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CLIMATE FINANCE: IS IT MAKING A DIFFERENCE?

A review of the effectiveness of Multilateral Climate Funds LEAD AUTHORS Smita Nakhooda Marigold Norman

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Acronyms

ACCF	Africa Climate Change Fund	FFEM	Le Fonds Français pour l'Environnement Mondial
ADB	Asian Development Bank	FIP	Forest Investment Program
AfDB	African Development Bank	FONERWA	National Climate and Environment Fund
AF	Adaptation Fund		(Rwanda)
AFD	Agence Francaise du Developpement	FSF	Fast Start Finance
Amf	Amazon Fund	GAIN	Global Adaptation Index
ASAP	Adaptation for Smallholder Agriculture Programme	GCCA	Global Climate Change Alliance
BCCTF	Bangladesh Climate Change Trust Fund	GCCI	Global Climate Change Initiative (US)
BCRF	Bangladesh Climate Resilience Fund	GGGI	The Global Green Growth Institute (United States)
BMZ	Federal Ministry for Economic Cooperation and Development (Germany)	GCF	Green Climate Fund
BNDES	Brazilian Development Bank	GEEREF	Global Energy Efficiency and Renewable Energy
BRICS	Brazil, Russia, India, China and South Africa	055	Fund
CBFF	Congo Basin Forest Fund	GEF GEF-5	Global Environment Facility Global Environment Facility Trust Fund
CDM	Clean Development Mechanism	GHG	Greenhouse gas
CER	Certified emissions reduction	GIZ	Deutsche Gesellschaft für Internationale
CIDA	Canadian International Development Agency	uiz	Zusammenarbeit, Germany
	(now part of the Department of Foreign Affairs, Trade and Development)	GRIF	Guyana REDD+ Investment Fund
CIFs	Climate Investment Funds	IADB	Inter-American Development Bank
COP	Conference of the Parties	ICCTF	Indonesian Climate Change Trust Fund
CTF	Clean Technology Fund	ICF	International Climate Fund (UK)
DECC	Department of Energy & Climate Change, UK	ICFI	International Climate Forest Initiative (Norway)
DEFRA	Department for Environment, Food & Rural	ICI	International Climate Initiative (Germany)
	Affairs, UK	IFAD	International Fund for International Development
DFAT	Australian Department of Foreign Affairs and Trade	IFC	International Finance Corporation
DFID	Department for International Development (UK)	JBIC	Japan Bank for International Cooperation
DRC	Democratic Republic of Congo	JI	Joint Implementation (implemented under the Kyoto Protocol)
DRM	Disaster-risk management	JICA	Japan International Cooperation Agency
EBRD	European Bank for Reconstruction and	KfW	German Development Bank
	Development	LDC	Least-developed country
EIB	European Investment Bank	LDCF	Least Developed Countries Fund
EM-DAT	Emergency Events Database	LUCF	Land-use change and forestry
EWS	Early warning system	MCCF	Mexico Climate Change Fund
Ex-Im	Export-Import Bank of the United States	MDB	Multilateral development bank
FA0	Food and Agriculture Organization of the United Nations	MIES	Interdepartmental Commission on Greenhouse Effect, France
FCPF	Forest Carbon Partnership Facility	MOFA	Ministry of Foreign Affairs (Japan)
FCPF-CF	Forest Carbon Partnership Facility Carbon Fund	NAMA	Nationally Appropriate Mitigation Action
FDI	Foreign Direct Investment		

NAPA National Adaptation Programme of Action SCCF Specia	al Climata Changa Fund
NAPANational Adaptation Programme of ActionSCCFSpecial	al Climate Change Fund
NORAD Norwegian Agency for Development Cooperation SIDS Small-	-island developing state
ODAOfficial development assistanceSREPScaling	ng Up Renewable Energy Program
OPIC Overseas Private Investment Corporation, USA SSA Sub-S	Saharan Africa
PPCR Pilot Program for Climate Resilience UNDP United	d Nations Development Programme
	d Nations Environment Programme
forest carbon stocks: sustainable management	d Nations Framework Convention on te Change
stocks USAID United	d States Agency for International
SCF Strategic Climate Fund Develo	opment
WB World	Bank

Executive summary

Executive Summary

International efforts to tackle climate change are at a critical juncture. At the end of 2015 governments will gather at the Paris climate summit to frame a new international agreement aimed at preventing 'dangerous climate change'. Achieving that goal requires a high level of ambition backed by practical policy commitments. Finance has a pivotal role to play in supporting developing countries to reduce emissions, decarbonise their economies, and adapt to the impacts of climate change. Governments across the world's poorest countries see financial commitments as key to a global deal in 2015 that can deliver meaningful climate action.

There is a great deal at stake. Developing country governments are rightly concerned about potential tensions between sustaining the economic growth needed to generate jobs and reduce poverty, and reducing greenhouse gas emissions. International cooperation on finance has the potential to help countries manage such trade-offs, and create new incentives for low carbon development. For millions of the world's most vulnerable people in developing countries, international climate finance has the potential to support the policies that can build resilience against the threats posed by a changing climate. It follows that finance for action on climate change should occupy a central position in post-2015 development goals as well. Multilateral funds are a particularly important piece of the global climate finance architecture as they are direct products of international policy processes.

But are climate funds making a difference? Governments of contributing countries need evidence that climate funds are making good use of their scarce tax dollars if they are to justify a continuation or scale-up of commitments. This report provides a critical review of the climate finance architecture. It examines more than a decade of experience of multilateral climate funds including the Global Environment Facility (GEF), the Climate Investment Funds (CIFs), and the Adaptation Fund (AF). It also considers the experience of national funds created to receive international funding such as Brazil's Amazon Fund and the Indonesia Climate Change Trust Fund (ICCTF). We ask whether the existing architecture is fit for the purpose of delivering finance to the right countries on the scale, terms and conditions required. Our findings draw on the first global ranking of recipients of multilateral climate finance (see Box 1).

Our answer to this question is largely positive. Climate funds have broken new ground by helping countries begin to confront the implications of climate change for development. The finance they spend is targeting countries that need it. Mitigation funding is concentrated in developing countries with relatively high (and rising) greenhouse gas (GHG) emissions, maximising with opportunities for efficient mitigation. Adaptation finance is targeting some of the poorest countries. Against this backdrop, efforts should be made ahead of the Paris summit to ensure that the Green Climate Fund (GCF) is adequately resourced. Recent pledges send a much needed signal to this end: by November 2014 the GCF had raised more than \$9 billion, just seven months after its official resource mobilisation process began.

There is considerable scope for improvement, however, and opportunities to learn from past experience. Funds need to be more flexible and less risk averse. They need to become more transparent in the way that they report the results achieved and the impact of international public finance. Transaction costs can be lowered, and decisionmaking processes made more efficient. Funds should also support a wider range of government, business, and community actors within countries. Greater emphasis needs to be placed on the development of national capacity – and on appropriate approaches to engage private businesses and investors. Climate funds need to develop innovative relationships with the financial institutions that are most active in climate relevant sectors, notably infrastructure.

The current finance architecture

The threat posed by climate change to the development gains made over recent decades demands an urgent, comprehensive and global response. Since 1992, the United Nations Framework Convention on Climate Change (UNFCCC) has set out a framework for international action to stabilise GHG emissions to prevent dangerous climate change. The UNFCCC recognises that developed countries have contributed the most to the global accumulation of GHG emissions, while developing countries bear less historical responsibility. This recognition has led to a commitment from developed countries to mobilise finance to help developing countries respond to climate change, and such 'climate finance' has become a central issue in international negotiations.

Commitments to deliver climate finance to developing countries are longstanding. Developed countries pledged to deliver finance approaching \$30 billion between 2010 and 2012, in the context of a commitment to mobilise \$100 billion per year from public and private sources by 2020 in the Copenhagen Accord of 2009. These commitments were affirmed in the Cancun Agreements of 2010. In addition, the need to achieve 'balanced finance' for adaptation was recognised, with an emphasis on the needs of particularly vulnerable countries, including small-island developing states (SIDSs), least-developed countries (LDCs), and African states. It was in this context that parties agreed to create the GCF as a new operating entity of the financial mechanism for the UNFCCC.

Effective spending of multilateral climate finance and delivery of successful outcomes are critical in building consensus on the imperative to take action in response to climate change. The nine international funds reviewed in this report have approved about \$1 billion a year since 2008 and overall levels of approved finance have

Box 1: ODI's Global Ranking of Climate Finance

This report presents the first comprehensive break-down of how multilateral climate finance has been spent in 135 countries over the last decade. It shows that Morocco, Mexico, Brazil, South Africa and India are the top beneficiaries, each receiving over half a billion dollars, largely as loans. The pool of funds available for climate change adaptation is smaller: Bangladesh, Nepal and Niger have been the most successful low-income countries, each receiving more than \$110 million to invest in early warning systems and other resilience enhancing activities. But some countries have been left behind. Fragile states such as the Ivory Coast and South Sudan, gained much smaller sums - \$350,000 and \$700,000 - respectively, reflecting the difficulty of spending funds in these environments.

Several middle income countries, highly vulnerable to the impacts of climate change, such as Namibia, El Salvador and Guatemala also received much smaller volumes of finance, less than \$5 million. Saudi Arabia and Oman, with high per capita incomes, have benefited least from climate funds. These countries have the potential to contribute to climate funds, as other richer developing countries such as Mexico and Korea have begun to do. Half of the \$7.6 billion approved to date has been concentrated in the top ten countries, largely reflecting the focus of the Clean Technology Fund to provide large loans to support countries with fast growing emissions.

How was the data gathered?

This report draws on data gathered through the ODI and Heinrich Böll Foundation's (HBF) Climate Funds Update (CFU) which compiles data on how much finance climate funds have raised, where it is spent, and what the projects funded seek to achieve. CFU is the world's leading source of information on climate funds: our data is updated quarterly and available at www.climatefundsupdate. org. The report also draws on ODI's work on the effectiveness of climate finance, including a series of reviews of international climate funds, which were informed by interviews with fund administrators, contributors and recipients. We reviewed more than 880 projects and programmes funded between 2003 and September 2014 by the 9 funds analysed in this report. We used data on national greenhouse gas emissions from WRI's Climate Analysis Indicator Toolkit (cait2.wri.org) and data on vulnerability from the 2013 ND-GAIN (http://index.gain.org/) to understand whether climate finance was targeting mitigation opportunities and vulnerabilities.

increased rapidly in recent years (see figure 3). This remains a relatively small share of the total climate-related investment that already takes place in developing countries from both the public and private sectors.

While climate funds have played a significant role in reported climate finance contributions from developed countries, the share of finance directed through their bilateral agencies is often much greater.

Four of the funds reviewed – the GEF, which also provides secretariat services for the SCCF, the LDCF and the Adaptation Fund – are linked to the UNFCCC. The CIFs were created in 2008 as new multilateral funds managed by the World

Bank in partnership with regional development banks to pilot new multilateral approaches to the delivery of climate finance at scale. The creation of climate funds without links to the UNFCCC was controversial, but the CIFs have tested many new approaches to climate finance. They have increased the scale of funding available, extended the range of financial instruments, and helped mainstream climate change considerations into investments by multilateral development banks (MDBs). The CIFs are expected to close their operations once a new UNFCCC climate finance architecture (in the form of the GCF) is operational.

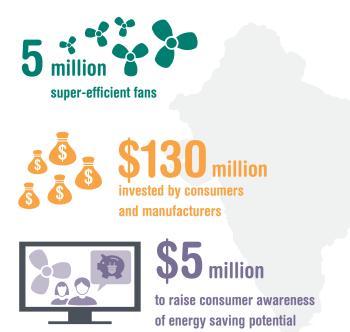
Funds have been subject to considerable scrutiny and have become increasingly inclusive, seeking to respond to guidance from diverse stakeholders. Active engagement from civil society and the private sector with these funds can bring new issues and perspectives to bear on decisions made. But sustaining substantive engagement from non-governmental stakeholders takes commitment on their part, and may benefit from support.

How effective have multilateral climate funds been at reducing emissions and building resilience to climate change?

Climate funds have spent money in places that can use it, on activities that can reduce emissions and increase resilience to climate change. There are now more than ten international multilateral funds created by the global community, to channel climate finance to developing countries (see figure 3 for timeline), including the GCF. Ensuring that the climate funds created under the UNFCCC have adequate finance is critical to securing the ambitious global agreement on climate change hoped for in Paris in November 2015.

Mitigation finance has targeted middle-income countries, where emissions are already high and growing rapidly. In Mexico, the second highest recipient of multilateral climate finance over the last decade, programmes funded by the GEF and the CTF have enabled a significant scale-up in installed renewable energy in a system that was once powered solely by fossil fuels. Furthermore, the cumulative investments that the GEF

Figure 1: Expected results of climate finance for India's Super Energy-Efficient Equipment Program (SEEP)





to support payments to manufacturers based on the number of fans sold

CO CO_2 CO_2

5 million tonnes

in CO2 avoided over the 15 year lifecycle of the fans

Source: GoI/IBRD (2012)

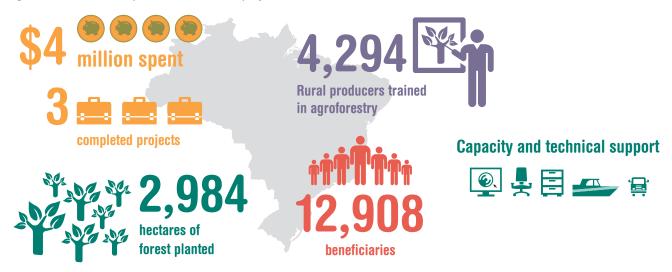
and CTF have made in solar thermal power over the years in countries, such as the top recipient Morocco, have the potential to increase installed solar capacity in developing countries by 40%. In India, climate funds are financing the deployment of super energy-efficient fans, supporting the implementation of new climate change response policies: \$50 million in performance-based finance will enable consumers to invest \$130 million to purchase these appliances (see figure 1).

Climate funds are also supporting efforts to reduce emissions from deforestation and degradation in forest rich countries that have shown political commitment to Reducing Emissions from Deforestation and forest Degradation plus conservation (REDD+). National funds, such as the Amazon Fund in Brazil, are creating new incentives for local government to develop plans to combat deforestation. The three projects completed so far have supported the reforestation of nearly 3,000 hectares of land, trained 4,000 rural producers in better agroforestry techniques and have strengthened forest oversight capacity (figure 2).

Adaptation funds have targeted poor and vulnerable countries, particularly in sub-Saharan Africa and South Asia. Both regions are highly vulnerable to climate change, including disasters associated with climate extremes. Niger, Bangladesh and Nepal are amongst the largest recipients of climate finance, largely for adaptation. The Pilot Program for Climate Resilience (PPCR) in Nepal, for example, is working to ensure that people in 27 high-risk settlements are covered by a community-based early warning system (EWS). All three countries are also accessing some mitigation finance to invest in more sustainable land-use management, and renewable energy systems, which also promote resilience benefits (see figure 4). Small-island developing states (SIDS) such as Samoa, the Maldives, Jamaica, and St Lucia are among the largest recipients of adaptation finance for disaster risk reduction. However, not all poor and vulnerable countries have been able to access climate funds.

Larger funds, such as the CIFs, have succeeded in engaging lead ministries responsible for strategic investment planning and financial management decisions at country level. Historically, climate funds have been small actors involved in niche activities, commanding low levels of political attention. As such, they have struggled to bring climate finance into the mainstream of economic and development decision-making. In some cases, however, climate funds have supported new institutional arrangements that bring key ministries together to address climate change. In Zambia, for example, the PPCR has supported the Ministry of Finance and National Planning to collaborate with a broad range of government departments, including the Ministry of Agriculture and Cooperatives, the Ministry of Tourism, Environment and Natural Resources and the Ministry of Local Government and Housing as well as wider non-governmental stakeholders to implement adaptation programmes. There is, of course, an important role for ministries of the environment in bringing expertise and insight on climate change issues to bear on these vital topics.

Climate funds are now partnering with a growing diversity of international and developing country based institutions, and helping them to do more on climate change. The number of multilateral implementing agencies has expanded from the three original founding partners of the GEF i.e. the World Bank, the United Nations Development Programme (UNDP) and the United Nations Figure 2: Results of completed Amazon Fund projects in Brazil



Source: Amazon Fund (2014)

Environment Programme (UNEP), to include more than 40 institutions (see figure 5). This expansion results, in great part, from innovations introduced through the Adaptation Fund that facilitated developing country-based institutions to have direct access to climate finance. The range of partners for climate funds now includes regional development banks, a range of international organisations, developing country ministries, trust funds and NGOs. The involvement of development finance institutions in developing countries is particularly noteworthy: the Development Bank of South Africa and Brazil's FUNBIO are now implementing agencies of the GEF. The Amazon Fund sits within efforts to encourage the Brazilian Development Bank (BNDES) to scale up sustainable investment, and to improve the Bank's environmental and social impacts.

But, funds have not been universally successful. There are many examples of programmes that were not well designed to reflect national circumstances. Too often, there has been a failure to consider how policy, regulations and institutional capacity will affect intended outcomes. National stakeholders have sometimes voiced concerns that some programmes have tended to reflect the priorities of the international implementing institutions and the donors that fund them, rather than responding directly to their national needs and circumstances.

Ultimately the amounts of funding available have been small, and often difficult to access. While funds have developed elaborate measures to safeguard programme quality and promote low-risk investments, resulting procedures can be extremely cumbersome. Furthermore, the capacity of countries to formulate creative and transformational ideas about how to maximise the impact of available finance has varied greatly. There remains an urgent need to invest in the institutions and people in government, the private sector and civil society who can put this funding to the best possible use.

To date, funds have struggled to mobilise private investment. Climate funds must engage both the public and private sectors. This has been particularly challenging. Funds have created private sector set-aside programmes to focus attention on these opportunities, but their impact remains to be seen.

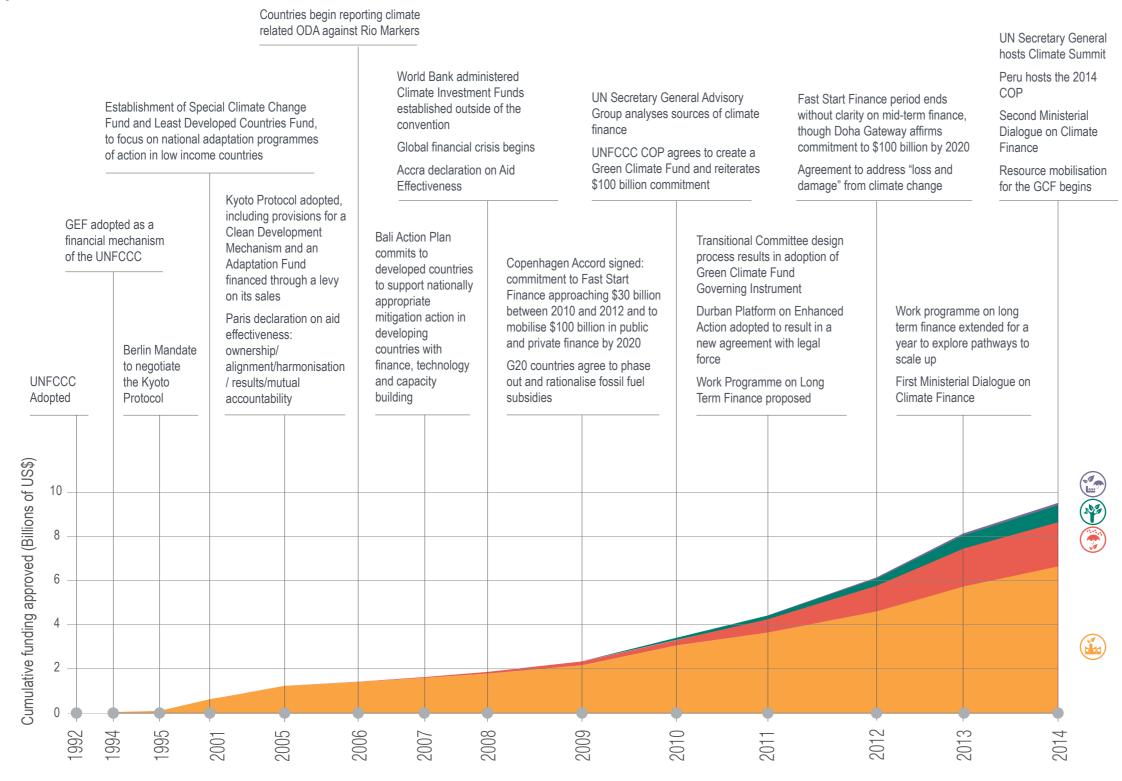
How can the climate-finance architecture become more effective?

