

# The State of REDD+ Finance

**Marigold Norman and Smita Nakhooda**

## Abstract

This paper presents a thorough synthesis of available data to illuminate the current global state of finance for reducing emissions from deforestation and forest degradation (REDD+). It adds to a growing body of work that seeks to understand the size and composition of finance for REDD+ initiatives, as well as the delivery of climate finance more generally. The analysis shows that aggregate pledges of both public and private finance are significant, at more than US \$9.8 billion for the period between 2006 and December 2014, but the pace of new pledges slowed after 2010. The public sector contributes nearly 90 percent of reported REDD+ finance, with the preponderance of funding concentrated among a relatively small number of donors and recipient countries. The paper analyzes early experience with performance-based finance, although such finance represents less than two-fifths of pledges to date. New institutions in the climate finance architecture such as the Green Climate Fund have recognized the opportunity to engage on REDD+ finance, but the extent to which they succeed in creating new and effective channels of support remains to be seen.

JEL Codes: F35, Q23, Q54

## CGD Climate and Forest Paper Series #5

## **The State of REDD+ Finance**

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This is a joint paper with ODI. ODI is a leading independent think tank on international development and humanitarian issues. Their mission is to inspire and inform policy and practice which lead to the reduction of poverty, the alleviation of suffering, and the achievement of sustainable livelihoods in developing countries.

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## Foreword

This paper is one of more than 20 analyses being produced under CGD's Initiative on Tropical Forests for Climate and Development. The purpose of the Initiative is to help mobilize substantial additional finance from high-income countries in support of the pay-for-performance approach to transfers that is at the heart of the global REDD+ program.

The analyses will feed into a book entitled *Why Forests? Why Now? The Science, Economics, and Politics of Tropical Forests and Climate Change*. Co-authored by senior fellow Frances Seymour and research fellow Jonah Busch, the book will show that tropical forests are essential for both climate stability and sustainable development, that now is the time for action on tropical forests, and that payment-for-performance finance for reducing emissions from deforestation and forest degradation (REDD+) represents a course of action with great potential for success.

Commissioned background papers also support the activities of a working group convened by CGD and co-chaired by Nancy Birdsall and Pedro Pablo Kuczynski to identify practical ways to accelerate performance-based finance for tropical forests in the lead up to UNFCCC COP21 in Paris in 2015.

This paper, "The State of REDD+ Finance" by Marigold Norman and Smita Nakhooda of the Overseas Development Institute, was commissioned by CGD to provide an up-to-date summary of the international financial resources that have so far been mobilized for REDD+ initiatives. By providing authoritative estimates of funding totals broken down by sources, destinations, uses, and stage of disbursement, the paper is intended to illuminate and analyze current patterns and trends in REDD+ finance.

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## Summary

How are we financing efforts to reduce emissions from deforestation and degradation? This paper analyses over 23,000 individual projects or pledges of support for REDD+ between 2006 and 2014 to review experiences to date. Aggregate pledges and investments from both the public and private sectors are significant, at more than US\$9.8 billion for the period between 2006 and end of 2014. More than 56% of all finance was pledged between 2006 and 2010, reflecting optimism about design of a REDD+ mechanism in the lead up to the 2009 Copenhagen Conference of Parties.

But political momentum behind REDD+ has slowed, compounded by the global economic crisis which has reduced political appetite for international spending in developed countries. As the difficult realities of REDD+ program delivery have become apparent, new pledges have been smaller and slower to manifest. Since 2010, global pledges for dedicated REDD+ initiatives average US\$796 million annually.

Almost 90% of REDD+ finance identified comes from the public sector. Bilateral institutions have played a central role, and manage 51% of finance pledged since 2006 compared to around 33% of finance managed by multilateral funds. Bilateral programs actually represent the largest sources of finance for REDD+, particularly in forest rich countries.

While there are more than 20 REDD+ donors and 80 recipient countries, activity is relatively concentrated. Norway, the US, Germany, Japan and the UK provide 77% of identified funding with ten countries receiving the majority of finance. Indonesia and Brazil collectively receive 35% of allocated funding. 20% of funding is directed to global programs or international research and just 17% of allocated funding is supporting REDD+ activities and programs across the remaining 75 recipient countries.

At least 58% of public funding is channeled as ex-ante grants for readiness activities which are not directly reducing emissions. While 42% of public sector finance has been pledged as ex-post payments on performance, these programs do not always pay for verified emissions from reduced deforestation. It is therefore likely that a significantly higher proportion of the finance pledged has been focusing on capacity building and other readiness activities to date.

Norway and Germany have piloted performance-based programs. Experience to date suggests the importance of mobilizing enough finance to incentivize desired results, and

having clear agreements that lay out mutual expectations. It also suggests the need to monitor program performance rather than just spend, and improve how performance-based REDD+ programs are structured and managed to deliver verified emissions reductions.

## **1. Introduction**

More than 1.6 billion people or 25% of the global population rely on forests for their livelihoods and deforestation and degradation of forest land is estimated to account for roughly 12% of global greenhouse gas emissions (IPCC WGII, 2014). To address concerns around the management and conservation of forests, a financial mechanism known as REDD+ (Reducing Emissions from Deforestation and forest Degradation; conservation of forest carbon stocks; sustainable management of forests; and enhancement of forest carbon stocks<sup>1</sup>) was developed. REDD+ seeks to recognize the value of the carbon stored in forests, and shift incentives from deforestation and land use change to forest conservation and sustainability (Larson and Petkova, 2011).

REDD+ officially became part of the international climate agenda in 2007 when parties to the United Nations Framework Convention on Climate Change (UNFCCC) committed to address climate change through the Bali Action Plan and the Bali Road Map. In 2009 at the 15th session of the conference of the parties to the UNFCCC in Copenhagen, developed countries pledged more than US\$3.5 billion in fast-track financing for REDD+ (Streck et al, 2010). Countries also agreed to a phased approach to REDD+ implementation where finance and activities would focus initially on REDD+ strategy development, capacity building activities, implementation of policies and measures, and move towards results-based demonstration activities and verified emissions reductions. Financing for REDD+ could therefore move from public sector ex-ante grants and loans to ex-post payments based on actual results/emissions reduced, potentially funded through emerging carbon markets.

Since then, the global economic crisis (2008-2009), the landscape for REDD+ looks very different (Peters-Stanley et al, 2013; Lowery et al, 2014). This paper explores the global state of REDD+ finance today. It highlights the level of REDD+ finance, the dominance of public sector financing, the main donors, and their motivations in financing REDD+.

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<sup>1</sup> UNFCCC definition set out in Working Group III contribution to the IPCC 5th Assessment Report "Climate Change 2014: Mitigation of Climate Change" that was accepted but not approved in detail by the 12th Session of Working Group III and the 39th Session of the IPCC on 12 April 2014 in Berlin, Germany.

This paper adds to a growing body of work that seeks to understand finance for initiatives that will reduce emissions from forest degradation, and the delivery of climate finance. It breaks new ground by presenting a thorough synthesis of available data on finance for REDD+, by incorporating data from the ODI HBF Climate Funds Update (CFU)<sup>2</sup> which tracks the operations of dedicated climate finance initiatives, research on Fast Start Finance, including building on datasets compiled by WRI, ODI, IGES, Germanwatch, Cicero and Climate Advisors, as well as finance reported by donors to the Voluntary REDD+ Database (VRD) of the REDD+ Partnership (<http://reddplusdatabase.org/>). Annex I presents the full methodology used to reconcile differences in reporting parameters and scope.

## **2. Global REDD+ finance**

### **2.1 Scope**

The focus of this analysis is on the international financial flows or mechanisms originating outside a developing country that support actions aimed at reducing emissions from deforestation and forest degradation. Determining what actually counts as REDD+ and forest related finance is not easy and significantly impacts global estimates of how much finance is directed toward it.

The UNFCCC decision on REDD+ refers to ‘policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation; and the role of conservation, sustainable management of forest and enhancement of forest carbon stocks in developing countries’ (Bali Action Plan, para 1 (b) (iii)) which will include activities that are country-driven, promote co-benefits and biodiversity, actions that are consistent with conservation of natural forests, involvement of indigenous peoples and local communities as well as transparent forest governance (Sánchez, 2010). However, donor institutions often report funding against broad categories such as “environment” or “forests”. This can complicate efforts to determine the actual amounts or proportion that targets REDD+ and forest related activities, which in turn can result in the same flows being counted multiple times.

This report therefore tracks international pledges and flows of finance linked to the UNFCCC decisions on REDD+ as well as relevant activities that support policy approaches

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<sup>2</sup> <http://www.climatefundsupdate.org/>



and positive incentives around the three phases of REDD+. These include the following activities in the context of reducing emissions from deforestation and forest degradation, conservation of forest carbon stocks, the sustainable management of forests, and the enhancement of forest carbon stocks:

- *The development of national strategies or action plans, policies and measures, and capacity-building;*
- *The implementation of national policies and measures and national strategies or action plans that could involve further capacity-building, technology development and transfer and results-based demonstration activities;*
- *Results-based actions that should be fully measured, reported and verified.*

## **2.2 REDD+ finance**

More than 89% of all REDD+ and forest related funding tracked has been pledged by the public sector through both bilateral and multilateral channels.

Twenty-one countries collectively pledged almost US\$5 billion through bilateral agreements between 2006 and 2014<sup>3</sup>. In addition, developed countries and the private sector<sup>4</sup> are channeling finance through dedicated multilateral funds targeting REDD+ and sustainable forest management. Finance pledged to the Forest Carbon Partnership Facility (FCPF) Readiness Fund, Carbon Fund, the Forest Investment Program (FIP), the Amazon Fund, the Congo Basin Forest Fund (CBFF) and the BioCarbon Fund Initiative for Sustainable Forest Landscapes (ISFL) totaled US\$3.2 billion between 2008 and the end of 2014. Donor countries pledged US\$23 million through multiple channels involving both bilateral and multilateral programs<sup>5</sup>. Around US\$463 million has been reported, though the particular channels are not known.

While hopes were high that REDD+ would attract investment from the private sector, the absence of a compliance market for REDD+ credits has meant that private sector engagement and investments have been low (Diaz et al, 2011). Voluntary offset transactions

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<sup>3</sup> This figure is based on countries reporting to the REDD+ Partnership's Voluntary REDD+ Database for REDD+ contributions between 2006 and 2014, as well as those reporting Fast Start Finance contributions through ODI and HBF Climate Funds Update for the period 2010 to 2012. The two datasets have been compared in detail to prevent double counting of commitments over the Fast Start Financing period between 2010 and 2012. The 21 countries include: Australia, Austria, Belgium, Canada, Denmark, the European Union, Finland, France, Germany, Ireland, Italy, Japan, Luxembourg, Netherlands, Norway, Slovakia, Spain, Sweden, Switzerland, the UK and the US.

<sup>4</sup> Private investors include British Petroleum, CDC Climat supporting the FCPF Carbon Fund and Petrobras supporting the Amazon Fund for example.

<sup>5</sup> This figure is based on CFU data reported as of December 31, 2014 at <http://www.climatefundsupdate.org/data>

for REDD+ projects including sustainable forest management as well as afforestation and reforestation are estimated to be worth around US\$1 billion over time<sup>6</sup> by Ecosystem Marketplace, a leading source of information on private markets for ecosystem services (Goldstein and Gonzalez, 2014). Forest Trends' REDDX initiative reports just US\$8.2 million in private finance and US\$101 million from private foundations across ten tropical forest countries between 2009 and 2012<sup>7</sup>.

Table 1 summarizes reported REDD+ finance data by donor/funding channel. Our conservative estimate of global financing for REDD+ is in the region of US\$9.8 billion based on tracked and verified finances analyzed and compared across a number of complementary institutions and initiatives. This figure would likely be higher if more complete data was available on private sector investments. Figure 1 highlights how different sources of REDD+ finance stack up.

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<sup>6</sup> Ecosystem Marketplace track offsets reported since the 1990s through interviewing offset project developers, brokers, and retailers, as well as carbon offset-accounting registries, and exchanges that track and facilitate offset ownership. Given the different timeframe for private sector finance, this report focuses on discussing public sector financing at the global level in the donor discussions. The report discusses some private sector investments in the context of recipient countries which have been backed up by additional data from Forest Trends' REDDX Initiative. Private sector investments are discussed in more detail in section 4.

<sup>7</sup> Forest Trends' REDDX reporting REDD+ finance at the national level for the period 2008-2012 for Brazil, Colombia, DRC, Ecuador, Ghana, Indonesia, Liberia, Mexico, Peru and Tanzania. Available at <http://reddx.forest-trends.org/>

**Table 1: REDD+ finance**

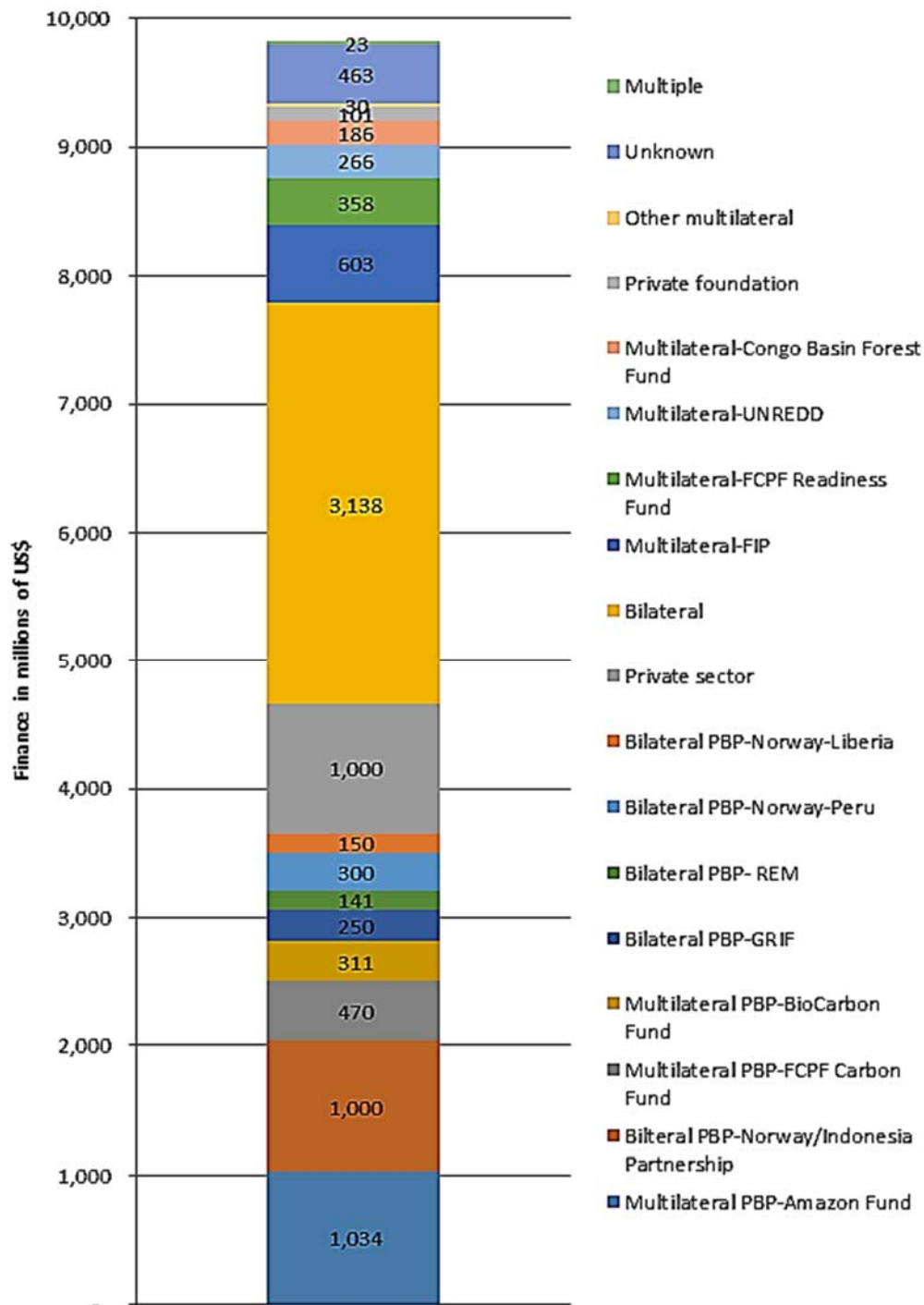
Type of funding/donor	Scope of Data	Data Tracking Institution/source	Total financial pledge/investment reported in millions US\$
<b>Bilateral</b>	21 donor countries <sup>8</sup>	Detailed assessment and compilation using: ODI FSF data 2010-2012 Voluntary REDD+ Database (VRD) of the REDD+ Partnership (2006-2014)	4,981
<b>Multilateral</b>	6 multilateral REDD+/forest focused funds <sup>9</sup>	ODI HBI CFU tracking (2008-2014)	3,227
<b>Other Multilateral</b>		ODI FSF data 2010-2012 And ODI HBI CFU tracking (2008- 2014)	30
<b>Multiple channels</b>	21 donors and 6 multilateral REDD+/forest focused funds	Detailed assessment and compilation using: ODI FSF data 2010-2012 Voluntary REDD+ Database (VRD) of the REDD+ Partnership (2006-2014)	23
<b>Unknown</b>	21 donors and 6 multilateral REDD+/forest focused funds	Detailed assessment and compilation using: ODI FSF data 2010-2012 Voluntary REDD+ Database (VRD) of the REDD+ Partnership (2006-2014)	463
<b>Private Foundations</b>	10 REDD+ countries <sup>10</sup>	Forest Trends' REDDX March 2014	101
<b>Private sector</b>	162 projects	Ecosystem Marketplace 2014	1,000
<b>Total</b>			9,825

<sup>8</sup> This includes countries self-reporting REDD+ financial contributions to the REDD+ Partnership's Voluntary REDD+ Database for the period between 2006 and 2014, as well as those reporting Fast Start Finance contributions for the period 2010 to 2012. The two datasets have been compared in detail to prevent double counting of commitments over the Fast Start Financing period. The 21 donor countries included in this report are: Australia, Austria, Belgium, Canada, Denmark, the European Union, Finland, France, Germany, Ireland, Italy, Japan, Luxembourg, Netherlands, Norway, Slovakia, Spain, Sweden, Switzerland, the UK and the US.

