100</sup> Cambridge Economic Policy Associates (CEPA) (2013). Forests and Climate Change Programme: Review of Returns. Study for the Department for International Development, London, UK; & Forum for the Future (2009). Forest Investment Review. Study prepared for the UK Department for International Development (DFID). Forum for the Future, London, UK. [online]. Available at: http://www.forumforthefuture.org/project/forest-investment-review/overview

<sup>&</sup>lt;sup>101</sup> As we have no more robust information for BioCF and FCPF-C it is assumed that the programme funding is equally split between Africa, Asia and Latin America.

<sup>&</sup>lt;sup>102</sup> In reality this is not actually allocated by the fund, this describes the logic of the model which can best reflect the fund operation.

<sup>&</sup>lt;sup>103</sup> The model assumes a farm represents one livelihood. In reality this is not likely to be the case but allows conservative estimates.

## Illustration of activity logic 104

Below is an example of how the logic in both the FCPF-C and BioCF models flow, the numbers and assumptions discussed are simplified and for illustration only and do not directly relate to any one activity used in the actual modelling.

### FCPF-C and BioCF approach

It is assumed that interventions can sequester 60 TCO2e over 30 years per hectare, equivalent to 2 TCO2e per year per hectare. Total funding allocated to this activity is £0.5 million. The assumption is that the fund will buy one tonne of  $CO_2e$  for £5.

This means that the programme can buy;

- 100,000 TCO2e (£0.5m/£5)
- 50,000 hectares (100,000TCO2e/2 TCO2e pha)
- 1,000 individuals impacted (assuming ave. farm size of 500 ha / single occupancy)

#### Activities

181. The model works on the assumption that multiple activities will take place under each fund. The activities of the model describe the possible activities that may be included in the fund. It is a stylised model and does not reflect the full range of possible interventions or any specific country plan, although the modelling is optimised to best reflect the current pipeline of activities. This section describes each of the activities used in this modelling exercise, it is assumed that these would be mutually exclusive and no interactions occur between activities. The strength of evidence upon which activity modelling is based is mixed; the logic base follows published fund documentation. Most of the evidence to the level of carbon stocks, impact of different techniques such as sustainable forest management, crop revenue and yields are sourced from the academic literature and therefore has been peer reviewed and considered robust. The costs associated with changing from the counterfactual such as certification or planting trees are sourced from publications from KPMG, WWF and Green Resources among others. These have been cross checked where possible to ensure robustness.

<sup>&</sup>lt;sup>104</sup> Note for illustration purposes only does not reflect actual activities or figures used in the modelling. Activity 'A' does not directly related to any activity in the model, the box only represents the logic upon which the modelling is based. Equally assumptions and numbers used in the box are illustrative only.

#### Model activity 1: small scale plantation farming

182. Arable and livestock farming generally have limited (if any) carbon and ecosystem benefits<sup>105</sup>. This activity assumes land users moving from arable farming to using their land to plant trees. These trees can be extracted at the end of the growing cycle for sale, hence providing a financial return to the land. Whilst standing these trees absorb carbon and potentially<sup>106</sup> provide a more diverse ecosystem as well as protecting soil from degradation. If used for timber construction the carbon will be permanently (or long term) stored in the wood. The likely alternative is the trees are used for firewood or charcoal where the sequestered carbon is released. It is likely that the alternative source for this firewood or charcoal would be native/virgin forest and therefore the plantations will reduce the pressure to deforest natural forests<sup>107</sup> for firewood or charcoal. Thus protecting higher carbon stores and richer ecosystem forests.

Model activity 2: sustainable forest management (SFM)

183. Activity two of the model assumes land users move from maximising short term private gains by unsustainable extraction of forest resources<sup>108</sup> to a sustainable management cycle that maximises longer term private and social benefits. This protects carbon stocks from loss and allows for continued carbon sequestration. In addition the biodiversity and ecosystems also benefit from more sustainable use of forest resources.

Model activity 3: afforestation and reforestation (A and R)

184. Afforestation and reforestation activities both involve planting forests either where there was no forest previously or where forest once existed but has been cleared. The land is assumed to be degraded and of no carbon or ecosystem value<sup>109</sup>; arable farming is assumed to provide income to the land users/owners. The land use change undertaken increases the carbon sequestration (and storage) value of the land and enhances the ecosystem value including biodiversity, watershed and soil protection<sup>110</sup>.

Model activity 4: regeneration (R)

185. Similar to activity 3, regeneration involves changing the use of the land from a degraded state to one that is of a higher carbon and ecosystem value. Unlike A and R activities, regeneration involves lower costs as the land is allowed to largely naturally regenerate back to a natural state. It is assumed that 20% of the land is planted to assist in regeneration. The other associated cost is the opportunity of receiving income from

<sup>&</sup>lt;sup>105</sup> For simplicity we assume there are no benefits to ecosystems or carbon of these systems. In reality they may negatively impact carbon and ecosystems thereby the results from this model present a conservative picture of the programme returns.

<sup>&</sup>lt;sup>106</sup> Depending on species planted.

<sup>&</sup>lt;sup>107</sup> The model only recognises the carbon stored in a year and does not value the indirect carbon benefits of displacing charcoal production from virgin forests which could be higher. Further it is highly dependent on the counterfactual. Assumptions around carbon stocks are tested using sensitivity analysis.

<sup>&</sup>lt;sup>108</sup> The counterfactual assumes that extraction of resources has the equivalent impact of normal logging activities.

<sup>&</sup>lt;sup>109</sup> As advised by DFID forestry advisers.

<sup>&</sup>lt;sup>110</sup> With associated increases in below ground carbon.

alternative uses<sup>111</sup>. The expected benefits from regeneration activities will be lower compared to those from afforestation and reforestation because lower carbon and ecosystem beneficial shrubs will generate first. The model assumes that the value of regenerated land is 28% of replanted forest<sup>112</sup>, therefore fewer carbon credits are generated per hectare.

Model activity 5: National Park designation / no-deforestation zoning

186. This model activity requires the authority to designate a formerly logged area of forest (or area of forest under threat from continued logging encroachment) a national park or no-deforestation zone, therefore protecting the trees in the area that may have been felled otherwise. Thus avoiding the carbon stored in the trees from being emitted, sequestering further carbon and providing wildlife and other ecosystem benefits. The carbon benefit is associated with the land protected from deforestation versus the baseline deforestation rates<sup>113</sup>.

Model activity 6: agroforestry

187. Agroforestry is an integrated approach of using the interactive benefits from combining trees and shrubs with crops and/or livestock to increase productivity of land under cultivation. Several country plans identify agroforestry as one of the proposed interventions under a landscape approach. Cocoa shading is a specific agroforestry technique highlighted by some of the FCPF-C proposals and as a strong option in the BioCF. It involves farmers intercropping cocoa trees with generally native forest species <sup>114</sup>. Growing the forest species means the land captures additional carbon and reduces soil erosion and land degradation compared to a non-shaded regime. In the short term, the yield per hectare is decreased however the long term sustainability of production is higher as soil nutrient protection is greater<sup>115</sup>.

Model activity 7: sustainable agricultural practices

188. The model assumes that farmers initially grow palm oil and soy using unsustainable practices. Moving from unsustainable to sustainable agricultural practices will have a gain in carbon and ecosystems as well as increasing productivity (yield per hectare) and potentially allowing farmers to capture additional income from the price premium associated with certification<sup>116</sup>.

<sup>&</sup>lt;sup>111</sup> That is, this is represented in the counterfactual uses of land which is considered to be agriculture.

<sup>&</sup>lt;sup>112</sup> Yuan Pan et al (2011)

<sup>&</sup>lt;sup>113</sup> Based on country ER-PIN data referenced from observations.

<sup>&</sup>lt;sup>114</sup> The Ghana FCPF-C ER-PIN shows moving from low shaded regime to a high shaded regime increases shading trees on the land from 50% to 80%. To be conservative we assume that an additional 20% of the land area is given over to shading trees, representing a movement from low to medium shade regimes.

<sup>&</sup>lt;sup>115</sup> Long term impacts are not accounted for in this model.

<sup>&</sup>lt;sup>116</sup> In some cases certification attracts a price premium in others it generates yield increases which increase gross earnings per hectare compared to non-certified produce.

#### Portfolio split: by activity

- 189. The model is built of the seven activities listed above. The model for each fund assumes a slightly different mix of activities which is described in Table 2.3. The balance of the activities is designed to reflect the available information from the Emissions Reductions Program Idea Notes (ER-PINs), business cases and country information to ensure the portfolio presented reasonably reflects the opportunities that may come from investing in either of the fund across one or more potential countries.
- 190. BioCF and FCPF-C both fund a variety of activities which help enhance forest and agricultural carbon stocks. The BioCF fund mix is based on the mix of activities in **Annex D**, which is also used to inform the financial make-up of the modelling, reflecting the Ethiopia pilot project under the BioCF. The activities modelled under the FCPF-C reflect a mix suggested by the ER-PIN presentations made to the FCPF committee meetings over the last year.

Table 2.3: Central spending portfolios for BioCF and FCPF-C

Activity	BioCF Spend (per cent of total)	FCPF-C Spend (per cent of total)
Model activity 1: small scale plantation farming	7% (£4.8m)	2% (£1.1m)
Model activity 2: sustainable forest management (SFM)	19% (£12.1m)	24% (£11.0m)
Model activity 3: afforestation and reforestation (A and R)	4% (£2.4m)	15% (£6.6m)
Model activity 4: regeneration (R)	4% (£2.4m)	10% (£4.4m)
Model activity 5: National Park designation / no- deforestation zoning	37% (£24.1m)	15% (£6.6m)
Model activity 6: agroforestry	15% (£9.6m)	10% (£4.4m)
Model activity 7: sustainable agricultural practices	15% (£9.6m)	24% (£11.0m)

## Modelling assumptions

#### **UK** Government contribution

191. For modelling and assessment purposes it is assumed that, on behalf of the UK government ICF, DECC will make a contribution of £45m to the FCPF-C and a £50m BioCF (exclusive of each other) It is assumed that the contribution is made as a grant in 2013<sup>117</sup> and no money is returned to the UK.

#### Benefit and cost attribution

192. Benefits are attributed on the basis of the contribution that the UK Government puts into each of the funds compared to the total donor funding required. Private finance encouraged is attributed to the UK Government on the same basis as the benefits. We assume that other donors will come along side to fund the remaining money, informal discussions with other donors have suggested that this is likely should DECC invest in BioCF and FCPF-C.

#### Timescales

193. All FCPF-C countries must be ready by 2015, therefore it is assumed that it will take two years for the FCPF-C to set up<sup>118</sup> in a country and to start to buy credits. The BioCF is estimated to also take two years to set up<sup>119</sup>. Therefore benefits accrue from 2016 onwards for the FCPF-C and BioCF and last as long as the credits are bought; 8 years in the BioCF case and 6 years under the FCPF-C<sup>120</sup>. For these funds benefits are valued in the year that they occur, to be conservative no persisting attributable benefits are valued

#### Financial assumptions

194. The financial assumptions are based on information from ER-PIN documentation for the FCPF-C plus estimated variable costs following a bottom up approach. Bottom up variable costs allow the modelling to demonstrate the difference in cost associated with a different activity mix. Fixed costs are estimated on the basis of evidence from ER-PINs. The BioCF costs are based on a bottom up cost approach, estimating the cost undertaking a certain activity per hectare or farm. Public and private finance is calculated on the basis of this bottom up modelling and information gathered from other reliable sources. The BioCF model is optimised to match the private finance leverage ratio predicted by the data from the World Bank (see **Annex D**). The leverage ratio used does

<sup>&</sup>lt;sup>117</sup> 2013 is the price base year. The model assumes that the UK commits the money in 2013 and therefore the cost to the UK is occurred in this year. Other donor contributions are modelled as made at the point of purchase of the emission reduction credits.