It is clear that the climate-finance architecture needs to mobilise much larger scales of finance to support climate mitigation and adaptation activities and focus more on supporting underlying policy, regulatory and enabling environments alongside efforts to make large investments. Without such strategic elements, climate funds are unlikely to achieve the desired impact. The following steps can increase the effectiveness of climate finance initiatives:

1. Take more risk, and support innovation. Climate funds need to be more flexible and willing to take risks to foster greater innovation, including for the adoption and improvement of new technologies that can reduce emissions and increase resilience. This is a major shortcoming of the current system, given the continued need to reduce the costs of low-emission and climate-resilient approaches and find better responses to climate change.

2. Support national stakeholders to strengthen policy, regulation and institutional capacity. Climate finance needs to incentivise a wide range of actors to shift their investments in the most efficient ways possible. As such, climate funds should focus on strengthening national institutions and enabling environments, particularly in countries where a clear policy commitment to

Figure 3: The evolution of multilateral climate finance



* The timeline highlights the history of approvals since inception of the multilateral climate funds. This therefore includes approvals for the Adaptation Fund, the Global Environment Facility (including all five replenishment periods), the Least Developed Countries Fund, the Special Climate Change Fund the Clean Technology Fund, the Forest Carbon Partnership Facility, the Forest Investment Program, the Pilot Program for Climate Resilience and the Scaling-up Renewable Energy Program.



climate change is emerging, and where public financialmanagement systems allow the monitoring of progress.

3. Use the right types of finance for the appropriate purpose. Climate funds are focused increasingly on finding the most appropriate instruments to encourage low carbon and climate-resilient investment at the lowest possible cost. In many cases, however, climate funds need to consider the full suite of financial options, including grant and concessional funding and consider opportunities to support institutional capacity building and create incentives that encourage investors to engage on new issues that they perceive to be higher risk. Even relatively small amounts of

Figure 4: Expected and achieved climate finance results in Nepal \$8.7 million (out of USD 72 million) \$6.37 million Baseline studies, vulnerability assessment and community based early Cooperation agreements with Probiotech (PBT). Nutri Food (NF) and Eastern Sugar (ESM) were warning system needs assessment conducted signed to build the capacity of 15,000 farmers 35 Community Disaster Management Committees and 8 Village Disaster **Risk Management Committees have been formed in the Project Working** 1,100 farmers (50% women) trained to support sustainable cultivation of sugarcane **Districts of Terai** USD 11.78 million \$3.6 million Agriculture and food security (out of USD 40 million) NAPA Water resources and energy Thematic Expected: 30,500 households and 143,350 individuals will benefit Forests and biodiversity areas from increased access to electricity Climate-induced disasters

Sources: CIF(2014b,c);GEF (2012); FCPF (2013a). SREP and PPCR figures are illustrative examples for a subset of projects.

Figure 5: The diversity of implementing agencies is increasing



Sources: Adaptation Fund (2014), GEF (2014), CIF (2014a)

grant finance can complement the use of less concessional and non-concessional financial instruments, and greatly increase their impact.

4. Create new incentives for the institutions, investors and businesses that are shaping infrastructure and development finance choices to step up their efforts to reduce emissions and increase climate resilience through new partnerships. Funds and the implementing entities through which they work need to find better ways to engage with national stakeholders, including domestic investors from the public and private sectors, and navigate domestic economic priorities and politics. There is an opportunity to extend the range of partnerships, particularly with the new infrastructure financiers (which include many developing country development finance institutions). A wider range of partnerships, including with new and emerging sources of infrastructure finance, for example the anticipated BRICS New Development Bank or the Asian Infrastructure Investment Bank, may help these institutions realise their stated commitments to sustainable development by taking concrete action on climate change.

5. Set a high bar for the ambition of supported programmes, and understand impact. Climate funds need to set a high bar for impact, and help countries to identify investment opportunities that can really transform sectors and economies. These interventions may be more complex to design, as they require greater iteration and partnership with national stakeholders. While existing funds have focused on measuring results, the transparency and consistency of approaches has been less successful with significant variations in how basic rules for GHG emission accounting are used and applied, and in the quality of the data collection that underpins these estimates. Similarly, there is a recognised need to deepen metrics of resilience, and systematise approaches across actors in the global climatefinance architecture. Funds must adopt more consistent and transparent monitoring and reporting of results to enable a more robust understanding of what they are achieving.

While these findings are of relevance for all actors in the climate finance architecture, these are also opportunities that the newly created GCF has the potential to help address. As an operating entity of the UNFCCC, the GCF has unique legitimacy to provide finance for climate action in both developed and developing countries. The pledges made to the GCF by November 2014 made it nine times larger than the GEF (see figure 6).

As developing countries also make contributions to the GCF, it is taking on a more global character. Over time, this may help to break some of the traditional divides between contributors and recipients. Of course, pledging is often the easy step, and it could take a long time for these pledges to be deposited. The experience of existing funds suggests that better efforts to deepen engagement with the right players within recipient countries will be essential if funding is to be disbursed quickly. Nevertheless, the GCF is already well positioned to mobilise significant levels of finance and to take a different approach to many of the key challenges our research identifies (see Box 2).

It is now time to simplify, and consolidate the global climate finance architecture, and scale up finance.

There are now too many multilateral climate funds, both under and beyond the UNFCCC convention that support adaptation and mitigation in developing countries. Each of these funds had a particular purpose and function at the time of their establishment, but there is now too much overlap, and too little money available through these disparate channels. There is a particular proliferation of adaptation funds, each with their own governance and

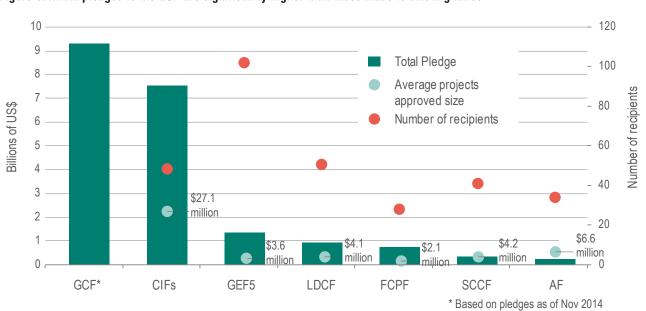


Figure 6: Initial pledges to the GCF are significantly higher than those made to existing funds

Source: Climate Funds Update 2014

Box 2: Key features of the GCF

- The GCF has adopted an active risk-management framework from the outset. Loan contributions will be complemented with a capital cushion that will be calibrated to help ensure the fund can make relatively risky investments. This should allow it the potential to offer the range of forms of finance required to target national needs.
- The GCF has a dedicated private sector facility to help it meet the particular challenge of finding more effective ways to engage. It will be especially important for the fund to be able to take more risks and forge new partnerships.
- The GCF is also well placed to use a range of types of financial instruments, including for capacity building and institutional strengthening, and to support deeper engagement of national stakeholders. The country programming division of the fund already administers a readiness programme to offer up-front investments in national processes and institutional capacities. But the needs for institutional and enabling activities go beyond readiness and will also need to be reflected in the projects and programmes that the Fund supports.
- The GCF accreditation framework allows it to work with a potentially vast range of implementing partners. From the outset it will be able to work with developing country based institutions, including those accredited to the GEF and Adaptation Fund.

administrative structures, and very small amounts of funding (see figure 7).

The current capitalisation and development of the GCF presents a significant opportunity to learn from the past decade and work to improve engagement with the private sector, encourage flexibility and set a high bar for implementation to reduce emissions and build resilience to climate change. Of course, the GCF still needs to demonstrate that it can deliver a vibrant portfolio of

programmes. The GEF, for its part, has been replenished to fund climate-change activities through 2018. The question of what to do with the CIFs, however, requires attention: much of what the CIFs were designed to pilot has now informed the design of the GCF. Work to map the options for consolidation and their implications is now needed, with strong commitment to improving on the experience of multilateral climate funds over the past decade.

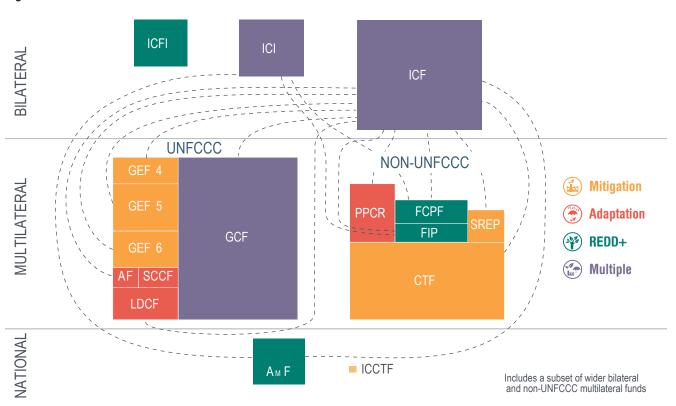


Figure 7: The climate finance architecture

Source: Climate Funds Update (2014)

1. Introduction

Climate change threatens global prosperity and development. Global temperatures are rising, and it is 'extremely likely' that this warming has been driven primarily by humans since the mid-20th century (IPCC WGI, 2013). Avoiding the worst impacts of climate change requires 'aggressive' mitigation with commitment to zero carbon emissions globally by 2070 at the latest (UNEP, 2014). Climate-related disasters will have an increasing impact on poverty, with more than 325 million poor people across 49 most affected countries becoming more vulnerable by 2030 (Shepherd et al., 2013). These realities require all countries to find new paths to lowemission development, and paths to increase the resilience of people and economies to the impacts of climate change. Climate change is, therefore, a paramount challenge for efforts to finance sustainable development.

In response, developed countries have committed to mobilise finance to help developing countries respond to climate change. Commitments to scale up finance under the United Nations Framework Convention on Climate Change (UNFCCC) recognise the common but differentiated responsibilities of all countries to respond to climate change. Finance can help developing countries that have contributed far less to the global accumulation of greenhouse gas (GHG) emissions to reconcile their efforts to respond to climate change with their ongoing efforts to reduce poverty and achieve economic development. The Copenhagen Accord of 2009 and the subsequent Cancun Agreements of 2010 set out a number of goals to mobilise new and additional climate finance from public and private sources. But mobilising \$100 billion from public and private sources as a goal in and of itself is not particularly useful if it does not significantly support and enhance developing country efforts to mitigate climate change and respond to its impacts. In this

context, the international community has sought to raise resources for the Green Climate Fund (GCF).

The wider challenge of financing climate-compatible development, of course, is to 'green' the trillions of dollars that flow towards 'business-as-usual' approaches each year. International climate finance commitments sit within a much wider emerging range of initiatives that support this overriding goal. For example, efforts are getting underway to make climate change a material consideration for mainstream finance through tools that aim to help investors account for their carbon impact.1 Investors are increasingly concerned about carbon-related risks to their holdings, and the prospect of unburnable carbon-intensive investments becoming new 'stranded' assets.² This is a big agenda, and one where much needs to be done. This report, however, has a narrower focus: the role of multilateral climate funds in supporting the transition to low emission and climate resilient development.

The international community has more than a decade of experience with helping developing countries address climate change through multilateral climate funds such as the Global Environment Facility, the first operating entity of the financial mechanism of the UNFCCC, the Adaptation Fund, and newer initiatives such as the Climate Investment Funds. More than \$12 billion in finance has been committed to such funds over the past six years alone. In addition, a number of developing countries, including Brazil and Indonesia, have created national climate funds to raise finance from the international community for climate action. A distillation of lessons from existing funds can support the efforts of the GCF to get to work as a more innovative, nationally owned and generally effective fund than its precursors.

Box 3: Key definitions

👜 Mitigation

Technological change and substitution that reduce resource inputs and emissions per unit of output. Although several social, economic and technological policies would produce an emission reduction, with respect to Climate Change, mitigation means implementing policies to reduce greenhouse gas emissions and enhance sinks (IPCC 2007).

资 Adaptation

Initiatives and measures to reduce the vulnerability of natural and human systems against actual or expected climate change effects. Various types of adaptation exist, e.g. anticipatory and reactive, private and public, and autonomous and planned. Examples are raising river or coastal dikes, the substitution of more temperature shock resistant plants for sensitive ones, etc. (IPCC 2007).

🖗 REDD+

A global initiative comprising a series of activities that developing countries could take to reduce emissions and increase carbon stocks by slowing, halting, and reversing forest loss and degradation as well as the related global mechanism for recognizing and supporting them. (Daviet and Larsen 2012, Watson 2012).

1 UNEP FI and the WRI WBCSD GHG Protocol are working to develop GHG emission accounting tools for the financial industry, which will also explore options for managing climate risks.

2 See, for example, the Carbon Tracker Initiative and Grantham Research Institute on Climate Change and the Environment at LSE. Unburnable Carbon (http://carbontracker.live.kiln.it/Unburnable-Carbon-2-Web-Version.pdf)

What have these funds achieved so far? What have they helped deliver, and if they worked, why did they work? What do we need to do differently if we want to finance climate-compatible development more effectively in the future? This report builds on ODI's ongoing programme of work to analyse the effectiveness of international climate finance, using a common analytical framework, in order to answer these pressing questions. In doing so, it analyses the impact of nine international climate funds:

- The Adaptation Fund (AF)
- Clean Technology Fund (CTF)
- Forest Investment Programme (FIP)
- Forest Carbon Partnership Facility (FCPF)
- Global Environment Facility (GEF) (with a focus on activities under its fifth replenishment)
- Least Developed Countries Fund (LDCF)
- Pilot Programme on Climate Resilience (PPCR)
- Scaling Up Renewable Energy Programme (SREP)
- Special Climate Change Fund (SCCF)

As well as two national funds:

- The Amazon Fund
- The Indonesia Climate Change Trust Fund

Why multilateral climate finance?

The role of climate funds in global climate finance efforts

The \$1 billion approved annually on average (between 2008 and 2013) through multilateral climate funds represent a modest share of the \$361.5 billion in public finance to address climate change identified on average in 2011 and 2012 (CPI, 2013). But these small sums belie the significant influence that these funds have had as a core component of the global public-finance architecture.

Many of these funds have been designed and created as part of efforts to secure global action on climate change. They are products of the global policy process: and adequate investment in them helps to build trust in that process. These institutions have been pioneers in helping to focus attention on opportunities to mitigate greenhouse gas (GHG) emissions and adapt to the impacts of climate change in the context of development needs. They have created incentives for development-finance institutions - major players in the landscape of international climate finance - to channel their own resources towards lowcarbon and climate-resilient approaches. Funds have focused on results, and have sought to learn from past experience. Responding to climate change is also a quintessential challenge of collective action that requires commitment from all countries. Multilateral funds bring both developed and developing countries together to agree an approach on how best to tackle this collective

problem. They have created space in which new ideas can be fostered through collective deliberation with scientific, private sector and civil society actors, thereby setting new norms for governance of public finance.

Understanding what works, and what makes climate funds effective is vital to ensure that finance is really helping reduce emissions and increase vulnerability. But it is also necessary if finance is to be scaled up. In a context of austerity it has been difficult for developed countries to raise the resources that they have committed to provide (Nakhooda et al., 2013). Citizens in developed countries and the politicians who represent them need to better understand whether climate finance is delivering real climate and development benefits. In parallel, the international community has been deliberating over an acceptable arrangement to succeed the Millennium Development Goals (MDGs). The proposed Sustainable Development Goals (SDGs) articulate universally applicable commitments on the part of developed and developing country governments to support sustainable development. An emerging recognition of the imperative to ensure environmentally and socially sustainable development has been the hallmark of these new approaches. Lessons from climate finance may, therefore, also inform attempts to incorporate climate-change considerations into wider efforts to finance development.

Structure

This report begins by setting out the framework for assessing how effectively multilateral climate finance has been spent to date (Section 2) and summarising the methodology used for this report. Section 3 reflects on the organisational effectiveness of multilateral climate funds, distilling lessons from how these institutions have been structured, and lessons for transparency, inclusion and impact evaluation. The report then considers the effectiveness of climate funds in targeting the right places (Section 4) before discussing the extent to which finance is reducing emissions and building resilience globally. Section 5 focuses on 12 countries that have received some of the largest amounts of finance for mitigation and adaptation and analyses the linkages between climate funds and emerging national policies, strategies and priorities with respect to climate change. Section 6 reflects on whether funds are working at the right scales and supporting innovation. Section 7 reviews the role of climate funds in catalysing private action and finance. Section 8 considers the way in which funds have engaged with national policy, regulations and institutions that enable investment in climate change, and the extent to which their priorities have been 'owned' by developing countries. Section 9 sets out conclusions and recommendations.

2. Approach and methodology

Maximising the effectiveness of climate change finance is an urgent issue for both the climate change and development communities. The OECD (2014c) defines effectiveness as a 'measure of the extent to which an activity attains its objectives'. But different communities have different perceptions and understandings of what makes climate finance effective.

Insights from the emerging literature on climate-finance effectiveness

This area of enquiry sits within a growing body of practice and literature that seeks to understand the best ways to use relatively small amounts of public finance to deliver the greatest possible impact in enabling climate compatible development. Chaum et al. (2011) suggest that the effectiveness of climate finance may be enhanced when it: promotes clear objectives that are shared among key stakeholders; supports activities that have a powerful demonstration effect; balances public and private capital; uses a results-based approach that considers cost effectiveness and supports actions that are aligned with national priorities (which are also administered transparently with predictable financing).

A substantial emphasis has been placed on measuring the additional finance 'leveraged' by public climate finance (Brown and Jacobs, 2011; Brown et al., 2011), with a strong focus on leverage ratios as a key metric, though such approaches may be fraught with difficulty. Buchner et al. (2012) highlight the importance of strong real-time systems to monitor progress and draw early lessons. A lack of consistency in approaches to measuring the impact of climate finance is a substantial challenge, even in the case of finance, where such methodologies exist and have been used extensively in the context of, for example, the carbon markets. Issues of baselines and attribution become highly compounding factors. Ellis et al. (2013) identify more than 12 different indicators used by existing climate funds to measure mitigation impact; not all funds use all indicators, and the use of these indicators is often inconsistent. The challenge is even greater in the case of adaptation finance, where the one common metric that is emerging appears to be the number of beneficiaries of adaptation finance (though this quantitative indicator reveals very little about how their resilience or ability to adapt has been affected).

Several studies highlight the importance of institutional capacity in accessing and programming climate finance (Vandeweerd et al., 2012; Ellis et al., 2013), as well as the centrality of enabling environments that align public and private investment with low-carbon and climate-resilient approaches (UNFCCC, 2012; UNFCCC, 2013). The interaction of climate funds with domestic political and economic priorities (and in turn, the effect that climate funds may have on the political economy of investment within recipient countries) has also been stressed (Rai 2013a,b), with an emphasis on stakeholder engagement as a means to help manage and navigate such context.

Against this backdrop, a number of different approaches to understanding the effectiveness of climate finance have emerged from policy researchers and in the literature. The Climate Policy Initiative has begun to develop a series of studies that analyse key elements that allowed low-carbon

Box 4: UNFCCC guidance on climate-finance effectiveness

In 1998, the Conference of the Parties (COP) proposed the following criteria against which to assess the effectiveness of operating entities of the financial mechanism:

- (a) The transparency of decision-making processes
- (b) The adequacy, predictability and timely disbursement of funds for activities in developing-country Parties
- (c) The responsiveness and efficiency of [the] project cycle and expedited procedures, including its operational strategy, as they relate to climate change

(d) The amount of resources provided to developing country Parties, including financing for technical assistance and investment projects

- (e) The amount of finance leveraged
- (f) The sustainability of funded projects.