<sup>9</sup> Multilateral funds include: the Forest Investment Program (FIP), Forest Carbon Partnership Facility (FCPF) Readiness Fund, FCPF Carbon Fund, the BioCarbon Initiative for Sustainable Forest Landscapes, the Amazon Fund and the Congo Basin Forest Fund.

<sup>10</sup> Including Brazil, Colombia, DRC, Ecuador, Ghana, Indonesia, Liberia, Mexico, Peru and Tanzania.

Figure 1: How global REDD+ finance stacks up: Public and private pledges 2006 to March 2014



Source: Compilation of public sector reported data from the REDD+ Partnership Voluntary REDD+ Database and ODI HBF Climate Funds Update covering REDD+ financial commitments for 2006 to 2014. Private sector data is sourced from Ecosystem Marketplace's State of the Forest Carbon Markets Report 2014. Private Foundation data from Forest Trends' REDDX initiative data as of December 2014. "PBP" stands for "performance-based payment" to represent programs paying on performance or verified emissions reduced.

## Other domestic sources of REDD+ finance

This paper focuses on international flows of finance for REDD+ and forest related activities. However, developing countries, particularly in emerging economies, are increasingly prioritising REDD+ within their national budgets and allocating domestic funds or co-financing international REDD+ programs. Domestic contributions to REDD+ have not been comprehensively captured or tracked to date but are widely accepted as an important component of the global REDD+ financing landscape (REDD+ Partnership 2012, 2013; Princes Charities 2012).

Global estimates place domestic REDD+ financing in the region of US\$10 billion per annum (Streck and Parker, 2012) or twice the level of international REDD+ pledges (Tennigkeit et al, 2013). However data at the national level (reported through Forest Trends' REDD-X) suggests that governments are responsible for up to 50% of REDD+ finance. For example, the Mexican government reports domestic contributions of US\$333 million or 43% of Mexico's total REDD+ finance, while the government of Ghana reports that it has provided over US\$39 million or 37% of total REDD+ finance tracked in-country.

As of January 2015, the REDD+ Partnership reports US\$1.6 billion in domestic investments across 40 countries. But this figure is likely significantly higher requiring more complete understandings of what "counts" as REDD+ finance within countries, and more systematic frameworks for reporting which ensures that international finance is not re-packaged or double counted as new and additional finance. Many countries are now investing in systems to identify and monitor domestic spending on climate finance, including through the use of climate public expenditure reviews. For example, UNDP recently supported Indonesia to complete an analysis of expenditure related to mitigation, which sought to quantify domestic spending on REDD+ activities.

## How much finance is really needed for REDD+?

Estimating REDD+ financing needs has been described as 'almost a meaningless question' (Angelsen in Streck and Parker, 2012) as costs depend on a wide range of issues and local factors. There have been several attempts to estimate needs with the Eliasch Review suggesting 'that the finance required to halve emissions from the forest sector by 2030 could be around US\$17-US\$33 billion per year if including global carbon trading' (2008: xvi). In 2009, the Informal Working Group on Interim Finance for REDD+ estimated that between 15 and 25 billion Euros would be required for a 25% reduction in annual global deforestation rates by 2015 (IWG-IFR 2009).

Reports such as the 2006 Stern Review focused on opportunity costs, and the importance of creating financial incentives to encourage governments and landowners to keep forests standing instead of cutting them down for alternative land uses, such as palm oil. The scale of payments needed is related to the opportunity costs of these alternative uses. This type of needs estimation also looks at the costs of setting up and implementing a REDD+ system in-country.

However, there is a lot of uncertainty in estimating opportunity costs of land including 'the ability of developing countries to implement needed safeguards, and the complex global market for food, biofuels, and forest products' (Morris and Stevenson 2011: 3). A number of studies have developed economic models to estimate financial needs using a price range of US\$5–\$20 per ton of CO<sub>2</sub>e avoided (Kindermann et al 2008). Such estimates suggest that with forest degradation currently releasing 'around 6 billion tons of carbon dioxide into the atmosphere each year, reducing deforestation 50 percent by 2020 would cost in the range of US\$15–\$60 billion per year in direct financial transfers' (Morris and Stevenson 2011: 3).

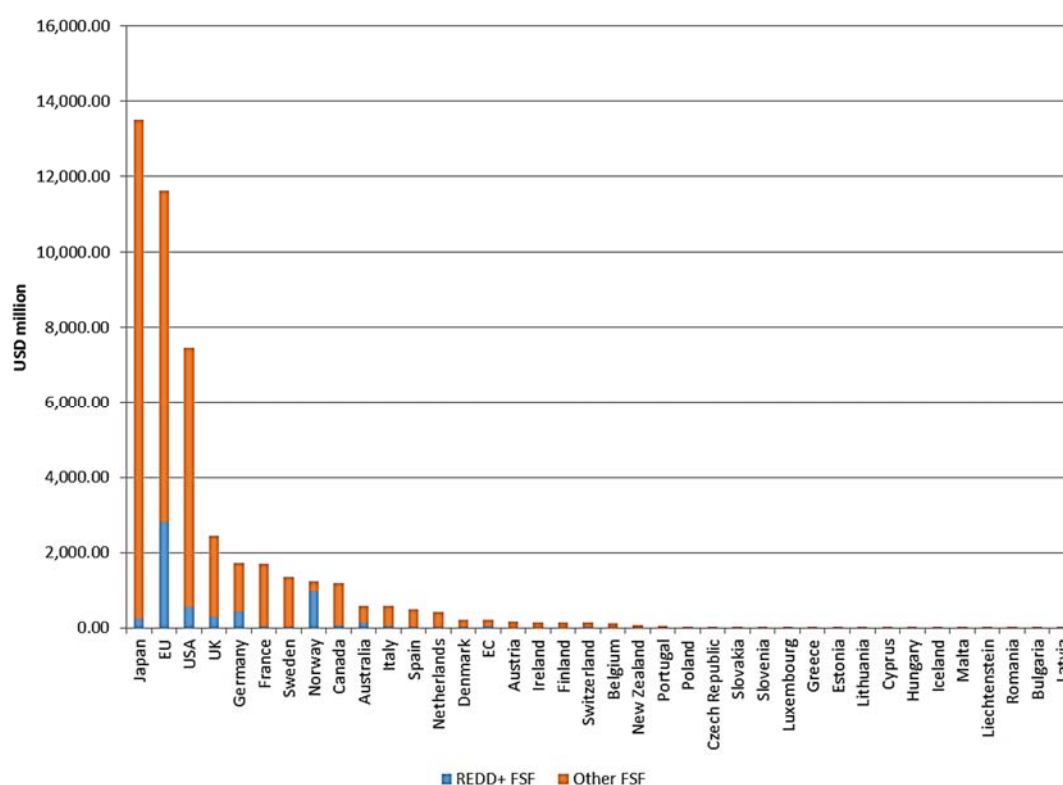
To prepare for the later phases of REDD+ and longer term financing based on results, it is accepted that developing countries may need to undertake low emissions development planning; build measuring, monitoring, reporting and verification systems and create new agencies and institutions for management of REDD+. Global cost estimates for reducing deforestation do not often factor in these costs (Morris and Stevenson, 2011) but a 2009 study estimated capacity building costs over the period 2010-2012 in the region of US\$4-US\$6 billion.

## 2.3 REDD+ in the context of Fast Start Finance

The 2009 Copenhagen Accord and the 2010 Cancun Agreements encouraged developed countries to make some initial substantial financial commitments to support developing countries mitigate and adapt to climate change. Developed countries pledged to provide US\$30 billion in new and additional ‘Fast Start Finance’ (FSF) from 2010 to 2012. Countries report that they exceeded these pledges, mobilizing US\$35 billion for climate change (Nakhouda et al, 2013). Figure 2 highlights donor country FSF pledges with the proportion of funding directed towards REDD+.

Furthermore, developed countries also committed to a goal of mobilizing US\$100 billion of climate finance per year for developing countries from public, private and alternative sources in the context of transparent and meaningful mitigation action.

**Figure 2: Donor Fast Start Finance and proportion focused on REDD+<sup>11</sup>**



Source: Nakhouda et al, 2013. *Mobilising International Climate Finance: Lessons from the Fast Start Finance period*. Conversions based on OECD exchange rates<sup>12</sup>.

<sup>11</sup> The EU contribution in Figure 2 comprises financial contributions from all EU Member States.

<sup>12</sup> Total figures are based on those reported to the UNFCCC, and for EU member states, those reported in the EU Accountability Report on Financing for Development 2013. “Other FSF” includes all aggregate finance reported at either the project or program level. Some data were provisional at time of reporting by governments.

REDD+ finance accounted for around 10% of FSF as a whole (Nakhouda et al, 2013). This is a relatively small share of overall climate finance, but some countries such as Norway dedicated 79% of their FSF contributions to REDD+ activities. Japan's small share (just 2% of FSF) directed to REDD+ has substantially lowered the average given it was the single largest contributor of FSF (Watson et al, 2014).

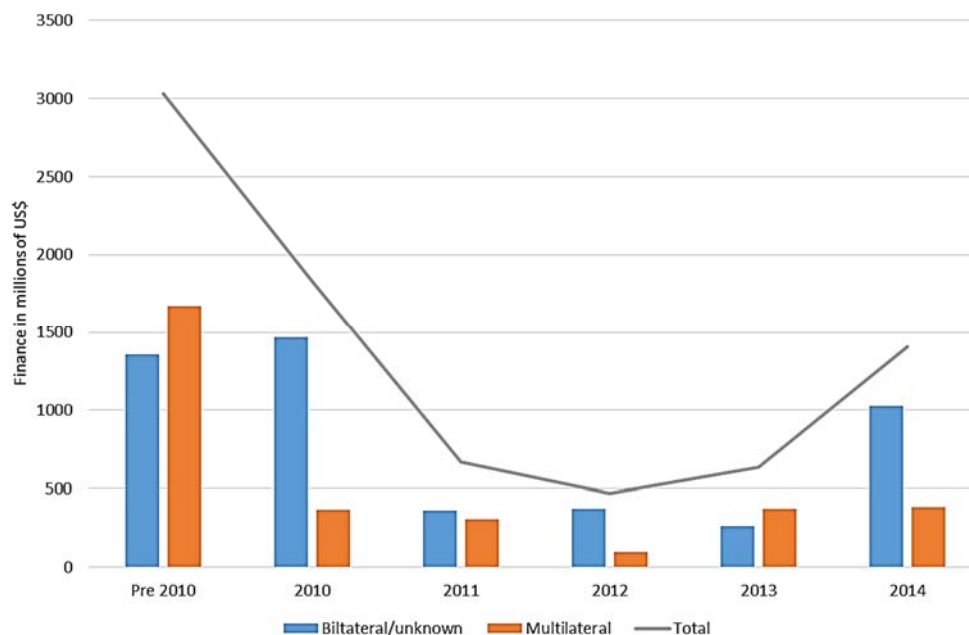
## **2.4 Annual Trends in REDD+ Finance**

Donor pledges to REDD+ were highest prior to 2010 (see figure 3) reflecting the political optimism around the prospects for a global REDD+ mechanism in the lead up to the Copenhagen Conference of the Parties (Westholm et al, 2012). These included large commitments of finance from Norway including a US\$1 billion pledge to the Amazon Fund in 2009; a US\$1 billion pledge to Indonesia in 2010, and a US\$250 million pledge to Guyana in 2009 through the Guyana REDD+ Investment Fund (GRIF). As noted, REDD+ played a significant but relatively small role in efforts to deliver FSF and new pledges recorded in 2011 and 2012 have been lower. However, important new pledges have been made in 2013 and 2014 including Norway's US\$300 million bilateral commitment to Peru and US\$150 million to Liberia to support zero deforestation by 2020. In addition, the UK, US and Norway also committed over US\$310 million at the Warsaw 2013 Conference of Parties to support a new multilateral BioCarbon Initiative for Sustainable Forest Landscapes.

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The EU is presented both at the EU level and at the member state level. Japan's leveraged private finance is excluded from the figure.

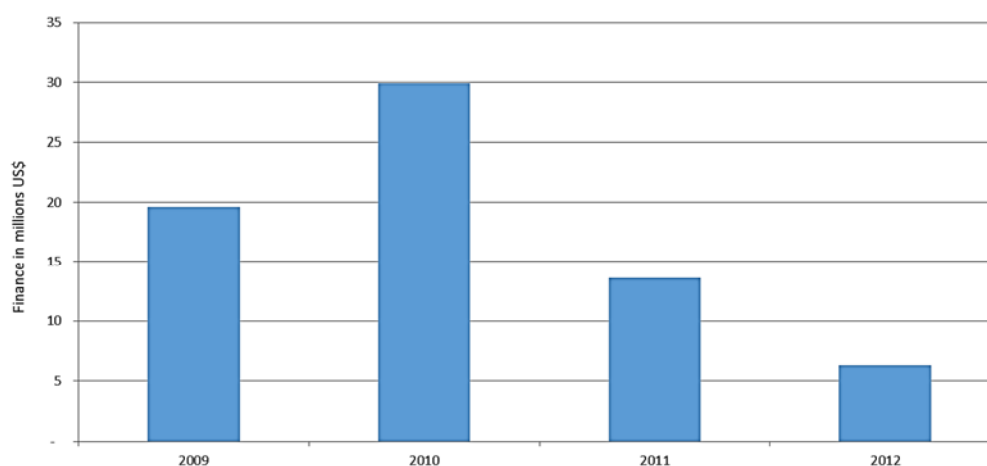
**Figure 3: Annual bilateral and multilateral pledges for REDD+**



*Source: Compilation of public sector reported data from the REDD+ Partnership Voluntary REDD+ Database and ODI and HBF Climate Funds Update covering REDD+ financial commitments for 2006 to 2014.*

Private philanthropy makes up a small but significant share of overall global REDD+ finance. Private foundations also showed early enthusiasm for REDD+ with the majority of reported finance pledged between 2009 and 2010 (Figure 4).