<sup>&</sup>lt;sup>118</sup> Republic of Congo ER-PIN. This is financed by donor contributions.

<sup>&</sup>lt;sup>119</sup> Information received by World Bank Carbon Finance Unit (CFU)

<sup>&</sup>lt;sup>120</sup> There is a likelihood of permanence and sustainability of the projects after the funds have stopped buying credits, as international carbon markets are likely to be opening post 2020 and the transaction costs involved in returning to the previous land use are significant. There are no guarantees of permanence and therefore we have taken a conservative assumption by only assessing the carbon savings on the number of credits bought per year.

not include off-taker agreements<sup>121</sup> which are accounted for in increases in income in the modelling here. The FCPF-C model is optimised to match the leverage ratios predicted in the Costa Rica ER-PIN. Both may suffer from optimism bias, however sensitivity testing to ensure the model is robust to its assumptions is undertaken. It is likely that gaps in funding will be covered by donor financing, such as in the DRC ER-PIN.

195. The price for which the carbon credits are bought is based on information from the Carbon Finance unit at the World Bank for the BioCF from tranches 1 and 2. As there is no better information available, a central value of \$5tCO2e is assumed for FCPF-C. There is currently no agreed figure for BioCF tranche 3, and so in the absence of further information it is assumed that the same value will be relevant. This is clearly not at a level that would incentivise forestry over high-value activities such as mining.

## Private Finance Leverage

196. In the BioCF we are unable to quantify the amount of private finance contributed the projects from off-taker agreements, which is expected to be significant. It is estimated up to 4 times the original investment could be leveraged in off-taker agreements (see **Annex D**). We assume that the additional costs incurred to set up the activities for which emissions reductions payments are made are paid for by a mix of public and private contributions (for more detail see financial assumptions below).

#### Administration costs

- 197. It is assumed that the administration costs are funded out of the contributions to each of the fund. This reduces the amount of money available to buy carbon credits. For BioCF this amounts to up to 6.75%. Of this fee, 2% will be used to pay World Bank central costs. 0.75% will be used to meet the costs of setting up the country windows, while up to 4% will be used to pay for World Bank administrative costs incurred in relation to activities within the country windows themselves. The BioCF model assumes that further up-front investments will also be made by other donors and the private sector to support the purchase of carbon credits.
- 198. Around 6.4% of FCPF-C funds will be used for activities other than buying emissions reductions credits; 1.7% on Carbon Fund Administration, 2.5% on shared costs with the Readiness Fund and marketing, and 2.2% on programme costs including verification of emissions reductions. In addition to these costs associated with setting up the FCPF-C, further activities under the Readiness Fund also support FCPF-C investments. These activities are not accounted for within the fees described here.

#### Carbon Equivalent abated and land area

199. In the case of FCPF-C and BioCF land area is calculated using the number of carbon credits bought from the programme. The amount of carbon equivalent saved per hectare by moving from the counterfactual activity to the programme activity is calculated using data from the academic literature and therefore is considered reasonably robust. This can be used to calculate the area that can be achieved given the financial resources available for each activity.

<sup>&</sup>lt;sup>121</sup> This is where private companies guarantee the purchase of a certain amount of produce at a set price.

## Ecosystem valuation

200. The model disaggregates ecosystem service values associated with planted forest, sustainable forest management, agroforestry, regenerated forests and natural forest values. Due to a lack of reliable data the valuations are not disaggregated by region. The ecosystem valuation is based on academic literature and previous business cases, where appropriate experts have inputted knowledge. These values are applied uniformly to the land area impacted by the project.

#### Income and livelihoods

- 201. The net income effects are calculated individually for each component. The counterfactual being arable farming<sup>122</sup>, normal extractive logging<sup>123</sup> or growing of cash based agricultural crops in an unsustainable manner<sup>124</sup>. The loss of income from halting this activity is calculated based on market and farm gate valuations of produce as appropriate. The shift to the carbon credit eligible activity under either FCPF-C or BioCF will cause a change in income source, but may still provide some income from the land. In addition, for FCPF-C and BioCF credit payments also contribute to increase in income from each activity.
- 202. The number of livelihoods impacted does not include those whom are impacted by the forest being designated a national park. This activity is likely to most impact logging companies as well as those who use the forest in an informal manner, of which we have no direct estimates. Under the other activities carried out as part of the programme it is expected that livelihoods will be positively impacted in both income (land revenue plus carbon credits) and environmental terms. The calculation is based on the average farm size and each farm accounts for one livelihood. In reality this is likely to be far greater, possibly an average of 4 to 6 people per household<sup>125</sup>.

## Regional focus

203. The modelling of both FCPF-C and the BioCF assume that there is not a defined region of operation. Instead the models assume that there is an equal split of investments across Africa, Asia and South and Central America. This is because the FCPF-C will fund a range of countries and the exact target countries for the BioCF have not yet been determined. Therefore the modelling has been left open to provide a possible indication of results from an 'average' project.

<sup>&</sup>lt;sup>122</sup> For plantations, A and R and regeneration in FCPF-C and BioCF; and agroforestry in the FIP.

<sup>&</sup>lt;sup>123</sup> For sustainable forest management and national parks.

<sup>&</sup>lt;sup>124</sup> For Cocoa shading in FCPF-C and BioCF; and sustainable agricultural practices in all funds.

<sup>&</sup>lt;sup>125</sup> It is also likely the impact on women and children is significant as a large number of farming households are headed by women, although often these have smaller land holdings than male headed households (The IFAD poverty assessment in eastern and southern Africa noted that an estimated 25-60% of rural households in countries in the region were headed by women). Women often also farm the land in many male households.

## Carbon valuation<sup>126</sup>

204. The social value of CO<sub>2</sub>e, as assessed in this appraisal, does not reflect the price paid per tonne of carbon equivalent by the FCPF-C or BioCF. The model assesses the social value of carbon using the DECC pre-October 2012 traded carbon prices. The main results refer to the use of the central forecasted values, the future price of carbon is uncertain and therefore individually sensitivity tested. The high and low scenarios presented in Table 2.4 reflect changes in the valuation of carbon. It is assumed that during the period when FCPF-C and BioCF are buying credits no carbon credits are sold onto international markets. However under the FCPF-C, unlike the UK, some other donors do not cancel the credits. However, we assume that the credits bought from the new country are fully funded by the UK and therefore no credits are sold onto international markets as a result of the UK contribution. This would not impact the results that are attributed to the UK.

#### Discount rates

205. In line with appraisal guidelines a 3.5% discount rate is applied to global public goods; in this case the carbon benefits accruing from the project. All other costs and benefits are discounted at a developing country discount rate of 10%, this is because we do not know exactly where the fund will invest and therefore cannot use country specific discount factors.

#### Leakage

206. A key assumption is the impact of leakage, this is the amount that the new activity displaces the original activity to another area and the negative impacts of the original activity are felt there as opposed to the project area. In this situation there are no net carbon or ecosystem benefits. It is thought that a landscape approach should minimise local leakage and national leakage, however international leakage (e.g. that of Brazil to Columbia) could still be significant. A 25% leakage factor is applied in the modelling of the central scenario in the three funds<sup>127</sup>.

#### Evidence Assessment

207. The modelling is based on data and information from the funds central administrative units, published documents and country idea notes, academic literature on the impact of interventions and experienced forestry experts and officials. There are however weaknesses within these data. The funds admin units and the country idea notes provide a good indication of what activities are expected to be undertaken by the countries. However, the data within these notes are expectations and not evidence from the field. The financial data (that the leverage ratios are based on) are also expectations only.

<sup>&</sup>lt;sup>126</sup> Where 'carbon credits' are discussed credits are paid for emissions of CO2e.

<sup>&</sup>lt;sup>127</sup> This is advised by forestry advisers in DFID and as used in the Investments in Forests and Sustainable Land Use business case. In addition project plans support a figure of this magnitude, for example, in the recently prepared FIP project notes the DRC assumes 30% and Burkina Faso assumes 40% adjustments for leakage and non-permanence. This also includes an adjustment to allow the project to be conservative and account for additionality in its estimations, although it does not explicitly state at what level this is. Leakage will be far higher under the FIP as it does not take a landscape approach.

none of the plans have yet identified or brought on board the additional donor finance or private finance required. To account for this the model used calculates the required upfront costs to achieve the change from the counterfactual and applies the expected ratios of private to donor finance in the country plans. This relies on the cost data used in the model to be reliable. There are two sources of this; academic literature and published studies by consultancies and trade bodies, these vary in quality. The premium or yield bonus associated with certified produce is calculated from trade bodies. Further, the model is based on average rather than marginal costs.

208. The evidence that the modelling is based on is moderate in the most part, however is weak elsewhere. To allow for the level of uncertainty in the evidence the modelling is deliberately conservative in the assumptions that are made and also in the counterfactual identified.

Central Scenario Results

Table 2.4: Headline results

	Central Forecasts – Programme	
	FCFP-C <sup>128</sup>	BioCF <sup>129</sup>
Val	ue For Money Indicator	s
Net Present Value	£572m	£813m
Benefit Cost Ratio	3.05	4.41
Investment Cost- Effectiveness (£/TCO <sub>2</sub> e)	£18.86	£12.36
Private Finance	£104m	£118m
Private Finance Leverage Ratio	0.77	0.93
Non-UK Donor Finance	£91m	£76m
	ı	ı

<sup>&</sup>lt;sup>128</sup> Optimised to private sector leverage factor expected in Costa Rica FCPF-C plan.

<sup>&</sup>lt;sup>129</sup> Optimised to private leverage factor in **Annex D**.

Carbon Impacts			
Total CO2e (MTCO2e)	10	11	
CO <sub>2</sub> e Benefits	£296m	£313m	
	Ecosystem Impacts		
Land Area Protected (ha)	0.7m	0.5m	
Ecosystem Benefits	£311m	£329m	
Livelihood Impacts			
Livelihoods Impacted <sup>130</sup>	50,000	24,000	
Income Change	£244m	£409m	
Income Change Excluding ERPs	£206m	£381m	

	Central Forecasts – UK Attributed	
	FCFP-C	BioCF
Val	ue For Money Indicator	s
UK Investment	£45m	£50m
UK Attribution	33%	40%
UK Net Present Value (£m)	£189m	£321m
Attributed Cost- Effectiveness	£13.45	£11.44

<sup>&</sup>lt;sup>130</sup> Proxied by number of farms.

(£Donor/TCO <sub>2</sub> e)			
Private Finance	£34m	£46m	
	Carbon Impacts		
Total CO2e (MTCO <sub>2</sub> e)	3.3	4.3	
CO2e Benefits	£97m	£123m	
Ecosystem Impacts			
Land Area Protected (ha)	0.2m	0.2m	
Ecosystem Benefits	£103m	£130m	
	Livelihood Impacts		
Livelihoods Impacted	16,000	10,000	
Income Change	£81m	£161m	
Income Change Excluding ERPs	£68m	£150m	

209. In the central forecast the FCPF-C returns a partial net present value (NPV) of £572m with a benefit cost ratio of 3.05, UK attributable results show a NPV and donor BCR of £189m and 6.25 respectively. This shows that the fund is assessed as returning a higher private and social value than that invested to achieve the assessed outcomes. Wider analysis suggests that 10m tonnes of CO<sub>2</sub>e are sequestered, abated or emissions avoided across a land area of 0.6mha, which potentially impacts on the livelihoods of 50,000 small holder farmers<sup>131</sup>. Results attributable to the UK are significant at 3.3MTCO<sub>2</sub>e. The model has been optimised to a private leverage ratio of 0.77 matching the Costa Rica ER-PIN detailed financial information.

<sup>&</sup>lt;sup>131</sup>One farm is assumed to represent one person impacted.