In the fourth review of the financial mechanism of the UNFCCC in 2007 the following additional guidance was agreed:

(a) Examining relevant sources and means of financing [that] would assist developing countries to contribute to the achievement of the objective of the Convention, in particular innovative means of financing, such as for the development of endogenous technologies in developing countries

(b) Examining the role of the financial mechanism in scaling up the level of resources

(c) Assessing enabling environments for catalysing investment in, and the transfer of, sustainable technologies that mitigate greenhouse gas emissions, and for enhancing resilience to climate change.

Sources: UNFCCC (1998) Decision 3/CP.4 Review of the financial mechanism, UNFCCC (2007) CP.13 Fourth review of the financial mechanism.

or climate-resilient investments to coalesce, and project anticipated impact (Falconer and Frisari, 2012; Frisari and Falconer, 2013; Trabacchi and Stadelmann, 2014). The Brookings Institution and the Center for Global Development have developed a scorecard to assess the 'quality' of climate finance (QuoDA Climate Finance) based on their Quality of Development Assistance index (Sierra et al., 2013). The scorecard identifies 15 potential indicators that could complement measures of development assistance quality to assess the quality of climate finance; the authors concluded that they were only able to compute five of these indicators.

ODI's framework for understanding the effectiveness of climate finance complements these approaches by taking the work of dedicated climate funds as the starting point for analysis, and developing an inductive approach that analyses how they work and what they achieve. The framework draws on accepted approaches used to assess the effectiveness of multilateral funds (DFID, 2011), and touches on many of the issues discussed in the literature, and occupying the attention of policy makers, as well as UNFCCC guidance on the effectiveness of its financial mechanisms (Box 4). The framework was used to complete detailed reviews of the AF (Canales Trujillo and Nakhooda, 2013), the Amazon Fund (Forstater, et al., 2013), the CTF (Amin and Nakhooda, 2013), the GEF (Nakhooda and Forstater, 2013), the SREP (Barnard and Nakhooda, 2014), the ICCTF (Halimanjaya et al., 2014), and the PPCR (Canales Trujillo et al., 2014). These studies were informed by interviews with relevant Fund administrators, contributors and recipients, as well as reviews of fund documentation, evaluations, and secondary literature.

The overarching approach also builds substantially on Ballesteros et al. (2010) to assess how power, responsibility and accountability arrangements shape the legitimacy of international climate finance institutions. The goal of the framework (summarised briefly below, see figure 8) is to present qualitative insights into the achievements of climate funds, complemented with quantitative analysis of performance and impact (see Box 5, page 28). While our analysis captures the emerging impacts of funds, and their approaches to results assessment, it has not been possible to quantify authoritatively their cumulative impacts on mitigation or adaptation, because of the difficulties of comparing reported results across funds.

Box 5: 10 Elements of Effectiveness of Climate Funds

The process of spending

1. The amount of finance mobilised affects what a fund can achieve. Many public climate funds raise some finance from developed-country governments, but the form varies.

2. The formal representation and voice of contributor and recipient perspectives in fund decisionmaking shapes perceptions of legitimacy (Ballesteros et al., 2010). The extent to which the fund engages with stakeholders including NGOs, business, investors and relevant experts, affect its responsiveness. The transparency, efficiency and nimbleness of its decisionmaking processes are also key considerations.

3. The allocation of resources to prioritised activities is one of the key outcomes of an effective governance structure. Such allocation may be informed by explicit and implicit strategies that set out roles for key actors, manage risks and guide investment, as well as by political considerations.

4. Disbursing funds as quickly and efficiently as possible is also a core concern. There may be trade-offs between rapid disbursement, however, and robust execution (Diarra, 2011).

5. The approach that a fund takes to measuring results and learning from ongoing experience is of central importance in understanding its effectiveness, as are its actual reported results. These systems may need to be improved and refined over time (Chaum et al., 2011; Buchner et al., 2012b, CIF Evaluation Oversight Committee, 2012).

The outcomes of spending

Ultimately, the effectiveness of climate funds will need to be considered in relation to the results frameworks that they have set for themselves, which will be linked to their objectives and their driving theory of change. Many funds are in the very early stages of implementation, however, and as a result reporting on achieved results is only just emerging, and it is too early to reach conclusions on their impact. Nevertheless one can consider the emerging impact that funds are beginning to have on a number of fronts.

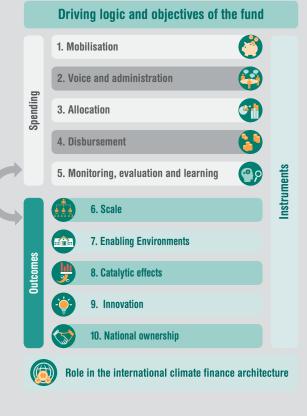
6. Finance is needed at diverse levels or scales (from national to sub-national and community level), requiring consideration of the extent to which funds have been able to support projects of a variety of sizes, and the implications of the approach taken (particularly with respect to the needs of poorer and more vulnerable communities). Not all funds are designed to work at all scales, however, and not all of them may need to.

7. Finance interacts with policy, regulations and institutions, and can help to strengthen enabling environments for low-carbon and climate-resilient development. Therefore, the framework considers whether and how funds have helped to strengthen the underlying policy, regulatory, and institutional and capacity requirements that will enable climatecompatible development at various scales within recipient countries.

8. Success in catalysing private-sector investment is a priority for several funds. It is necessary to understand whether access to the fund will help to reduce the costs of actions to address climate change or otherwise enhance returns, or reduce associated risks (Buchner et al., 2012a). It may also be useful to analyse how much private finance has been leverage directly through fund activities, and how much co-finance has been mobilised where such data are available.

9. Responding to climate change will require innovations in how we approach development challenges (Byrne et al., 2012; Siegel and Strong, 2011). The framework considers how international climate funds have supported a broad continuum of approaches to innovation, including technologies, deployment approaches and financing models, as well as capacities and institutions (including at the local level).

10. Increasing national ownership is a paramount consideration and includes alignment with national priorities, the use of or close links to national systems for spending and tracking finance, and the engagement of stakeholders across and beyond government (including the private sector and civil society).



Source: S. Nakhooda, 2013. The Effectiveness of International Climate Finance. London: ODI.

3. How is climate finance being spent?

Take-away messages

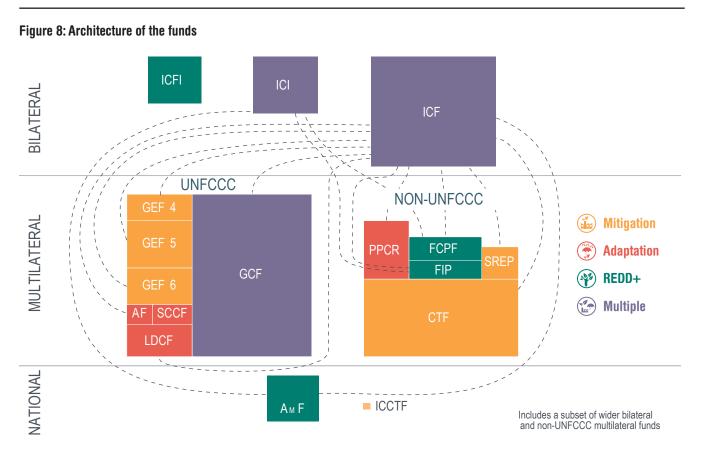
- The amounts of funding that have been entrusted to multilateral funds under the UNFCCC are small, and this has greatly constrained what they are able to achieve.
- The CIF has been entrusted with much larger volumes of loan, capital and grant funding, and is able to work in a smaller number of countries.
- Perceptions of the institutions that both anchor climate funds and deliver the funded programmes also shape perceptions of their legitimacy and effectiveness.
- Multilateral climate funds have brought developed and developing countries together to agree on how best to finance climate change, and are increasingly inclusive of civil society, private sector and other inputs.
- They have been subject to substantial scrutiny, and have sought to respond to demands from diverse stakeholders.
- While there is substantial transparency, reporting on the status of disbursement needs to improve to give stakeholders a better sense of the pace of programme implementation which remains slow.
- Implementation needs to be accelerated without compromising on programme quality: simpler application processes, and support to help stakeholders understand and navigate processes may help.
- Several funds now have overlapping objectives: there is scope to simplify and rationalise the climate-finance architecture.

The number of dedicated climate funds has grown from one to more than 10 over the past decade. Each fund has its own origins and history, but they have somewhat overlapping objectives (see figures 8 and 9).

Origins and objectives of climate funds

The GEF became an operating entity of the financial mechanism of the UNFCCC in 1992³ and provides funding for mitigation activities through its climate focal area. It uses new and additional grants as well as concessional finance to cover the incremental or additional costs of achieving global environmental benefits.⁴ The GEF was designed to draw on the capabilities of existing international institutions, hosted by the World Bank and drawing on UNDP and UNEP for delivery, and therefore has no independent legal personality of its own. The Fund now works with 15 different partner agencies, including regional and national development banks, various UN agencies, and international NGOs.

The GEF's independent Secretariat also hosts three other financial mechanisms of the UNFCCC: the LDCF, the SCCF, and the AF. The SCCF was established in 2002 to support adaptation activities in all developing country parties to the UNFCCC, as well as to facilitate technology transfer. The LDCF became operational in the same year to support the preparation and implementation of National Adaptation Programmes of Action (NAPAs) in the group of 48 least-developed countries (LDCs). The AF is an instrument of the Kyoto Protocol designed to fund 'concrete' adaptation projects in developing countries. Parties agreed on its creation in 2001 as part of the Marrakech Accords, but extensive negotiations on its governance and working modalities meant that it only became operational in 2009, nearly five years after the Kyoto Protocol was ratified in 2005. As operating entities of the financial mechanism of the Convention, all of these institutions are subject to guidance from (and must report to) the Conference of the Parties (COP) of the UNFCCC (in the case of the AF, the technical line of accountability

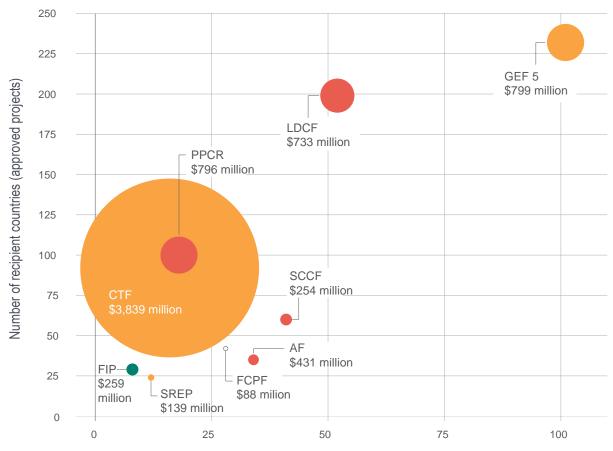


Source: Climate Funds Update (2014)

4 The GEF is the oldest multilateral climate fund, created as a consolidated financial mechanism to fund environmental issues and the implementation of multilateral environmental agreements.

³ The GEF is also a financing mechanism for the other multilateral agreements reached at the 1992 Rio Summit on Sustainable Development, including the Convention on Biodiversity and the Convention to Combat Desertification.

Figure 9: Relative size and focus of climate funds



Number of recipient countries with approved funding

	Thematic focus	Country focus	Instruments	Administration
	Mittigation Adaptation REDD+	MICs	Loans Grants	The World Bank GEF Secretariat National Secretariat
AF	٢	۵ ک		GEF
GEF	۵	۵ ک		GF
LDCF	٢	۲		GF
SCCF	٢	۵ ک		GF
CTF				WB
FCPF	P	۲		WB
FIP	P	۵ ک		WB
PPCR	٢			WB
SREP				WB
Amazon				
ICCTF	کې 🌍			

Source: Climate Funds Update (2014)

is to the Conference of the Meeting of the Parties of the Kyoto Protocol).

The newest fund to be created under the UNFCCC is the GCF. The GCF was envisioned in the Copenhagen Accord of 2009, with countries creating a transitional committee of both developed and developing country representatives at COP 16 in Cancun to design the fund. The governing instrument for the GCF was adopted in 2011 in Durban; it has taken two years for the Board of the Fund to agree on how it will operate in practice. But in November 2014, the final meeting of the initial resource mobilisation process for the Fund resulted in record pledges of \$9.3 billion. The concluding chapter of this report analyses the implications of our review of the effectiveness of existing funds for the operationalisation of the GCF.

Pilot funds outside the UNFCCC

The establishment of the Climate Investment Funds (CIFs) in July 2008 represented a substantial shift, by introducing a big new player outside the UNFCCC. The CIFs consist of two World Bank-administered trust funds: the Clean Technology Fund (CTF) and the Strategic Climate Fund (SCF). The CTF aims to promote scaled-up financing for the demonstration, deployment and transfer of low-carbon technologies in middle-income countries. The SCF supports piloting of new development approaches or scaled-up activities aimed at a specific climate change challenge or sector. The SCF has established three programmes: the Pilot Program for Climate Resilience (PPCR), the Forest Investment Program (FIP) and the Scaling Up Renewable Energy in Low-Income Countries Program (SREP).

The CIFs emerged, in part, from the interest of some of the largest donor countries in piloting a new approach to financing solutions to climate change, harnessing the implementation capacity of the multilateral development banks (MDBs)⁵ (Nakhooda and Amin, 2013). While the creation of a multilateral climate fund dominated by MDBs with no links to the UNFCCC has been controversial in negotiations, the CIFs have pushed the envelope on many important aspects of climate finance. The establishment of the CIF preceded, but may have incentivised, the creation of the GCF under the UNFCCC. As such, the CIFs are intended to sunset once the GCF is 'operational'. The definition of 'operational', however, is somewhat ambiguous: while the GCF resource-mobilisation phase is to be completed by the end of 2014, the GCF will not be able to approve funding for new programmes until late 2015.

The World Bank also administers the Forest Carbon Partnership Facility (FCPF), which became operational in 2008. It consists of a Readiness Fund, which provides technical and financial assistance to developing countries to prepare for participation in future incentive systems to reduce emissions from deforestation and forest degradation (REDD+), and a Carbon Fund to pilot performance-based payments for verified emissions reductions.

Finance entrusted to climate funds is modest, but growing

The resources that a fund can raise have a fundamental influence on what it can achieve, and the international funds studied have taken different approaches to raising contributions, with varying degrees of success. Both the volume of funding and the form in which finance is contributed affect the investments a fund can make. Overall, pledges to climate funds are small in comparison to the amount of public finance spent by donor countries through bilateral channels. Only 18% of the Fast Start Finance (FSF) mobilised between 2010 and 2012 was spent through multilateral climate funds with 62% spent bilaterally (Nakhooda et al., 2013).

The GEF has a structured process to raise grants through voluntary replenishments every four years. During the most recent GEF cycle – its sixth – \$1.07 billion was mobilised for spending in 135 eligible countries. Funding from the CIFs has substantially increased aggregate levels of climate finance available: the PPCR's impact on overall levels of adaptation finance over the past five years is particularly notable and is roughly equivalent to the total adaptation finance mobilised by the LDCF, SCCF and the Adaptation Fund collectively. The CIFs success in raising finance reflects the trust that contributors have placed in them, as well as their willingness to accept non-grant contributions such as capital contributions and loans. The CIFs have sought to offer a focused injection of funding with the goal of having a 'transformational' and demonstration effect rather than spreading funding thinly across large numbers of recipients. This approach explains the concentration of funding in a relatively small number of countries (75% of the funding approved to date is spent in 20 countries).

Despite high hopes, little funding comes from innovative sources

Recognising the challenges associated with a reliance on relatively small and voluntary contributions, funds have made some initial attempts to diversify funding. Donor contributions to the AF are complemented with proceeds from a 2% levy on sales of Certified Emission Reductions (CERs) under the Kyoto Protocol's Clean Development Mechanism (CDM). Low carbon prices since mid-2011 mean that the resources raised, while significant, are substantially lower than originally hoped. Traditional country contributions now represent the

⁵ African Development Bank (AfDB), Asian Development Bank (ADB), Inter-American Development Bank (IADB), European Bank for Reconstruction and Development (EBRD), and the International Finance Corporation (IFC).

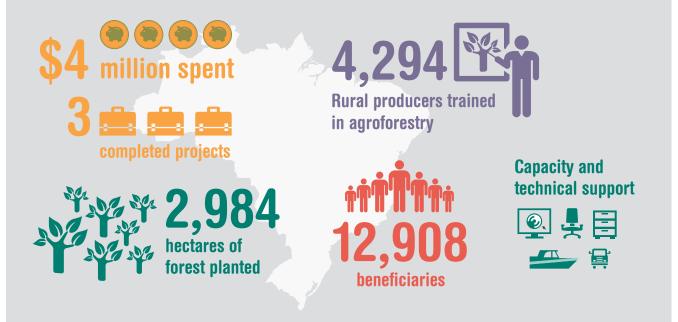
Box 6: Results from the Amazon Fund's portfolio

As of September 2014, the Amazon Fund has approved \$431.38 million for REDD+ activities across 62 projects. While the Amazon Fund works on a 'payment-for-performance' model where donors provide financial support to deliver the objectives of the fund equivalent to the emissions reductions already achieved, project-level monitoring is focused largely on checking that grant recipients are spending money on the activities stated. As such, the monitoring of individual projects is based on financial spend, with more detailed public reporting on results achieved at the end of a project. As of November 2014, three projects in the Amazon Fund's portfolio are now complete and reporting against their original delivery goals. These initial projects highlight that the Amazon Fund is delivering outcomes that improve institutional capacity and reduce deforestation in key tropical forests.

Preserving Porto dos Gaúchos has focused \$500,000 on capacity building in the Mato Grosso Municipality by providing equipment to support environmental management, including IT, GPS and vehicles to combat and control deforestation.

In addition to capacity-building projects, Portal Seeds and the Amazon's Water Springs projects have tried to increase the number of hectares of recovered forest within the Amazon, using agroforestry techniques and training that also benefit local farmers. The Ouro Verde Institute implementing the Portal Seeds project worked specifically with the Pastoral da Terra Commission, the Female Farmers Movement (Movimento de Mulheres Camponesas) and the Regional Community Association for the north of the state of Mato Grosso to recover 1,246 hectares of land. With \$2.3 million in support from the Amazon Fund, this project has also worked directly with 1,916 people to encourage farmers to value forested land and to use more sustainable agroforestry techniques.

The Amazon's Water Springs project sought to tackle, in particular, the problem of rural environmental degradation and to reduce deforestation in Alta Floresta, which was on the list of cities that account for the greatest deforestation in the Amazon. The project has been key to reducing the levels of deforestation in Alta Floresta and has led the Brazilian Government to remove the city from list of the highest deforestation cities. In addition, this project finance has led to the recovery of 1,738 hectares and has benefited almost 11,000 people through agroforestry and grazing-rotation training.



majority of the AF's relatively modest resources. The Amazon Fund's payment-for-performance fundraising model has had similarly mixed results, though the scale of finance involved is larger. Under this model, countries contribute funds by purchasing non-tradable certificates for emissions reductions. Norway has committed to spend up to \$1 billion. Germany and the Brazilian oil company Petrobras provide smaller contributions, but the current funding remains substantially less than anticipated at the design phase. In practice, the finance received is not related directly to reductions in deforestation or associated certification (Forstater et al., 2013).

The UK and the US have been the largest contributors to multilateral climate funds to date. They have each pledged roughly equal amounts to mitigation and adaptationfocused funds respectively. Other major contributors include Japan, Germany, France, Canada and Australia.

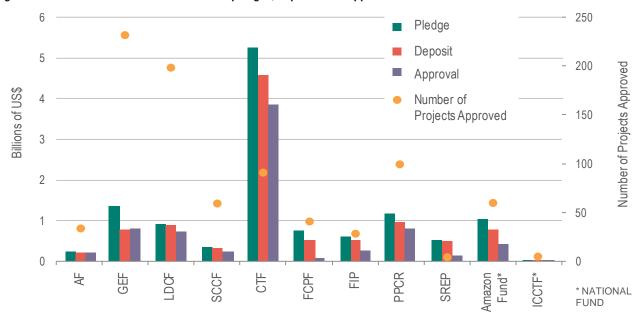


Figure 10: Multilateral climate-fund finances: pledges, deposits and approvals

Source: Climate Funds Update (2014)

Different types of finance serve different functions

Contributions to climate funds have been provided in the form of grants, capital contributions, or concessional loans.⁶ The form of capitalisation used influences the amount of risk that the fund can take on in its programming.