**Figure 4: Private Foundation financial pledges for REDD+ in ten tropical forest countries between 2009 and 2012**



*Source: Forest Trends' REDDX*

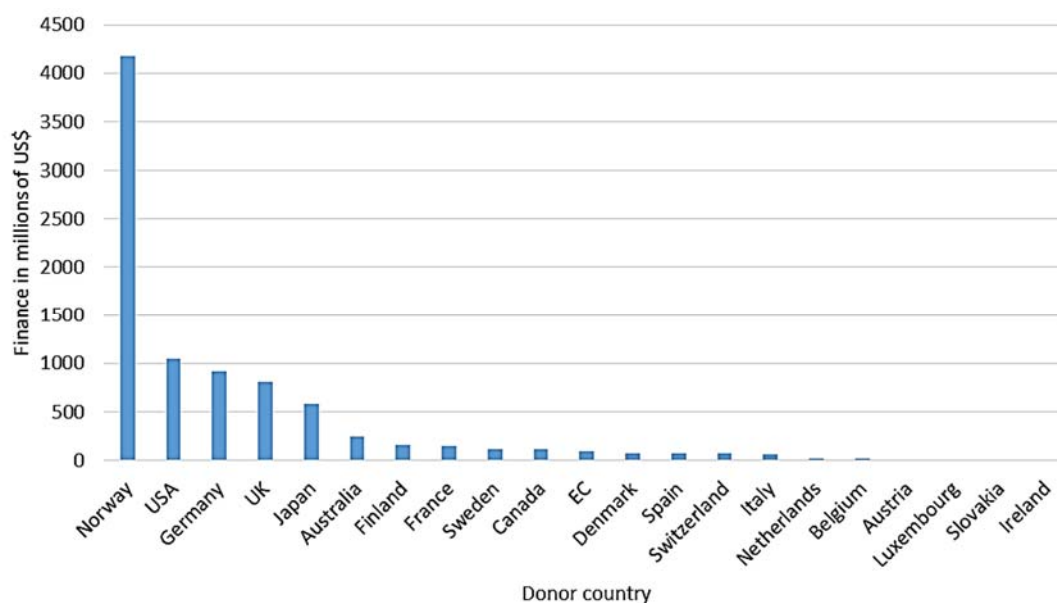


Recipient country experiences with accessing REDD+ finance are discussed in section 4. In general, it is clear that the delivery of REDD+ finance has been difficult to predict, with the timing of commitments to different developing countries largely explained by the particular circumstances of their negotiations with donors and trajectory of access to international funds (Canby et al, 2014).

### 3. REDD+ Donors

A relatively small number of donors have provided the majority of REDD+ finance to date, with major variation in the scale and time frame of the commitments made.

**Figure 5: Donor country pledges for REDD+ for the period 2006-2014**

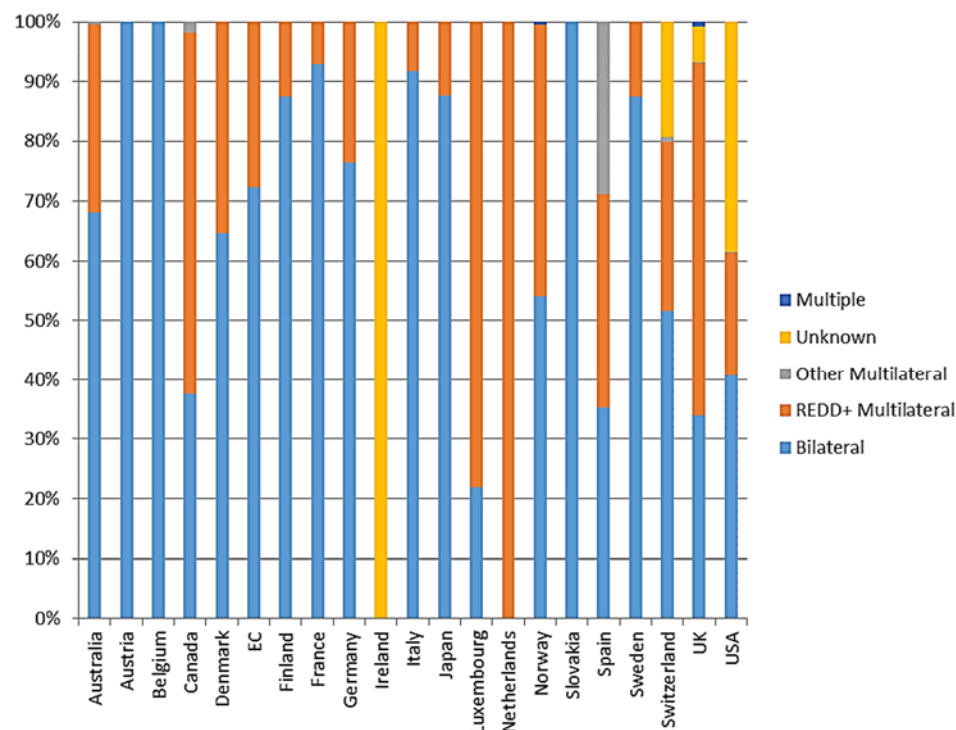


*Source: Compilation of public sector reported data from the REDD+ Partnership Voluntary REDD+ Database and ODI and HBF Climate Funds Update covering REDD+ financial commitments for 2006 to 2014.*

The UK, the Netherlands and Luxembourg are channeling the majority of their REDD+ finance through dedicated multilateral funds. In contrast, Japan, Finland, Germany and France are directing the majority of pledges through bilateral arrangements.

Decisions around how to finance REDD+ often reflect perceptions of the respective strengths of institutions in recipient countries as well as a general desire from donors to test and learn from a number of approaches for financing REDD+ (UK Department of Energy and Climate Change, 2014).

**Figure 6: How donors are channeling REDD+ finance for the period 2006-2014**



*Source: Compilation of public sector reported data from the REDD+ Partnership Voluntary REDD+ Database and ODI and HBF Climate Funds Update covering REDD+ financial commitments for 2006 to 2014.*

Norway's REDD+ funding commitments were made in the context of seeking to mobilize support for ambitious pledges to reduce emissions within the UNFCCC process. Norway has also sought to attract private investment in REDD+, including efforts to pilot and operationalize an international REDD+ mechanism with potential ties to the carbon markets. Its support for key tropical forest countries that have expressed a commitment to ambitious action has raised the profile of REDD+ politically in countries such as Brazil, Guyana and Indonesia. Norwegian finance for REDD+ is often relatively small in the context of the economies that it targets, but large enough to get key actors within government to take it seriously, creating financial incentives for high level policy makers to continue to take actions that will help protect forests and promote national sustainable development objectives (Nakhooda et al, 2013).

Other major donors such as the UK, Germany and the US have been motivated to invest in REDD+ as a way of pursuing both development and biodiversity objectives. The UK government-supported Stern Review raised the profile of opportunities to address climate change by reducing deforestation, highlighting the opportunities for 'win-win' interventions

(Stern et al 2007) and support for REDD+ has been a central pillar of UK climate finance (Watson et al, 2014). Biodiversity benefits of investments in REDD+ have also been an important consideration for Germany in delivering continued finance. Alongside its commitments to mobilize finance for climate change activities under the UNFCCC, Germany has also made complementary commitments under the Convention on Biodiversity (CBD) to scale up finance for forests and biodiversity protection (Harmeling et al 2013). Germany's REDD+ spend is thus aligned closely with national commitments under both the UNFCCC and the Convention on Biological Diversity (CBD).

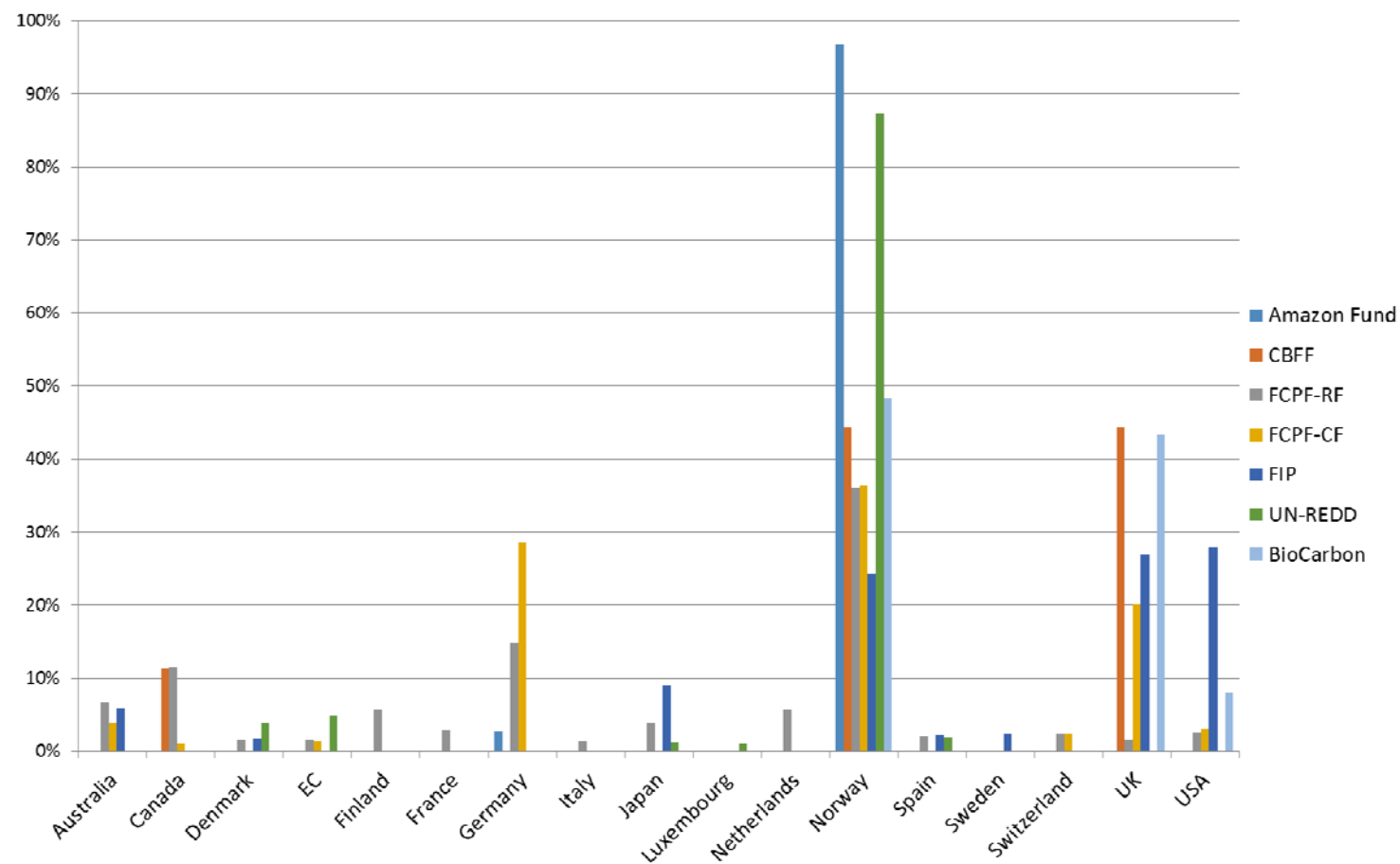
### **3.1 Multilateral funds**

Six main multilateral funds focus on forestry and REDD+ related programs: The UN-REDD Programme, the Forest Carbon Partnership Facility (both the Readiness and Carbon Funds), the Forest Investment Program, the Amazon Fund, the Congo Basin Forest Fund and the BioCarbon Fund Initiative for Sustainable Forest Landscapes (ISFL).

Multilateral funds have a number of important core attributes which encourage investments from donor countries. Multilateral development banks have robust governance and a 'known track record and safeguards, offer(ing)...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' (UK Department of Energy and Climate Change, 2014). The pooling of resources from a number of different donor countries also allows implementation of programs in a wide range of countries and contexts. In particular, shared programs are seen to encourage harmonization of donor and recipient approaches to reducing emissions from forest degradation.

Figure 7 highlights how different donors have financed REDD+ multilateral funds as a percentage of the overall finance raised. Norway supports all of the main REDD+ multilateral funds and provides by far the most significant share of finance for the Amazon Fund and the UN-REDD Program. The UK provides over 40% of CBFF and BioCarbon ISFL finance as well as nearly 30% of FIP finance.

Figure 7: Comparison of top ten donor pledges to the main REDD+ multilateral funds



Source: ODI HBF Climate Funds Update website, February 2015.

In total, the UN-REDD Programme has raised US\$235 million in funds from international donors and, like the FCPF Readiness Fund offers relatively small grants (in the region of US\$5 million) to REDD+ partner countries for capacity building and readiness activities. The FCPF Readiness Fund raised US\$358 million and has allocated initial US\$200,000 grants to support 20 countries to produce a REDD+ Preparation Proposal (R-PP) with a follow up US\$3.4 million allocated for implementation of the R-PP and development of a national REDD+ strategy. An additional US\$200,000 is available to support countries develop national feedback and grievance redress mechanisms that are accessible, predictable, fair, transparent and compatible with national as well as international standards. In total, the FCPF Readiness Fund has allocated US\$123.2 million with US\$64.7 million disbursed as of the end of 2014.

The FIP has raised US\$603 million from international donors. Slow project approval and financial disbursements have impacted continued resource mobilisation. For example the UK suggested that the FIP ‘is not ready and able to accept further funding’ until allocations and disbursements of current finance pick up (UK Department of Energy and Climate Change, 2014). At the end of 2014, the FIP has approved US\$190.3 million for REDD+ activities.

Established in 2009, the Amazon Fund developed an innovative payment-for-performance fundraising model to monitor and combat deforestation in the Amazon. The Brazilian Economic and Social National Development Bank (BNDES) manages the fund which is often seen as an example of how a developing country is leading and managing climate funds in an inclusive way (Forstater et al, 2013). Under this model, donors provide financial support to deliver the objectives of the fund equivalent to the emissions reductions already achieved. This was estimated on the basis of the hectares of avoided deforestation achieved below a reference level (or baseline), average carbon stocks and a fixed carbon price. Norway pledged US\$1 billion, Germany US\$28.4 million and Brazilian oil company Petrobras<sup>13</sup> US\$5.6 million, to pay for a certain amount of emission reductions at an agreed price (Forstater et al, 2013). Since 2005, Brazil has reduced its Amazon region deforestation rate by 75% (UK Department of Energy and Climate Change, 2014) and 90% of Brazil’s emissions reductions were not paid for by the existing pledges to the Amazon Fund. The Amazon Fund differs from other dedicated multilateral funds for REDD+, in that it is

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<sup>13</sup> Petrobras is a publicly traded corporation where the Government of Brazil is the majority stakeholder. As such, the finance from Petrobras does not represent an international flow but is included within this paper as a contribution to the Amazon Fund, predominantly funded by Norway and Germany.

predominantly funded by one donor country and at least 80% of mobilised funding is to be spent in Brazil.

The Congo Basin Forest Fund (CBFF) managed by the African Development Bank was set up in 2008 to support projects that reduce poverty and deforestation in the Congo Basin. The CBFF has raised US\$186 million to date (CFU, February 2015). Allocation and disbursement of deposited funding has also been an issue, which has impacted continued mobilisation of finance. There have also been a number of local concerns around the longer-term sustainability of REDD+ projects and finance. A number of the NGO beneficiaries have very little financing outside of the CBFF and it is not clear how project activities will continue once these projects close after the three year CBFF project cycle (African Development Bank, 2013).

The FCPF Carbon Fund and BioCarbon Fund Initiative for Sustainable Forest Landscapes were established to help transition countries from REDD+ readiness activities to verified emissions reductions through a performance-based payment approach. The Carbon Fund became operational in 2011 and aims to test large-scale, jurisdictional approaches<sup>14</sup> for REDD+ with an emphasis on integration with policies and national REDD+ strategies developed as part of the FCPF Readiness Fund processes. At the end of 2014, the FCPF Carbon Fund had raised US\$470.2 million from a broad array of public and some limited private sector and NGO donors. Costa Rica was the first country to sign a Letter of Intent with the Carbon Fund and is now eligible to access up to US\$63 million for verified emissions reductions. The DRC, Nepal, Ghana and Mexico are also approved pipeline countries.

The BioCarbon ISFL became operational in November 2013, with the UK, Norway and US announcing US\$280 million in collective pledges at the Warsaw Conference of the Parties<sup>15</sup>. The fund is also aimed at testing jurisdictional approaches that integrate reducing deforestation and degradation with the climate smart agricultural practices to green supply chains. As of February 2015, the fund is only operational in the Oromia region of Ethiopia,

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<sup>14</sup> Jurisdictional approaches refer to sub-national (provincial) REDD+ programs and their activities. This serves as a framework from which to approach REDD+, with an emphasis on integration, both with policies and national REDD+ strategies. In this instance, jurisdictional REDD+ has not been taken to encompass the national level.