- 210. The BioCF central model run returns a partial NPV of £831m and benefit cost ratio of 4.41, UK attributable results show a NPV and donor BCR of £322m and 8.32 respectively. The fund is therefore assessed as being good value for money with private and social benefits out weighing the costs. This is likely to be a lower end estimate of the impact of the fund as we are unable to value a large number of benefits associated with the programme such as the off-taker agreements, which could allow farmers to secure loans against. Carbon savings are estimated at 11mt and valued at £313m (4.3mtCO<sub>2</sub>e attributable to the UK investment). Ecosystem benefits are valued at £329m, with 0.5m hectares affected. Calculated on the average farm size 24,000 livelihoods are impacted by the programme<sup>132</sup>. Assuming that the average farming household is actually 4 individuals, the number of individuals impacted could be 100,000 for the BioCF. This model is optimised to the data on private sector leverage in **Annex D**. Bottom-up analysis suggests that the UK contribution could leverage as much as 2.76 times its money in private contributions, excluding off-taker agreements.
- 211. The attributed cost effectiveness of FCPF-C, at £13.43 per tonne of CO2e, is above the average of the current ICF portfolio, but well below the maximum of approximately £25/TCO2e. The attributed cost effectiveness of BioCF is £11.44/TCO2e which is below the average of the current portfolio. FCPF-C and BioCF are within the current boundaries of the ICF portfolio and are assessed as providing good value for money on the economic indicators presented here.

### Sensitivity Testing

- 212. This section presents sensitivity and breakeven analysis for all the major assumptions in the model.
- 213. High and low carbon price scenarios for each of the funds are presented below in Table 2.5. Under both high and low scenarios each of the funds still return good value for money, with cost effectiveness rates remaining well within the current bounds of the ICF portfolio and positive programme NPVs. Excluding carbon valuation<sup>133</sup> entirely also returns a positive NPV in the central scenario for both funds.

<sup>&</sup>lt;sup>132</sup> One farm is assumed to represent one person impacted.

<sup>&</sup>lt;sup>133</sup> i.e. no value is attached to a tonne of CO2e.

Table 2.5: Carbon equivalent price sensitivity

	Programme – Carbon Price Sensitivity			
	FCPF-C		BioCF	
	High	Low	High	Low
	Value For N	Money Indicat	ors	
Net Present Value	£655m	£475m	£910m	£701m
Benefit Cost Ratio	3.35	2.70	4.82	3.94
	Carbo	on Impacts		
CO <sub>2</sub> e Benefits	£380m	£198m	£409m	£201m

- To test the robustness of the model the expected carbon saved from each activity is reduced by 50%. It is clear from carbon price testing that the NPV will not go to, or below, zero and therefore breakeven analysis is not appropriate. However, the impact of reducing the carbon saving assumptions in the FCPF-C model does lead to an increase in NPV from £572m to £919m, with a smaller change in BCR, moving from 3.05 to 3.08. This change is driven from the available money being able to buy more land area as each hectare of land saves less carbon. The result is a greater land area (1.2m ha instead of 0.6m ha) and increased ecosystem valuation (from £311m to £516m). The BCR change is minimal as it costs to turn land from the counterfactual to that under the programme is largely modelled on a per unit basis. The impact of increasing the same assumption by 50% means the NPV falls from £813m to £457m and the BCR falls to 3.03. When changing the carbon saved from each activity in the BioCF model the same impact occurs; the NPV increases from £813m to £1,327m, however the BCR decreases from 4.41 to 4.18. This BCR decrease is due to the activity mix in the BioCF model meaning a greater number of more costly activities are undertaken and the benefits from these activities per unit are lower than those in the FCPF-C model. This testing has shown that the BioCF and FCPF-C are robust to changes in assumptions around the carbon price and carbon saved from each activity and therefore also this part of the assumed counterfactual.
- 215. As with the carbon price, reducing ecosystem values or income values to zero did not reduce the NPV to below zero, therefore the model remains robust to the assumptions

used to calculate these values. Ecosystem valuation accounts for approximately 31% and 37% for FCPF-C and BioCF respectively. Ecosystem valuation is an output of the model and not an input therefore decreasing the value by 50% leads to the BCR is reduced to 3.72 and 2.49 for the BioCF and FCPF-C respectively. The analysis also showed excluding the social values of carbon and ecosystems the NPVs of both funds remained positive. This suggests that the private incentive remains, but largely driven by the benefits captured by the plantations element of the model.

- 216. To further test the robustness of the modelling breakeven analysis was carried out on a number of the factors upon which the model most depends. This is the point at which the model's NPV turns negative when adjusting a single or group of values assumed in the model. Should the NPV turn negative the project, as assessed by this model, would no longer be economically viable. Here each model is tested on the leakage factor, ER payments and crop revenue. The FCPF-C modelling was slightly less robust to all factors than the BioCF model.
- 217. The breakeven leakage factor is crucial, it indicates the amount by which the net impact of the programme can decrease without turning the NPV negative. Both models NPV does not turn negative until a leakage factor of 83% for FCPF-C and 87% for BioCF are reached. The modelling means that the leakage factor can also be considered an additionality impact and therefore the model is also insensitive to high additionality reductions. The modelling may not suggest that the project returns a negative NPV at these levels, however a leakage or additionality factor of 80% is a serious worry for project design and should be closely monitored to ensure that the project returns maximum value for money.
- 218. The analysis showed more variation in the breakeven point for the payment of ERs with FCPF-C NPV turning negative at \$39.74 (£25.88) and BioCF occurring at \$216.28 (£140.84) per tonne of CO<sub>2</sub>e. It is highly unlikely that the prices paid by the funds will reach these sorts of levels as previous experience has shown that ER payments have not been greater than \$5-\$6 per tonne of CO<sub>2</sub>e. Prices in the voluntary carbon market are currently \$5.9, down from the 2011 high of \$6.2 per tonne of CO<sub>2</sub>e<sup>134</sup>.
- 219. Due to the high variation in international market and farm gate prices for traded and non-traded crops it was considered appropriate to test these assumptions with breakeven analysis. This testing also gives an indication of the robustness of the modelling to the assumed counterfactual situation. For the counterfactual crops (see activities description) value the BioCF remains positive until the value is increased by 312%, whilst this is in the realms of possibility over the short term permanent fluctuations to this level are not expected unless there is a shock that causes a significant reduction in production which would hit livelihoods anyway. The FCPF-C is less robust to 133% increases. The BioCF model is robust to a decrease in the value of the crops grown under the projects by 55%. Due to the dependency on agriculture the FCPF-C is more reactive to crop prices; as a result the breakeven point is a 38% permanent decrease in the value of the crops grown under the projects are either nationally or internationally traded and therefore open to competition elsewhere. However, at these prices it is unlikely that costs of growing the

<sup>134</sup> State of the Voluntary Carbon Markets 2013

crops would be covered and therefore these prices would be unsustainable on international markets.

- 220. Analysis on the BioCF undertaken by Lions Head on behalf of the World Bank has suggested that the private sector leverage ratio of upfront costs is 0.9. The central scenario is optimised to 0.9 leverage, with the shortfall in costs made up with additional donor finance<sup>135</sup>. With no additional donor contributions this is closer to 2.8. This increases the UK-attributable results to 77% as opposed to 33%. This still represents good value for money as the programme results are not changed, although the UK-attributable carbon emissions reduction is increased from 4.3 MTCO2e to 8.4 MTCO2e.
- The FCPF-C model assumes that only donors buy ERs, some of the ER-PINs suggest that they may be able to sell up to \$60m per year to the international markets. This seems exceptionally ambitious given the current state of the market for C/VERs and therefore was not included in the initial modelling. A scenario, based on the central assumptions but with a further \$60m per year contributions by the private sector, was run and lead to 42mtCO<sub>2</sub>e emissions reductions achieved. As it is assumed that all these emission reductions come from the private sector, the private sector leverage ratio is large at 6.26 and the BCR is 3.67. There is substantial detail on the Costa Rica ER-PIN and it has been reviewed by the FCPF-C committee. Optimising the model to match the profile of the Costa Rica ER-PIN results in a saving of 14MTCO2e. This shows the modelling in this business case is in line with that of the ER-PINS as Costa Rica's own estimated emissions savings is between 12 and 13MTCO<sub>2</sub>e. Although the model over predicts the land area by approximately 20%, suggesting the model is unable to represent specific variations in activities under the FCPF-C or the forest reference levels used in the ER-PINs. Should a 20% reduction be applied via the leakage factor to the central scenario results the BCR for the FCPF-C is 2.4 and BioCF is 3.3. With attributed 2.8MTCO<sub>2</sub>e in the FCPF-C and 3.9MTCO<sub>2</sub>e in the BioCF at an attributed cost per tonne of £15.87 and £12.89 respectively.
- 222. BioCF and FCPF-C models are sensitive to the mix of activities assumed, particularly the key driver of income change is the inclusion of plantations, which has far lower carbon benefits than other activities. These are a crucial element in the plan to protect forests, acting as buffer zones. Excluding plantations from the FCPF-C leads to a decrease in the NPV from £572m to £299m (a 47% decrease) and a BCR of 2.34 from 3.05. BioCF is equally sensitive to plantations which account for 7% of the modelled spending. Excluding plantations from the BioCF model causes a decrease in the NPV from £813m to £418m (a 49% decrease) and a BCR of 3.59 as opposed to 4.41. However, these data show that both the BioCF and FCPF-C models remain robust to the exclusion of key activities driving the results.

#### Value for money assessment

223. The cost benefit analysis presented here is only partial; it does not include a number of co-benefits or other non-monetisable benefits that each fund is likely to provide. Further the analysis uses an indicative portfolio of interventions which is realistic but, due to a lack of robust information, not reflecting any one FCPF or BioCF target country

<sup>&</sup>lt;sup>135</sup> As suggested in the Ethiopian ERPIN.

- specifically. As such, it cannot be used to determine the optimal allocation of funds between the funds. Instead it provides an indication of the value for money of investing in each fund. Under the VFM criteria the FCPF-C and the BioCF provide good returns.
- 224. The FCPF-C performs well against the key VFM indicators, returning a positive NPV and a reasonable BCR at 3.05. The UK attributable results show significant attributable carbon savings (3.3MTCO<sub>2</sub>e) at a reasonable cost per tonne of £13.43. We expect to leverage 0.77 pounds for every pound the UK puts into the fund. This could be even higher if country plans become a reality (at 42 MTCO<sub>2</sub>e saved), although there are doubts on the likelihood of this. In addition, the livelihood impacts are likely to be significant as there is a strong focus on sustainable agriculture and forest management.
- 225. The BioCF trails a new approach to landscape management particularly focusing on private sector supply chains and off-taker agreements. Analysis suggests that the private sector leverage is 0.93 but could be as high as 2.76. This could be higher still should off-taker agreements be included as well. The fund also performs well against other VFM criteria, showing significant attributable carbon savings of 4.3 MTCO<sub>2</sub>e at an investment cost of £11.44 per tonne. This is below the current estimated average of cost per tonne of the ICF projects. The BioCF concentrates more heavily of forest zoning and therefore the estimated livelihood impacts are lower than the FCPF-C.

## 3 Commercial Case

# 3.1 Why is the proposed funding mechanism/form of arrangement the right one for this intervention, with this development partner?

- 1. The UK has a history of investing through multilateral projects, both within the International Climate Fund and in wider Official Development Assistance. The UK uses a range of bilateral and multilateral projects to spread and minimise risk (see strategic case section 1.1.5). In particular, multilaterals enable the UK to engage in regions where we have little or no diplomatic presence thus are a cost-effective way to ensure sound management of UK-funded projects without requiring on the ground oversight from UK staff. The finance proposed in this document will sit alongside new and on-going bilateral projects specifically designed to tackle climate change, or delivering important emissions reductions co-benefits, such as biodiversity improvement.
- Multilateral projects are also successful in leveraging further finance from other donor countries and the private sector. In leading by example UK participation in multilateral funds encourages other donor countries to engage.
- 3. Multilaterals fund capacity building projects, such as improving monitoring and reporting, to enable the success of their project level interventions. These reforms remain in place after the multilaterals' work is done; allowing smaller-scale privately funded projects to commence, thus enabling more sources of income to flow into the region.