Historically, climate funds only provided finance as grants. The CIFs, however, were established at a time when low-carbon and climate-resilient investments were increasingly viable. It therefore offered an expanded range of instruments (Figure 11, overleaf). The large size of the CIFs projects, particularly their large infrastructure investments, mean that loans and other concessional instruments represent more than half of the funding approved for projects by multilateral climate funds to date. In practice, however, grant finance from funds such as the GEF has long been complemented with additional finance, including loans raised by implementing agencies and other executing partners. Indeed, recipients of GEF funding have long been required to raise co-financing. There is substantial variation in the terms on which finance is offered, which is often tailored to intervention needs (figure 12, overleaf).

The CTF has also been funded with loans and capital as well as grants, meaning that it may have to repay some of its funders. It must, therefore, disburse the majority of its resources as loans, and has particular constraints in the degree of financial risk that it can take on with its investments. The CTF has consequently been unable to provide much funding for capacity building, institutional strengthening or technical assistance.

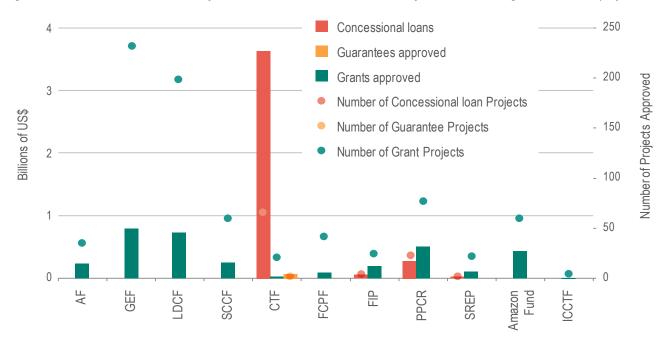
Inclusive decision-making

How funds are governed shapes the level of trust and legitimacy that they garner with contributors, recipients and the wider group of stakeholders with which they must interact to implement projects and programmes successfully. Rules for allocating fund resources are generally set out during their creation (Box 7, page 36) but both contributors and recipients have an interest in influencing how these rules are interpreted in practice.

The establishment of climate funds has involved lengthy negotiations over who controls decisions and developing countries have pushed hard for a strong voice. By committing money to climate funds, contributors cede a degree of control over how these resources are used on the understanding that other states will do the same in the interest of burden sharing (Milner and Tingley, 2012).

The respective responsibilities of contributors and recipients were debated intensely during the establishment of the GEF, and have continued to be an issue of concern to the UNFCCC COP and members of the GEF council. The GEF began as an initiative of contributor countries that wanted to avoid fragmentation of funding for

⁶ Loans offered on cheaper-than-market terms.





Source: Climate Funds Update (2014)

environmental issues, as a trust fund of the World Bank (Porter et al., 2008). As it evolved to play a role in financing the implementation of multilateral environmental agreements, developing countries demanded a governing structure that gave them a stronger voice in decisionmaking. It took three years of negotiations to agree a double-majority governance structure, whereby a 60% majority of the whole governing body and a 60% majority of contributing countries are needed when decisions cannot be taken by consensus. In practice, however, the GEF Secretariat has played a central role in funding decisions.

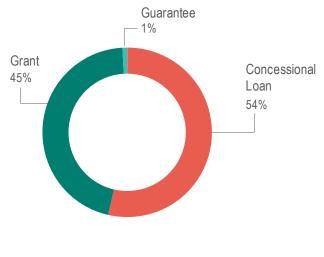


Figure 12: Instruments used by multilateral funds

Source: Climate Funds Update (2014)

Similar concerns about developing country representation were raised during the establishment of the CIFs and, as a result, governing committees that had equal representation of developed and developing countries were created to steer decision-making. In the case of the AF, by contrast, developing countries hold the majority of seats on the Board. While such arrangements may enhance legitimacy, they may have costs in terms of efficiency. The CIFs evaluation, for example, notes that trust-fund committee meetings are often long and protracted, and that the various committee structures have significant transaction costs (CIF Evaluation Oversight Committee, 2014). Balancing inclusion with expediency is therefore a significant challenge for new funds. These arrangements reflect the importance of recipient-country ownership in programming finance for development, and wider trends in the governance of international institutions (Ballesteros et al., 2010; Booth, 2011).

Funds have also made space for civil-society and private-sector organisations as observers. In many cases these stakeholders are making important contributions to the work of funds; but it takes concerted time and focus for them to engage. As Chapter 8 discusses in more detail, however, the engagement of stakeholders within countries is an area where many climate funds could be doing more. In the case of the CIFs, contributors are perceived to have been more vocal, submitting detailed written inputs on decisions, and making proposals that have substantially shaped the fund's trajectory (CIF Evaluation Oversight Committee, 2014). In the case of the GEF, a parallel replenishment process to raise funds from developed

Box 7: Fund allocation systems

Funds must prioritise spending among countries with differing capacities to receive and use money and among a wide range of potential project options. They have taken a number of approaches to this challenge. The GEF, for example, allocates financing based on the System for Transparent Allocation of Resources (STAR), a criteria-based framework that determines the amount of funding each country receives on the basis of their potential to generate global environmental benefits and their implementation capacity. For funds such as the CTF, resources have been allocated on a first-come, first served, basis to proposed investment plans that have been developed by countries with the MDBs and approved by the CTF governing committee. LDCF funding is available to all LDCs on an equal basis under the 'balanced access' principle. In contrast, the SREP, PPCR and FIP have worked in pilot countries selected through an expert-driven and criteria-based process.

Each approach has its own benefits and drawbacks. A first come, first served, approach allows faster programming. A more strategic approach may rationalise funding decisions and reduce scope for discretion by secretariats and implementing entities, but complicate implementation. In the case of the LDCF, the principle of equal access means that funding is set aside for countries with less institutional capacity to develop proposals and navigate the Fund's requirements, but it has also meant that a significant portion of funding is held up because countries are not yet ready to access it.

countries has been found to give contributors significant informal influence, despite the relatively balanced governance arrangements of the 32-member GEF Council (Nakhooda and Forstater, 2013; Ballesteros et al., 2014). For the AF, however, the availability of finance from CER levies has offset contributor influence to some extent. Developing countries are reported to often be more active in the discussions of the AF Board.

Transparency has improved, but there is a lack of reporting on disbursement

The level of transparency and access to wider observers also varies by fund. The GEF, LDCF, SCCF and AF are all relatively transparent in their disclosure policies. In terms of observer access, the GEF was the first financial institution to engage NGOs formally in its operations via the GEF-CSO Network7, through which accredited observers can submit written inputs into the work programme of the fund. NGO interest in engaging with the GEF on climate issues has waned, however, as it is no longer as new or interesting as it was at the outset. There has been more active recent engagement from civil society with the AF, with its associated NGO Network providing substantive inputs into the deliberations of the fund. A recent independent evaluation of the CIFs concluded that the 'CIFs governance structure has achieved legitimacy in design through inclusive and balanced framework, an expanded role of observers, and good disclosure and transparency' (CIF Evaluation Oversight Committee, 2014). These arrangements have improved over time: at the outset CTF decision-making was largely made in executive sessions, and meeting documentation was not disclosed systematically.

Reporting on private-sector engagement and on levels of finance disbursed has, however, been less successful.

MDB business-confidentiality rules reduce disclosure about the terms, status and actors involved in CIF private-sector projects. While these rules are understandable, disclosure of private-sector project details would be very valuable to those attempting to understand how best to use public finance to redirect and catalyse private sector finance for low-carbon and climate-resilient investments.

Another major gap has been the completeness of reporting on the disbursement of climate finance. These processes are notoriously slow, but accurate data is difficult to access. For the CIFs, information on private sector disbursement is not disclosed. For the GEF, SCCF, LDCF, and AF, information on disbursement to implementing entities is compiled, but information on their onward disbursement to executing entities is reported less consistently. The GEF has reported that the different definitions used by implementing entities for disbursement is a challenge, and the need for more consistency. As of September 2014, of the \$7.6 billion in approved finance across eleven international and national climate funds, only \$760 million had been disbursed from multi-year projects. However, the disbursement status on over \$3 billion of the approved finance remained unreported or unknown (figure 13, overleaf).

The administration of climate funds is closely managed, but processes are often slow

There is valid scrutiny of the costs of managing climate funds, with perceptions that the funds are both costly and inefficient. As figure 14 shows, the administrative costs of funds vary, but international funds are relatively cost-effective with administration fees that range widely from 1% to 15% (see page 38). The costs of SCCF and the LDCF administration low, despite their small size, as they use the GEF's systems. However the AF's small

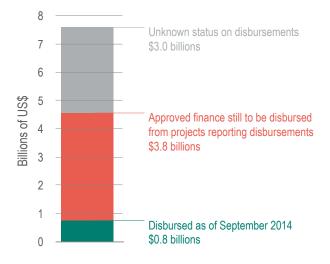
⁷ Formerly the GEF-NGO Network.

size of capitalisation and more extensive functions have resulted in a higher administration cost of more than 10%. Interestingly the cost of administration of the ICCTF was particularly high, in part as a result of its very small size, as well as the relatively high fees charged by UNDP as the interim administrator of the fund.

In turn, the maximum management fees charged by implementing entities range from about 10% for GEFmanaged funds, to 8.5% for the AF. In the case of the much larger programmes funded through the CIF, management fees are found to be significantly lower, although there are no caps on fees except for MDB project implementation services for the CTF.8 The independent evaluation of the CIFs projected that administrative costs represent 1.4% and 7.5% for the CTF and SCF, with the higher costs of the SCF reflecting the greater investment made in developing investment plans. The absolute cost was, of course, significant, at \$41 million in 2013. While these costs may be low in relative terms, the cumulative costs of administration of so many multilateral funds is not insignificant.

The more pertinent concern, to some extent, is the slow pace at which programmes proceed from approval to the actual disbursement of funding. This has been a particular concern for the GEF, which has adopted targets to accelerate its programming cycle to an average of 18 months in response to concerns about the slow pace of implementation. The complexity of GEF proposal requirements are, in turn, compounded by the requirements of GEF implementing agencies themselves, often resulting in extremely slow progress. While the average time for

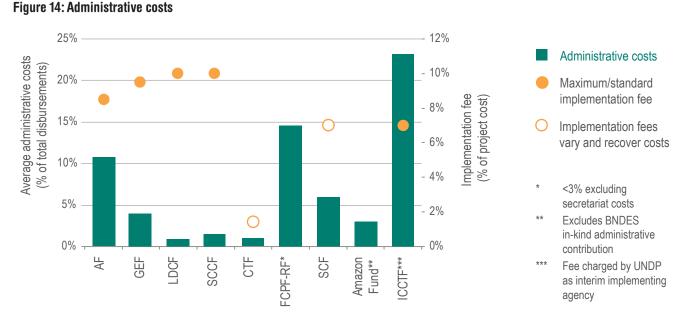
Figure 13: Disbursements of approved finance across eleven international and national funds



Source: Climate Funds Update (2014)

Note: Disbursement data assessed across the 11 multilateral climate fundsreviewed in this report.

a proposal to make it through the GEF project cycle has decreased, the fifth evaluation of operational performance noted that there is huge variation in efficiency underlying this achievement: it takes six months before half of the project concepts are accepted, and 20 months for at least half of the approved project concepts to be fully prepared



Sources: ODI (2014); GEF (2014); Adaptation Fund (2014); CIF (2014a)

Project implementation and supervision services (MPIS) fees for CTF public sector programmes are 0.18 % of undisbursed amount if paid semi-annually; 8 or 0.45% if paid upfront on full loan volume. These fees were adjusted after original levels did not allow for full cost recovery.

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and endorsed by the GEF CEO. It can take more than two years for 50% of concepts to become a reality on the ground (GEF IEO, 2014).

The CIFs have sought to be more efficient by relying on the implementation systems of the MDBs, and limiting the additional layers of oversight by the CIFs administrative unit. Nevertheless programme implementation has been slow – far slower than the timelines anticipated in investment plans. The development of Investment Plans for the SCF has often been slow, both to accommodate stakeholder input, but also because of a lack of urgency on the part of recipient countries in some cases. The CIFs evaluation concluded that it took an average of 18 months for projects in approved investment plans to reach trust fund committees for approval (CIF EOC, 2014). Political disruption in several of the CIFs countries (such as Egypt, Mali and Yemen) has been one cause of delays; the complexity of proposed interventions has been another. But a major factor has been the need for stronger incentives and accountabilities for MDB implementing teams to prioritise CIF-supported programmes. The introduction of an over-programming approach has not only improved the overall rate of approvals, but has also incentivised implementing entities to work more quickly. Nevertheless, improving the efficiency of programming remains a significant challenge for climate funds.

4. Is finance being spent in the right places?

Take-away messages

- Funds appear to have directed mitigation and adaptation finance in a logical fashion towards countries with high emissions and vulnerability to climate change, respectively
- Mitigation finance has targeted middle income countries, where emissions are already relatively high and growing rapidly
- The largest volumes of REDD+ finance targets countries that demonstrate political commitment to tropical-forest protection
- Adaptation finance targets poor and vulnerable countries, particularly in South Asia and sub-Saharan Africa

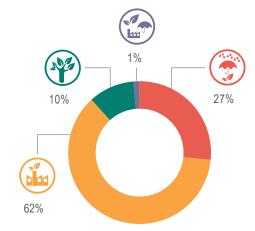
Is climate finance being spent in the places where it can have the greatest impact, and on activities that will really reduce emissions and increase resilience? Annex I ranks countries by the amount of multilateral climate finance received, their vulnerability and their contribution to global GHG emissions. While such a comparison shows only part of the picture, some significant messages jump out. Morocco, Mexico, Brazil, South Africa and India are the top beneficiaries, each receiving more than half a billion dollars, largely as loans. The pool of funds available for climate change adaptation is smaller: Bangladesh, Nepal and Niger have been the most successful low-income countries, each receiving more than \$110 million to invest in early warning systems and other resilience enhancing activities. But some countries have been left behind. Fragile states such as the Ivory Coast and South Sudan, received much smaller sums - \$350,000 and \$700,000-- respectively, reflecting the difficulty of spending funds in these environments. Several middle income countries, highly vulnerable to the impacts of climate change, such as Namibia, El Salvador and Guatemala also received much smaller volumes of finance, less than \$5 million. Saudi Arabia and Oman, with high per capita incomes, have benefited least from climate funds: indeed Saudi Arabia is at the bottom of ODI's ranking. Half of the \$7.6 billion approved to date has been concentrated in the top ten countries, largely reflecting the focus of the Clean Technology Fund to provide large loans to support countries with fast growing emissions.

This chapter considers the linkages between how finance is targeted, and national opportunities to reduce emissions and strengthen resilience with reference to national sources of emissions, vulnerabilities, and expressed policy priorities. We recognise, however, that alignment of objectives is not in and of itself sufficient to achieve the ambitious goals attached to climate finance which is to help transform development trajectories. In some cases while there may be high level alignment, in practice the impact of programmes on these trajectories may be unclear, or inadequate.

Mitigation finance seeks to reduce emissions in fast growing middle income countries

More than 72% of international public climate finance from multilateral funds has been channelled to mitigation and REDD+ activities (figure 15), totalling \$5.46 billion between 2003 and September 2014. This finance has targeted all regions globally, with Asia-Pacific receiving 29% of approved finance to date, while Latin America and sub-Saharan Africa have received around 27% and 14%, respectively. Many Asian countries are major GHG emitters and the region remains the world's most populous.

Mitigation finance is heavily concentrated in countries with high and growing emissions: 10 countries received 74% of international mitigation finance. A comparison of the geographic distribution of multilateral mitigation Figure 15: Thematic distribution of international multilateral public climate finance



Source: Climate Funds Update (2014)

finance with the GHG emissions of recipient countries using data from the Climate Analysis Indicator Tool (CAIT, using data for the most recently reported year: 2011) suggests that allocations have become more concentrated in countries with higher emissions over time). As can be seen in figures 16 and 17 (overleaf), the top 10 recipients of mitigation finance include three of the largest GHG emitters in the world: India, Brazil and Indonesia. The distribution of finance also reflects country needs and their own efforts to access the funding for which they may be eligible: wealthy developing countries with relatively high GHG emissions - including Iran, Saudi Arabia, and South Korea- have received very little mitigation finance. South Korea for example, is an OECD member, and has recently emerged as a significant contributor of finance to climate funds. While historically China has been one of the largest recipients of climate finance, in recent years it has accessed smaller volumes, and has not sought access to pools of concessional finance such as offered by the CIFs.

REDD+ finance targets countries demonstrating political commitment to tropical forest protection

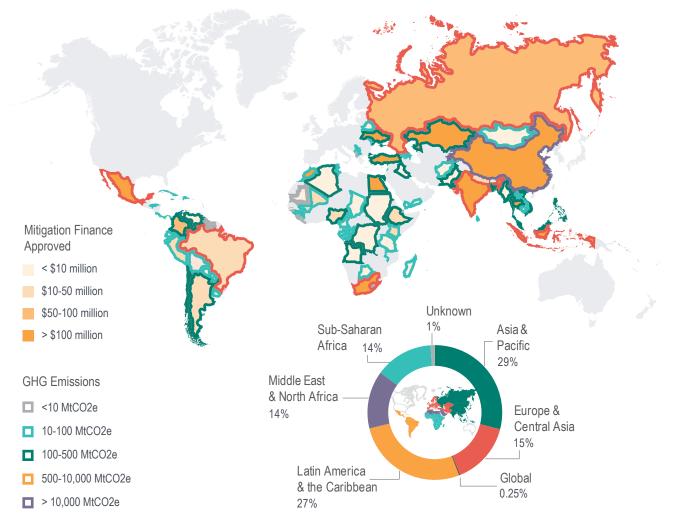
Finance targeting Reducing Emissions from Deforestation and forest Degradation as well as the conservation of forest carbon stocks; sustainable management of forests; and enhancement of forest carbon stocks (REDD+) through the FIP and the FCPF is relatively low, particularly in comparison to mitigation finance more generally. Finance is concentrated in ten countries (see figure 18, page 39). The FCPF Readiness Fund has offered relatively small grants (in the region of \$4 to \$5 million) to around 24 tropical forest countries to support national policy and strategy development (and has signed participation agreements with 45 countries). Its Carbon Fund helps transition countries from REDD+ readiness



Figure 16: Top 10 recipients of mitigation finance and their GHG emissions (excluding land-use change and forestry)

Source: WRI's CAIT data presenting total GHG emissions for 2011 (WRI, 2011).

Figure 17: The geography of climate mitigation finance recipients: heat map showing climate finance and national CO2 emissions



Sources: Climate Funds Update (2014), WRI (2011)

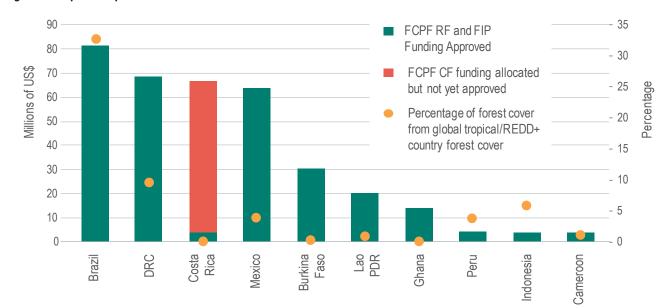


Figure 18: Top 10 recipients of REDD+ finance

Sources: Climate Funds Update (2014); FAO (2010)

activities to verified emissions reductions through a performance-based payment approach, with an emphasis on integration with national policies and REDD+ strategies developed through FCPF Readiness Fund activities. As of November 2014, Costa Rica was the only country to have signed a Letter of Intent with the Carbon Fund, making it eligible to access up to \$63 million for verified emissions reductions. The Democratic Republic of Congo (DRC), Nepal, Ghana and Mexico are also poised to access the FCPF carbon fund.