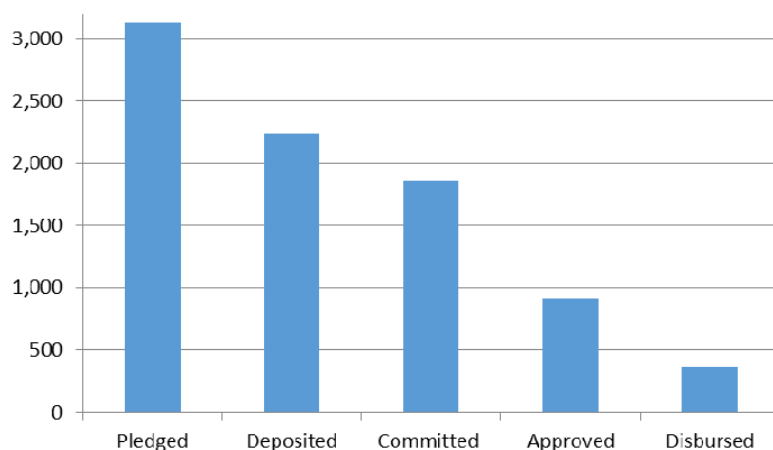
<sup>15</sup> Since the 2013 announcement of collective pledges of US\$280 million based on contributions of US\$135 million from Norway, US\$120 million from the UK and US\$25 million from the US, the December 2014 mobilised funding reached US\$311 based on US\$150 million from Norway, US\$135 million from the UK and US\$25 million from the US. The UK has since pledged an additional £40 million to the BioCarbon ISFL in January 2015.

although other proposals are currently under consideration with likely recipients to include Colombia, Zambia and Indonesia. The Amazon Fund, the FCPF Carbon Fund and the BioCarbon Fund are discussed in more detail in section 5, which reflects on the role of performance-based payments in financing REDD+.

### 3.2 Disbursements of REDD+ pledges

For all the discussion of donors and pledges of support for REDD+, finance actually released or disbursed from donor bank accounts to recipients has been much lower. Funding channeled through multilateral development banks highlights the protracted disbursement timeframe (Figure 8). Donors have deposited<sup>16</sup> around 75% (or US\$2.4 billion) of the US\$3.2 billion pledged<sup>17</sup> to multilateral development banks. Dedicated multilaterals have themselves committed 60% (of the overall US\$3.2 billion pledged) to countries or projects<sup>18</sup>, with 32% of the total finance formally approved<sup>19</sup> and just 12% actually disbursed<sup>20</sup>.

**Figure 8: Pledges and disbursements through dedicated multilateral funds 2006-2014**



Source: ODI HBF Climate Funds Update. Based on data for the Forest Investment Program, the FCPF Carbon Fund, the FCPF Readiness Fund, the Congo Basin Forest Fund, the Amazon Fund, the BioCarbon Fund ISFL and the UNREDD Programme as of 31<sup>st</sup> December 2014.

<sup>16</sup> “Deposits” represent the funds that have been transferred from the donor into the account(s) of the fund.

<sup>17</sup> “Pledges” represent verbal or signed commitments from donors to provide financial support for a particular fund.

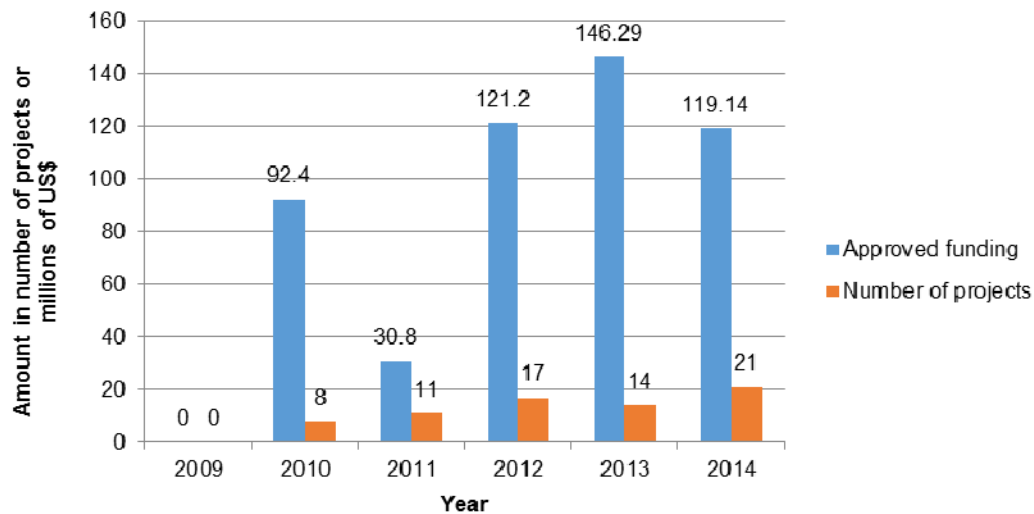
<sup>18</sup> “Commitments” in this context refers to funding that has been set aside or announced as being set aside for a country but has not been formally approved for a specific project or program. This would include for example the FCPF Carbon Fund announcing a US\$63 million commitment to purchase verified emissions reductions from Costa Rica.

<sup>19</sup> “Approvals” represent funds that have been officially approved and earmarked to a specific project or program.

<sup>20</sup> “Disbursements” represent funds that have been released to a recipient’s bank account, recording the actual transfer of finances, services or materials. In cases where in-kind or technical assistance has been provided, such as trainings, workshops, administration capacity building or provision of technology or infrastructure, disbursements are tracked when the funds have been transferred to the service provider or the recipient.

Slow progress in program approval and implementation as well as slow processes for transferring finance result in relatively slow disbursement. The Amazon Fund for example has been criticized for bureaucratic procedures in transferring funds to “grantees” which has impacted overall efficiency (Zadek et al, 2010). Figure 9 shows how the number of Amazon Fund project approvals has increased between 2010 and 2012. The pace of approvals has improved: As of December 2014, the Amazon Fund has cumulatively approved US\$391 million for projects and disbursed US\$147 million.

**Figure 9: Amazon Fund allocations over time: projects and finances**



*Source: ODI and HBF Climate Funds Update as of December 2014*

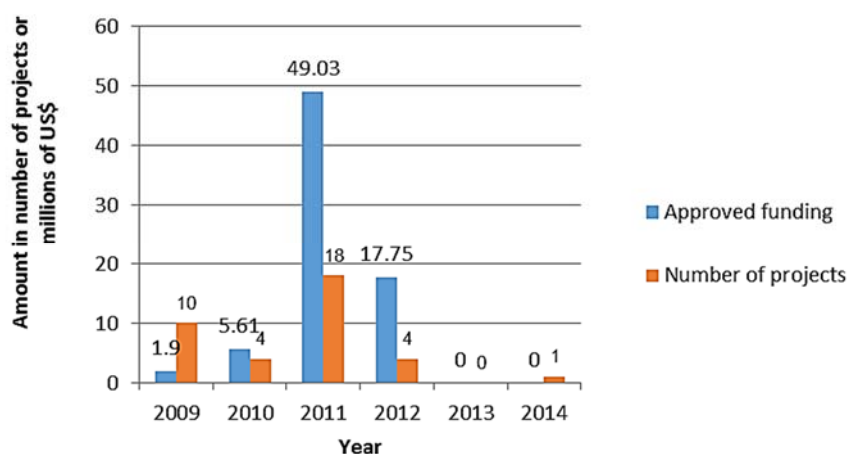
In addition the Congo Basin Forest Fund (CBFF) has also struggled to select projects and disburse agreed funds (PricewaterhouseCoopers et al, 2011). Figure 10 highlights CBFF project and finance allocations over time. In 2012, the CBFF conceded that ‘disbursement procedures are still tricky for some beneficiaries and something needs to be done in order to solve this issue. ‘Norway and the UK have made a number of visits to the CBFF offices to...identify bottlenecks and solutions...to improve the performance of the CBFF portfolio’ according to the fund’s performance report. To date, the CBFF has approved US\$82.24 and disbursed US\$52 million<sup>21</sup>. In general, most projects disburse about 15% the first year, 50% the second year and at least 90% in the final, third year (African Development Bank 2013).

<sup>21</sup> The value of CBFF approvals and disbursements (reported in Euros) has decreased over 2014 since initial publication of this paper. This reflects significant strengthening of the US Dollar against the Euro in the second half of 2014. The CBFF portfolio of projects consists of 37 projects collectively accounting for €70.8 million. While the CBFF portfolio of projects was collectively worth US\$96 million in approvals in January 2014, the same portfolio was worth US\$82 million in December 2014. The CBFF disbursed more than €14 million in 2014 with on average 67% of approved funding across the 37 projects now disbursed.



Stakeholders have complained that slow disbursements and evaluations have led to a number of projects being put on hold or abandoned altogether (Karsenty, 2012) and are linked to a lack of expertise on forest and climate change issues within the African Development Bank (African Development Bank, 2013).

**Figure 10: CBFF allocations over time: projects and finances**



*Source: ODI and HBF Climate Funds Update as of December 2014*

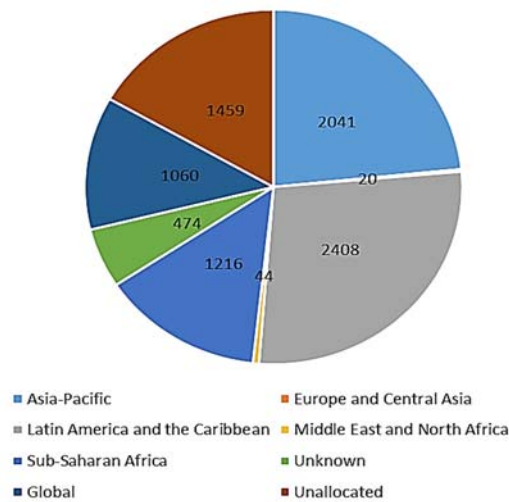
The adoption of performance-based payments affects disbursement rates, as a significant proportion of committed funding will be disbursed towards the end of a project or program of activities. Nevertheless, slow disbursement — particularly for programs focused on capacity building or more traditional implementation — have affected fundraising efforts. For example, the business case for the UK’s recent investments in the BioCarbon ISFL and FCPF Carbon Fund notes that a number of existing funds such as the CBFF have a ‘considerable tranche of funds from previous donations still to disburse (which means the funds are) not currently accepting a new round of projects and investments’ (UK Department of Energy and Climate Change, 2014).

#### **4. Recipients of REDD+ finance**

REDD+ finance has targeted all regions around the globe although Latin America and the Caribbean (accounting for 28% of multilateral and bilateral funding pledges), and Asia Pacific (23%) have attracted the most significant support from donors (Figure 11). Sub-Saharan Africa will receive 14% of pledged finance. However, there are differences across channels. Dedicated multilaterals have tended to fund REDD+ in the Latin America and Caribbean region, committing 74% of allocated funding to the region. In contrast, bilateral

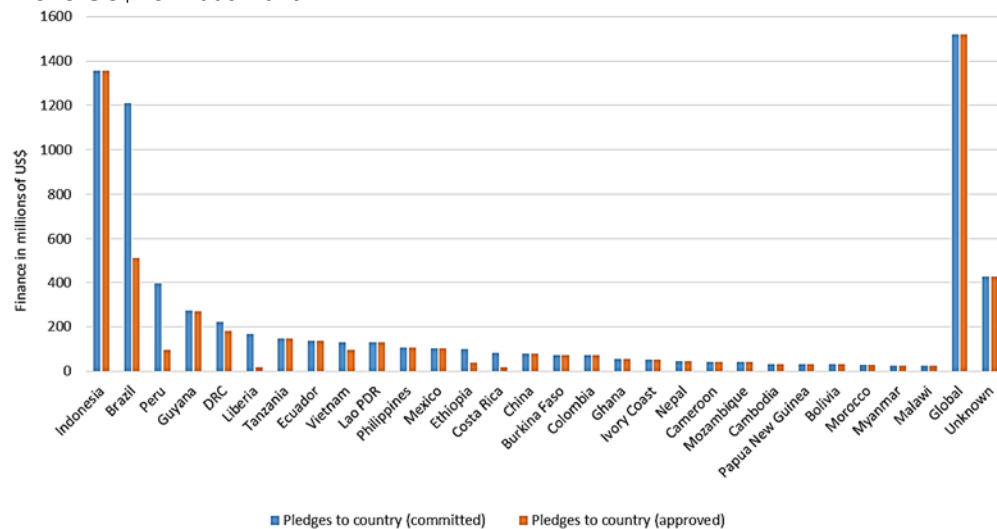
programs have pledged 38% of funding for REDD+ in Asia Pacific and 18% of funding to international research and programs with a global or multiple region focus. The largest is the UN-REDD National and Global Program (US\$72 million), which aims to benefit all UN-REDD Program partner countries simultaneously by developing and delivering knowledge-based services, products and expertise to assist their progress through the full REDD+ process.

**Figure 11: Funding pledged to recipient regions between 2006 and 2014 (in millions US\$)**



*Source: Compilation of public sector reported data from the REDD+ Partnership Voluntary REDD+ Database, ODI analysis on the Fast Start Finance period between 2010 and 2012 and ODI and HBF Climate Funds Update covering REDD+ financial commitments for 2006 to 2014.*

**Figure 12: Funding pledged (committed and approved) by recipient country in millions US\$ for 2006-2014**



Source: Compilation of public sector reported data from the REDD+ Partnership Voluntary REDD+ Database, ODI analysis on the Fast Start Finance period between 2010 and 2012 and ODI and HBF Climate Funds Update covering REDD+ financial commitments for 2006 to 2014.

Donors have financed REDD+ activities in more than 80 recipient countries since 2006, but our review suggests 35% of finance has been directed to just two priority countries: Indonesia (19% of total REDD+ finance pledged) and Brazil (17%). Table 2 therefore explores the REDD+ context in these two countries. Other top recipients include Peru, Guyana the Democratic Republic of Congo and Liberia (together, these four countries will receive 15% of funding) followed by Tanzania, Ecuador, Vietnam and Lao PDR . With 20% of funding directed to global programs or international research, just 17% of allocated funding is supporting REDD+ activities and programs across the remaining 75 recipient countries.

**Table 2: National context and REDD+ landscape for Brazil and Indonesia**

	<b>Brazil</b>	<b>Indonesia</b>
<b>Forest status and losses</b>	Largest area of tropical forest in the world with rates of loss at 0.4% between 2005 and 2010, deforestation has slowed but 2013 data suggests that deforestation is increasing (INPE, 2013). An estimated 77% of Brazil's emissions result from forest and land use change (GoB, 2012/2 <sup>nd</sup> UNFCCC comms).	Third largest area of tropical forest in the world and rates of deforestation at 0.7% between 2005 and 2010 (MoE, 2009). An estimated 60% to 85% of Indonesia's emissions arise from land use and change (GOI 2011 in FIP; National Council on Climate Change, 2010).
<b>National REDD+ commitments</b>	<p>2009 voluntary GHG reduction commitment at UNFCCC – Copenhagen (between 36.1% and 38.8% by 2020 compared to business as usual emission levels).</p> <p>Copenhagen pledges have been internalized in the national policy framework through the National Policy on Climate Change (2009). In this context, reducing emissions from deforestation represents the lion's share (24.7%) of total GHG emission reduction targeted.</p> <p>A National REDD+ Strategy is under formulation, but has yet to be agreed. Brazil submitted Reference Level data to the UNFCCC in Bonn, June 2014.</p>	<p>2009 voluntary GHG reduction commitment at UNFCCC – Copenhagen and G-20 in Pittsburgh: reduction between 26-41% (depending on donor assistance) of GHG emission by 2020 against business as usual emissions.</p> <p>2009 international commitments embodied in the National Action Plan to reduce GHG emissions (RAN-GRK).</p> <p>Letter of intent between Indonesia and Norway (2010) whereby Indonesia commits to implementing a number of REDD policies and creating new REDD agencies/funds in exchange for financial support. This included the creation of:</p> <p>A moratorium of new forestry concession firstly enacted in 2011 for two years and extended for two additional years in 2013;</p> <p>REDD+ national fund (FREDDI) to channel Norway funds and other co-financing.</p>
<b>REDD+ finance sources</b>	<p><i>Multilateral:</i> Amazon Fund; FIP</p> <p><i>Bilateral:</i> Germany, Japan, Spain, Austria, France UK, and the US.</p> <p><i>Private foundations:</i> Including ClimateWorks Foundation, Gordon and Betty Moore Foundation, David and Lucile Packard Foundation, Ford Foundation and Skoll Foundation.</p>	<p><i>Multilateral:</i> UN-REDD Program, FCPF and FIP</p> <p><i>Bilateral:</i> UK, Japan, South Korea, Germany, Australia, US, France, Denmark, Finland, the EU and Norway (who have pledged US\$1 billion by 2015 in their 2010 Letter of Intent).</p> <p><i>Private foundations and private sector:</i> ClimateWorks Foundation, Gordon and Betty Moore Foundation, David and Lucile Packard Foundation, Ford and Macquarie.</p>

Source: ODI Effectiveness of REDD+ Finance, 2014.