## 3.2 Value for money through procurement

- 4. There are two stages of procurement relating to multilateral investments. The first stage relates to the UK Government reviewing funding options, selecting a preferred fund and entering into a contract with them. This Business Case undertakes this assessment of options, considering strategic fit, operational effectiveness and value for money.
- 5. Having chosen a fund to invest in, the Fund itself procures in relations to its own projects. This section assesses how the preferred funds ensure value for money through these processes. Additional information on monitoring, evaluation and reporting, which is critical to understanding the overall performance and value for money of the fund is explored further in the Management Case (section 5.4).

## 3.2.2 BioCarbon Fund and FCPF-C

6. Both of these funds are managed by the World Bank, and will follow the Bank's procurement policies<sup>136</sup>. World Bank procurement policy is driven by "economy and efficiency" as outlined by their Articles of Agreement. Within the Bank, the Corporate Procurement Unit works to ensure that the Bank receives the best value for money form

<sup>&</sup>lt;sup>136</sup>http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/PROCUREMENT/0,,contentMDK:20060842~menu PK:93304~pagePK:84269~piPK:84286~theSitePK:84266,00.html

procurement contracts in terms of price, fitness for use, environmental efficiency, maintenance provisions, operating costs, guarantees, delivery and installation, and payment terms. The technical and financial capabilities of each procurement option are assessed in line with Bank policies.

- 7. An international competitive bidding process is used for all contracts (with exceptions only if the nature of the procured goods or services, or the size of the country, justifies them). The World Bank also has a policy to maintain high ethical standards for fair and equitable treatment of suppliers providing goods, works and services.
- 8. The International Finance Corporation (IFC), the private sector focused investment and advisory arm of the World Bank, could be involved in some of the procurement agreements arranged under the BioCarbon Fund and the FCPF-C. In the IFC, competitive procurement is mandatory for all operational procurement above \$50k and must be advertised. In order to further assure value for money, certain steps are required for procurement above specified threshold values. The IFC is implementing a new, mandatory, web-based procurement tool, which will further ensure compliance.
- 9. Performance management of contracts through the two funds will again use standard World Bank processes. The Fund Management Teams within the Bank will manage any contracts that are agreed and oversee the technical quality and unit costs of the work that results from these. There is considerable expertise within the Bank on engagement with the private sector, and this knowledge will be drawn upon by the two funds in their private sector engagement activities.
- 10. There is considerable oversight and scrutiny of World Bank procurement operations; around 5% of procurement operations are reviewed internally and a smaller amount of operations go to external review every year. The World Bank's Carbon Finance Unit core team will be responsible for operational, procurement and financial management, ensuring proper execution of trust fund activities, appropriate fiduciary responsibility and value for money. The World Bank has begun a review of its procurement policies and practices to ensure that procurement is as well aligned with the World Bank's development objectives as is possible.
- 11. The World Bank has an Access to Information Policy, which means that it has to fully disclose most documents. There are some exceptions to this, including certain financial and deliberative processes.
- 12. In addition, donors to these two funds are able to exert a degree of control over the management of expenditure through their roles in the funds' governance processes. These are described in more detail in the management case (section 5).

## 4 Financial case

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

- 1. The UK will provide £95 million in 2013/14 financial year from the ICF. The full sum will be disbursed and recorded in one payment in December. It will be 100% capital resource (CDEL).
- 2. Indirectly, management of our contributions, and participation in Trust Fund Committees will require administrative resource from DECC and DFID. The current UK resource for the management of the CIFs is set out in the Management Case, section 5.
- 3. The administrative resource for the two investments in this business case is estimated at 0.6 FTE from DECC and 0.2 FTE from DFID in the first year of the investments (see table 4.1). It is expected that there will be a heightened demand for DECC resource during this period in order to set up the BioCF jurisdictional windows and gain the approval of the FCPF-C Board to support an additional country investment. On-going, DECC FTE requirement is expected to drop to 0.2 overall, while DFID requirement will increase to 0.4 FTE (spread over two country offices). DECC will lead on engaging with the funds during this period, while DFID in-country staff will be required to manage the development of BioCF jurisdictional windows on the ground. In the absence of a DFID-country office, or resource to support the programme, DECC will need to consider increasing its resource in London, or rely more heavily on the World Bank country teams to provide on-going support to the programmes.

Table 4.1: FTE requirements for managing new investments

	Department	First year	On-going
FCPF-C	DECC	0.1	0
BioCarbon Fund	DECC	0.5	0.2
	DFID	0.2	0.4
Total		DECC: 0.6	DECC: 0.2
		DFID: 0.2	DFID: 0.4

4. The financial contribution to the funds will be fixed. 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.

#### 4.1.1 FCPF Carbon Fund

- 5. HMG has previously funded the FCPF-C. Additional contributions would affect the cost of World Bank administering the fund which is currently around 8% this figure would be reduced as a result of economies of scale in the delivery of country programmes. At present the Carbon Fund is programmed to use its funds to support the piloting of 5 ER-PINS. Any additional finance used to purchase a greater number of verified emissions reductions from those pilots would lower the administration costs as a percentage, as the fixed costs would be spread. Were the money used to finance an additional country's ER-PIN, the variable administrative costs (for example preparation, supervision, and verification costs) would increase.
- 6. The Fund forecasts budgeted and actual spend on an annual basis. These are as accurate as is possible with the information available. Longer term forecasting, such as to 2020, is challenging as there are a significant number of unknown variables that could impact on budgeting.

#### 4.1.2 BioCarbon Fund

- 7. The World Bank predicts that the project and administration costs for the new tranche of the BioCarbon Fund will be below the historic costs of the BioCarbon Fund's first two tranches. This is based on the expectation that a smaller number of larger transactions will lie behind a jurisdiction scale organisational structure than the smaller structures that have gone before. However, oversight on the ground will still be needed to some extent, for example to complete monitoring and reporting activities. The first two tranches of the BioCarbon fund operated at a much smaller scale and therefore did not benefit from economies of scale in terms of administration in the way that the third tranche is likely to. The third tranche will also benefit from lessons learning that has accumulated through the program so far.
- 8. Based on the assumption that each jurisdiction window will contain c.\$50 million, the World Bank estimates that the administration expenses of tranche 3 would be about 0.7% of fund capital p.a. in the first years of the program. On a \$50 million investment this would equate to about \$350k p.a. As the portfolio matures it is expected that the costs of fund administration will drop; this has been the case with the two past tranches. For these tranches, the administration fund has dropped to about 0.2% of fund capital p.a., or about \$100k p.a. for a \$50 million fund.
- 9. Project-related expenses are forecast to follow a similar trajectory as a portfolio of programs is developed. These could be expected to be about 1.0% of fund capital p.a. in the first years of operation (about \$500k p.a. on \$50 million), and as the window matures to decrease to about 0.4% of the window's capital p.a. (about \$200k p.a. on \$50 million).

- 10. To ensure accurate forecasting throughout each year, the following steps will be taken:
  - A payment schedule will be forecast indicating the drawdown of funds from the UK contribution;
  - An annual projection of spend will be obtained from the World Bank, six months in advance of each financial year, based on the Bank's pipeline and funding needs. This will be updated as actual spend information is collated;
  - The actual spend against the forecast will be monitored and updated regularly by the World Bank, who will update the UK on a quarterly basis;
  - DECC project staff will be able to compare reports on the implementation of agreed activities with the financial reports. The timing and content of implementation and of financial reports will be specified in an Administration Agreement between the UK and the World Bank.

## 4.2 How will funds be paid out?

- 11. There are two tiers of payment, first the payment out from the UK to the multilateral, secondly from the multilateral to projects. The UK 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. It is deemed by the Bank to be a paper based security and is treated like a bond or security in terms of obligation. This means that it creates a contractual obligation to pay. It is also non-tradable. 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. It uses the Bank of England as a conduit for these payments.
- 12. Although promissory notes stipulate that the amount concerned, or any part of it, is payable on demand, prior to issuing the Promissory Note the UK will sign a contribution arrangement, agreeing a payment schedule with the trustees in writing. The schedule sets out the amounts and dates of the payments that the beneficiary will request.
- 13. 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 previous contributions to the CIFs and to a number of other DECC ICF projects. It enables the UK government 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.
- 14. Once paid out from the UK each multilateral has different processes for disbursal.

#### 4.2.1 FCPF Carbon Fund

15. Under the FCPF Carbon Fund, funds are transferred from the World Bank to the governments of the piloted countries. A benefits sharing plan, proposed by the recipient country and agreed by donors, will dictate how funds are distributed within the country.

- 16. Where results-based payments are made from the World Bank to recipient countries, a results based payment framework will be agreed by the Bank. This will include an Emission Reductions Purchase Agreement (ERPA), which is the legal document between the World Bank and recipient country. The World Bank will complete a verification process to ensure claimed results are in fact real before making any payments. Disputes between country governments and the World Bank will be covered by an explicit Feedback and Grievance Redress Mechanism, agreed through the ERPA between the parties FCPF provides funds for setting this up. Disputes over the text of the ERPA, which is a legal document, can go to arbitration, where they can be decided by English law. Disputes over the verification process could be raised with the World Bank and the independent verifier.
- 17. While it is likely that the payments from the fund would increase in the latter years following the period it would take to verify the emissions reductions, there is a possibility for advanced payments based on interim progress reports in order to spread the payments from the fund to countries, but this will not become clear until ERPA stage.

#### 4.2.2 BioCarbon Fund

- 18. The World Bank developed a payment model for the Ethiopia pilot project; although this has not yet made any payments and so hasn't been tested, it will provide the basis for the model that will be used for further investments in the Fund.
- 19. For the BioCarbon Fund tranche three jurisdiction windows, the UK will pledge funding through a Participation Agreement. The UK will pay the contribution via a promissory note into a central trust fund. These funds will be disbursed to daughter trust funds as jurisdiction windows are selected by the donors. Interest paid on up-front funding will be paid into BioCF+, while interest on any money drawn from the promissory note will be added to tranche three funds.
- 20. For the BioCF+, UK financial accounting will allow for some of the BioCarbon Fund tranche three contribution to be used through the BioCF+ Trust Fund for technical assistance activities only if these activities still contribute to asset building activities. This is important if an RDEL/CDEL swap is to be avoided. This process will also be governed by the Administration Agreement, to be agreed between the World Bank and the UK Government. This agreement will include a payment schedule, which will govern the timing of payments against the promissory note. Where work is to be completed by a third party (ie, not the World Bank), the Bank will sign a grant agreement with the third party to govern this.
- 21. As with the FCPF-C, an ERPA will be agreed between the World Bank and the recipient country for results-based payments. The ERPA will allow for some up-front payments but the majority of funds will be payments for results.