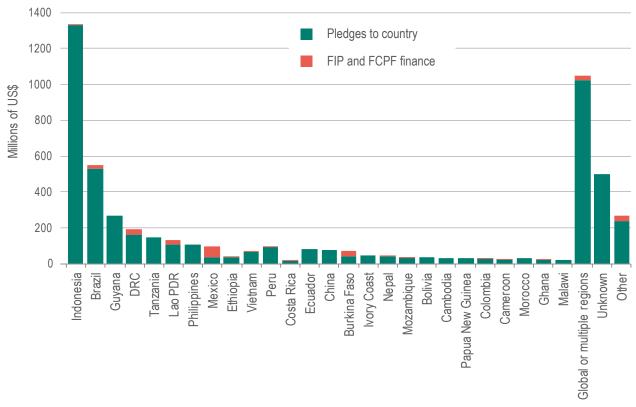
Countries such as Norway have provided substantially larger sums of finance for REDD+ activities in key forestrich countries through bilateral channels. International funds have, however, helped to pilot planning processes and new methodologies. Countries such as Brazil which has shown political commitment to reducing emissions from deforestation and forest degradation has been effective in accessing funding for such activities through national funds such as the Amazon Fund. Similarly Indonesia is beginning to establish dedicated national funds to support implementation of its REDD+ strategies. In general, multilateral finance tends to be relatively small in scale and complements the level of bilateral, private foundation and private sector investments in key developing countries (figure 19, overleaf).

Adaptation finance has focused on low-income countries

Countries in all regions have accessed adaptation finance from multilateral funds, but countries in sub-Saharan Africa and Asia and the Pacific receive nearly three quarters of all finance, with 41% and 29%, respectively (figures 20 and 21, see page 42). Access to the LDCF has allowed all 48 LDCs to receive adaptation finance. The PPCR has also sought to support LDCs. As a result, 69% or \$1.33 billion of total approved adaptation finance from multilateral funds has targeted LDCs. Of course, the volume of finance that LDCs have received is modest in absolute terms, reflecting the small size of these funds. And we should note that not all LDCs have received adaptation finance. Furthermore, LDCs are not the only vulnerable countries: climate change poses an existential threat to SIDS, several of which are middle-income or high-income countries. While some of the larger programmes supported by adaptation funds are in South Asia, funds have supported 153 projects in sub-Saharan Africa, and this region has received the largest total volume of adaptation finance: \$772 million.

43% of the total adaptation funding supports projects in the ten largest recipients of finance (figure 20, overleaf). In Niger, \$117.4 million has been approved for 12 projects; about half of the approved finance is from the PPCR to support a project aimed at building resilience in the agricultural sector. Bangladesh has accessed \$120.2 million from adaptation funds. The largest amounts of funding have been accessed from the PPCR to support infrastructure in coastal zones (these two projects account for half of all approved finance). The PPCR has a substantial impact on the regional distribution of adaptation finance: in Asia and the Pacific, the PPCR contribution accounts for \$290.8 million of a total \$594 million.

The UNFCCC reflects the principle that Annex II Parties 'shall assist the developing country Parties that are particularly vulnerable to the adverse effects of climate





Source: Norman and Nakhooda (2014)

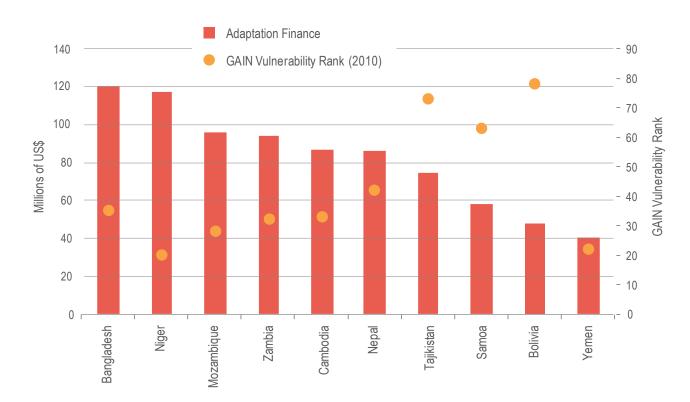


Figure 20: Top ten recipients of adaptation finance and their national vulnerability

change in meeting costs of adaptation to those adverse effects' (Article 4). Vulnerability is, however, difficult to measure objectively as a result of the complex pathways through which climate change manifests and the resulting difficulties in the aggregation of impacts, let alone in the prediction of future impacts (Barr et al., 2010). Vulnerability is often defined as a function of physical impact and adaptive capacity⁹ (IPCC, 2007), but different indices result in different measures of relative vulnerability as a result of methodological choices. It is therefore quite difficult to assess linkages between the distribution of adaptation finance and vulnerability. Nevertheless a comparison of the distribution of finance from adaptation funds and vulnerability as measured by two prominent indices (see Box 7) suggests some convergence with key vulnerabilities (Figure 21, overleaf).

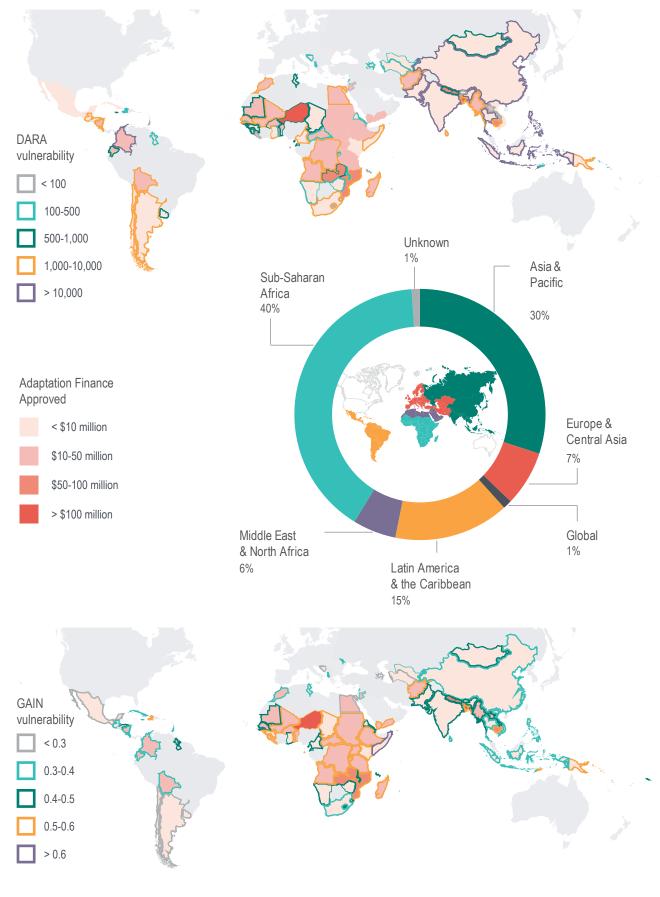
Box 8: Vulnerability indices

The GAIN Index, managed by the University of Notre Dame, estimates vulnerability in water, food, health, human habitat, ecosystem services and infrastructure. Vulnerability is a function of climate risk – itself composed of exposure and sensitivity – and adaptive capacity. This paper focuses on the 'vulnerability score' of the GAIN Index, which also generates a 'readiness score' of a country's ability to absorb and apply financial resources for adaptation. A score is generated from a total of 36 indicators of vulnerability, with a higher score indicating greater vulnerability. Scores range from 0 to 1, with the most vulnerable countries scoring between 0.5 and 0.6.

The DARA Climate Vulnerability Monitor is comprised of 34 indicators of the economic, human and ecological effects of climate change. The 'climate' component', used in this paper, includes 22 indicators across four impact areas: environmental disasters, habitat change, health impact, and industry stress). DARA measures both the positive and negative effects of climate change in 184 countries between 2010 and 2030, assessed in mortality or share of GDP. Here we use only the mortality component of the DARA Climate Vulnerability Monitor.

Sources: http://index.gain.org/, http://daraint.org/

9 Vulnerability is defined by the IPCC 'as the extent to which a natural or social system is susceptible to sustaining damage from climate change. Vulnerability is a function of the sensitivity of a system to changes in climate and the ability to adapt to system to changes in climate' (IPCC, 2007).





Source: Climate Funds Update (2014)

5. Are emissions being reduced and resilience enhanced?

Take-away messages

- Mitigation finance is targeting the most emissions intensive sectors in the top recipient countries. In countries where energy is the most significant source of emissions, they have primarily funded renewable energy and energy efficiency. Several countries are also accessing climate funds to support more sustainable transportation systems, though this represents a relatively small share of what they have sought funding for.
- Adaptation finance is supporting more resilient infrastructure, early warning systems to alert people to weather changes, and disaster risk reduction efforts. Country adaptation strategies are often quite expansive and encompassing, however, with a relative lack of prioritisation.
- Impact measurement has been a focus of all funds and although methodologies and approaches are improving, there is still major variation in how different entities account for and report results. This is still a challenge for mitigation funds, even though GHG emission reduction accounting methodologies are relatively well established. It is an even greater challenge for adaptation funds. These gaps make it difficult to compare results, or reach sensible conclusions about cost effectiveness.
- The funds are making significant investments, that do seem poised to have important impact. But, in many cases, it is not clear that the approach they have taken will be sufficient to support the shift to low carbon and climate resilient development trajectories at the scale and pace that is necessary. There is much that remains to be done, and many opportunities to better optimise the use of available finance.

Table 1: Monitoring and evaluation frameworks of mitigation funds

Clean Technology Fund (CTF)

Under the CTF Revised Results Framework, countries are required to report against the following outcomes:

Tonnes of GHG emissions reduced or avoided
 Volume of direct finance leveraged through CTF
 Installed capacity (MW) as a result of CTF

interventions

4. Number of additional passengers using low-carbon public transport as a result of CIF intervention

5. Annual energy savings as a result of CTF interventions (GWh).

Investment plan guidelines require evidence of poverty reduction and co-benefits by prioritising activities that: (1) help reduce poverty by enhancing economic growth or by improving services to the poor, and/or (2) provide local or regional environmental benefits, such as improved air or water quality, or biodiversity benefits" (CIF

Evaluation Oversight Committee, 2012).

Scaling Up Renewable Energy Program (SREP)

The SREP Revised Results Framework is structured around:

- A. Transformative impact level:
- 1. A national measure of 'energy poverty', such as the Multi-dimensional Energy Poverty Index (MEPI) or an equivalent

2. Annual electricity output from renewable energy, in GWh

3. Increased public and private investments in targeted subsector(s) per country per year (\$).
B) Increase the supply of renewable energy and increase access to modern energy services:
(1) annual electricity output from renewable energy as a result of SREP interventions (GWh)
(2) number of women and men, business and community services benefitting from improved access to electricity and fuels as a result of SREP interventions.

Global Environment Facility (GEF)

The GEF-5 Climate Focal Area Framework is structured around expected objectives, outcomes and associated indicators for the fund as a whole. All projects are not required to address all objectives.

Goal: to support developing countries and economies in transition toward a low-carbon development path.

Impacts: slower growth in GHG emissions and contribution to the stabilisation of GHG concentrations in the atmosphere. Key indicator: tonnes of CO2 equivalent avoided (both direct and indirect) over the investment or impact period of the projects.

Key target: 500 million tonnes under the \$4 billion scenario and 600 million tonnes under the \$4.5 billion scenario.

This section of the report reviews the monitoring and evaluation frameworks that climate funds are using, and the results that they have reported to date. We then consider the extent to which climate funds are addressing the key sources of emissions and vulnerabilities of recipient countries, and the extent to which funding is aligned with national strategies and expressed priorities.

Monitoring and evaluation of climate finance is difficult, but systems are advancing

Climate funds have tried to focus finance and action on reducing emissions and addressing vulnerabilities. But monitoring and evaluation of these results and reporting on impact has been more challenging. With climate funds still evolving their methodologies and their parameters for measuring impact, the choice of metric as well as the underlying use of data tends to vary widely (see Table 1).

Furthermore, the parameters and assumptions that underpin accounting frameworks have a major effect on estimates of impact. For example, a recent review of GEF experience with mitigation projects noted that the inclusion of indirect emission reductions could increase the impact of a project by as much as ten-fold (GEF IEO, 2014). In addition, emission reductions are also linked to the objectives of a project. A project that seeks to support replication could justifiably count these indirect emissions. But boundaries vary across projects and programmes. Similarly, in the case of the CTF there is acknowledgement of the need for more consistent approaches to GHG impact accounting to allow more robust reporting of impact, and the CIFs administrative unit is in the process of developing tools to support this goal. Current reporting on GHG emissions uses such disparate approaches, however, that the CIFs administrative unit has itself resisted any efforts to aggregate reported progress (Buchner et al., 2012). In contrast to monitoring and reporting against mitigation targets, adaptation and resilience building activities have been more difficult to distinguish from activities that contribute to 'good' development. This can make it more difficult to measure and report on the impact of adaptation finance (Jones et al., 2012; Fankhauser and Burton, 2011). Therefore, conventional development interventions, such as those that support sustainable livelihoods, social protection or disasterrisk reduction programmes also strengthen resilience (often without recognising it explicitly) and can mean that the full impact on reducing vulnerability and building resilience is not adequately captured (Levine et al., 2011). Table 2 summarises the key elements of the results frameworks of existing adaptation funds. The GEFmanaged LDCF and SCCF look to 'support developing countries to become climate resilient by promoting both immediate and longer-term adaptation measures in development policies, plans, programmes, projects and actions.' It presents impact in terms of reduced economic losses at the country level. While there are three objectives against which LDCF / SCCF results are assessed, there are heterogeneous sub-criteria that constitute these objectives, with a relatively lengthy and diverse list of indicators of impact against which funded programmes may report.

These include the number of people who have become less vulnerable, as well as targets related to the number of regional, national, subnational institutions that have been strengthened. The AF tracks progress against both outcomes and outputs across seven core results areas – each corresponding with a more detailed set of indicators. The PPCR has narrowed its results framework down to five core results areas, and has developed a central scorecardbased system to assess progress, with assessment against reporting criteria at the country level. Qualitative indicators tailored to the particular intervention have been developed, and progress against these is now being reported.

There has been growing interest in trying to understand the cost effectiveness of climate finance, particularly for mitigation. A metric often used to this end is to compare the total investment cost with the amount of GHG emission reductions achieved. This can be a highly inadequate indicator, however: as it can shift incentives in directions that may detract attention from where funds are needed most. This issue was highlighted in a recent evaluation of the CIFs.

International climate funds have reported a mixture of expected and actual results against identified areas. Table 3 summarises results reported to date. Given that many of the programmes funded have long timelines (more than 30 years in many cases) it is not surprising that progress towards emission reduction targets is relatively modest, given that they are in most cases, in their very early stages of implementation. Similarly, indicators of installed renewable energy potential are often the first to show progress (because, for example, the metric has been achieved as soon as a wind farm has been built), while energy savings that result from energy efficiency programmes may take a bit more time to accumulate. Reporting on the emission reduction impact of REDD+ funds from the FIP and FCPF has yet to begin, even though these programmes were launched more than five years ago. In the case of adaptation, expected results are quite heterogeneous.

The common metric for adaptation is the number of beneficiaries. 10 PPCR-supported programmes are expected to benefit more than 15 million people; the LDCF projects more than 8 million beneficiaries; the SCCF more than 3 million, and the AF expects its programmes to have more than 2 million direct beneficiaries. Funds also expect to support the installation of early warning systems to support better responses to weather events (AF projects for example, will support 85 early warning systems); the restoration of ecosystems to enhance their resilience to climate impacts, and training to help people understand and respond to the impacts of climate change. Aggregate reporting against the actual achievement of these results is only just emerging, though funds such as the PPCR and others are now reporting on the impact their funding has had in helping countries to develop climate-change response strategies and incorporate climate into sectors such as health. In cases such as the LDCF where there is some aggregate reporting, however, actual achievements seem significantly smaller than the targets set to date

How does mitigation finance align with national priorities?

Six case-study countries were chosen from the top 10 recipients of mitigation and REDD+ finance (Brazil, India, Indonesia, Mexico, Morocco and South Africa) to represent a range of recipient countries. An in-depth assessment of

Pilot Program for Climate Resilient (PPCR)	Least Developed Countries Fund and Special Climate Change Fund (LDCF/ SCCF)	Adaptation Fund (AF)
 Degree of integration of climate change in national, including sector, planning. Evidence of strengthened government capacity and coordination mechanism to mainstream climate resilience. Quality and extent to which climate responsive instruments/investment models are developed and tested. Extent to which vulnerable households, communities, businesses and public-sector services use improved PPCR supported tools, instruments, strategies, and activities to respond to climate variability or climate change. Number of people supported by the PPCR to cope with the effects of climate change. 	 Reduce vulnerability to address the adverse impacts of climate change, including variability. Increase adaptive capacity to climate change, including variability. Technology transfer: Promote transfer and adoption of adaptation technology. Each outcome area includes indicators that address outcomes and outputs. The full results framework is included in the annex. 	Outcome 1: reduced exposure at national level to climate-related hazards and threats. Outcome 2: strengthened institutional capacity to reduce climate risks and losses. Outcome 3: strengthened awareness and ownership of adaptation and climate risk-reduction processes at local level. Outcome 4: increased adaptive capacity within relevant development and natural-resource sectors. Outcome 5: increased ecosystem resilience in response to climate change and variability-induced stress. Outcome 6: diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas. Outcome 7: improved policies and regulations that promote and enforce resilience measures.

Table 2 Monitoring and evaluation frameworks of adaptation funds

Table 3: International multilateral climate funds: expected and current results



Clean Technology Fund (CTF)

Supports large-scale emission-reduction opportunities, particularly in middle-income countries.

- 70 projects (as of November 2014)
- \$3.87 billion approved
- 2010-2042

Expected results

As of November 2014:

- 589 million tons of CO2e based on 37 MDB approved projects
- · 29.84 MW in installed capacity for renewable energy
- 5,604,670 additional passengers using low-carbon transport per day based on 5 projects reporting
- 73,135GWH of energy savings (7% of target) based on 16 projects.
- \$19,367 million in direct finance leveraged based on 37 projects.

Reported results

As of June 2014:

- · 12.3 million tons of CO2e, based on 37 projects reporting
- 2,255 MW in installed capacity for renewable energy, based on 22 projects
- N/A reporting on number of additional passengers using low-carbon transport
- 11,166 GWH of energy savings, based on 16 reporting projects
- \$7,022 million in direct finance leveraged.



Forest Carbon Partnership Facility (FCPF)

Supports tropical forest countries reduce emissions from deforestation and forest degradation through financial and technical assistance via the Readiness Fund and to pilot a performance-based payments system through a Carbon Fund.

- 45 participation agreements signed (October 2014)
- 2008-2020

Expected outcomes include:

- at least 2 Readiness Packages complete by 2014, 8 by 2015 and 20 by 2018 to support reducing emissions from deforestation and degradation
- · 5 countries demonstrating carbon accounting by 2017
- engagement with all stakeholders to sustain local community livelihoods with all REDD+ national strategies containing biodiversity and development linkages
- a number of new requests to participate in the REDD+ Readiness and Carbon Fund processes.

Reported results

Reporting has not yet addressed the first two outcomes. There is evidence that the REDD+ strategy development processes in Costa Rica, the DRC, El Salvador and Tanzania include links to biodiversity and development outcomes.

As of March 2013, 17 additional countries expressed interest in joining the FCPF.

Forest Investment Programme (FIP)

Supports efforts to reduce emissions from deforestation and degradation in tropical forest countries including Brazil, the DRC and Indonesia.

- 16 projects across 8 pilot countries as of Nov 2014
- \$267.2 million
- 2010-2025

Expected results

The Business Plan anticipates:

- 17,418 net jobs created,
- 426 MtCO2 of CO2 equivalent reduced or avoided (exclusively forestry),
- 19 million hectares where deforestation and degradation are avoided,
- \$821 million of public finance mobilised for climate change purposes and \$66 million of private finance mobilised.