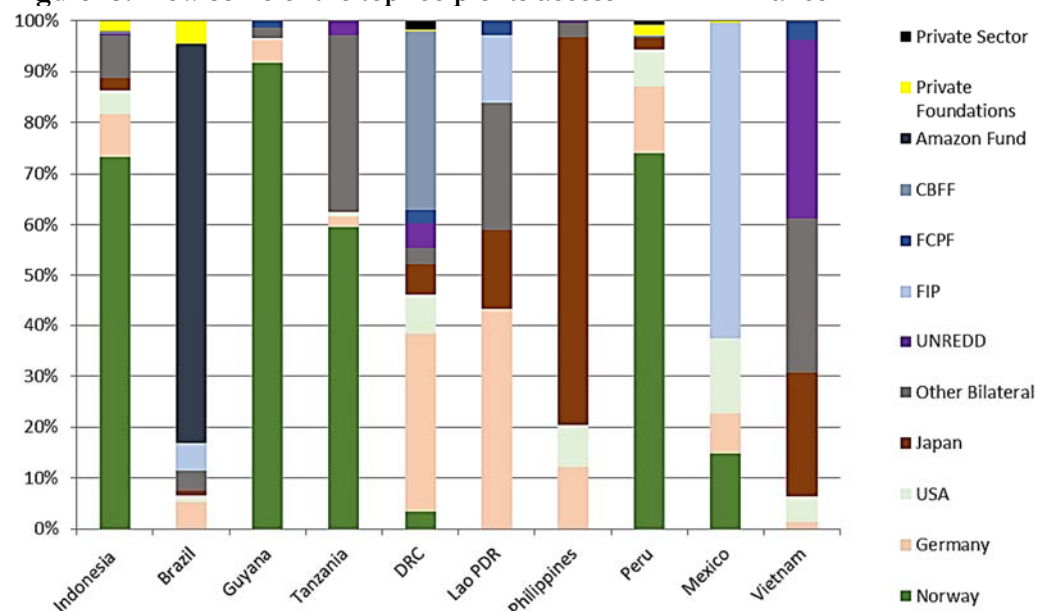
Recipient countries receive finance in very different ways from a number of donors. Figure 13 shows how some of the main recipients of REDD+ finance access funding.

The government of Norway has provided a large percentage of the finance available to REDD+ recipient countries. Bilaterally, Norway has provided over 70% of Indonesia's finance, over 90% of Guyana's and 60% of Tanzania's total pledges since 2006. Norway's commitments to the Amazon Fund and Congo Basin Forest Fund are also major sources of finance in Brazil and the DRC.

Indonesia, Guyana, Tanzania, Lao PDR, Philippines, Peru receive more than 80% of their finance through bilateral agreements highlighting how important it is that recipient countries develop strong relations with bilateral donors in order to mobilise finance. Brazil receives over 80% of available finance from the Amazon Fund, while Mexico receives around 60% of allocated finance through the Forest Investment Programme of the World Bank. Private foundations have played a minor role in financing REDD+ at the national level, although they have targeted Peru, Brazil and Indonesia.

REDD+ finance is not necessarily channeled to the national government: donor agencies or embassies often play a significant role. 72% of German REDD+ finance during the FSF period, for example, was managed by the international technical assistance agency, GIZ and, development bank KfW (Watson et al, 2014). These agencies then work closely with recipient country partners, particularly national governments, to deliver technical assistance and projects. In this way Germany's development cooperation approach has been relatively 'hands-on'.

**Figure 13: How some of the top recipients access REDD+ finance**



Source: Compilation of public sector reported data from the REDD+ Partnership Voluntary REDD+ Database and ODI and HBF Climate Funds Update covering REDD+ financial commitments for 2006 to 2013. Private foundation and private sector data from Forest Trends' REDDX initiative data as of 2014.

National governments have only received a small proportion of finance directly. During the FSF period, only 8% of REDD+ finance from the top five contributors was channeled to recipient governments (Watson et al, 2014). The exception is Japan which has pledged 64% of its REDD+ FSF to recipient country national governments through the Forest Preservation Program.

NGOs have also received a significant volume of finance to implement REDD+ activities across global programs and also in-country. During the FSF period, around 8% of finance was directed to NGOs. Half of this finance was provided by Norway through a dedicated program to support civil society engagement in REDD+ efforts, and to provide accountability for the wider programs it funds.

In part, the choice of recipient institution is likely to reflect perceptions of the respective strengths of institutions in recipient countries. The offer of results-based payments at a sufficient scale can provide a strong incentive to change practices and access the finance held by a third-party intermediary.

## **5. Paying for performance: Reducing emissions from deforestation and degradation**

REDD+ finance offers an opportunity to pay for actual emissions reduced and to therefore encourage preservation of forests and a reduction in deforestation and forest degradation. However, to date, the vast majority of finance has been targeted towards readiness activities such as capacity building, training workshops, strengthening in-country institutions and developing national REDD+ policies and strategies (Angelsen, 2013). These activities are ultimately based on preparing a country for verified emissions reductions on a payment for performance basis.

### **5.1 Performance-based payments**

As noted, a number of donors and climate funds are exploring performance-based approaches to REDD+. Broadly a performance-based payment approach disburses finance to delivery agents (which might include private companies or state agencies) upon the delivery of (predetermined) results or outputs (Müller, Fankhauser and Forstater, 2013). Such mechanisms have been used to deliver development assistance for health and education, with payments based on evidence of progress towards agreed outcomes such as the number of pupils passing an educational qualification, or the number of individuals

vaccinated for a disease. The relative successes of such results-based approaches depend on a wide range of variables including the scale of implementation, the type of recipient, the complexity of indicators, and the way that the performance will be measured (Birdsall and Savedoff (2010); Savedoff (2011) and Pearson et al (2010)).

The relatively narrow focus of REDD+ and the technical potential to measure and monitor forest cover and associated emissions, has raised interest in the potential to use performance-based or ex-post finance.

However, as of December 2014, 42% of total bilateral and multilateral REDD+ finance has been pledged on a payment for performance basis. This suggests that at least 58% of finance has been channeled ex-ante in the form of grants for readiness activities that are not specifically tied to reducing emissions from deforestation and forest degradation.

## **5.2 Performance-based payments and REDD+ donors**

The scope of donor performance-based payments for REDD+ have been relatively limited to date. Norway is the biggest proponent of results-based payment mechanisms stating that ‘ex post payments for verified emission reductions provide the best way to incentivize emission reductions in any sector, including REDD+’ (Government of Norway, 2012).

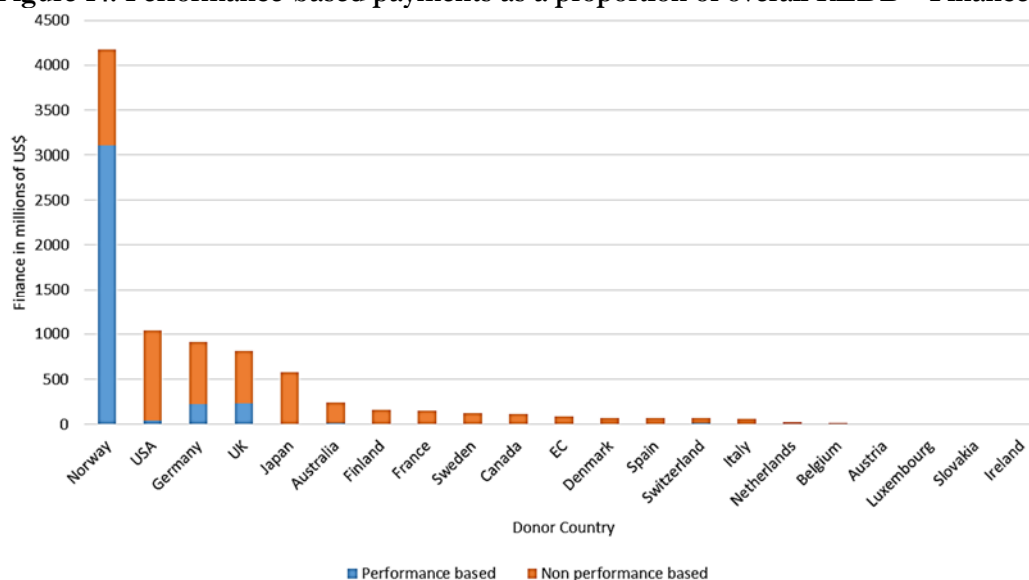
The scale of Norway’s support for performance-based aid is significant as set out in Figure 14. Since 2006, Norway has pledged over US\$3 billion in performance-based payments through a number of high profile bilateral and multilateral agreements such as a partnership with Indonesia, establishing the Amazon Fund and the Guyana REDD+ Investment Fund (GRIF) and more recently through bilateral commitments with Peru and Liberia. Around 74% of Norway’s REDD+ pledges have piloted performance-based payment approaches to reducing emissions.

Germany has also focused on financing results, pledging around 25% of overall REDD+ finance (or US\$224 million) in payments for performance through multilateral funds and, more recently the REDD+ Early Movers Program (REM). REM, managed by GIZ and KfW is designed to offer bridge funding between late Phase II readiness activities and Phase III aimed at producing verified emissions reductions at scale.

A number of countries are funding multilateral programs aimed at producing carbon offsets and reducing emissions such as the Forest Carbon Partnership Carbon Fund and the

recently announced BioCarbon Fund ISFL launched in 2013. The UK, Norway and the US are funding both dedicated multilaterals.

**Figure 14: Performance-based payments as a proportion of overall REDD+ Finance**



*Source: Compilation of public sector reported data from the REDD+ Partnership Voluntary REDD+ Database, ODI analysis on the Fast Start Finance period between 2010 and 2012 and ODI and HBF Climate Funds Update covering REDD+ financial commitments for 2006 to 2014.*

### 5.3 REDD+ performance-based payments in action

Donors and dedicated funds have approached REDD+ performance-based payments in diverse ways, which has ultimately impacted the results and finance flowing. Table 3 summarizes and compares across different bilateral and multilateral performance-based programs. The size of programs varies substantially from US\$61 million for multiple countries in the case of the German REDD+ Early Movers program (which received additional support from Norway to extend the program to Colombia and Ecuador at the 20th session of the Conference of the Parties in Lima in December 2014), to more than US\$1 billion in the case of the Amazon Fund. And their scope varies from “jurisdictional” to more contained at local or sub-national level as in some of the REDD+ early mover cases. Several are in quite early stages of implementation, and much remains to be seen about how they will work in practice.

#### 5.3.1 Payment timing and focus on results

To date, only a relatively small number of programs or percentage of performance-based finance is actually paid ex-post and based on results achieved. Although, a number of



programs claim to be paying for results but are do so at a relatively superficial level, or pay in ex-ante (Kenny and Savedoff, 2013).

Norway's financial support to the Amazon Fund is contingent on emissions reduced in legal Amazon region. However, while Brazil's overall deforestation rate is monitored by the Brazilian Forest Service (SFB) and Brazilian National Institute of Space Research (INPE) with independent auditing of results, the Amazon Fund does not specifically assess or remunerate its projects based on the emissions reduced. In addition, Amazon Fund projects are actually supporting a range of forest conservation and sustainable development objectives and not specifically targeted towards emissions reductions as the main outcome. Therefore there is a fundamental distinction between the way that the international donors provide finance to the Amazon Fund (on a performance-based payment basis) and the way the Amazon Fund manages, monitors and provides finance to projects and activities (as non-reimbursable investments and disbursements based on project spend).

The BioCarbon Fund ISFL of the World Bank became operational in November 2013. This new program also aims to deliver emissions reductions through performance-based payments. However, around 27% of the US\$311 million raised has been allocated for ex-ante technical assistance funding that will support countries such as Ethiopia (the first pilot jurisdiction), Colombia, Zambia and Indonesia (under consideration) build public sector capacity, engage the private sector and create integrated programs. The World Bank notes that 'payments that are purely based on performance (i.e., after emission reductions have been verified) do not alleviate the upfront financing needs unless they can be advanced in the form of pre-payments or monetized' (World Bank, 2014).

Both the BioCarbon Fund ISFL and the FCPF Carbon Fund are only in the very initial stages of piloting performance-based payment mechanisms and it is therefore unclear the extent to which ex-ante payments will be made across their portfolios. The Carbon Fund has made an initial commitment to Costa Rica to negotiate the purchase of up to US\$63 million worth of emissions reductions and removals. This funding is to preserve 340,000 hectares of privately owned land including Indigenous People's territories but it remains unclear how this mechanism will work and to what extent payments will be delivered on emissions reduced.

### 5.3.2 *Incentive mechanisms*

Payment for results is intended to incentivize action and encourage change. The reference levels for this change, however, vary widely across programs, and have implications for the “result” that ensues. However, as of December 2014, allocation and spend has lagged behind the pledged and available funding. The Amazon Fund contracted US\$391 million in grants and the GRIF committed around US\$40 million to project activities (Amazon Fund, 2014; GRIF 2014) out of much larger available pledges. The rate at which the Amazon Fund is allocating and then disbursing funding raises questions about the extent to which falling deforestation can really be attributed to Amazon Fund supported activities (Zadek, Forstater, and Polocow, 2010).

Yet at the same time, the results Brazil is delivering in terms of deforestation reductions require much greater investment than the funding that is available through the Amazon Fund itself. Put another way, the “performance” is much larger than the currently available “payment”. The reference level set for the payments was initially based on historical deforestation for the period between 1996 and 2005. Due to the rapid fall in deforestation between 2004 and 2009, Brazil will be ‘earning’ REDD+ credits in the order of US\$10 billion or 10 times the promised or available amount (Angelsen 2013). In addition, the Amazon Fund portfolio has focused on capacity building activities; few programs to date have targeted overarching market drivers of deforestation, or sought to encourage additional private sector investment.

### 5.3.3 *Monitoring and Indicators*

Paying for performance is often most successful when the performance can be measured against a clear outcome (Kenny and Savedoff, 2013). Establishing multiple, complex indicators can muddy the focus on a core goal or outcome. It can also mean that funding is not necessarily disbursed based on results but becomes more dependent on the political negotiation skills of recipients, and their ability to convince a funder that progress towards achieving outcomes is on track.

The Norway Indonesia Partnership has encouraged implementation of a phased approach to REDD+ through a transition from readiness towards verified emissions reductions. Multiple performance indicators cover institutional strengthening and policy criteria such as completing a national REDD+ strategy, creating an independent MRV institution, a moratorium on forest and peatland concessions as well as the creation of a new REDD+

Agency under which it was expected that REDD+ finance will be tracked and coordinated. Finally, this agreement commits to pay for verified emissions reductions. The first assessment of the Norway Indonesia Partnership suggests that progress is being made, and that the Letter of Intent is already having positive impacts. It ‘has brought to the fore many questions that must be answered if REDD+ is to be made to work, some of them now being asked in Indonesia for the first time’ (Caldecott et al 2011).

In addition, there is a need to reflect on how performance is assessed. The Amazon Fund monitors projects through an assessment of spend rather than impact (Forstater et al., 2013) although efforts to develop wider performance-based metrics are underway. The initial evaluation of the Norway-Indonesia Partnership noted that activities and finance should be more focused on the *quality of processes* rather than an exclusive focus on *outputs and dates* (Caldecott et al 2011).