#### 4.3 What is the assessment of financial risk and fraud?

#### 4.3.1 FCPF Carbon Fund and BioCarbon Fund

- 25. Development spending in general entails some risk of fraud. The ICF has agreed a medium-high appetite for risk in this respect. By working with multilaterals risk is minimised as the burden of scrutiny is shared between donor countries and the multilateral itself. Diversification, as an investment strategy, is also designed to lower overall investment risk, although it should be noted that there is a fraud risk associated with payments to each of multiple recipients within the funds. Other risk-reducing benefits of investing multilaterally are covered in the strategic case (section 1). They include the fact that multilaterals often have a stronger, more permanent presence in regions benefitting from funding than the UK. This pool of experienced, locally engaged staff provides more direct oversight and control.
- 26. Each of the funds follows the investment policies and procedures of the relevant MDB. These are audited annually by a reputable auditor.
- 27. In the FCPF Carbon Fund, a liquidity risk exists for private sector donors such as BP and CDC who seek a return on their investment, and that risk will depend on future carbon markets. The UK will retire its credits when the fund closes, thereby eliminating any financial risk in that respect. The credits could be retired when produced without having a different effect; however it is likely to be administratively easier to retire all credits at the same time when the fund closes. There is no material credit risk within the fund as payments are made to countries up-front in US\$. All credits are disclosed through reporting to fund participants. Each participant will receive their pro-rata share.
- 28. The World Bank, the delivery organisation for the FCPF-C and the BioCarbon Fund, follows its own Governance and Anti-Corruption (GAC) guidance, which has been approved by the UK. Risk of fraud varies depending on individual countries. The World Bank's own Integrity Vice-Presidency deals with suspected fraud and corruption within the FCPF.
- 29. All BioCarbon Fund grants are also covered by the GAC guidance. World Bank policies on Financial Management and Procurement also apply to this Fund's activities. The risk of fraud is taken seriously by the Bank; both the BioCarbon Fund team member allocated to a particular project and the World Bank regional contact will be directly responsible for supervision of it and therefore for any instances of fraud.
- 30. The risk of fraud in the BioCarbon Fund could be more limited still because the majority of funds will only be paid once results are produced. These results can be independently verified before payments are made.

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

#### 4.4.1 FCPF Carbon Fund

33. The FCPF Carbon Fund has its own MRV framework called the FCPF Monitoring and Evaluation Framework, which is available on their website<sup>137</sup>. The framework was agreed by the Participants Committee, including the UK, and will be well aligned with the majority of donors' Key Performance Indicators. It is meant to encompass all key building blocks required for the effective monitoring and evaluation of the performance of the Fund as it evolves until 2020, including financial accounting. Key elements of the framework are a result chain and logical framework, and a performance measurement framework.

#### 4.4.2 BioCarbon Fund

- 34. A budget will be drawn up based on the annual work plans. This will be agreed with donors. Expenditures will be monitored quarterly by the World Bank and reported on annually. Financial statements and audits are generated by using a standard method set out in the Fund's procedural documents. These are typical World Bank procedures for monitoring donor funds.
- 35. Each of the Trust Fund windows will be accountable to the donors for that window. This means that donors have the option of being directly engaged with the financial accountability processes of the fund.

<sup>&</sup>lt;sup>137</sup> FCPF, Programme Level Monitoring and Evaluation Framework, 2013

## 5 Management Case

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

#### 5.1.1 FCPF Carbon Fund

- 1. While the FCPF Facilities Management Team is responsible for administering the fund, all decisions are assumed to be taken at meetings by the Participants in the fund; these are the donors and the recipients. While it is important that donors therefore attend these meetings, votes can be cast remotely. Decisions are made by consensus where possible, and if not any donor can push an issue to a vote. This follows a 2/3 double majority. There are two votes. In the first, each donating country gets one vote; in the second, each country gets a number of votes proportionate to their investment in the fund. In both votes, a 2/3 majority is needed to pass a motion.
- 2. The FCPF Carbon Fund is a multi-donor trust fund under which no party casts undue influence in the voting. Donors are unable to attach conditionality to contributions, and smaller donors are protected by a one party one vote system.
- 3. There is no provision in the FCPF charter to withdraw a contribution at the discretion of the donor. Should the fund fail before it is due to close, the World Bank will agree an alternative use for the funds; they have the option of returning funds to the donor, but this is not obligatory. This gives us flexibility. The same applies for any funds that remain when the Fund closes in 2020.

#### 5.1.2 BioCarbon Fund

4. Donors are able to choose their level of engagement with this fund. The World Bank plans to include donor finance thresholds for each window to ensure that the governance is lean, and therefore can be flexible and responsive. We will be expected to engage firmly with the management of the funding windows the UK is supporting, and will be able to do this as a Participant in the Fund. Where multiple donors invest in the same jurisdiction window, each donor will have a proportion of the voting right (if a vote is called for), equal to their financial contribution to the fund. This is also the case for BioCF+. However, the World Bank has a strong desire to ensure donors reach consensus on management issues where this is possible, and will work hard to achieve this. There are provisions for voting where this is not possible - votes within country investment windows will be on a majority basis with donors possessing votes in proportion to the size of their investments. As we intend to match-fund the country windows we are investing in with other donors, the UK should have 50% of the votes in the windows in which it holds an interest, and so it should not be possible to be outvoted. Since its inception in 2004, only one vote has been held in the BioCF, all other issues being resolved through consensus. It is possible that additional donors could invest in a particular country window and therefore reduce the UK's voting share to less than 50% - this scenario will be investigated in more detail during BioCF Board Meetings. if the UK chooses to make this investment.

Risk description	Mitigation	Residual RAG
Difficulty securing private sector leverage. Companies may not be genuinely committed to sustainable sourcing and will do the minimum required to protect their brands, and no more. The programme could struggle to form partnerships with companies as envisaged. The impact of the programme would be significantly diminished as a result	Her Majesty's UK Government (HMG) will seek to influence funds to work only with those companies with explicit and verifiable commitments, transparent supply chains and practices, and assurance processes. Means of spurring further private sector action will be explore through the demand-side measures component. HMG will use its experience of successful intervention in the timber trade to expand influence into the agri commodity sector. It will influence as a leading contributor to the work plan of the Tropical Forest Alliance 2020 to harness synergies in Consumer Goods Forum companies' ambition for zero deforestation supply chains.	
National, jurisdictional and project baselines against which performance is measured are inflated, exaggerating estimates of performance and reducing additionality.	In some cases approximations (e.g. historic rates of deforestation) will need to be accepted to enable early REDD+ implementation. However all of the preferred funds either directly support development of accurate baselines or require accurate baselines and monitoring arrangements as a precursor to results-based payments.	
Projects fail to create interventions that are sustainable in the long term	Ensure that long term sustainability of project concepts is written in from the start, and that progress against this aim is checked at regular intervals through the lifetime of the projects.	
Private sector investments supported by the programme are not additional and would have taken place without public support. The programme provides an unjustified subsidy to private investments.	Private sector investment in the programme's area of intervention is at present limited. HMG to influence the funds to ensure additionality is a central consideration for private sector funding.	
Support for sustainable forestry and agriculture displaces unsustainable activities into other locations. Overall rates of deforestation remain high and the credibility of investments to reduce	Leakage is a risk with all investments in climate change mitigation and reducing deforestation. Reducing leakage is part of a long-term transformation. Leakage will be partially managed through working to encourage a broad-based transformation of supply chains. The jurisdictional approach central to the BioCarbon fund may reduce	

deforestation is impaired.	this risk where consistent controls are applied across a landscape.	
Not possible to scale up interventions.	Focus on building jurisdictional level contacts and providing sufficient World Bank resources to manage the wide range of projects that are required.	
Slow start-up of BioCarbon Fund Tranche 3, due to differences in stakeholder asks, leads to delayed implementation.	World Bank facilitated design workshops with donors in September. Plan to swiftly engage potential recipient governments in the same way once long list of priority jurisdictions has been agreed.	
Not enough countries are ready for Carbon Fund funding in 2015, leading to risk that UK funding is not required.	Continued support for readiness through other investments in HMGs forest project portfolio. Ensure promissory note to the Carbon Fund includes conditionality on the number of high quality ER-PINs received.	
HMG resource constraints lead to low capacity to influence funds.	New G7 resource recruited at DECC forests team to manage projects. However relatively low level of resource across DECC will limit influence.	
DFID unable to provide the necessary in-country resources.	DECC investigates the option of providing resources through an ICF RDEL-CDEL swap, or managing the funds remotely using London-based resources.	
Poor alignment between multiple multilateral funds and concurrent bilateral funding leads to overlaps and waste, reducing value for money.	All of the preferred funds are administered by the World Bank. Where these funds operate in common territory the World Bank will account for overlaps using compatible registers of activity. The proposed investments also focus on implementation and payments for results as opposed to readiness where the majority of international funding is presently targeted. There remains a risk overlap and double counting that will have to be reviewed as the programme develops.	
Multi-donor funds mean it is difficult for the UK to secure an additional country to fund in the FCPF-C.	Use influence over the fund through informal and formal channels to demonstrate the benefits of an additional country. The fund secretariat suggests that this change is likely to be approved by the other donors.	
Lack of World Bank presence in-country	Engage sufficient World Bank in-country staff.	

jeopardises project effectiveness.		
UK funds are not used for the intended purpose	The World Bank will independently verify emissions reductions before providing payment for results. Also, all payments will be registered publically to avoid overlap.	
Low price of carbon credits will stifle private sector demand, and thus reduce private sector investment in forest projects by this route.	In the BioCarbon Fund, the private sector will be engaged in projects through a wide range of agreements, including off-taker agreements, to increase their incentives to engage. In FCPF-C, the voluntary market will be used to attract private organisations wanting to demonstrate corporate social responsibility.	
The activities of the two funds overlap	It will be ensured that the countries selected for BioCarbon support will not be the same as those supported by the FCPF-C.	
Working with many small partners within a country programme will be financially inefficient	For these programmes to be effective, they will need to engage with small partners. While the efficiency of fund deployment will be tracked and monitored by the World Bank, for the programmes to be effective they will need to do this. In the BioCarbon fund, funds will be channelled through jurisdiction-level national bodies to improve efficiency.	
Effective enforcement of MRV not possible.	Engage sufficient World Bank in-country staff with a broad enough mandate to complete MRV requirements. Ensure MRV structure is agreed with countries before projects commence.	
Payments for verified emission reductions through the Carbon Fund of BioCarbon Fund leads to perverse outcomes as cobenefits are not accounted for.	Application of World Bank safeguards.  Monitoring will be required to ensure these safeguards are applied consistently.	
Women do not benefit from the proposed interventions under each component. There is a risk that interventions perpetuate poor working conditions for women.	Promote gender mainstreaming. Include gender assessments for each project and include appropriate gender expertise within programme management structures.	
Fraud risk.	Implementation through well-established MDB trust fund structures with respected fraud checks and balances.	

- 5. The World Bank has prior experiences of donors choosing the full range of degrees of interaction with their Funds and so is comfortable with the UK engaging as closely as desired with its investment. The World Bank also has to gain approval from donor countries each year for how the work program is devised and for what budget allocation is needed for each jurisdiction investment window. The donors will have to provide this approval before the World Bank can act. This gives the donor reasonable control and the World Bank reasonable guidance to operate throughout the year.
- 6. If the World Bank can act within the guidelines provided by the donors, the process continues undisturbed; in cases where the work program needs to divert from the guidance provided, the World Bank must get approval from the donors to do so. As the UK is very likely to have a commanding portion of the vote within jurisdiction windows it invests in, the risk of not being able to direct its investments as it wishes is relatively low. Once funds are committed, the UK will not have the right to withdraw them before the completion of the window investment period. Terms for managing serious breaches of conditions by the World Bank will be considered through the legal documentation that will govern the UK's investment in the fund.

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

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

7. There is no formal or binding conditionality to the funds.

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

Detailed results framework

- 8. At this stage, it is not possible to write a full monitoring, reporting and evaluation plan (M&E plan). This is because variables such as the locations and sectors that are going to be impacted by this investment have not been agreed. However, at this stage we can set out the guidelines and parameters within which we would like this work to proceed. Both FCPF-C and BioCF will consist of a series of projects that aggregate up to the country and jurisdiction level respectively. It will therefore be important to capture results both at the project level and at the programme level.
- 9. For BioCF, we expect a detailed M&E plan and results framework to be completed within six months of ICF finance being committed to these funds for the country windows into which the UK is investing. DECC guidance exists to guide this process; the plan and framework will draw both on existing World Bank and ICF frameworks. The Participation Commitment signed by DECC includes explicit reference to M&E, pointing the way for further detailed discussions between DECC and other donors to agree the details of the approach on M&E.