Reported results

As of September 30, 2014, 6 FIP countries submitted their FY14 results reports:

- Brazil, Burkina Faso, DRC, Indonesia, Mexico and Peru. These include country specific targets:
- Brazil targets 7.8 million ha of total land area where sustainable land managementpractices will be adopted.
- Burkina Faso aims to achieve 13.8 million tons of CO2e of GHG emission reductionsover the lifetime of the projects in 1,3 million ha of Sudano-Sahelian dry forest.
- The Democratic Republic of Congo (DRC) aims at reducing over 18 million tons of GHG emissions over 30 years.
- Indonesia aims at 130.5 million tons of CO2e to be reduced or avoided after the financial closure of the last project or program supported under the investment plan.
- Peru indicated a reference emission level of 61.5 million tons of CO2e and the fact that4.2 million ha of tropical mountain forests and wetland forests would be part of their FIP investments.

Global Environment Facility (GEF)

Supports developing countries to implement international agreements on climate change, as well as other agreements including biodiversity, land degradation, international waters, dangerous chemicals and protection of the ozone layer.

- 5th replenishment
- 938 projects under GEF-5
- \$3.408 billion approved

Expected results

 The total amount of direct and indirect mitigation expected is 10.8billion tons, including 2.6 in direct and 8.2 in indirect emissions reductions BtCO2eq, respectively.

Reported results

- Projects are rated to assess their achievements towards the proposed outcome. Overall, 86% of the completed projects were rated to be in the satisfactory range.
- For climate change projects reviewed, 87 of the 113 completed projects (77%) showed evidence of reducing GHGs including CO2.





Scaling Up Renewable Energy Programme (SREP)

Finance scaled-up renewable energy deployment in lowincome countries, focusing on improving energy access.

- 14 projects approved across 6 pilot countries
- \$163 million approved
- 2010-2025

Expected results

- Nine projects approved as of September 2014 would expand energy access to 5 million people and 300,000 businesses.
- Increase public and private investments in renewable energy by \$1.01 billion
- Supply 682,283 MW in renewable energy.

Reported results

 Annual reporting commenced in 2014, but no results reported to date.

Adaptation Fund (AF)

Supports adaptation projects in developing countries aimed at improved agricultural practices, flood control and hydraulic management systems, as well as improved weather monitoring and early warning systems.

- 41 country projects as of November 2014
- \$148 million approved
- Rolling programme; many results will take more than 15 years to manifest.

Expected results

Preliminary expected results for the annual financial year 2013-2014:

- 2,126,381 people as direct beneficiaries
- 85 early warning systems
- 39 policies to address climate change risks
- 30 projects supported to conduct risk and vulnerability assessments
- 7,000 staff trained to respond to and mitigate impacts of climate related events
- · 80,000 hectares natural habitats created/ protected/restored
- 82,000m of coastal area protected.

Reported results

 No aggregation of project-level reporting as of November 2014; a first evaluation of the Fund is forthcoming in 2015.



Special Climate Change Fund (SCCF)

To support climate change actions that are complementary to the GEF and specifically linked to adaptation, technology transfer, mitigation in selected sectors and economic diversification.

- 67 projects across 76 countries (as of September 2014).
- 50 projects endorsed by GEF CEO and under implementation
- \$296.5 million approved
- First project approved in 2006.

Expected results

Expected outcomes based on 32 approved projects:

- reducing vulnerability for 3.54 million people
- · 2.64 million hectares of land better managed

Least Developed Countries Fund (LDCF)

Supports LDCs to adapt to climate change by identifying key vulnerabilities and adaptation needs, as well as raising awareness and promoting learning.

- 97 projects across 51 LDCs (as of September 2014)
- \$386.3 million approved
- Rolling programme and results are reported on annual basis. Projects approved since 2003.

Expected results

- Expected outcomes based on 79 approved projects:
- reducing vulnerability for 8.1 million people
- 1.54 million hectares of land better managed
- 481,659 people trained to identify, prioritise, implement, monitor and evaluate adaptation strategies
- 255 regional, national and subnational institutions with strengthened capacities
- 112 regional, national and sector wise plans developed.

Reported results

- Annual impact reporting suggests:
- 238,431 people as direct beneficiaries
- 28,672 people trained in climate change adaptation projects and programmes.

Pilot Programme on Climate Resilience (PPCR)



Support pilot programmes in vulnerable countries to strengthen resilience to climate change and mainstream investment in adaptation at scale.

- 46 projects approved by PPCR Sub Committee (as of November 2014)
- \$832 million approved
- 2010-2019

Expected results

- 7,600,171 women supported to cope with the impacts of climate change (based on 10 project reports).
- 1,718,359 people below the national poverty line supported to cope with the effects of climate change (based on 8 projects).
- 15,211,581 people supported to cope with the effects of climate change (2 projects).

Reported results

- Targets are set at country level to reflect national focus of programmes. As of November 2014, reporting on core indicators is incomplete.
- Reporting highlights impact of PPCR in supporting development of the National Climate Change Policy and Plan in St Lucia; the National Action Plan on the Reduction of the Consequencesof Climate Change in Tajikistan, and climate in the Niger National Health Sector Strategy.
- 13,886 people trained to identify, prioritise, implement, monitor and evaluate adaptation strategies
- 169 regional, national and subnational institutions with strengthened capacities
- 102 regional, national and sector wise plans developed.

Reported results

Only expected results are reported.



national priorities was conducted to consider the policy and regulatory context, sectoral GHG emissions and areas where multilateral funds have focused their finance to date.

Mitigation finance has, primarily, supported renewable energy in India, Indonesia and South Africa, with Mexico and Morocco, as well as some interventions aimed at increasing energy efficiency. To date, REDD+ finance from multilateral funds has focused on developing policy, building capacity and strengthening national institutions in country, as well as developing accurate monitoring, reporting and verification systems that will allow the longterm evaluation of emissions reductions and deforestation at the national level.

Finance to reduce GHG emissions targets the highest emitting sectors

For the most part, mitigation finance has targeted the highest emitting GHG sectors in key recipient countries, and sectors prioritised in national climate change response strategies and policies. As noted, however, funding has largely been approved to support renewable energy and energy-efficiency projects in countries with substantial abatement potential in the energy sector. As we discuss further in chapters 6 - 8, the extent to which funded programmes have realised the full potential to support a transition to low emission and climate resilient approaches varies. In most countries there is a huge amount of work that remains to be done, and opportunities to increase the impact of climate finance in achieving this goal. Brazil on the other hand has focused on opportunities to reducing emissions from deforestation and forest degradation, as well as sustainable forest management, as this is its largest source of emissions. REDD+ funds have also been set up to seek and prioritise investments in Brazil as a result of its vital role in global efforts to realise REDD+. Brazil has, however, received relatively low levels of funding for renewable energy and energy efficiency generation despite policy and regulations setting out targets for renewables and a national Energy Efficiency Action Plan.

How does adaptation finance align with national priorities?

There has been a significant growth in multilateral adaptation finance since 2011 reflecting allocations from two main adaptation funds: the PPCR and the LDCF. In this section we analyse the alignment of adaptation finance with emerging climate-change adaptation priorities in six case-study countries receiving significant volumes of adaptation finance (Bangladesh, Cambodia, Ethiopia, Nepal, Samoa and Zambia).

Box 9: Multilateral finance and national mitigation priorities in South Africa

South Africa has set ambitious national mitigation targets to reduce GHG emissions by 34% below the baseline by 2020 and 42% by 2025. These build on efforts initiated in 2007 under the auspices of the South African Cabinet to explore long-term mitigation scenarios that would enable the country to reduce its emissions in line with the realities of climate change and associated science. Around 92% of South Africa's national emissions come from just three sectors: energy generation and supply (64%), industry (15%) and transport (13%). International finance has, therefore, been well matched with South Africa's GHG emissions by sector: funding for wind and solar development amounts to \$353.55 million and accounts for more than 77% of the country's climate finance. Energy-efficiency projects receive around \$20.78 million directly. A significant proportion (51%) of all mitigation projects in South Africa target both renewable energy and energy efficiency (Montmasson-Clair, 2013).

Transport, however, has received less funding to date. In general, energy has been the focus of both domestic mitigation efforts and international finance, although some funding for sustainable transport projects was accessed through the GEF 4, and 'substantial investment' was anticipated in a potential second phase of programming for which CTF funding might be sought

There is variable alignment of adaptation finance with national priorities

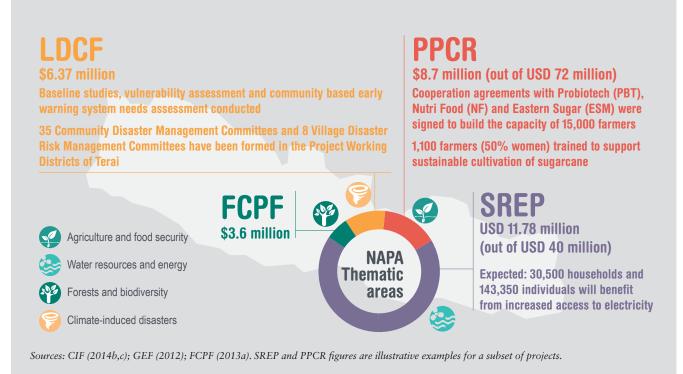
While the spending priorities of funds align well with the priorities expressed in NAPAs in some countries, there has, in general, been variation in alignment with national priorities. In Samoa, for example, infrastructure is a national adaptation priority, particularly in coastal zones, and 26% of Samoa's multilateral projects have approved support for infrastructure. In other countries, alignment with national priorities has been less clear, however. In Bangladesh, food security is a central theme of the Bangladesh Climate Change Strategy and Action Plan (BCCSAP) (2009) as well as a number of national policies (Ministry of Environment and Forests GOB, 2009) but only a modest share of international finance supports such approaches.

Box 10: Climate Funds Alignment with National Priorities in Nepal

Nepal's NAPA (2010) recognises six key thematic areas for action: Agriculture and Food Security; Forests and Biodiversity; Water Resources and Energy; Climate induced Disasters; Public Health; and Urban Se The PPCR spent \$9 million on agriculture and food security through the 'Enhancing Food Security and Building Resilience for Farmers through Private Sector Participation' project. Agreements have been signed with three companies to support capacity building and training of 15,000 farmers. The FCPF has supported readiness and capacity building in the forestry sector through a \$3.6 million REDD+ Readiness Preparation Plan (R-PP).

Nepal's development has been severely limited by lack of access to energy. To address this national priority, the SREP, has funded a \$12 million 'South Asia Subregional Economic Cooperation Power System Expansion' project with a target to provide 30,500 households and 143,350 individuals with increased access to electricity.

To reduce the impact of climate induced disasters the LDCF has started implementing the \$6.37 million 'Community Based Flood and Glacial Lake Outburst Risk Reduction' project. By the end of the project, it is estimated that at least 100% of the population who are directly vulnerable within the 27 high-risk settlements will be covered by a comprehensive community-based Early Warning System.



Adaptation finance has focused on infrastructure, early warning systems and disaster-risk management and water resources

Almost one third of adaptation finance has supported infrastructure projects in the six case-study countries. This has, for the most part, been financed by the PPCR, which differs from other multilateral adaptation funds in its use of loans and grants, as well as its focus on mainstreaming climate-change adaptation. Infrastructure is suited to concessional loan finance, given the productivity of this investment – and, therefore, for the prioritisation of infrastructure sectors for economic development – as well as the nature of returns to this investment.

Early warning systems (EWS) and disaster-risk management (DRM¹⁰) have received a fifth of all finance approved by the multilateral funds. The development of EWS and DRM has also been a key focus for contributors through their FSF programmes and of adaptation-focused ODA (Nakhooda et al.; ODA/DAC dataset, 2014). Bangladesh, for example, has received development finance for DRR, while other countries have mainly received funding for emergency response (Kellett and Caravani, 2013). It is possible that finance flowing to EWS and DRM is even higher than it appears, as it is often embedded in wider climate-related activities and classified in other

10 DRM is the category used in the NAPA sectorial classification. However, the projects supported by the adaptation multilateral funds are all disaster-risk reduction (DRR) activities.

sectors. This might include water and agriculture adaptation projects encompassing flood control or drought-resistance elements.

The water sector has received around 12% of adaptation finance - the third highest sector - in the six countries analysed. To some extent, this reflects national priorities: for example, climate change may reduce the reliability of access to freshwater by communities in mountain eco-systems for drinking, irrigation and other uses in Nepal which has used (OECD, 2003; GoN, 2010; GoN, 2011), and more than 50% of the adaptation approved by multilateral adaptation funds so far has been used in the water sector. Nepal has also accessed funding from mitigation funds such as the SREP to strengthen energy security, which may also have resilience enhancing benefits, as well as seeking access to REDD+ finance (Box 10). Similarly Ethiopia has integrated adaptation and mitigation related objectives in its 2011 Climate Resilient Green Economy (CRGE) strategy (Box 11).

National adaptation priorities change over time. The vulnerability of societies to climate change is also a dynamic reflection of a country's underlying economic, social, demographic, cultural and institutional contexts. Multilateral funding has, to some extent, reflected this dynamism: the recognition that LDCs have specific adaptation needs led to the establishment a work programme that included the development of NAPAs. NAPAs had a major influence on the first adaptation funding received by LDCs through the LDCF in the early 2000s, and sought to focus on urgent and immediate actions. The extent to which NAPAs were closely linked to national priorities and processes, however varied substantially. Countries have since developed broader climate change strategies that recognise the need to ensure that key economic sectors such as energy, mining, tourism and infrastructure must be made more resilient to climate change.

In Bangladesh, for example, the 2005 submitted NAPA identified 15 measures, with the top three priorities for coastal-zone resilience being afforestation, water access and capacity building for infrastructure and conflict management. In 2009, adaptation priorities were embedded in its Climate Change Strategy and Action Plan (BCCSAP), with the priority actions including more medium-term measures around 'Food Security, Social Protection and Health'; 'Comprehensive Disaster Management'; 'Infrastructure'; and research and knowledge management, as well as capacity building. Multilateral adaptation funding for Bangladesh has both supported the immediate actions identified in the NAPA, such as community-based afforestation of coastal zones; but also more long-term measures, such as the building of climate-resilient roads and coastal embankments (supported by the PPCR).

Box 11: Ethiopia's integrated climate and development approach

Ethiopia is one of a number of low-income countries to have formally integrated climate and development through its Climate Resilient Green Economy (CRGE) Strategy which was developed by the government in 2011. Ethiopia has experienced rapid economic growth over the past decade and aims to become a middle income country by 2025 (MoFED, 2010), but despite this rapid growth, the country still ranks poorly on development indices.

The CRGE aims to better coordinate key sectors of the economy in pursuit of a sustainable growth path. The vision is to improve resilience to climate change, secure the abatement of greenhouse gas emissions, enhance the avoidance of future emissions, and foster economic development alongside reduced carbon-dependent growth (FDRE, 2011).

A funding mechanism – the CRGE Facility – is envisaged to receive \$200 billion from national, international, public and private sources in the next two decades as it mobilises, accesses and combines domestic and international climate finance through grants, guarantees and results-based payments. The goal of the Facility is to make the administration of such funds easier to direct and coordinate. It has also commenced the process of accreditation to become a National Implementing Entity for the Adaptation Fund. Bilateral funders, including the UK government and others, have played a substantial role in supporting these efforts, as have other international organisations such as the Global Green Growth Institute, the African Development Bank and others with additional resources. An estimated \$440 million in domestic finance is programmed to climate change actions annually. Indeed the majority of adaptation is funded domestically. Dedicated climate funds have cumulatively approved \$98 million through nine funds, as of late 2014.

Early support from the LDCF enabled the creation of Ethiopia's NAPA. More recently, the LDCF has financed climate information and early warning systems, as well as tools for autonomous adaptation (including climate-risk information, financing, insurance and technical support). Ethiopia's SCCF project, worth \$1 million, also supports early warning systems; working to improve livelihood strategies and resilience of farmers. The SREP of the CIFs is the largest climate fund in Ethiopia: the investment plan was endorsed in 2012 and will develop large hydropower and distributed renewable energy. The majority of the \$30 million approved through SREP is for geothermal energy sector development, and all of it is grant finance.

Sources:

E. Zewdu et al. Climate Finance in Ethiopia, Overseas Development Institute London: 2014

N. Bird, Fair Share: Climate Finance to Vulnerable Countries, Overseas Development Institute, London 2014.

6. Are funds working at the right scales and supporting innovation?

Take-away messages

- The size of programmes supported by climate funds varies greatly from well under a million dollars in the case of GEF small and medium size programmes, to several hundred million dollars in the case of concessional loan programmes funded by the CIF.
- Funds have started to learn from past experience, developing partnerships with financial intermediaries which often have greater capacity to ensure that a range of funding options are available and are better networked within a country. This has helped larger climate funds effectively scale their operations, particularly on energy efficiency.
- All funds have supported sub-national action to some extent, but have interfaced primarily with national governments. A more express focus on the needs of local government institutions, and in particular those at the city and municipality levels is needed. The particular political and policy challenges of direct sub-national engagement may mean that this prospect is easier said than done.
- While there has been some innovation in the design of climate funds such as the Adaptation Fund and the Amazon Fund, in general climate funds have so far provided very little support for innovative approaches. Intense pressure on funds to use scarce public resources safely has sometimes dissuaded innovation. The need to repay loans can further constrain ability to target the key risks that impede public or private investment.
- More support for research, development and deployment of innovative technologies is needed. A greater appetite for risk and innovation is essential if climate funds are to realise their potential to help countries make the transition to low carbon and climate resilient development.

The issue of scale has pre-occupied discussions of climate finance from several vantage points, particularly the size of interventions, and their level. We therefore considered, first, whether funds have been able to work at diverse levels (from national to sub-national and community level), as well as the extent to which they have been able to support projects of a variety of sizes, and the implications of the approaches taken (particularly with respect to the needs of poorer and more vulnerable communities). We then considered how funds are straddling the competing dimensions of working at scale: or the challenge of managing both 'big' and 'small' projects effectively. In this section we also consider how well existing funds have been able to support the full continuum of innovation, including technology, finance, and local innovation capacity.

Funds are supporting big and small interventions

Addressing the climate change threat requires mobilising large sums of finance, and finding ways to execute lowcarbon and climate resilient investments in as many places as possible, while shifting very big investment decisions away from business as usual. On the other hand, companies need access to smaller amounts of finance to kick-start their investments: a complaint that is often heard from renewable energy and resource efficient companies is that they need a few hundred thousand dollars (or less) in risk-tolerant or concessional money to help them kick-start or expand their businesses, whereas funds want to disburse millions of dollars.

Responding to trade-offs between the different scales of operation

On the face of it, the size of programmes supported by climate funds varies immensely - from well under a million dollars in the case of GEF's small and medium size programmes, to several hundred million dollars in the case of concessional loan programmes funded by the CIFs. In seeking to increase the impact of international climate funds, there has been a strong focus on accelerating and scaling-up investment to demonstrate the potential for transformational change in high-emitting sectors of countries with large and rapidly growing emissions. This has created pressures to move large volumes of funding quickly. In the case of the CIFs, this has reinforced the pre-existing tendency of the sovereign guarantee arms of the MDBs to favour large-scale investments. This tendency arises from the transaction costs (due diligence and internal approval processes), which are the same for small projects as they are for large ones. In the case of the Amazon Fund, there has been a strong interest in ensuring that resources would not be overly concentrated, and that communities and local institutions would have access to funding. In practice, however, the Brazilian National Development

Bank (BNDES), which manages the programme, did not really have the systems in place to manage numerous small-scale transactions.

Working in partnership with others: intermediaries and small-grant programmes

Funds have responded to these challenges in various ways. For larger funds, the approach has been to channel funding through financial intermediary institutions based in recipient countries, including both national development banks and local commercial banks. These institutions have greater capacity to administer smaller programmes, and should be better networked within the country. Their capacity to assess and appraise renewable energy and energy efficiency programmes, however, may be limited. CTF programmes with financial intermediaries have therefore often included a technical assistance component aimed at supporting them to build up their capacities and leverage their networks to identify low-carbon investment opportunities within their countries.