#### 5.3.4 *Other benefits*

REDD+ programs structured on a performance basis are also supporting important processes and delivering co-benefits. Norway’s commitment to Guyana has demonstrated successes through developing a national system for monitoring, reporting and verifying deforestation and carbon emissions. This national MRV system ‘has identified a recent rise in emissions from deforestation, and has been able to attribute the increase to a particular driver—gold mining’ (Birdsall and Busch, 2014). Information on the drivers of deforestation can help countries better adjust policies and measures to address any changes in emissions. In addition, the GRIF has also strengthened forest governance institutions and encouraged broad buy in for the country’s Low Carbon Development Strategy.

## Additional options for REDD+ Finance

In light of the challenges experienced in piloting REDD+ performance-based programs, climate or green bonds issued by governments (at local, regional or national level) or companies, and impact bonds linked to projects or programs are currently receiving significant attention as a way of mobilizing upfront financing as well as incentivizing emissions reductions (Lowery et al, 2014; The Global Canopy Program et al, 2014).

Although climate or green bonds are fixed-income financial instruments (where the issuer is obliged to pay interest and/or to repay the principal), impact bonds are not a traditional bond, since repayment and return on investment are contingent upon achieving a number of desired outcomes; and if these are not achieved, investors will not receive return or repayment.

While models for climate or green bonds and impact bonds linked to REDD+ outcomes are still being developed and piloted, it is likely that these instruments will face similar challenges to broader performance-based payment programs assessed in this paper. While bonds attempt to provide early ex-ante finance for REDD+ activities, this still relies on 1) investor interest and willingness to provide up-front pre-financing for REDD+ and 2) public sector demand for emission reductions. These investments will likely continue to be impacted by the same political uncertainty which has impacted the carbon markets. Furthermore, repayment relies on long term public demand for REDD+. The likely scale or level of pre-financing remains dependent on what donors will be continuingly willing to repay for REDD+ in ten to fifteen years. As this report demonstrates, there has been cautious financial and political commitment for REDD+ to date with US\$8.7 billion in total public sector commitment (out of the US\$9.8 billion overall total) between 2006 and 2014. In addition, experience from the Amazon Fund illustrates how emissions reduced have vastly exceeded public financing available. All financing options require political certainty and commitment to ultimately ensure both upfront investment and security that there will sufficient funds (from both public and private sources) to pay for results delivered in ten to fifteen years.

**Table 3: REDD+ performance based payment programs compared**

	Guyana REDD+ Investment Fund (GRIF)	Forest Carbon Partnership Facility's (FCPF) Carbon Fund	Norway/Indonesia Partnership	Amazon Fund	Germany's REDD+ Early Movers Programme (REM)	BioCarbon Initiative for Sustainable Forest Landscapes
Financial pledge	US\$250 million	US\$470 million	US\$1 billion	US\$1.03 billion	US\$61 million	US\$311 million
Finance type funders	Public-Bilateral  Funders: Norway	Public and Private-Multilateral  Funders: UK, EU, Australia, Canada, Germany, Norway Switzerland, USA, BP, CDC Climat and TNC  Managed by World Bank	Public- Bilateral  Funders: Norway	Public and Private-Multilateral  Funders: Norway, Germany and Petróleo Brasileiro S.A. – Petrobras  Managed by Brazilian National Bank BNDES	Public-Bilateral  Funders: Germany, Norway	Public- Bilateral  Funders: Norway, UK and USA
Scale	Jurisdictional	National and jurisdictional	Jurisdictional	Regional and project level	National and jurisdictional	Jurisdictional
Geographical Scope	Guyana	Only countries already registered with the FCPF and at determined level of REDD+ readiness	Indonesia	Amazon Basin. 80% of resources targeting Brazilian Amazon. Up to 20% of resources may be directed to other biomes in Brazil and other tropical countries	Global	Unknown. The only jurisdiction is the state of Oromia in Ethiopia. Jurisdictions in Colombia, Indonesia and Zambia are currently under consideration.
Activity Scope	Only reduced emissions from deforestation at the start. Other REDD+ activities could be addressed in the future.	Full scope of REDD+	80% of funds are dedicated to verified emissions reductions from deforestation, forest degradation or peatland conversion. Some institutional and capacity building activities will be supported with 20% of the finance.	REDD+, sustainable forest management, recovery of deforested areas. Other capacity building activities are funded by the Amazon Fund that do not directly create emissions reductions.	Only verified emissions reductions from deforestation	Potential activities for support include small scale plantation farming, sustainable forest management, afforestation and reforestation, regeneration, National Park designation / no-deforestation zoning, agroforestry and sustainable agricultural practices.
Reference Level	Based on Guyana's historical deforestation rates for 2000-2009 (0.03%) plus the global average deforestation rate of 0.52% from 2005-2010. Reference level set at 0.275%. Guyana receives less compensation if deforestation rate rises above 0.056%, and none if rate rises above 0.1%	Geo-referenced and nested. Adjustments from historical average are allowed only for programs within high forest, low deforestation countries. Public consultation and peer review are required in the approval process for a reference level.	Based on either UNFCCC level or domestically according to Indonesia's emissions reductions pledges and UNFCCC methodological guidance.	Based on a historical reference level; i.e. average deforestation, over past ten years, and updated every five years. The emission factor (lost carbon per ha) is set to 100tC/ha, with a payment of US\$5/tCO <sub>2</sub> .	Based on proxy indicators, primarily the IPCC's conservative estimates of forest carbon or country targets along with conservative assumptions on the price of CO <sub>2</sub> for VERRs	Not yet implementing. The pilot project in Ethiopia has agreed to begin with a simple MRV approach based on historic deforestation rates and then elaborate as capacity is built in implementing agencies over time and established initial performance targets.
Leakage	A national land use planning system is to be developed to avoid leakage. Leakage is captured in the national accounting system.	Both international and domestic leakage potential must be assessed. In the MRV system only domestic leakage has to be counted.	Unknown	Not specifically addressed. It is unclear whether BNDES requires leakage management from projects	Unknown	Unknown
Funder payments	Initial payment on signing Administrative Agreement in 2009, then annually on request from the World Bank (Trustee). Annual payments based on projected 12 months of projects and admin costs. Total is determined by results and emissions avoided.	Payments made on delivery of the emission reductions which have been independently verified. Some upfront payments may be possible subject to conditions still to be established.	US\$200 million to be paid as 'contribution-for-delivery' of initial preparation and transformative activities (Phases 1 and 2 agreed in the Letter of Intent). US\$800 million to be paid as a 'contribution-for-verified-emissions-reduction' during the final third phase of the Partnership.	Payments on written requests from fund manager BNDES based on the financial needs of Fund and levels of emissions reductions attested by the Technical Committee	Payments solely on verified emissions reductions.  Incentive payments made in support for Readiness activities.	Payments expected when programs produce a defined result. The fund could also deploy results-based finance to incentivize policy changes in emerging markets that would advance the sustainable land management agenda.

MRV	Guyana and Norway issued a Joint Concept Note on MRV and Guyana developed a roadmap for installing a comprehensive national MRV system, including interim progress indicators.	Stepwise approach to a comprehensive system for conservatively measuring and reporting changes in deforestation, degradation, conservation and forest enhancement plus co-benefits, benefit sharing and safeguards. Local communities, private sector and others should be involved in implementation and verification of results.	Independent institution to conduct MRV created in Phase 1, and Phase 2 is planned to implement "a country wide MRV system.	Monitoring by SFB/MMA (Brazilian Forest Service) and INPE (Brazilian National Institute of Space Research). Results are independently audited.	Performance measured using proxy indicators- primarily the IPCC's conservative estimates of the carbon content of forest ecosystems or country specific targets plus conservative assumptions about the CO <sub>2</sub> price per tonne for paying for emissions reductions.	Unknown
Example program or project	Fast tracking the Amerindian Land Titling process. The Project seeks to a) issue titles for all Amerindian villages that submit requests, b) strengthen existing mechanisms to deal with unresolved land issues, c) improve Ministry of Amerindian Affairs outreach	Costa Rica is the first country to be endorsed. 29.5 million tons of CO <sub>2</sub> emissions reductions for which the Carbon Fund is expected to pay US\$63 million (based on a price of US\$5 per ton of CO <sub>2</sub> ).	Pilot project in Central Kalimantan province.	Supporting the state of Amapá to increase technical knowledge on production /extraction of açaí berries, wood and Brazil nuts, improve land-use planning and develop instruments for REDD+ implementation	REM has already agreed to spend around €19 million buying 8 million tCO <sub>2</sub> from REDD+ activities in the State of Acre over a four year period.	The Oromia REDD+ Program in Ethiopia will promote cross-sectoral investments in the area of forests, agriculture, livestock and biomass energy.
Reported lessons and challenges	Some performance indicators considered vague and insufficiently defined. Early concern that scope was "outside the forest" – e.g. in creating low carbon jobs in urban centres. The Guyanese Government has reported slow payments and severe budgetary cuts applied by the Parliamentary Opposition (which cut GRIF project budget by 95% in 2013) which is impacting progress.	The carbon price for emissions reductions is not fixed and eventual pricing will take into consideration other factors.	Some performance indicators are too vague and have led to negotiations on the exact meaning e.g. what are 'natural forests' in the context of Indonesia's moratorium.	Initial reference level based on deforestation rate for 1996-2005. Brazil should have been paid US\$2 billion per year for the five year period (2009-13) equivalent to 10 times the promised amount. Amazon Fund has therefore been criticised for not being able to financially pay based on actual emissions reduced.	Unknown	Unknown

## 6. Private sector

Private sector engagement is considered paramount in delivering emissions reductions and a carbon market. Streck and Parker (2013) characterize the ways that private sector can engage as direct and indirect. Direct includes investments leading to land-use change such as specific forest-projects, or biodiversity and watershed services payments. Indirect includes investments in greening commodity supply chains, reducing the impact of activities directly on deforestation, or certified commodities.

There is little information available on investments where the primary objective is not REDD+. Conservation projects often target forested areas, and investment in conservation may result in reduced emissions. Similarly, watershed protection payments frequently rely on reforestation or reduced forest degradation as a means of protecting water quality and reducing soil erosion for example. Both these activities directly lead to delivering REDD+. However there is no consistent or collated data, at a global scale that quantifies the number, impact, scale or value of these activities worldwide, and no reliable method of calculating a contribution to REDD+ from these activities.

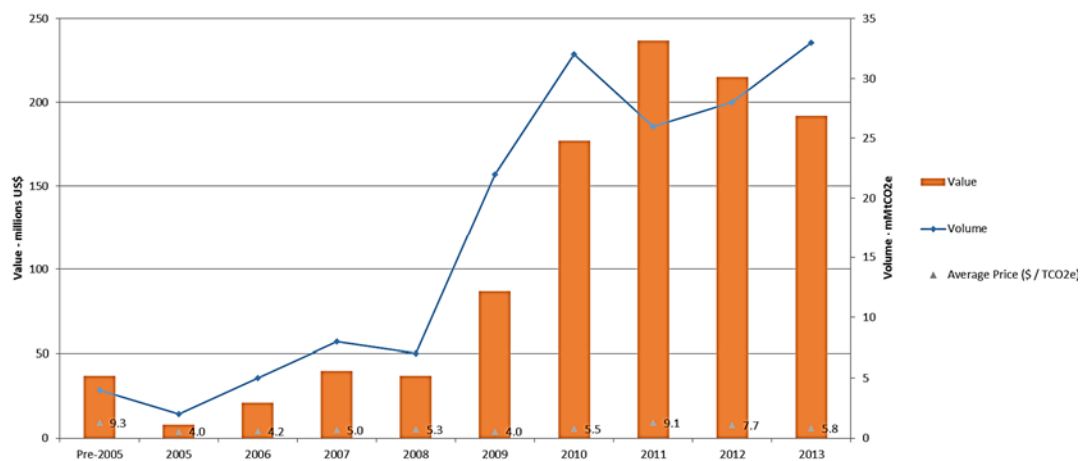
Our analysis focuses quite narrowly on direct private investment in REDD+ focused activities. The engagement of the private sector will take several forms, and roles and motivations of actors in each category is characterized by Bernard et al (2012):

- Financing and delivery of investments in actions or projects that lead to REDD+. This includes ‘project developers’ specifically aiming to produce forest carbon offsets, as well as private sector actors associated with drivers of forest degradation;
- Creating an end-demand for emissions by ‘purchasing’ emissions reductions from investors (with most of the focus on ‘project developers’);
- Brokering, evaluating, technical expertise to facilitate market.

## 6.1 Overview of private finance volumes and markets

Direct private investment in REDD+ is best characterized by the forest carbon offset market. To date, Ecosystem Marketplace estimates that forest carbon offset transactions have been worth around US\$1 billion million over time (Goldstein and Gonzalez, 2014), with the market currently at or near its peak. Demand for forest offsets grew rapidly from 2006, with the market peaking and steadying from 2010-2012, with some variations in average price and total volumes traded. The market was worth US\$200 million in 2013 (Figure 15).

**Figure 15: Annual forests offset market value and volume**

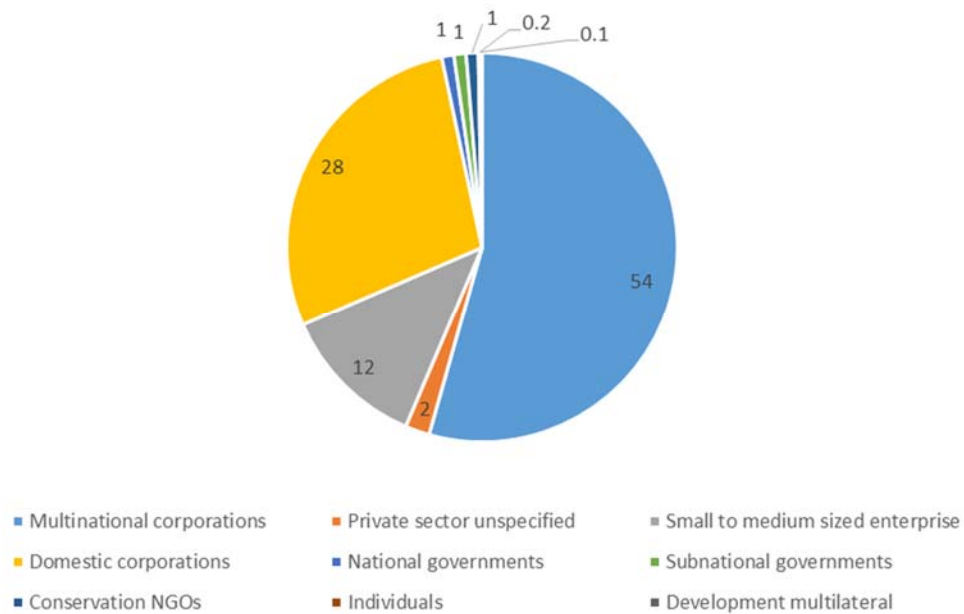


Source: Adapted from Ecosystem Marketplace's *State of the Forest Carbon Markets Report 2014*

In 2012 and 2013, the majority of the forest carbon transactions were purchased by the private sector, which demonstrates the synergy between this market and private sector

investment in REDD+. The majority of buyers (54%) were multinational companies (Goldstein and Gonzalez, 2014; see Figure 16). The public sector was responsible for 2%, although this dropped from 17% in 2011 as a result of the end of the Kyoto compliance period.

**Figure 16: Forest carbon offset buyer type (% share)**



*Source: Adapted from Ecosystem Marketplace's State of the Forest Carbon Markets Report 2014*

## 6.2 Drivers of demand and investment

While there has been active private sector engagement in recent years as demonstrated above, the current low price of carbon and the broader uncertainty surrounding carbon markets has impacted the overall level of private sector investment in REDD+, which remains well below the level of public sector investments (Peters-Stanley et al 2013) and at around 10% of the level which investors and project developers could provide.