10. For FCPF-C, the M&E Framework was approved by all donors, including the UK, in early 2013. However, at that stage DECC was not considering making such a significant investment in the fund, and DECC's Key Performance Indicator (KPI) methodology was still in development. The Framework does not include reference to the UK KPIs. There is provision in the Framework for additional work on indicators or methodologies to be included at a later date. We will use our influence in the fund to try to include reference to ICF KPIs where possible. However, as the UK will only have a 16% burden share if the further £45m investment is approved, it will be necessary to get the major donors (Germany and Norway) to agree with our approach if we are to be successful.

### Monitoring

- 11. An M&E approach has been developed at the cross-ICF level, which reporting from this programme will feed into. This focusses on both fund level and individual programme level M&E.
- 12. For the purposes of ICF-level reporting, a set of 15 KPIs and methodologies have been agreed between DECC, DFID and Defra, as well as standards and guidance for evaluation. Every ICF funded programme reports against all relevant KPIs and feeds into the headline figures of achieved results across all ICF interventions. Potentially relevant KPIs are listed in the table of potential indicators below. Some results from the project level will be selected to be aggregated across the FCPF-C and BioCF in order to feed into these KPIs, and allow cross-ICF reporting to take place against them. Programmes are expected to report against the relevant KPIs. We expect delivery partners to use the ICF KPI methodologies when reporting against these KPIs, to make it possible to get accurate aggregate results across the ICF. The results to be used for this will be proposed in the M&E plan. At the project level, it is imagined that a limited number of relevant, measurable and useful indicators will be identified to capture progress, both at output and outcome level. It is important that project-level indicators capture the key benefits of individual projects.

#### Reporting

- 13. Six month reviews: ICF investment-level reporting will be completed every six months using existing DECC templates. Six month reports are designed to be a light touch process (2 sides) to provide a snapshot of progress and emerging issues around ICF programmes, highlighting areas for concern in relation to results delivery and reporting against the log frame. The DECC project lead responsible for the on-going management of this project will also be responsible for submitting these reports. The legal agreements between DECC and the World Bank will outline parties' responsibilities for providing information and input into these reports.
- 14. Annual reviews: These will require both reporting against chosen indicators but also some qualitative judgment on progress and the likelihood of achieving a transformational impact.
- 15. Programme progress will be monitored against milestones that will be agreed on with the country/recipient. These will need to be carefully managed and drawn up so that they make the jurisdiction exert the effort to achieve results and be rewarded for these. Where there can be, payments made to assist with cash flow and program viability,

- change in greenhouse gas emissions (tonnes  $CO_2$  equivalent), and proxy indicators will be independently verified. It will also be necessary to explore how to capture cobenefits in this framework, while taking into account the fact that there is no increase in payments for such co-benefits.
- 16. As with KPIs, it will be essential for ICF annual and six monthly reporting to be aligned with the internal reporting of the World Bank on the two funds, both in terms of the timing of reports and in terms of the sharing of information between both parties. Details will be outlined in the M&E plan and results framework.
- 17. For FCPF-C, the established FCPF Monitoring and Evaluation Framework, mentioned in the financial case (section 4) will guide results monitoring, measuring and evaluating. Within this, the results chain and logical framework provide a strategic overview of the FCPF and support decision-making by illustrating the main results to be achieved by the Facility at various levels, and their associated performance indicators. They provide a frame to focus both the monitoring and evaluation efforts at the Facility level.
- 18. Also within this, the performance measurement framework is the key internal management tool to be used by the Fund managers to manage the collection, analysis and reporting on the performance data that must feed into the monitoring and evaluation functions. It captures key elements of expected results of the FCPF at the Facility level, by outlining proposed program indicators for each results level, targets, baselines, frequency of data collection, data sources and methods, as well as responsibilities for this data collection and consolidation.
- 19. For the BioCarbon Fund, the M&E framework to be developed will be based on an analysis of the specific projects supported within the jurisdiction programmes. The main indicator will be tons of CO<sub>2</sub> emission saved (consistent with ICF KPI 6), but other relevant indicators will also be monitored. There is general guidance from the World Bank on M&E indicators, but for carbon operations such as this Fund, the Bank also tailors these around the specifics of the jurisdictions that are being worked in.
- 20. It will be essential that the administrative burden of implementing this DECC-specific reporting is minimised by using the existing reporting processes in the World Bank wherever possible, and that the detailed results framework makes it clear how the World Bank and DECC reporting processes will interact.
- 21. The detailed results framework will give further information on the gathering of evidence to produce baselines against which indicators can be measured. The World Bank will be responsible for developing robust baselines, drawing on delivery organisations responsible for individual projects within the FCPF-C and BioCF.

#### Evaluation

22. At project level: It is expected that independent evaluations will take place at project and investment level. Every project applying for funding under these two funds shall provide its own M&E plan and results framework including theory of change, log frame and planned evaluations. These evaluations could be undertaken at the mid-term point

of the projects or investments (to provide feedback on performance, delivery etc.), as well as final evaluations at the close of projects or investments (to assess what was achieved, how they were delivered etc). The M&E plan will give further details on how evidence will be gathered and summarised for use in the ICF reporting processes. Again, it will be important that DECC evaluations will align as far as is practicable on existing World Bank evaluation processes.

23. At Fund level: Fund level evaluations will be considered further with the World Bank to determine who is best placed to undertake it. However, DECC will feed into this process even if not actually leading on it. It would be possible to do one or two midterm evaluations as well as a full term evaluation.

#### Responsibility

24. The World Bank will be responsible for gathering and collating results required by the detailed results framework. This includes responsibility for gathering results from delivery organisations at the project level. Project funding will be contingent on monitoring, reporting and evaluation activities being completed according to this business case and the legal agreements between DECC and the World Bank. DECC will be contributing to the design of the strategic fund-level evaluation(s) and will be represented at the Steering Committee.

## Budget

- 25. Further details of the budget provided for monitoring, reporting and evaluation purposes will be given in the M&E plan. However, DECC expect monitoring costs to be absorbed by fund programme budgets, and in addition for the equivalent of 1-5% of the fund budget to be used for evaluation. While monitoring costs can be accounted for as a CDEL cost for DECC budgeting purposes, evaluation costs cannot (they count as RDEL).
- 26. The budget for monitoring, reporting and evaluation activities at project level should be considered as integral part of the overall project cost.
- 27. It will be necessary to embed the requirements of the monitoring, reporting and evaluation activities into the individual projects that will be supported by the FCPF-C and BioCF when these are set up.

## 5.5 Logframe

- 28. The following log frame follows the logic model set out in the theory of change, reflecting key ICF priorities and drawing heavily on established ICF KPIs for which measurement methodologies are well established. The table below sets out a pool of possible indicators that can be relevant for the different themes. Each individual programme should use this as a tool and propose the most relevant indicators to its planned activities. Further details will be outlined in the detailed results framework within 6 months following the business case approval.
- 29. Application will in practice require harmonisation with operation of the funds which will be managed by MDBs. As the outputs and outcomes that the respective funds are

- targeting with this new funding become clearer more metrics will be developed in discussion with the fund managers.
- 30. It will be necessary to determine the baseline trajectory that each indicator will be tracked against. Further work with fund manager and UK government economists will be required to do this with confidence. As required for all ICF projects a detailed M&E plan will be developed within the first six months following approval of this investment proposal. In this baselines will be set and precise roles, responsibilities and timing for monitoring and evaluation agreed.

Impact / outcome / output	Indicators – this is a pool of indicators that could potentially be relevant to forest interventions
(1) Adaptation:  Vulnerable people in poor countries prepared and equipped to respond effectively to climate change. Impact.	<ul> <li>1.1.Number of people supported by ICF programmes to cope with the effects of climate change through these funds (ICF KPI 1).</li> <li>1.2.Number of people with improved resilience as a result of ICF support through these funds (ICF KPI 4).</li> </ul>
(2) Low carbon development: Developing countries implementing pro-poor development pathways on a trajectory to a two degree world. Impact.	<ul> <li>2.1. Number of forest dependent people with livelihoods protected or improved as a result of ICF support (ICF KPI 3).</li> <li>2.2. Number of direct jobs created as a result of ICF support to these funds</li> <li>2.3. Change in GHG emissions (tonnes carbon dioxide equivalent) as a result of ICF support to these funds (ICF KPI 6).</li> </ul>
(3) Forests:  Progress towards a 50% reduction in deforestation by 2020 leads to reduced GHG emissions, improved welfare in forest dependent communities and enhanced protection of ecosystem services and biodiversity. Impact.	<ul> <li>2.1 Above</li> <li>2.2. Above</li> <li>2.3 Above</li> <li>3.1.Number of hectares where deforestation and forest degradation have been avoided through ICF support to these funds (ICF KPI 8).</li> <li>3.2. Value of ecosystem services generated or protected as a result of ICF support (ICF KPI 10).</li> <li>3.3. Biodiversity value of change in forest area as a result of ICF support.</li> </ul>
(4) REDD+ progress:	4.1. Number of countries passing respective readiness assessments in the three funds attributable to additional ICF funding.  4.2. Number of REDD+ implementation initiatives funded through these

Enhanced progress towards an international REDD+ mechanism. Outcome.	funds attributable to ICF support.  4.3. Change in rate of progress from readiness to results based payments attributable to ICF funding through these initiatives.  4.4. Number of REDD+ country reference level submissions to the UNFCCC attributable to ICF support to these funds.
(5) Enabling framework: Governance and market reform reduce deforestation rates. Outcome.	<ul> <li>5.1.Level of integration of climate change in national planning as a result of ICF support (ICF KPI 13).</li> <li>5.2.Change in number of cases of land tenure resolution and legal enforcement in protected areas in accordance with an effective land use plan, in jurisdictions supported by ICF.</li> </ul>
(6) Influence and leverage: Public and private investments reduce pressure on forest landscapes. Outcome.	<ul> <li>6.1. Volume of public finance mobilised through the three funds alongside the ICF contribution (ICF KPI 11).</li> <li>6.2. Volume of private finance mobilised alongside or as a part of the three funds for REDD+ purposes as a result of ICF funding (ICF KPI 12).</li> </ul>
(7) Learning: Knowledge, tools and learning lead to effective and coordinated activity to reduce deforestation. Outcome.	<ul> <li>7.1.Extent to which interventions are likely to have a transformational impact (ICF KPI 15).</li> <li>7.2.Level of institutional knowledge of climate change issues as a result of ICF support (ICF KPI 14).</li> </ul>
(8) Example output indicators:  Precise outputs expected will be defined at the MDB level in consultation with donors.	<ul> <li>8.1.Number of smallholders receiving loans for low-deforestation agriculture projects funded by ICF.</li> <li>8.2.Number of indigenous community members receiving grants for sustainable forestry projects.</li> <li>8.3.Emission reductions supported by ICF funding that are purchased by private sector in voluntary carbon markets.</li> <li>8.4.Additional hectares of registered and effectively protected forest area attributable to ICF funding.</li> <li>8.5. Violations of safeguards in the last six months of operation across the three funds.</li> <li>8.6. Sanctions meted out for safeguard breaches in the last six months across the three funds.</li> </ul>

#### Annex A

## ICF guidance on what constitutes a transformational programme

The following criteria provide a guide on what could constitute a transformational programme. Programmes that fulfil more than one of these criteria may be considered to have a higher likelihood of being transformational.