The impact of these programmes remains to be seen, but an initial assessment of financial intermediary programmes supported by the European Bank for Reconstruction and Development (EBRD) and the International Finance Corporation (IFC) in Turkey suggests that the intermediaries supported a significant 54 of the 1,160 renewable energy programmes licensed by the national regulator (5.4%) and that the intermediaries have helped the banks to scale up their operations, particularly on energy efficiency. This is seen as a significant achievement, although the renewable energy market in Turkey was quite well established by the time the CTF began to engage. In the case of the Amazon Fund, the initial project size cap of \$1 million was lifted in 2011; the Fund is now partnering with national commercial banks and NGOs, such as the Brazilian Biodiversity Fund (FUNBIO) to manage smallgrant funds for the promotion of sustainable enterprise and community development. This aims to help smaller NGOs and community associations to access the fund on a practical level.

While the GEF capitalisation has constrained the size of its portfolio, it distinguishes between full-size projects of more than \$1 million and medium-sized projects (MSPs) of up to \$1 million (for which approval can be devolved to the CEO of the GEF). It also created a Small Grants Program (SGP), managed by UNDP, to channel funding allocations of less than \$50,000 to community and NGO managed programmes. The SGP has helped the GEF build a constituency for its action at community level; however the links between programmes under the SGP and core medium- and full-size GEF projects needs to be strengthened. Similarly, the FIP has established a small-grant programme to support community-level action to reduce emissions from deforestation and degradation and to benefit indigenous peoples in particular. The set-up of this mechanism, however, has been extremely slow as a result of both transaction costs and the lack of trust from intended beneficiaries in the MDBs.

The FIP is to be administered by a third party recruited through competitive tender. This also suggests that there may be options to increase efficiency by reducing the layers between a climate fund and its real operating modalities.

Linking the global with the local

While national governments have been the interface for international funds, implementation of climate policy and the key investments that need to be made to operationalise that policy often happen at sub-national level: in the cities and local communities that are impacted directly by climate change. The extent to which funds have been able to support local institutions and actors has varied substantially. To date, no existing funds have expressed a specific focus on engaging institutions at the sub-national level, but all funds have supported sub-national action to some extent.

The CIFs operate at any level at which the MDBs operate. For public-sector investments, this includes lending to national governments; lending to national governments for on-lending to sub-national entities such as a national development bank; or lending directly to sub-national entities. The CTF, for example, will support a number of programmes working with municipal institutions and the national government to implement more sustainable transport solutions in Bogota (Colombia), Cairo (Egypt), Mexico City (Mexico), Manila and Cebu (Philippines) and Hanoi and Ho Chi Minh City (Viet Nam). Municipal energy efficiency programmes have been explored in Kazakhstan, Mexico, Turkey and Ukraine. In engaging with the PPCR, several countries have decided to focus on particular areas or regions. In Jamaica, for example, the PPCR will support efforts to mainstream climate change into local and national development plans, with a particular focus on an upstream portion of the Rio Minho watershed, including the Rio Bueno basin. Similarly in Zambia, an approach based on river basins has been taken, with three local government units acting as leading counterparts in the delivery of the programme which has spanned a number of levels of government.

The Amazon Fund was always intended to support sub-national level activity and create incentives for more ambitious state-level action to combat deforestation. In order to access the Amazon Fund directly, states must have developed a strategy to reduce deforestation and degradation; intended to create an incentive for states to identify priorities before they approach the Fund. Several of its programmes now work directly through state governments, with many supporting state fire-fighting capacity.

There is a growing recognition that funds needs to support more decentralised action on climate change. It is certainly the case, however, that national governments are more often the main point of reference for international climate finance. A particular opportunity space that may warrant greater focus and engagement, however, is support for urban action on climate change (Huhtala et al., 2010). Cities are both highly vulnerable to the impacts of climate change, as well as central agents in investment in transport, electricity, housing and other critical infrastructure that affect both resilience as well as GHG emission footprints. Cities are now seen as new frontiers for ambitious climate action (Global Commission on the Economy and Climate, 2014) but international climate funds have yet to focus expressly on these opportunities. The scale-up of action may also involve a more direct engagement with urban and municipal financial management: such capacities may be stronger in some cases at city level than at national level, and there is often substantial variation across cities.

Nevertheless, experience reinforces the complexity of direct engagement with sub-national institutions, which often runs into tricky political and policy issues. Plans for the CTF to finance implementation of the Bangkok Metropolitan Area Action Plan on Global Warming and associated emission reductions, for example, did not materialise as a result of such complexities. The programme component proved difficult to implement as significant policy and regulatory changes would be required to allow realisation of its objectives. Indeed, the challenge proved to be grounded in issues of sub-national and national governance, rather than finance per se (given that there was adequate public finance available domestically for the programme component). Similarly, municipal energy efficiency programmes in Mexico have not yet materialised. Issues of sovereignty can compound these dynamics, as national governments may feel it is their purview to make allocation decisions within their country.

There is a dearth of support for innovation in developing countries

There is broad agreement that innovation across a broad continuum, including technologies, deployment approaches and financing models, as well as capacities and institutions (including at the local level) is needed to address climate change effectively. Yet despite this recognition, finance allocated for research and development has been declining globally (Global Commission on the Economy and Climate, 2014). In addition, there has been a dearth of support for more innovative approaches across the multilateral climate funds over the past decade. Ultimately, funds are under immense pressure to demonstrate success and avoid failures and have, therefore, been reluctant to take on risks related to technology or deployment.

While there has been a lot of focus on more innovative approaches to climate-fund design in the AF, ICCTF and the Amazon Fund, a review of their emerging portfolios and investment strategies suggest limited emphasis on supporting or enabling more innovative approaches.

The GEF has focused on supporting the deployment of innovative technology, given the central importance of technology transfer to the UNFCCC. In its first cycle, the GEF focused on technology demonstration. Evaluations found that this approach spread its resources too thinly and was not cost effective (GEF, 2010). In 2004, however, the GEF launched a strategic programme on technology transfer in response to requests to this effect from the UNFCCC COP. Since then, the GEF has re-engaged with technology innovation in a more explicit way. The first objective of the GEF-5 climate-change strategy is to promote the demonstration, deployment, and transfer of innovative low-carbon technologies. The strategy proposes that 'although it requires additional time and risks to work with new, emerging technologies, GEF experience with concentrating solar power (CSP) and fuel-cell bus (FCB)

technologies, for example, has shown that GEF support in the early stages of these technologies has played a pivotal role in spurring interest and subsequent investments in these technologies, thereby accelerating the pace of their commercialisation, albeit in a limited number of countries' (GEF, 2010). These experiences reinforce the importance of tolerance for risk and of willingness to fail in supporting innovative approaches, particularly around technology.

The CTF was intended to focus on financial innovation, capitalising on the networks of the MDBs and the wider range of instruments that it would have at its disposal to facilitate clean-technology deployment. It can only finance technologies that are close to commercial viability: in designing the CTF, there was limited appetite on the part of developed-country governments to take on loans for more experimental technologies and programmes.

7. Are funds catalysing private action and finance?

Take-away messages

- Despite being an area of substantial focus, most funds have struggled to engage the private sector directly to the extent hoped. The slow pace of fund programming processes has sometimes discouraged private actors.
- While dedicated set-asides may increase focus on opportunities, their impact is shaped by the priorities that are set, and their linkages to wider priorities and needs at national, regional and global level.
- More tailored private-sector engagement (particularly within recipient countries) in the design of climate fund supported programmes is needed to understand and appropriately respond to the needs and concerns of private actors seeking to invest in low-carbon and climate-resilient activities.
- Improvements in the transparency of reporting on private-sector projects would support more accurate understanding of the real impact of public finance on wider investment.

There has been growing interest in using climate finance to facilitate private action on climate change, and to attract or direct private finance towards the solutions to climate change (Buchner at al. 2012). International climate funds have been under substantial pressure, particularly from contributors, to find new ways to work with the private sector. The importance of private finance in efforts to tackle climate change has been recognised expressly in efforts to deliver climate finance. The Report by the UN's High Level Advisory Group on Climate Finance (2010) suggested that actions to promote low-emission and climate resilient development would be, for the most part, public policy based and private sector financed, with international public finance used catalytically alongside much larger capital flows. What is clear is that both the public and private sectors have a vital role to play in the transition to low carbon and climate resilient development. Furthermore in developing countries public sector and parastatal actors often play a central role in the key sectors that climate finance seeks to target, for example including energy and water. A large body of research and practice on these issues is emerging, including through an OECD coordinated research collaborative on tracking private climate finance.11

Developing countries, particularly MICs, are increasingly able to attract private sector flows to finance their own development efforts and they are no longer reliant on ODA and other official flows (OOF) (World Bank, 2013). Emerging economies attracted more foreign direct investment (FDI) than developed economies in 2010 as a result of a combination of high growth rates, graduation to MIC status and perceptions of increased credit worthiness (Greenhill and Prizzon, 2012). Wider debates on development finance are also increasingly focused on questions around how to engage private actors. Yet approaches to attracting private finance, including for climate action, need to be treated with caution. The public sector dominates infrastructure, which is a key sector for climate finance: more than 75% of infrastructure spending in developing countries (and closer to 90% in many International Development Association (IDA) countries), is financed entirely by the public sector. The lines between public and private are also blurry. Public financing may be supported indirectly by the private sector, if governments are able to mobilise funding from private capital markets (Sierra, 2011). In this context a core purpose of development finance institutions has been to intermediate between private capital markets and investment opportunities in developing countries. In practice, however, there can be a risk that public finance intended to "crowd in" private finance, may in fact compete with it and "crowd it out".

Developing countries have sometimes, in turn, observed a trade-off between the use of available public finance to support private sector implemented activities, and support for public action on climate change. While there has been great emphasis on the need to engage the private sector on climate finance, climate funds have often struggled to do this in practice.

New approaches to support for private-sector action

The GEF has a long history of working with the private sector in various informal ways, but GEF evaluations recognise that it has struggled to engage with the sector in a proactive and strategic way (GEF IEO, 2014) and this theme has often been raised in the GEF replenishment discussions. GEF funding processes are perceived to be too slow and cumbersome for the private sector. Indeed, the shift to a country-based allocation of funds may have inadvertently reduced space for GEF engagement with the private sector by exacerbating perceived tensions between directing available resources to public sector programmes rather than private sector initiatives.

Private sector engagement has been encouraged across the CIFs, including the PPCR, SREP and FIP. The IFC has led many of these programmes. Despite its express objectives on this count, however, the CIFs' record of achievement is mixed: a recent evaluation of the CIF noted that "risk aversion has dampened the CIF's appetite for risky (potentially innovative) private sector projects, which has led to delay and some missed opportunities to pilot and learn"(CIF Evaluation, 2014 p 13). In the case of the ICCTF, while design documents proposed an innovation fund and the transformation-fund programmes intended to target and harness the investment capacity of domestic private sector actors, these aspects of the fund have yet to materialise.

Targeting the private sector through set-aside programmes

To respond to the demand for greater private sector engagement, the 4th and 5th GEF cycles set aside \$80 million to support public-private partnerships related to environmental objectives. In the 4th cycle, the GEF funded an IFC-managed Earth Fund initiative (Box 12). Evaluations of the programme concluded that its approach had been flawed. In the 5th cycle, the GEF private sector set aside was used to finance MDB-managed Public Private Partnerships (PPPs) that meet focal-area objectives. In addition, the GEF was to encourage the use of non-grant instruments as part of System for Transparent Allocation of Resources (STAR) allocations for climate change, and encourage innovation in small- and medium-sized enterprises through competition and innovation.

¹¹ See http://www.oecd.org/env/researchcollaborative/ for more information

Box 12: The GEF Earth Fund experience

In 2007, the GEF set aside \$50 million for a Public Private Partnership Initiative subsequently named the 'The Earth Fund', to pilot more systematic private sector engagement. The goal of the Fund, which was created outside the country-level Resource Allocation Framework in use at the time, was to demonstrate the potential for strategic partnerships to achieve a greater scale of investment (IEG, 2013). Five platforms were established, which were expected to use innovative funding mechanisms such as prize funds and venture capital. The largest platform (\$30 million) was managed by the IFC, and focused primarily on climate change. An Earth Fund Board, including three representatives of the private sector, was established to meet at least once a year.

While there were high hopes for what the Earth Fund would achieve, a 2010 evaluation concluded that it had not achieved its purpose: 'it did not attract private funding at the Earth Fund level nor did it establish partnerships with the private sector' (GEF EO, 2010). Rather than being co-owned or operated with private-sector organisations, the platforms were owned and operated by GEF agencies, in some cases including agreements with NGOs. The process by which the five platforms were selected was unclear. The private sector was not effectively brought in to share responsibilities or accountability. Returns to Earth Fund-supported projects were found to be so low that money flowing back for reinvestment would be minimal. Furthermore, the responsibilities of the GEF Secretariat (which was to oversee the programme) relative to implementing agencies (particularly the IFC) were not clear. The review also concluded that a mechanism to capture lessons from the experience should have been established to support continual improvement, but had not been put in place.

Sources: GEF Evaluation Office (2010) Review of the Global Environment Facility Earth Fund.

There has been substantial pressure on the CIFs to be more ambitious and creative in their approaches to private sector engagement, including through the full use of the suite of instruments that it has at its disposal. One approach has been to seek to deepen and improve networks and outreach.

In 2013, private sector set aside programs for all four CIFs were approved, and MDBs were invited to develop proposals on allocation of these funds. The CIFs' approach to dedicated private sector programmes seems to reflect some of the lessons from the GEF's experience with set-asides, by clarifying the goals and objectives and likely outcomes that proposed sub-programmes might fund. It is clear, however, that there are many links between the objectives of the proposed sub-programmes and the country programmes that are already underway. It is important to find ways to ensure complementarity rather than duplication.

An appropriate balance also needs to be struck between public and private interests in taking some of these approaches forward. For example, while it is important to give private investors certainty in the regulatory framework for renewable energy, policy and subsidy regimes are necessarily dynamic, and a structured process that reduces incentives as technology costs come down will be essential to their long-term viability. It would be useful to complement risk-mitigation programmes with efforts to strengthen regulatory capacity to manage such trade-offs, and introduce changes without disrupting markets.

Public-private partnerships and financialintermediary programmes

Another approach taken by climate funds to support private-sector action is to invest in PPPs. During GEF-5, the Facility has supported the African Development Bank to develop a fund for private investment in clean energy in sub-Saharan Africa. It has also supported the EBRD to establish a structured financing facility to catalyse the creation of energy efficiency and energy-service company (ESCO) markets in Egypt, Jordan, Morocco and Tunisia. A PPP programme with the IADB funds both climate change and biodiversity programmes. The GEF also partnered with the United Nations Industrial Development Organization (UNIDO) to run a competition pilot to feature and support small and medium enterprises to develop clean technologies.

The CTF has also invested in a growing number of PPPs, such as through the Ourzazate Concentrating Solar Thermal power programme in Morocco, which is implemented by a special purpose agency established by the Government and executed through a competitively procured private company. Reviews of project documentation commissioned by the CIFs administrative unit suggest that private investment shares range from 12% in the Morocco/MENA Regional Concentrating Solar Thermal Power (CSP) programme to 78% in the Mexico Renewable Energy Program (De Nevers, 2013). Revisions to investment plans have, in some cases, resulted in resources being re-allocated from public-sector programmes to private sector initiatives. For example, when political opposition to sovereign lending impeded projects, resources were re-programmed, at least partially, to support publicprivate approaches. In Indonesia, a programme to support private sector geothermal exploration replaced the original public sector geothermal proposal.

Private sector projects in the current PPCR portfolio support, for the most part, natural resource management and infrastructure sectors. Examples include: supporting agribusiness to develop climate resilience and contribute to food security (Bangladesh, Nepal, Niger and Zambia); development of climate resilient housing in coastal regions (Bangladesh); credit lines for agriculture and water sectors (Mozambique); management and control of water resources (Niger); and forest management, timber harvesting and tourism (Mozambique). In Zambia, the PPCR has been supporting the development of an index for weather insurance and efforts to extend micro-credit with \$15 million (CIF, 2012b).

Country reports from Bangladesh suggest that markets require greater sensitisation and awareness of climate challenges, impacts and opportunities. Financial institutions require more certainty regarding climate risk, and more data to inform risk assessments (CIF, 2010a).

A need for deeper and more tailored engagement with private sector stakeholders has been acknowledged. Recent analysis of the PPCR's relatively advanced efforts to engage the private sector in Nepal suggest that its attempts to address initial costs and capacity gaps may support continued private investment in targeted sectors (Trabacchi and Stadelmann, 2013).

A large share of private sector programming has been funded through financial intermediaries, often using fairly similar approaches (ICF, 2013). A substantial challenge associated with such programmes is that concerns around business confidentiality have precluded much disclosure about exactly what projects and programmes have been funded in practice (Hulova, 2012). In response, the MDBs have begun to produce learning products that distil aggregate lessons around achievements. IFC and EBRD, for example, published an in-depth impact assessment of their financial intermediary programmes in Turkey (Econoler, 2013), which provided aggregate detail on the funding leveraged and the technologies supported, with some detail on the achievements of the various banks that had engaged. In addition, the MDBs have published notes on lessons learned from efforts to engage the private sector, which note that the reporting and processing requirements of accessing CTF resources can complicate efforts to develop such programmes.

Mobilising and leveraging private finance

There has been strong interest in understanding how much private finance has been mobilised or leveraged by public finance spent through climate funds. Many stakeholders see this as a core metric of effectiveness in directing private investment towards low carbon and climate resilient activities, despite its many limitations. The methodologies that climate funds use to measure the additional finance their activities have leveraged vary substantially. An overriding challenge is that leverage ratios may be highest where public finance is least needed. This is a substantial limitation to using leverage as the primary indicator of effectiveness in mobilising the private sector, which may in fact create the wrong incentives. On the other hand it is of course vital that funding spent engages other actors investing in relevant sectors, and helps to shift overarching investment priorities to be lower emission and more resilient.

The GEF reports on the co-finance associated with the projects that it funds (and requires this information to be indicated in project proposals before their approval). The GEF OP 5 report (GEF IEO, 2014) found that co-financing ratios are highest for climate change mitigation projects, and have increased substantially during the 5th cycle, achieving ratios as high as 1:14. Most of this finance comes from implementing agencies, however, and ratios are particularly high for programmes implemented by MDBs, which often use GEF finance for technical assistance and capacity-building programmes as part of large-scale investments that use loans and other instruments.

CIF funds are always blended with additional sources of finance, including regular funding from the MDBs, as well as bilateral funding and recipient country co-finance. Such blending helps to reduce the overall costs of interventions that might otherwise be too expensive to execute (World Bank, 2013). Funds have also helped international development finance institutions to pay more concerted attention to climate risk. One of the major contributions of the CTF (and the CIFs) has been to encourage the MDBs to work together, including in terms of programmatic approaches that bring different parts of the banks together. This is important, because the MDBs have the potential to support governments to address climate change through their core development finance operations, regardless of the evolution of the international climate-finance architecture. It is possible, however, that the incentives, policies and conservative culture at many MDBs have prevented them from being sufficiently nimble or flexible to take on new risks, even where the CIF procedures were designed to promote such innovation.

In the case of the CTF, as of March 2014, \$3.5 billion had been leveraged against approved projects with predicted total leverage of \$19.09 billion (CTF/TFC.12/3). PPCR reporting on current co-finance suggests average leverage amounts to 1:1.32 (CIF, 2013b). Most of the co-financing has been raised from the MDBs themselves (64%) and other public-sector institutions. Co-financing from recipient governments accounts for just 14% of total co-financing. The leverage and co-financing ratios vary substantially from project to project, even within the same general sector: wind and energy efficiency projects, for example, target a significantly higher share of private co-financing than interventions focused on agriculture, transport or geothermal power (Whitley et al., 2014).

In some cases, questions have been raised over the predicted leverage ratios set forth in country investment plans. For example, Tanzania's investment plan, approved in 2013, includes a geothermal project for which \$25 million of SREP funding is predicted to leverage \$460 million from the private sector (including through commercial bank loans). Contributors sought evidence to support this expectation for such a high leverage ratio,

with Switzerland, for example, endorsing the plan but stressing that 'the mere mentioning of this [private sector] funding in a financing table of the investment plan is not enough.' Other SREP investment plans have been critiqued for an inadequate emphasis on the private sector. The two grid-connected geothermal and wind projects in Ethiopia's plan, for example, were challenged by contributor countries over their reliance on public funding when there may have been an opportunity to encourage private sector involvement (Rai et al., 2013).