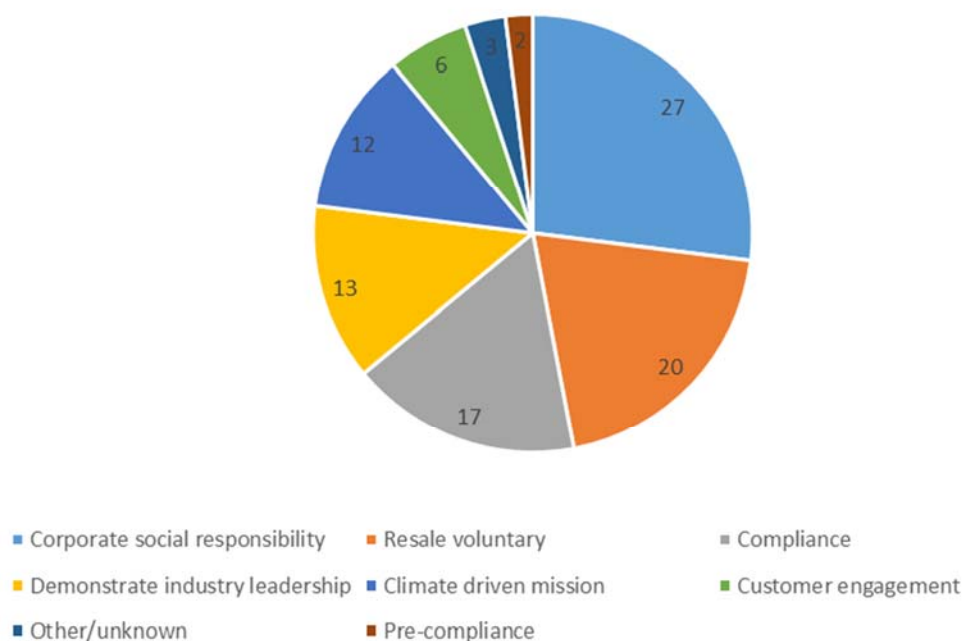
Low levels of investment are explained in part by the weak status of the emissions compliance market. Furthermore, few existing compliance markets accept forest and REDD+ emissions reductions. Forest conservation is currently excluded from the CDM, and offset credits from forestry and land-use change are excluded from the EU ETS, because of concerns over permanence, leakage, establishing baselines and accuracy of MRV



(CarbonMarketWatch, 2014)<sup>22</sup>. The forest carbon offset market is dominated by voluntary markets, with the value of compliance markets falling significantly in recent years, primarily driven by the end of the compliance period for the Kyoto Protocol in 2012.

Ultimately, demand for forest carbon offsets has come from buyers who want to demonstrate climate leadership within their industry and to meet corporate, social responsibility targets. While the voluntary demand markets remain vulnerable to consumer preference and ‘whims’, the forestry offset market shows less variability and a higher average price paid per tCO<sub>2</sub>e than the rest of the market (Stanley-Peters et al, 2013). The voluntary market represented 89% of total volume in 2013 (Goldstein and Gonzalez, 2014). Corporate social responsibility, voluntary resale and looking to meet obligations under compliance markets are responsible for 64% of the demand in 2013 (Goldstein and Gonzalez, 2014; see Figure 17).

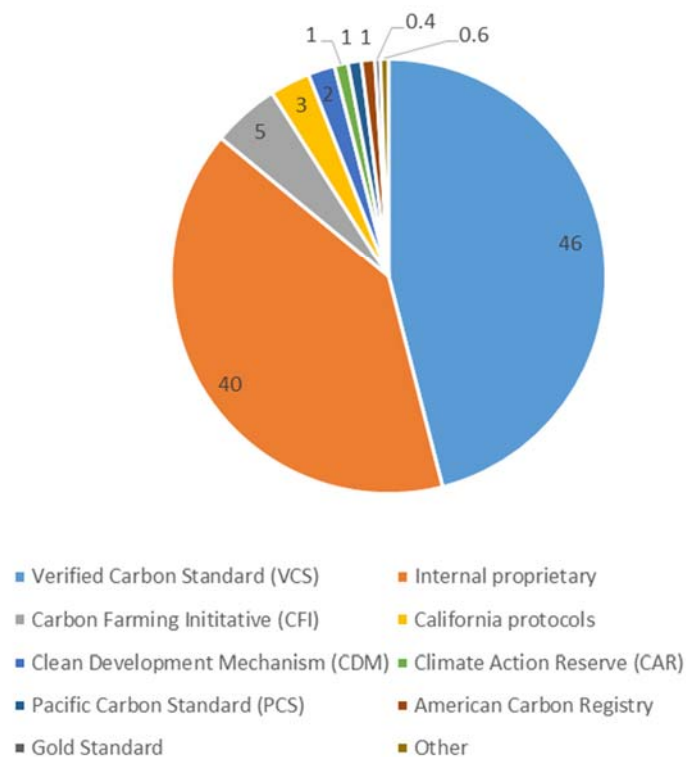
**Figure 17: Forest carbon offset buyer motivation (% share)**



*Source: Adapted from Ecosystem Marketplace's State of the Forest Carbon Markets Report 2014*

**Figure 18: Market share (%) by standard/certification**

<sup>22</sup> CarbonMarketWatch, 2014. REDD. [online. Accessed 2<sup>nd</sup> July 2014] Available at: <http://carbonmarketwatch.org/category/redd/>

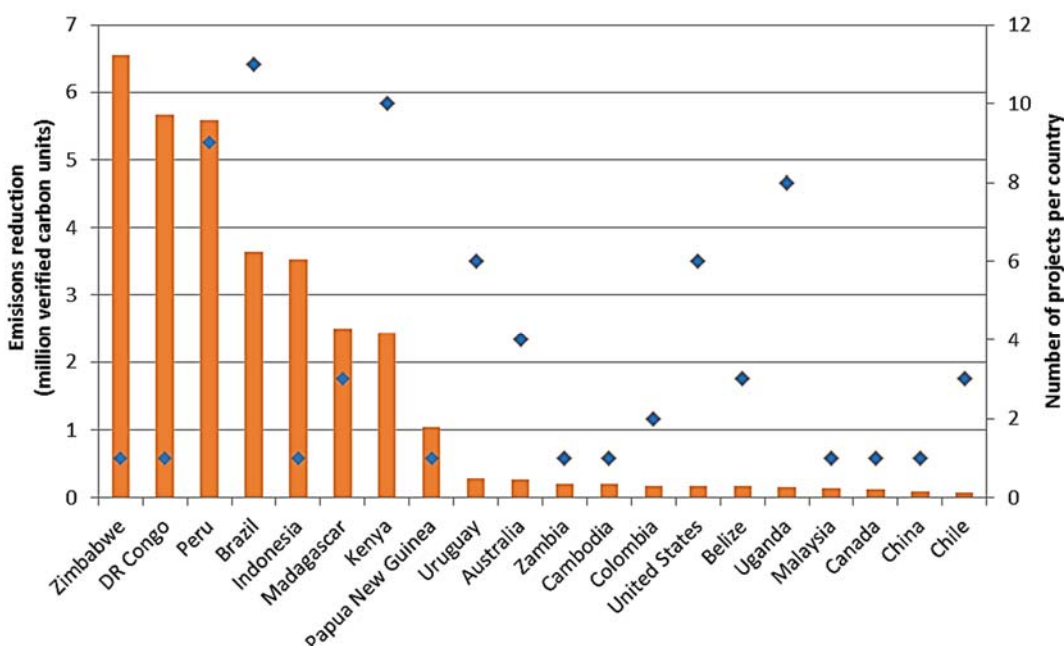


*Source: Adapted from Ecosystem Marketplace's State of the Forest Carbon Markets Report 2014*

Buyers from 23 different country locations transacted forest carbon offsets in 2013. 98% were sold to buyers based in developed regions, with no buyers in Asia or Africa. EU-based buyers have been predominantly the largest source of demand for forestry offsets. In 2013, Europe based buyers purchased more than two-thirds of all offsets. North America accounted for a fifth of the forestry offsets sold in 2013 with pre-compliance in the Californian trading scheme a key motivation.

Available data on private investment in REDD+ is dominated by a few large-scale projects. Using the VCS's project-level data (VCS, 2014) it can be identified that 76% of the total estimated annual reductions are generated by just ten projects (out of 89) over 1 million tonnes per year. The projects are well distributed globally. Some countries have a few very large projects (Zimbabwe, DRC, Indonesia), while others have multiple smaller ones (Peru, Brazil, Kenya) but similar levels of total emissions reductions. The top 8 countries account for 93% of the total activity and have an order of magnitude, if not more, greater levels of activity than the other countries.

**Figure 19: Estimated annual emissions reductions (VCS standards) from Agriculture, forestry and land-use**



*Source: Adapted from VCS 2014.*

### Microsoft and Disney investing in REDD+

Over 67% of the forest carbon offsets were purchased by multinational companies in 2012. Some notable examples include:

**Microsoft** has been investing in offsets in Brazil, Kenya and Cambodia, as part of its overarching carbon neutral scheme. It has spent over \$4 million to date on forest carbon offsets.

**Walt Disney** has invested in one similar project in the Peruvian Amazon, to specifically help offset emissions from its resorts and cruises. Disney bought \$3.5 million worth of credits at \$8 each – higher than their value on the international markets.

These examples show how corporate responsibility is helping to provide private demand for forestry offsets flowing, but even huge global companies such as Microsoft do not provide finance in the order of magnitude required for REDD+ without a greater legislative need.

*Source: Dewan, 2014*

Significant additional investments have also been made beyond that reflected in the forest carbon offset market. For example, developers reported that they were unable to find a buyer for 30 MtCO<sub>2</sub>e in 2012 – worth an additional US\$236 million at the same prices. With

a five-year pipeline of US\$10.7 billion, there is space within the industry to increase investment and meet a ten-fold increase in market size if the demand emerges (Peters-Stanley et al, 2013).

### **Challenges of data availability**

Private sector engagement around REDD+ and the drivers of deforestation has been difficult to track and transparency around investments is often poor. This partly results from the fact that there is 'huge diversity amongst private sector actors' which makes it difficult to make generalizations and to 'conceptualize the private sector as a whole' (Henderson et al, 2012). At a project level, the Voluntary Carbon Standard's database remains the best source of accessible data, and this covers 57% of the forest carbon offset market as seen in Figure 19. The Ecosystem Marketplaces / Forest Trends methodology demonstrates many of the key issues. As the data is generated from a survey of actors involved in the market, protecting confidentiality of the responses is key (Peters-Stanley et al 2013). Therefore their reports only present aggregate data. As a result detailed price and location data is unavailable, but more importantly, as are details about each investor and buyer of offsets to greater unpick motivations and intentions.

## **7. Conclusion**

When originally conceived, the idea of large scale finance to reward efforts to reduce emissions from forests soared to global prominence. Part of its appeal was the potential of REDD+ to advance progress on multiple counts including biodiversity conservation, poverty reduction and development, as well as climate change. The potential to attract private investment, including through links to carbon markets also increased interest. Early enthusiasm for the concept was accompanied by substantial early pledges of finance to pilot new approaches and to take on longstanding and difficult issues that underpin deforestation and degradation in developing countries. These underpinning issues include economic incentives that create pressures on forests, and institutions and governance that are often weakly positioned to intermediate between long term sustainable development objectives and these near term pressures. Part of the challenge for REDD+ finance is therefore to create new political and economic incentives to enable change. The scale of REDD+ finance is therefore an important factor in its ability to command requisite political attention. In addition, how it is spent, and the terms on which it is made available are also crucial factors.

Our review of REDD+ finance highlights important investments that have been - and continue to be made - but it raises questions about the future trajectory of public support for such programs. To date, the implementation of REDD+ programs has been relatively slow, raising questions about whether additional finance is needed. But the relatively modest scale of finance, and the modalities through which it has been managed, may mean that some programs have not harnessed the requisite political support to facilitate expedient implementation. While REDD+ has historically been seen as an investment in mitigation, the contribution that reduced deforestation makes to increasing the resilience of forest ecosystems and the people who depend on them has also received growing recognition. Important experimentation is now underway to pilot performance-based approaches to financing REDD+. These initiatives have substantial diversity in terms of the amount of finance that is on offer, the scale or jurisdiction at which they seek to intervene, and the “performance” to which payment is linked. Important learning about the practical mechanics of such programs is beginning to emerge, but the evidence on whether such approaches will succeed in shifting incentives, and empowering constituents for change remains to be seen.

This reflects in part, a wider sense of uncertainty about future trajectories for climate finance more generally. An overarching context of difficult financial circumstances in developed countries, triggering policies of austerity and reduced political appetite for international spending is a compounding factor. While overall REDD+ has played a relatively small (though important) role in recent efforts to deliver on international climate finance commitments, recent initiatives including Norway’s bilateral support to Peru and Liberia and additional support to the REDD+ Early Movers Program in Colombia and Ecuador highlights continued interest in funding demonstrated results-based reductions in deforestation. In addition, the recently mobilised Green Climate Fund (GCF) looks set to focus efforts at least in part on scaling up financing for forests which has been identified as one of five potential investment priorities. The impact assessment identifies the potential for an emphasis on results-based finance for implementation of REDD+ strategies in a few jurisdictions showing momentum and clear potential for mitigation, alongside ecosystem services, livelihood results and other co-benefits (GCF, 2015). A results framework to track and incentivize investments in REDD+ that is consistent with the Warsaw decisions on a REDD+ instrument has been established. In addition, efforts are underway to help countries prepare to make effective use of the GCF through a readiness program that will build on ongoing efforts to reduce emissions from deforestation and degradation. Nevertheless, there are important questions that remain to be answered about the level of

public finance that developed countries will commit in the context of efforts to secure ambitious action on climate change through a new global agreement in 2015. In this context, the potential for investments that deliver paradigm shifting sustainable development benefits by addressing the links between forests and climate change will need continued attention.

## 8. References

- African Development Bank. *Congo Basin Fund 2012 Annual Report*. Tunis: African Development Bank, 2013.
- Angelsen, A. ed. *Moving Ahead with REDD: Issues, Options, and Implications*. Bogor: CIFOR, 2008.
- Angelsen, A. *REDD+ as performance based aid; general lessons and bilateral agreements of Norway*. Helsinki: UNU-WIDER, 2013.
- Angelsen, A., Brown, S., Loisel, C., Peskett, L., Streck, C., Zarin, D. 'Reducing emissions from deforestation and forest degradation: An options assessment report'. Prepared for the Government of Norway. Washington, DC: Meridian Institute, 2009. Available at: <http://www.REDD-OAR.org>.
- Asare, R., Yelibora, M., Adjei, R., and Manan, H. *Ghana: Mapping REDD+ financial flows 2009-2012*. Nature Conservation Research Centre and Forestry Commission of Ghana. Accra: 2013
- Bernard, F., McFatridge, S. and Minang, P. *The private sector in the REDD+ supply chain: trends, challenges and opportunities*. ASB policy brief. Geneva: IISD, 2012.
- BioCarbon Fund: Initiative for Sustainable Forest Landscapes brief accessed June 23 2014 <http://biocarbonfund-isfl.org/sites/biocf/files/documents/Bio%20CF%20ISFL%20Flyer%20version%208.pdf>
- Birdsall, N. and Busch, J. *Assessing Performance-Based Payments for Forest Conservation: Six Successes, Four Worries, and Six Possibilities to Explore of the Guyana-Norway Agreement*. Washington, DC: Center for Global Development, 2014.
- Birdsall, N. and Busch, J. *Assessing Performance-Based Payments for Forest Conservation: Six Successes, Four Worries, and Six Possibilities to Explore of the Guyana-Norway Agreement*: CGD, 2014.
- Birdsall, N. and Savedoff, D. *Cash on Delivery: A New Approach to Foreign Aid with an Application to Primary Schooling*. Washington, DC: Center for Global Development, 2010.
- BMZ. REDD Early Movers (REM) – Rewarding pioneers in forest conservation, financial rewards for successful climate change mitigation. Bonn: BMZ Division for the Environment and Sustainable Use of Natural Resources, 2012.
- Caldecott, J., Indrawan, M., Rinne, P. and Halonen, M. *Indonesia-Norway REDD+ Partnership: first evaluation of deliverables*. Helsinki: Gaia Consulting Ltd, 2011.
- Canby, K., Silva-Chavez, G., Breitfeller, J., Lanser, C., Norman, M., and Schaap, B. *Tracking REDD+ Finance: 2009-2012-Finance Flows in Seven REDD+ Countries*. Washington DC: Forest Trends 2014.
- Dewan, A. " Microsoft, Disney invest millions in forest carbon market", accessed June 23 2014 <http://www.forestsclimatechange.org/forests-climate-change-mitigation/microsoft-disney-invest-millions-forest-carbon-market/>
- Diaz, D. Hamilton, K. and Johnson, E. *The State of the Forest Carbon Markets*. Washington DC: Ecosystem Marketplace, 2011.
- Eicher, R. and Levine, R. *Performance Incentives for Global Health. Potential and Pitfalls*. Washington DC: Center for Global Development, 2009.
- Eliasch, J. *Climate Change: Financing Global Forests*. London: Office of Climate Change, 2012.
- financing (RBF) schemes: final report*. London: DFID Human Development Resource Centre, 2010.
- Forest Carbon Partnership Facility (FCPF) Carbon Fund Ninth Meeting (CF9). Brussels, Belgium, April 9-11, 2014.
- Forest Trends REDD*X* accessed 24 March 2014 <http://reddx.forest-trends.org/>