These criteria are a proxy for whether the programme will **bring about a change in incentives** either among key actors or enough actors to shift from one state to another (e.g. from conventional to lower carbon or climate-resilient patterns of development) or to speed up the pace of change (e.g. leading to a much more rapid fall in the rate of deforestation).

- 1. Scale: National, sectoral, regional or economy-wide programmes including institutional reform and policy reform are more likely to be transformational because of their reach. This could include large programmes such as energy sector reform, or large scale deployment of a technology so it can reaches a critical deployment mass and so drives down its deployment costs or a small TA programme that works to support a country to reduce national fossil fuel subsidies or remove a key barrier to transformational change. Projects that are particularly innovative may not be required to meet the scale criteria.
- 2. **Replicable**: programmes which others can and do copy, leading to larger-scale **or far faster** roll-out are more likely to be transformative. This includes programmes which help cut the cost for followers be it through investments in capacity and skills, by removing barriers through e.g. key policy change or helping drive technology down the learning curve.
- 3. **Innovative**: programmes which are new and innovative have the potential to be transformational by demonstrating and piloting new ways of achieving objectives that could lead to wider and sustained change. These programmes are often high risk but with corresponding high potential returns.
- 4. Leverage: programmes that leverage others to help increase the impact beyond the programme should, all things being equal, be more likely to be transformational by unlocking scale and replication potential. Leverage could be of domestic flows from recipient country, private sector or other aid flows but it is important that leveraging is additional and does not crowd out existing sources. It is also important to consider the investment/country context (risk-reward) for assessing the effectiveness of leveraging, as it is not strictly the highest level the better. It could also come about by encouraging mainstreaming at scale (e.g. a small shift in WB energy lending could have huge impact).

In order for a programme to be considered as transformational the following conditions are likely to prevail. These conditions are part and parcel of an effective development programme:

- Sustainable: Programmes that are sustainable are more likely to have an impact after they have ended. However, not all piloting and innovation programmes will be sustainable, as there is an element of experimentation in the ICF so innovative technology, for example, will only be sustainable if successful.
- Political will and local ownership: working with national stakeholders, including the powerful, who want to deliver change consistent with their own political economy will be more effective.
- Increased capacity and capability to act: strengthening local capacity supports continued, action on climate change and lays the conditions for transformational change.
- Evidence of effectiveness is credible and shared widely. Others are unlikely to follow unless they are confident of the case for change. This argues for substantial and quality M&E of key programmes, presenting failure alongside success.

## ICF Forests - Theory of Change

IMPACT: Progress towards a global forest conservation target (50% reduction in deforestation by 2020) leads to reduced greenhouse gas emissions, improved welfare in forest-dependent communities, and enhanced protection of ecosystem services and biodiversity across developing countries.

OUTCOME: Interventions supported by the UK (through bilateral and multilateral channels) deliver reduced greenhouse gas emissions, improved welfare in forestdependent communities, and enhanced protection of ecosystem services and biodiversity.

Outcome 1: Enhanced progress towards an international REDD+ mechanism, based on sound planning and good governance; evidence-based approaches to reducing deforestation; and competitive, results-based funding.

Outcome 2: Governance and market reforms reduce deforestation rates and curb the illegal and unsustainable use of forest resources. Outcome 3: Public and private investments in sustainable forestry, agriculture and land management reduce pressure on forest landscapes and ecosystems. Outcome 4: Knowledge, tools, evidence and learning contribute to effective and coordinated international and national systems, policies and strategies.

#### BioCarbon Fund interaction with other World Bank forest funds

There is complementarity between the climate and forest initiatives at the World Bank. Since 2005, the **BioCarbon Fund** (**BioCF**) has tested pilot activities for REDD+ projects and other land-use carbon projects serving as the precursor and 'fast start' action mechanism to the **Forest Carbon Partnership Facility** (**FCPF**). The FCPF focuses on national and sub-national REDD+ activities and is, in the first instance, working with countries to build up their capacities for making significant changes to their overall deforestation rates. Thirty-six countries are part of the FCPF readiness program; five countries are expected to be in the Carbon Fund. The **Forest Investment Program** (**FIP**) is one of the Climate Investment Funds. The FIP focus is on making investments in eight selected countries in forest and agriculture policies and programs that lead to reduced deforestation and promote sustainable forest management that in turn lead to emission reductions or the enhancement of carbon stocks.

There are some overlaps between these three initiatives, but crucially there are also some key differences. This note and the table below summarize some of those differences. Key differentiators for the BioCF Sustainable Landscape Initiative to highlight at the outset are:

- 1. **Simple governance** the BioCF Trust Fund structures enable local and nimble governance to ensure decisions can be taken for each country window separately and closer to actions on the ground. This governance structure helps enable fast start action to demonstrate specific approaches ahead of larger carbon flows coming in the future (for example from the FCPF);
- 2. **Private sector engagement** the private sector is integrated into the BioCF program design from the start with a view that private sector funds will scale impact once approaches are demonstrated:
- 3. **Jurisdiction level approach** the BioCF has pioneered multiple land based carbon methodologies, as such the programs will be designed to incorporate both REDD+ and broader land based carbon opportunities within a specific jurisdiction.

The table below summarizes and compares some of the key features of the three different funds:

	FIP	FCPF	BioCF		
Landscape design	✓	✓	<b>√</b> 138		
Jurisdictional accounting	×	<b>x</b> <sup>139</sup>	✓		
Results Based Payments (Carbon Fund)	×	× ✓ ✓ ✓ REDD+ only			
Technical Assistance / Readiness Fund	×	✓	✓		
Upfront Capital	√ (for 8 countries)	<b>x</b> <sup>140</sup>	<b>x</b> <sup>141</sup>		
Private Sector Integration	✓	√/ <b>x</b> <sup>142</sup>	✓		
Multi-stakeholder decision making / governance	✓	✓	√/ <b>x</b> <sup>143</sup>		

### **Key differences**

# Readiness Funds – Country capacity and general readiness framework (FCPF) vs. In-depth capacity building in specific jurisdiction (BioCF)

Both the BioCF and FCPF have readiness funds. These differ in their objectives. The FCPF has been a major contributor to raising country capacity around REDD+, helping 36 participating countries in the development of REDD+ strategies and

<sup>&</sup>lt;sup>138</sup> A particular focus of this fund.

<sup>&</sup>lt;sup>139</sup> Although accounting is completed at the country level.

<sup>&</sup>lt;sup>140</sup> Although being investigated by the FCPF Secretariat.

<sup>&</sup>lt;sup>141</sup> Upfront capital is envisaged to come from other sources, however this could be considered further as the project develops. 
<sup>142</sup> Although BP and one or two other companies are partners / investors in the Carbon Fund.

<sup>&</sup>lt;sup>143</sup> Governance model includes multi-stakeholder methods for the smaller number of stakeholders involved in this fund in relation to FIP / FCPF-C. Therefore not as relevant at this stage.

policies, building institutional capacity to manage REDD+, including environmental and social safeguards, and fostering domestic policy dialogue. Whilst FCPF contributes to the larger REDD+ readiness process in a country, the BioCF readiness fund (that is, BioCF+) will focus on a specific jurisdiction and often an implementing entity within that jurisdiction. The funds in BioCF+ will be used for technical assistance within the targeted geographies of the BioCF only, and will contribute to specific actions that will enable a future emissions reduction program, for capacity building, using funds to set the infrastructure around an emission reductions program such as on studies assessing drivers of deforestation, assisting in institutional technical capacity, design of MRV systems, etc. There is a strong likelihood that the BioCF programs will operate in countries that are part of a REDD+ readiness program (FCPF or UN-REDD) but where the framework will need to be developed in detail within the specific jurisdiction that the BioCF will operate in.

# Investment Funds – Investment funding (FIP) isolated from Emission Reduction programs to avoid double counting

Unlike the BioCF and FCPF only the FIP has investment funding available for eight participating FIP countries, for which the funding is channeled through the Multi-lateral Development Banks. Investment resources for both BioCF and FCPF activities will be needed and programs supported by both will have to leverage a wide-range of investment opportunities. However, in that process care will be taken to make sure that there is no double dipping into donor funds and that the results-based payments are additional (see BioCF T3 note on Double Counting). Given the fact that there are only eight FIP countries, there is a lower likelihood that the BioCF will operate in a FIP country (compared with an FCPF-readiness country).

# Carbon Funds – Payments for Emission Reductions from deforestation and forest degradation (FCPF) vs. Integrated approach and accounting (BioCF)

Both BioCF and FCPF have carbon funds. The FIP does not have a specific carbon fund that makes payments for emission reductions, but it does have emission reductions as a result indicator within its investment framework. The distinction between FCPF and BioCF is that carbon payments in the FCPF will only support REDD+ reductions, while the BioCF will test payments for a more comprehensive sectoral approach, including agriculture and energy. Given that FCPF carbon fund will target 5 countries, there is not expected to be a large degree of overlap between BioCF and FCPF carbon fund countries. In the few countries where implementation of national REDD+ strategies may be supported by both BioCF and FCPF, there will be clear jurisdictional separation to avoid double dipping. Although expected to be rare, where this may occur it will provide a unique opportunity to account for carbon at the project or program level within a single national framework and inventory, thus providing important lessons for the design of future climate finance.

Both the FCPF and the BioCF are housed in the same unit at the World Bank and share team members. The BioCF/FCPF team cooperates with the FIP Unit. The concerted actions of the three funds will spearhead important actions in developing countries to reduce deforestation and ensure better land management practices.

#### Annex D

## **Private Sector Leverage**

A key characteristic and target of the BioCF is to integrate sustainable land use practices that generate emissions reductions with activities and investment that entail private sector investment and management.

Estimating private sector impact is demanding. Even as the BioCF team are working to implement projects for the Ethiopia window there is a large possible range of private sector engagement in each activity. However, we have worked to estimate the total private sector leverage in the table below. The following should be highlighted:

- 1) The estimated \$ per hectare (2<sup>nd</sup> column) is an estimate of what will be required to get a project up and running. These total costs assume a 20 year project life and represent a median value of costs experienced in a range of different activities and locations. Within different activities, the ratio of the different cost types (implementation, opportunity, regulatory) varies dramatically. The calculations do not account for the size of the underlying project and therefore may overstate the cost per hectare, as larger projects achieve much better economies of scale. The costs include:
  - a. **Implementation cost** above and beyond investment in an underlying activity;
  - b. Any **opportunity cost** resulting from the change in land use;
  - All regulatory and transaction costs associated with producing emissions reductions
- 2) BioCF T1/2 costs are used to evaluate the feasibility of each activity providing approximate ranges for the projects that the BioCF team has already worked with. It is clear that almost all projects fall well within the range. Instances of lower carbon performance relative to expectations for T3 are likely the result of limited data for projects at scale in T1/T2.
- 3) Private investment is split into two categories:
  - a. For **Upfront Investment**, we have taken a low and high value for the expected \$ investment per hectare for an underlying agricultural or other productive activity. For the most part, these calculations are based on smallholder farming models, and have allowances for not necessarily using the whole area as productive land.

- b. For the **Output Value** we have used a conservative estimate of a commodity price multiplied by a similarly conservative yield per hectare as necessary. Outputs have been valued over 10 years and have not been discounted to present value. We Prices incorporate:
  - i. roundwood/sawnwood market values for forestry projects;
  - ii. cocoa market prices
  - iii. coffee prices for sustainable agriculture practices.

Without discrete projects, commodities and country locations in mind, these numbers are *rough estimates only*.

Taken together, these figures provide a figure for total private sector leverage for each activity. A sample portfolio of projects in a jurisdiction shows the areas directly supported by BioCF activities and creates a weighted average total private sector leverage for the fund window.