- Forstater, M. Nakhooda, S. and Watson, C. The effectiveness of climate finance: a review of the Amazon Fund. *ODI Working Papers*, 372. London: Overseas Development Institute, 2013
- Forum for the Future. *Forest Investment Review*. Study prepared for the UK Department for International Development (DFID). London: Forum for the Future, 2009. Available at: <http://www.forumforthefuture.org/project/forest-investment-review/overview>
- GCP, IPAM, FFI, UNEP FI and UNORCID. *Stimulating interim demand for REDD+ emission reductions: the need for a strategic intervention from 2015 to 2020*. Oxford: Global Canopy Programme, 2014.
- Global Witness. *Securing REDD+ Finance: Ensuring Transparent and Accountable Financial Flows*. Oxford: Global Witness, 2012.
- Goldstein, A., and Gonzales, G. *Turning over a New Leaf: State of the Voluntary Carbon Markets 2014*. Washington DC: Ecosystem Marketplace 2014.
- Green Climate Fund. *Analysis of the Expected Role and Impact of the Green Climate Fund*. Songdo, Korea, March 24-26, 2015.  
[http://www.gcfund.org/fileadmin/00\\_customer/documents/MOB201503-9th/06 - Analysis of the Expected Role and Impact of the Green Climate Fund 20150228 fin.pdf](http://www.gcfund.org/fileadmin/00_customer/documents/MOB201503-9th/06_-_Analysis_of_the_Expected_Role_and_Impact_of_the_Green_Climate_Fund_20150228_fin.pdf)
- Grieg-Gran, M. 'The Cost of Avoiding Deforestation: Update of the Report Prepared for the Stern Review of the Economics of Climate Change'. London: IIED, 2008.
- Grüning, C and Shuford, L. National Climate Finance Institutions Support Programme Case Study: Guyana REDD-PLUS Investment Fund (GRIF). Frankfurt: Frankfurt School UNEP Collaborating Centre for Climate and Sustainable Energy Finance, 2012.
- Hamilton, K., Peters-Stanley, M. and Marcello, T. *Building Bridges: State of the Voluntary Carbon Markets 2010*. Washington DC: Ecosystem Marketplace & Bloomberg New Energy Finance, 2010.
- Hansen, MC. et al. High-Resolution Global Maps of 21st-Century Forest Cover Change. *Science* 342 (2013): 850.
- Henderson, I., Coello, J., Fischer, R., Mulder, I. & Christophersen, T. 2012. The role of the private sector in REDD+: the case for engagement and options for intervention. UN-REDD programme: <http://www.un-redd.org/privatesectorpolicybrieflaunched/tabid/106428/default.aspx>
- Hoare, A., Legge, T., Nussbaum, R., and Saunders, J. Estimating the Cost of Building Capacity in Rainforest Nations To Allow Them To Participate in a Global REDD Mechanism. London: Chatham House, 2008.
- Informal Working Group on Interim Finance for REDD. Report of the informal working group on interim finance for REDD+ (IWG-IFR). London: UNFCCC, 2009.
- Kenny, C and Savedoff, W. Can Results-Based Payments Reduce Corruption? *Working Paper* 345. Washington DC: Center for Global Development, 2013.
- Kindermann, G., M. Obersteiner, B. Sohngen, J. Sathaye, K. Andrasko, E. Rametsteiner, et al.. 'Global Cost Estimates of Reducing Carbon Emissions through Avoided Deforestation'. PNAS, 105(30) (2008): 10302–307.
- Kissinger, G., Herold, M. and De Sy. V. *Drivers of Deforestation and Forest Degradation: A Synthesis Report for REDD+ Policymakers*. Vancouver: Lexeme Consulting, 2012.
- Korhonen, K., M. Brockhaus, A. E. Duchelle, S. Atmadja, and P. T. Thuy. 'Multiple Levels and Multiple Challenges for REDD+'. In *Analysing REDD+: Challenges and Choices*, edited by A. Angelsen. Bogor: CIFOR, 2012.
- Kuramochi, T., Shimizu, N., Nakhooda, S. and Fransen, T. The Japanese Fast- Start Finance Contribution. *Working Paper*. London: World Resources Institute, Washington DC, and Overseas Development Institute, 2012. Available at: <http://www.wri.org/publication/ocn-jp-fast-start-finance>.



- Larson, M. and Petkova, E. *An Introduction to Forest Governance, People and REDD+ in Latin America: Obstacles and Opportunities* in *Forests* 2 (2011): 86-111.
- Morris, D. and Stevenson, A. REDD+ and International Climate Finance: A Brief Primer. *Issue Brief 11-13*. Washington DC: Resources of the Future, 2011.
- Müller, B., Fankhauser, S Forstater, M. *Quantity Performance Payment by Results Operationalizing enhanced direct access for mitigation at the Green Climate Fund*. Oxford: Oxford Institute for Energy Studies, 2013.
- Muñoz Piña, C., and Ortega Flores, J. MÉXICO: Seguimiento del Financiamiento para REDD+ 2009-2012. Mexico City: 2013.
- Nakhooda, S. Fransen, T., Kuramochi, T. Caravani, A., Prizzon, A., Shimizu, N., Tilley, H., Halimanjaya, A., and Welham, B. *Mobilising International Climate Finance: Lessons from the Fast-Start Finance Period*. London: Overseas Development Institute, 2013.
- ODI and HBF Climate Funds Update, accessed 31 March 2014  
<http://www.climatefundsupdate.org/data>
- Pagiola, S., and Bosquet, B. *Forest Carbon Partnership Facility: Estimating the Costs of REDD at the Country Level*. Washington, DC: World Bank, 2009.
- Pearson, M., Johnson, M., and Ellison, R. *Review of major results-based aid (RBA) and results-based*
- Peters-Stanley, M., Gonzalez, G., and Yin, D. *Covering New Ground: The State of the Forest Carbon Markets*. Washington DC: Ecosystem Marketplace, 2013.
- PricewaterhouseCoopers. *Funding for Forests: UK Government support for REDD+*. London: 2011.
- Sánchez, M. 2010. REDD+ Progress made Monitoring and reporting aspects. Available: <http://www.conafor.gob.mx:8080/documentos/docs/7/561Maria%20Saenz%20Sanchez%20-%20MRV%20WS%20Jalisco%20Mexico%20UNFCCC.pdf>
- Savedoff, W. *Incentive Proliferation? Making Sense of a New Wave of Development Programmes*. Washington DC: Center for Global Development, 2011.
- Stern, N. *Stern Review on the Economics of Climate Change*. Cambridge: Cambridge University Press, 2007.
- Streck, C and Constenbader, J. *Standards for results-based REDD+ Finance: Overview and Design Parameters*. Washington DC: Climate Focus, 2012.
- Streck, C., and C. Parker. *Financing REDD+*. Pages 111-128 in A. Angelsen, M. Brockhaus, W. D. Sunderlin, and L. V. Verchot, editors. *Analysing REDD+: challenges and choices*. Indonesia: Center for International Forestry Research, 2012.
- Streck, C., Estrada Porrua, M., Bracer, C., Coren, M. *Options for Managing Financial Flows from REDD+*. Amsterdam: Climate Focus, 2010.
- Tennigkeit, T., Held, C., Carodenuto, S., and Merger, E. *Financing REDD+ through private forestry sector - How to attract REDD+ related private investments*. Freiburg: Unique Forestry and Land use, 2013.
- The Prince's Rainforests Project. (2011). Two Years On: Is interim REDD+ finance being delivered as needed? <[www.pcfisu.org/wp-content/uploads/2011/11/Two-years-on\\_Is-interim-REDD+-Finance-being-delivered-as-needed.pdf](http://www.pcfisu.org/wp-content/uploads/2011/11/Two-years-on_Is-interim-REDD+-Finance-being-delivered-as-needed.pdf)>
- The Secretariat of the Convention on Biological Diversity. REDD+ and Biodiversity. *CBD Technical Series 59*. Montreal: The Secretariat of the Convention on Biological Diversity, 2011.
- UK Department of Energy and Climate Change. *An International Climate Fund business case for DECC investment in the BioCarbon Fund and the Forest Carbon Partnership Facility-Carbon Fund*. Department of Energy and Climate Change, 2014.
- UN Food and Agriculture Organization. 'Global Forest Resources Assessment'. *FAO Forestry Paper 140*. Rome: FAO, 2010.
- UN Food and Agriculture Organization. *Global Forest Resources*. Rome: FAO, 2000.
- UNFCCC (United Nations Framework Convention on Climate Change). *Investment and Financial Flows to Address Climate Change*. Bonn: UNFCCC, 2007.

- UNFCCC. *Copenhagen Accord. Advance unedited version*. Bonn: UNFCCC, 2009.
- UNFCCC. *Text of the United Nations Framework Convention to Combat Climate Change*. Bonn: UNFCCC, 1992.
- Verified Carbon Standard. 'VCS project database', accessed 28<sup>th</sup> May 2014  
<http://www.vcsprojectdatabase.org/>.
- Voluntary REDD+ Database of the REDD+ Partnership. Accessed 24 March 2014  
<http://reddplusdatabase.org>
- Watson, C. and Nakhooda, S. *Financing Readiness: Insights from the Amazon Fund and Congo Basin Forest Fund's efforts to reduce emissions from deforestation and degradation*. London: Overseas Development Institute, 2012.
- Watson, C., McFarland, W., Nakhooda, S., and Caravani, A. *Fast Start Funding for Forests: The Challenge of Maintaining Momentum*. London: Overseas Development Institute, 2014.
- Watson, C., Nakhooda, S. and Caravani, A. *The practical challenges of monitoring climate finance: insights from Climate Funds Update*. London: Overseas Development Institute, 2012.
- World Bank Group. Modalities and procedures for financing results-based actions on REDD+. World Bank, 2012. Available at  
<http://unfccc.int/resource/docs/2012/smsn/igo/71.pdf>
- World Bank Group. The FCPF Carbon Fund: Pioneering Performance-based payments for REDD+ Accessed  
[http://www.forestcarbonpartnership.org/sites/forestcarbonpartnership.org/files/Documents/PDF/June2012/FCPF%20Brouchure\\_June%2013\\_2012.pdf](http://www.forestcarbonpartnership.org/sites/forestcarbonpartnership.org/files/Documents/PDF/June2012/FCPF%20Brouchure_June%2013_2012.pdf) :2012
- Wolosin, M and Lee, D. "US Support for REDD+: Reflections on the Past and Future Outlook." CGD Policy Paper 48. Washington DC: Center for Global Development. 2014.  
<http://www.cgdev.org/publication/us-support-redd-reflections-past-and-future-outl>
- Zadek, S., M. Forstater, and F. Polocow. "The Amazon Fund: Radical Simplicity and Bold Ambition Insights for Building National Institutions for Low Carbon Development". Avina Foundation, 2010.

## **Annex: Methodology**

### **8.1 Where does the data come from?**

Transparency of REDD+ finance has improved in recent years, but information is not readily or accurately available in one place. The majority of the data reported on REDD+ finance is captured by dedicated tracking initiatives. Following billions across the globe is no easy task and tracking requires sustained and on-going efforts to source, validate, and present information in a comparable way.

This study is a desk based research paper which focuses on updating and deepening analysis of data collected by ODI and HBF's Climate Funds Update to track bilateral finance committed during the Fast Start Finance period between 2010 and 2012 and finance flowing through dedicated multilateral funds.

This paper draws on the results from an analysis of over 23,000 individual projects or pledges of support for REDD+ and relevant efforts to reduce emissions from deforestation and forest degradation between 2006 and 2014. This includes assessing over 4,000 Fast Start Finance projects collected through donor submissions to the UNFCCC, OECD reported data and interviews with key donor countries as well as finance pledged and deposited to multilaterals up until December 31<sup>st</sup> 2014. Additional data for REDD+ finance pledged outside the FSF period was based on an assessment of over 19,000 projects/pledges reported by developed funder countries to the Voluntary REDD+ Database (VRD) of the REDD+ Partnership between 2006 and 2014.

In addition, we also use data collected by Forest Trends' REDDX or REDD+ Expenditures Tracking Initiative which follows public and private sector finance from high level donor commitments all the way down to how and when funding is spent on the ground. REDDX is currently tracking national levels of REDD+ finance in fourteen tropical forest countries, collecting information on finances committed, disbursed as well as the recipients and implementers in-country.

Some preliminary private sector investments have been collected from Ecosystem Marketplace's State of the Forest Carbon Market Report 2014, which assesses trends in the supply and demand of carbon credits.

To avoid double counting across the various sources, this report has disaggregated data by donor category and only counted from the source with the most comprehensive data.

## **8.2 What counts as REDD+ finance?**

The focus of this analysis is on the international financial flows or mechanisms originating outside a developing country that support actions aimed at reducing emissions from deforestation and forest degradation. Determining what actually counts as REDD+ and forest related finance is not easy and significantly impacts global estimates of how much finance is directed toward it.

The UNFCCC decision on REDD+ refers to ‘policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation; and the role of conservation, sustainable management of forest and enhancement of forest carbon stocks in developing countries’ (Bali Action Plan, para 1 (b) (iii)) which will include activities that are country-driven, promote co-benefits and biodiversity, actions that are consistent with conservation of natural forests, involvement of indigenous peoples and local communities as well as transparent forest governance (Sánchez, 2010). However, donor institutions often report funding against broad categories such as “environment” or “forests”. This can complicate efforts to determine the actual amounts or proportion that targets REDD+ and forest related activities, which in turn can result in the same flows being counted multiple times.

This report therefore tracks international pledges and flows of finance linked to the UNFCCC decisions on REDD+ as well as relevant activities that support policy approaches and positive incentives around the three phases of REDD+. These include the following activities in the context of reducing emissions from deforestation and forest degradation, conservation of forest carbon stocks, the sustainable management of forests, and the enhancement of forest carbon stocks:

- *The development of national strategies or action plans, policies and measures, and capacity-building;*
- *The implementation of national policies and measures and national strategies or action plans that could involve further capacity-building, technology development and transfer and results-based demonstration activities;*
- *Results-based actions that should be fully measured, reported and verified.*

### **8.3 When is REDD+ finance counted?**

Deciding when to count finance for REDD+ dramatically impacts the figures and contributes to the broad array of reported numbers on climate finance.

This paper tracks donor pledges of financial support for REDD+ which represent verbal or signed commitments from donors to provide financial support for a particular fund. All pledges are cumulative unless the data is specifically broken down to show annual changes in finance pledged. This study also reports on private sector investments in REDD+, focuses quite narrowly on direct private investment in REDD+ focused activities.

Deposits represent the funds that have been transferred from the donor into the account(s) of the fund. Also known as committed funds. All deposits are cumulative unless otherwise specified.

Commitments where referenced in relation to dedicated multilateral funds refer to funding that has been set aside or announced as being set aside for a country but has not been formally approved for a specific project or program. This would include for example the FCPF Carbon Fund announcing a US\$63 million commitment to purchase verified emissions reductions from Costa Rica.

Approvals or approved finance represents funds that have been officially approved and earmarked to a specific project or program. All approvals on figures are cumulative.

Disbursements represent funds that have been released to a recipient's bank account, recording the actual transfer of finances, services or materials. In cases where in-kind or technical assistance has been provided, such as trainings, workshops, administration capacity building or provision of technology or infrastructure, disbursements are tracked when the funds have been transferred to the service provider or the recipient.

The apparent progression of finance through each finance status is affected by the availability of information from funds and initiatives. Disbursals that appear as zero or low as compared to approvals could result from slow contributor disbursal or slow recipient uptake, but may also reflect a paucity of information on the status of finance after approval. This is true for some of the bilateral initiatives tracked. Slow disbursements are also a result, in part, of a move towards performance-based payments where a significant proportion of committed funding would be disbursed towards the end of a project or program of activities.