Column 1 2 3 4 5 6 7 8 9 10 11

Model Activity	Estimated \$ per ha	Estimated \$ per tCO2	t CO2 per ha	BioCF T1/2 tC02 per ha	Upf Inves	e Sector ront \$ stment	Upfront Private Sector Leverage	Years	Output \$ Value per ha p.a.	Total Private Sector Output Value	Estimated Private Sector Leverage per ha	Sample Hectares
1: Small Scale Plantation Farming	2200	12.5	176	150-200	2000	High 3000	1.1	10	150	1500	1.8	2000
2: Sustainable Forest Management (SFM)	600	6	100	100-150	2000	3000	4.2	10	300	3000	9.2	5000
3: Afforestation and Reforestation (A and R)	3000	12.5	240	300	1000	3500	0.8	10	150	1500	1.3	1000
4: Assisted Regeneration	1800	10	180	100	1000	3500	1.3	10	100	1000	1.8	1000
5: National Park Designation / No- Deforestation Zoning	600	6	100	100-150	0	0	0.0	10	0	0	0.0	10000
6: Cocoa Shading	2000	12.5	160	100-200	300	700	0.3	10	700	7000	3.8	4000
7: Sustainable Agricultural Practices	600	12	50	100-200	300	900	1.0	10	1800	18000	31.0	4000
8: REDD+	1000	8	125	50	300	900	0.6	10	50	500	1.1	15000

				Upfront				
				0.9 Portfolio Private Sector Leverage	5.0	1		
Sources								
Author	Year	Title	Link					

1 PwC 2012 Palm Oil Plantchttp://www.pwc.com/id/en/publications/assets/palm-oil-plantation-2012.pdf
2 KPMG 2012 Cocoa Certifica http://makingtheconnection.cta.int/sites/default/files/cocoa\_certification.pdf
3 Wood Resources International 2011 Monthly Repor http://www.wri-ltd.com/

4 Green Resources 2012 Annual Report and Internal Market Assessment (not in public domain)

5 Obidzinksi and Dermawan 2012 Smallholder tin http://www.cifor.org/publications/pdf\_files/articles/AObidzinski1001.pdf

6 Poyry 2012 A Review of Industrial Forest Plantations in Africa (not in public domain)

7 Unique Forestry and Land Use, and Clima 2012 The Case for Climate-Resilient Coffee Intensification in Ethiopia: Feasibility Study, Business Case and Transaction Model (not in public domain)

 8 LHGP Internal
 2013 

 9 BioCF Internal
 2012 

#### BioCarbon Fund tranche three principles for private sector engagement

#### Context

Corporates – global and local in the agricultural and food sectors – are now prioritizing sustainability within their operations. Within the last 5 years, the investment resulting from this prioritization has shifted from largely green branding campaigns to more fundamental characteristics of how companies do business, especially for companies that source inputs or operate directly in emerging markets. There are two core drivers of the growing private sector attention on issues around sustainability:

- 1) Sustainable supply chains: the different stakeholders and pathways by which products get to market. Companies are focusing on improving their supply chains for a variety of reasons:
  - Consumer appeal improving sales through branding e.g. fair-trade;
  - Investor awareness establishing sustainable business credentials as an investor branding exercise for e.g. state pension funds;
  - Improve productivity— working with local agribusinesses, smallholders and intermediaries to improve local capacity and improve the quality and quantity of supply;
  - Improve security of supply through
    - Reducing land-use/degradation, and therefore allowing for future agricultural or pastoral activity;
    - Financial sustainability for suppliers, by ensuring long term cashflows and reducing volatility.
- 2) Regional and National Government Dialogue: act as a channel for clear communication on sustainability and investment between companies and governments
  - **Social Licence to Operate** establishing corporate commitment to social, environmental objective in local communities
  - Reduce political risk or investment in emerging markets— mitigate private sector risk exposure in otherwise high risk markets.

#### **Contribution of Private Sector**

BioCF can harness this increase in private sector interest and support for sustainable and secure supply chains and channel it into improving the proposed Sustainable Landscape Initiative. There are a number of benefits the private sector could bring, for example:

- 1) Secure long term supply agreements for commodities produced on the jurisdiction
- 2) Attract capital for upfront project investment
- 3) Harness expertise on various stages in the value chain
- 4) Leverage private sector's innovation capabilities
- 5) Ensure the long term financial sustainability of projects
- 6) Enable scalability of programmes

To achieve these benefits the BioCF proposes to engage the private sector by:

- 1) Creating and supporting dialogue between private and public sector participants in limiting and reversing the drivers of deforestation and land degradation
- 2) Creating opportunities for private sector engagement at the design stage
- 3) Realising a handful of those opportunities that offer a best fit with the general programme development

Until the programmes have been finalised, there will be a variety of roles that the privates sector can fill with respect to BioCF projects – described more fully below. Regardless of what particular type of private sector partners the fund works with, and the roles they play, the BioCF will use the following principles:

#### **Principles**

#### 1) Alignment

- Country match companies must have local procurement or operations already active in the particular country.
- Land use activity correlation there must be a sufficiently direct link between business activity and land use- so focussing on primary and secondary agriculture, household energy access and timber/forest goods.
- Ethical Business companies must have robust Environmental, Social and Corporate Governance frameworks/policies in place.

 Alignment with World Band safeguards / International Finance Corporation performance standards – the companies' performance and operations must be in line with World Bank Group exclusion lists constraints and general best practice (e.g. no tobacco).

#### 2) Value add

- Minimum contribution companies must be willing to provide matched funding or an in-kind commitment.
- Working in partnership with a company must be predicted to add value to a program above what BioCF would be able to achieve independently.
- The structure for private sector engagement should not distort the incentives for certain behaviours in the value chain negatively.

## 3) Transparency

- Programs with private sector engagement will be closely monitored and undergo regular audited performance assessments.
- Companies must be comfortable with publication of non-sensitive information about how the programme is structured.
- Companies must be careful to coordinate messaging/marketing of initiative with the World Bank Group and Donors.

#### 4) Impartiality

- BioCF private sector engagement is not an endorsement of a particular private sector participant or product.
- o BioCF private sector engagement will not exclude particular companies arbitrarily.
- BioCF private sector engagement will avoid any conflicts of interest, and where conflicts arise, will expect proposals details how companies will mitigate or eliminate those conflicts.

#### **Potential Roles for Private Sector**

At this stage in the development of the BioCF T3, we see a few options for how the private sector can be integrated with a particular jurisdiction, or (more likely) with a particular activity within a jurisdiction. In addition, a single private sector organisation can sit in a single or multiple roles as applicable in a particular geography.

#### 1) Off takers

- Advanced commitments from multinational corporations to purchase declared volumes or values of sustainably sourced project outputs
- Multinational Corporations Nestle, Unilever, Diageo, Mondelez putting pressure on local intermediaries as possible
- Local retailers

#### 2) Partners

- Collaboration on existing investment/support for sustainable value chains
- WB programs/Input providers (e.g. Syngenta)/Multinational Operators in country (e.g. Diageo)

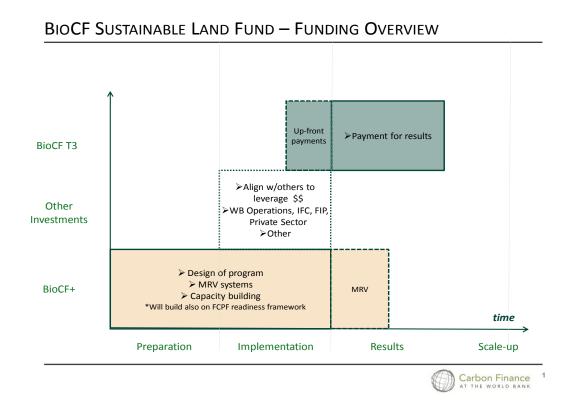
## 3) Operators/Proponents

- Private sector makes proposal for land management scheme that aligns with their own current activities or intentions and is linked to incentive payments from local gov't pool of capital
- Small holders, agribusinesses

# 4) Financiers

- Private sector provides (likely debt) capital to operators/proponents for upfront project costs. Emissions reduction payments cover roll-out of new financial products /increased risk profile of approach (i.e. cover the (short term) anticipated losses on a higher default rate for an MFI)
- o MFIs, commercial lenders

#### BioCarbon Fund tranche three: additionality and double counting



**Summary** - The BioCF's Sustainable Landscape Initiative will provide both (i) technical assistance and grant funding to support the creation of enabling environments through BioCF+, and (ii) payment for performance based on emission reductions (including some upfront milestone payments) through Tranche 3 (BioCF T3). These two fund mechanisms are highlighted in the orange and green sections respectively of the figure above.

There is a concern from donors to ensure that any jurisdiction type program is structured to ensure additionality by ensuring baselines are set reasonably and there is then sufficient scope to create a meaningful incentive for the jurisdiction. There is also a concern/risk that projects/programs may double-dip into different pots of donor based funding. To ensure this does not happen, the World Bank will adopt rigorous baseline methodologies based on its 10+ years of experience in establishing and then measuring carbon reductions; the Bank will also adopt a simple, but rigid, payment design structure to ensure programs are unable to double-dip.

<u>Ensuring additionality</u> – An important design feature of the BioCF is that an <u>emission</u> reduction is never paid for twice, and that any <u>emission</u> reduction is a real one, giving confidence that <u>environmental integrity</u> is maintained and that there is a net benefit to the environment from any action undertaken through the BioCF.

In terms of the payments made from BioCF T3, these will not be made without cognisance of the source and amount of underlying investments in the overall program area (beyond payments made by BioCF). Careful analysis will be made of the investments and for making sure that BioCF T3 payments make a significant difference to the viability of the longer-term operation and maintenance.

With large scale actions, it should be expected that up-front payments will be needed recognizing that cash flows are important to ensure actions can happen. Any up-front payment will be assessed based on the needs of the program so will vary from program to program (expected range could be 10-40% upfront payment, depending on a financial and risk assessment). Clearly, where an up-front payment is made, the payment will be deducted from the final payment for results.

To ensure environmental integrity and that the emission reductions are real, the BioCF will build on its wealth of experience in carbon markets where the concept of additionality had to be proven for each project. This means that the BioCF will only intervene where the case for a program goes beyond "business-as-usual", and where this will be compared with an independently determined reference level. It should be noted that there are numerous tests that will be applied in BioCF, to determine what constitutes additionality, including financial barriers, first-of-a kind actions and others. The BioCarbon Fund team has assessed additionality and baseline reference levels in all types of land based project since 2006. This work has been 100% successful to-date and all of the work has been independently assessed by third-party auditors (both through the project validation, the upstream process to assess project design conforms to standards, and final verification that determines emission reductions are achieved).

In summary, the aim of the BioCF T3 Sustainable Landscapes Initiative is to use the principles of rigor that are known in carbon markets, but accepting in some cases that the existing rules will need to be modified for large-scale jurisdiction approaches because there are no rules for jurisdictions at present. However, any modification that needs to be made will not compromise environmental integrity.

"Double Dipping" – To ensure there is no double dipping into donor funds, technical assistance and grant based funding flowing through the BioCF+ will not pay for any work that is directly related to the generation of emission reductions. BioCF T3 funding in contrast will be reserved solely for payments for emission reductions. This means BioCF+ could, for example, fund design of policy frameworks and capacity building at a jurisdictional level in a country (e.g., Oromia in the case of Ethiopia). The BioCF+ funding will also work to identify and design promising programs that bring together public and private sector actors that would enable delivery of emission reductions. However, the funding would not be used to invest directly into the establishment of programs that would be eligible to receive payment for delivering emission reductions (e.g., program for boosting sustainable coffee production within Oromia). Meanwhile, investment funding will be sought from other sources (see the middle unshaded box in the figure above) to secure the maximum leverage and impact for the resources donors commit to the Sustainable Landscapes Initiative.

© Crown copyright 2014

Department of Energy & Climate Change
3 Whitehall Place

London SW1A 2AW

www.gov.uk/decc

URN: 14D/110