In general, reported leverage ratios for the CTF are substantially higher (in some cases by several orders of magnitude) than other funds, such as the PPCR (Whitley et al., 2014). There is, however, a lack of publicly reported information on the precise volume of private finance that has been attracted, and its sources. The highest levels of private investment are generally observed in higher-income countries including Brazil, Colombia, India, Mexico, South Africa, Turkey and Viet Nam. Climate funds have provided guarantees, risk-transfer or risk-sharing facilities that aim to backstop private investment; small grants for technical assistance alongside large MDB loans; or relatively small concessional loans alongside large volumes of domestic (recipient country) public finance (Whitley et al., 2014).

Multilateral climate finance and private investment in low-carbon energy

In completing this report we also sought to understand how climate fund investments that seek to mobilise private finance relate to broader private investment in solutions to climate change. We compared, how clean energy investment as reported in the Bloomberg New Energy Finance database relates to the mitigation finance priorities of climate funds first globally (Figure 22, overleaf) and then more specifically at the national level for India, Indonesia, Mexico, and South Africa, (Bloomberg New Energy Finance, 2014). While such a comparison cannot determine whether climate funds are mobilising wider private finance directly, or whether public finance is competing with private finance, it does offer insights into how these priorities may relate to each other. Data availability restricted this analysis to investments in clean energy, rather than wider mitigation.

In India, climate funds are supporting investments in renewable energy including solar, wind and hydropower, which are now also attracting private investment. India has received a total of \$60 billion in investments between 2004 and 2013. More than \$24 billion of this is asset financing for renewable energy, which has been dominated with investments in solar and wind projects. Multilateral climate funds have focused on developing renewable energy and in supporting energy generation and supply activities, including hydropower. A recent review of institutional arrangements for climate finance in India found that many of the major programmes to support low-carbon energy in the country, while led by national- and state-level governments, are also supported with funding from international financial institutions, whether through direct finance, or through additional policy dialogue and support for technical assistance (Jha, 2014).

In Indonesia, it is clear that private investors and multilateral climate funds are supporting similar sectors, and the majority of finance has focused on geothermal energy. Data from Bloomberg New Energy Finance suggest that the private sector invested around \$2.3 billion between 2004 and 2012 in Indonesia, largely for renewable energy, with asset financing for new-build geothermal projects in the region of about \$1.3 billion. Other renewable energy sectors for new capacity investment were bio-energy and hydro, totalling \$0.5 billion. Geothermal power has also emerged as a major priority for multilateral climate funds, including new instruments to address private-sector risks, particularly related to exploration (Bloomberg New Energy Finance, 2014).

In Mexico, private investment has been directed largely to wind and solar technologies. Together, multilateral climate funds have made significant investments that have helped the renewable energy market in Mexico to take off (Polycarp et al., 2013). Funds for renewable energy totalled \$8 billion between 2006 and 2012 (Bloomberg New Energy Finance, 2014). The majority of private sector finance has been invested in the wind (\$2.3 billion) and solar (\$0.3 billion) sectors. In addition, the private sector has also invested \$5.5 billion in asset financing for new-build construction between 2006 and 2012. These are significant achievements, given the country's substantial domestic fossil-fuel reserves. At present, however, the largest share of multilateral climate finance supports the expansion of low-carbon transport systems, which are delivered largely through public-private partnerships

Similarly in South Africa, a combination of sustained effort by domestic actors complemented with support at various stages from international actors has helped to foster the emergence of a renewable energy market. Private investment in clean energy in South Africa totalled \$5.4 billion between 2006 and 2012: about \$5.1 billion was invested in renewable energy, with \$4.2 billion in new capacity investments (Bloomberg New Energy Finance, 2014), particularly in the solar (\$3 billion) and wind sectors (\$1.5 billion). Private investment responds largely to the emergence of a favourable policy and regulatory framework; the CTF programme in South Africa, however, did not engage with (or directly support) the emergence of this framework. Instead, the programme focused on supporting Eskom investments in solar and wind power (Box 13). Nevertheless, a lack of private sector engagement in the design of climate fund supported programmes has been highlighted as a substantial weakness (Naidoo, 2014). These limitations were compounded by the fact that the terms of the finance offered to commercial banks to scale up their engagement were not more attractive than other finance that was already available domestically.

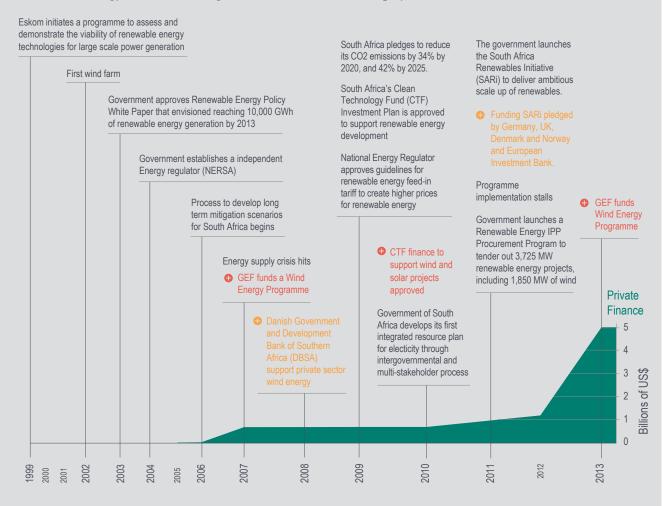
Box 13: Public vs. private investment in South Africa

In South Africa, the CTF supported the national utility to develop solar and wind programmes. Questions were raised at the time about whether this was the best use of resources, given the international focus on the need to support private investment. But the dominant role of para-statal institutions in energy service delivery in developing countries means that 'public' energy companies are central to addressing the challenge of decarbonisation. Helping public enterprises in the energy sector find alternatives to their historical reliance on fossil fuels presents a paramount challenge of governance (internal incentives) as well as finance. International climate funds have the potential to help address some of these challenges.

The regulatory framework in South Africa at the time of developing the original investment plan made it difficult (if not impossible) to finance private action on renewables directly. Furthermore, given Eskom's dominant role in the national energy sector, it has been important to support the national utility to develop low-carbon approaches as an alternative to its historical reliance on coal. Eskom stakeholders note that the complex procurement requirements of the CTF have made it difficult to implement the programme as efficiently as they would have liked (Naidoo, 2014).

There is a lack of clarity on the extent to which the CTF-financed programmes have really been prioritised within Eskom, and the extent to which they have helped to usher in requisite changes in approach to Eskom's wider investment and energy management systems to support more sustainable and low-carbon approaches.

A renewable energy market has emerged in South Africa, but funds played a minor role



Sources: BNEF (2014), Naidoo (2014), Polycarp, Brown and Fu-Bertaux (2014), Climate Funds Update (2014)

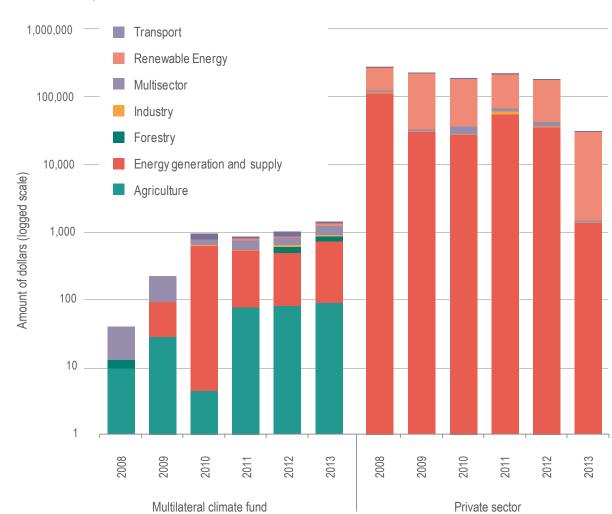


Figure 22: Public and private finance bar chart

8. Are funds strengthening enabling environments and ensuring national ownership?

Take-away messages

- Climate funds are starting to increase their ambitions on how they engage in countries, increasingly dealing directly with the lead ministries responsible for strategic investment and financial-management decisions at the national level instead of more peripheral actors. The aim is to support paradigm shifts rather than limiting ambition to incremental changes.
- Funds are starting to work with a more diverse group of international and developing countrybased institutions. The Adaptation Fund has pioneered direct access for national institutions in the hope of benefitting from their higher familiarity with country contexts and actors, while the GEF has recently accredited the National Development Bank of South Africa as its first developing country implementing partner. The GCF will continue this pattern of expanding the range of partners involved in the delivery of climate finance by allowing countries to access resources through multiple implementing partners from the sub-national to international level.
- The work of climate funds to help developing countries overcome policy, regulatory and institutional barriers to public and private investment in low-carbon and climate resilient approaches has already begun to have real impacts: the GEF's support to technical work underpinning the adoption of renewable energy and energy-efficiency policies in China, India, Mexico and Russia is one example.
- A focus on deployment has sometimes resulted in a loss of sight of issues relating to the enabling environments that can have major impacts on implementation. However, examples of resources for policy engagement and technical assistance (from the GEF for example) being combined strategically with CTF investment finance could have long-term impacts.
- Greater coordination is needed across providers of climate finance to maximise synergies and takes advantage of complementary competences and instruments. Incentives to this end could be reinforced at Fund level, and recipient countries should seek to facilitate such synergies.
- Domestic politics have influenced programme implementation in many cases, but have often been under-emphasised by climate funds. A more concerted effort is required to engage key stakeholders during programme design to understand their varying interests and their objectives for involvement. In this context it is critical to consider the underlying policy and regulatory framework and domestic context for investment in low-carbon and climate-resilient approaches, even if a programme may not be able to address these issues directly.

Policy, regulatory and governance frameworks have a fundamental influence on the viability of investment in low-carbon and climate resilient approaches. Public finance can be used to strengthen the underlying enabling environment for climate finance, and help address the various risks and barriers that different stakeholders (including private sector actors) face in scaling up investment in solutions to climate change, and in scaling back investment in business as usual approaches. There is now broad recognition that addressing such issues is central to ensuring the effectiveness of international climate finance (UNFCCC, 2012; UNFCCC, 2013; UNFCCC, 2014 forthcoming). How to engage in practice, however, has been a much more difficult issue.

These issues in particular (and indeed the wider questions related to the effectiveness of climate finance) are very closely linked to questions of national ownership. This section explores how well multilateral climate funds have been addressing these two crucial considerations.

In some cases, climate funds have supported emerging policy and regulation for climate action in developing countries

Almost all of the GEF-5 projects include a component to strengthen policies, regulations, or implementing capacity. In several cases, GEF funding has supported the costs of technical assistance or capacity building that would enhance investment programmes advanced by MDBs. A recent GEF evaluation of mitigation projects in China, India, Mexico and Russia, for example, documented causal links between GEF support and key policy changes in one third of the projects that it reviewed. It emphasised the importance of public-sector institutions, strategies and policies to enable private-sector replication of the approaches piloted. It also emphasised the importance of capacity-building components of programmes that target public institutions, knowledge centres and the private sector in supporting the mainstreaming of climate programmes. It found that enabling programmes that engaged key nongovernmental stakeholders (including the private sector) that could be advocates for policy change were more likely to succeed. Many approved CTF financed programmes are helping to realise the implementation of emerging climate change mitigation related policy priorities that have emerged from domestic processes. For example, the CTF is supporting implementation of India's Energy Efficiency Mission, which builds on priorities set out in the National Action Plan on Climate Change, and policy and regulatory efforts to promote energy efficiency and conservation. But the changes that have been made have not yet been at a scale that allows the fundamental re-alignment of policies with low-carbon development approaches

The type of finance funds can offer affects how they can engage on enabling environments

One of the challenges in this context has been the form of funding: grant and technical assistance finance has, in general, been limited to project-preparation grants of up to \$1 million and support for learning activities. This has meant that supplementary resources have been were needed to implement complementary projects that address questions of the enabling environment. In some cases, implementing entities have been able to mobilise funding from additional sources: for example the IADB complemented CTF resources with grant finance from the Sustainable Energy and Climate Change Initiative for technical assistance to support regulatory strengthening. These interventions facilitated CTF-funded renewableenergy programmes.

Where CTF finance could be combined with more flexible finance, early indicators of outcomes appear encouraging. For example, the EBRD was able to use \$8.45 million in grant finance from the GEF to help develop the regulatory framework for renewable energy in the Ukraine and help establish a feed-in tariff, as well as strategic environmental reviews. This finance has been complemented with support for a direct lending facility, which combines \$26 million from the CTF with \$65 million in EBRD finance and an additional \$33 million in equity from domestic investors (EBRD, 2013). While the environmental and social outcomes of the programme, as well as its cost effectiveness remain to be seen, these early indicators suggest that the programme is attracting significant private investment. But resources to this end have not been available to all MDBs for all interventions. Combining resources, including technical assistance or capacity building support, across multiple actors that link market-level interventions with project-level interventions can have a powerful combined effect (Lefevre, 2013). The impact of these combined investments, however, may only be felt after a substantial period of time has passed.

But these efforts need to step up

Many enabling programmes have not been well linked with the wider processes that shape investment in mitigation in a given country. Interventions have often taken narrow or technical approaches, rather than grappling with many of the challenges of governance and underlying incentives that present themselves within recipient countries. The GEF programmes have often been anchored in ministries of environment that have variable influence over wider investment and policy decisions. Programmes have often been too small to secure the attention of the key political constituents who can champion change. By contrast, approved CTF investment plans have placed uneven attention on issues related to the adequacy of policy,

Box 14: Financing Implementation of India's Energy Efficiency Mission

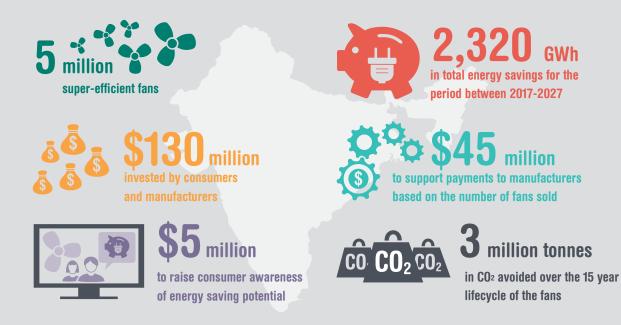
CTF funding for the production of energy efficient fans in India provides an example of a climate fund intervening at a key moment to support the implementation of a high-level government policy.

In 2008, as part of India's National Action Plan on Climate Change, the Government of India (GoI) enacted the National Mission for Enhanced Energy Efficiency (NMEEE), the implementation of which was entrusted to the Bureau of Energy Efficiency (BEE). The GoI predicts that the country's electricity generation will need to multiply by up to six times by 2031 to ensure that all households have a baseline level of consumption and to sustain economic growth at 8%.

Constraining electricity demand is, therefore, vital to limit the growth in the supply that is needed and to minimise associated GHG emissions. The Super Energy Efficient Equipment Program (SEEP) was envisaged under the NMEEE to accelerate the adoption of efficient technology for the most widely used electric appliances: LED lights and ceiling fans. Some 38 million fans are sold per year and last up to 20 years; higher up-front costs dissuade consumer investment in the far more efficient fans that are available today.

CTF support to the SEEP (approved in 2013) will be used to finance the incremental cost of super-efficient ceiling fans in the programme's pilot phase by providing commercial incentives through the BEE for manufacturers to produce fans over four years on a performance-based payment model. Five manufacturers will be selected by reverse auction, based on the discount they will offer to consumers below a set maximum retail price. The five million fans funded under the project are expected to save 232 GWh of electricity per year from 2017 to 2027-28 and avoid approximately 3 million tonnes of C02 emissions in their 15-year lifetimes.

The GEF has also supported the deployment of energy efficient appliances, and several programmes that support small- and medium-sized businesses to use more energy-efficient technologies over the years. In both cases, the priorities of the funds have been shaped by emerging national policy priorities.



Source: World Bank (2012) Project Appraisal Document - Super Energy Efficient Project. https://www.climateinvestmentfunds.org/cif/ sites/climateinvestmentfunds.org/files/SEEP%20PAD_CTEpdf

regulatory and governance frameworks that would affect the viability of proposed investments (Nakhooda, 2010; CIF Evaluation Oversight Committee, 2014). While the CTF investment criteria emphasised the need to address market barriers and support transformation, they did not necessarily prompt a focus on issues related to institutional readiness for programme implementation.

This was a missed opportunity, particularly as the CTF is anchored in ministries of finance, which have the potential to influence wider investment policy and signals, and offer a much larger scale of finance (several hundred million dollars, as opposed to \$5-\$40 million from the GEF). In general, climate funds have struggled to address underlying pricing, incentive and subsidy regimes that incentivise business as usual approaches. For example, the Indonesian investment plan did not address the underlying subsidy and pricing regimes for conventional energy and its implications for the viability of the renewable-energy technologies for which finance was sought. This was despite the fact that the World Bank and the ADB both

had an established record of working with national stakeholders to strengthen regulatory regimes and address subsidies (Nakhooda, 2010; Nakhooda and Tirpak, 2010). Similarly, the MENA Regional Investment Plan recognised the need to reform energy tariffs as key to the success of the project, but to date progress on this count in the context of CTF programming is unclear. While the Amazon Fund and the Indonesian Climate Change Trust Fund are anchored in national government and policy processes, both have focused on implementation, rather than addressing these underlying issues.

Political issues have also been a major factor, often under-emphasised by international climate funds, and can have a major disruptive impact on implementation. The CTF portfolio had significant commitments in the Middle East, particularly Egypt, and these programmes were disrupted by the political changes that swept through the region in 2010. In both Indonesia and Thailand, the need for parliamentary approval of sovereign loans to the government for programmes where the underlying regulatory framework was not aligned with the proposed investment has led to delays and prompted revisions to investment plans. In Indonesia, for example, there was a need for clarity on the legal framework for geothermal development before funding for public sector programmes could proceed. The wider context for engagement and government relationships with intermediaries are another major factor: the Indonesian Government's decision to stop borrowing from the MDBs adopted soon after the approval of the Indonesian investment plan, for example, required the plan to be revised.

Climate funds are starting to engage key relevant ministries, and support coordination

The extent to which international climate funds have been 'owned' by recipient stakeholders, and have helped to strengthen ownership of climate change as a policy issue, has been contentious. Ownership of an issue as cross-cutting as climate change, which requires action by a diversity of public, private and local actors, poses a significant challenge of coordination (Nakhooda and Jha, 2014) at multiple levels: across government ministries, and with key stakeholders at national level.

Funds have, however, engaged different actors at country level. The GEF has developed a formal architecture to secure national ownership of its programmes. Operational and Political Focal Points serve as the interface between national actors and the GEF, and must endorse proposals before they can be approved for funding. With the adoption of the STAR, countries now have greater clarity on how much funding they will be able to access, and may access up to \$30,000 to complete national portfolio-formulation exercises to engage stakeholders to agree priorities for the use of allocated resources. Steering committees that seek to engage stakeholders around the priorities of the GEF have been created in many countries. Some countries have taken similar approaches to their engagement with the Adaptation Fund: in this case many ministries and stakeholders have taken the initiative to constitute steering groups that include a formal role for civil society and local actors. These fora and processes can help create a space for deliberation and reflection over the role of the climate fund's operations in the domestic context (Nakhooda and Jha, 2014). They have also served to enhance the legitimacy of international fund programming within countries.

Nevertheless, many climate funds have been somewhat distanced from the heart of the institutional arrangements for investment in climate relevant sectors, and perceptions of their impact and traction are mixed. The CIFs have engaged key actors that take the lead on economic planning and investment, notably ministries of finance. In some cases, however, these ministries have often been more inclined to use available climate finance to support pre-existing investment priorities, particularly for infrastructure, than to engage in a more in-depth exploration of opportunities to optimise mitigation and address vulnerabilities. In many cases, stakeholder engagement beyond government has been weak. Recipient country stakeholders report a sense that implementing entities continue to drive their own agendas in developing programming proposals. The PPCR experience in Zambia, however, appears to have supported an inclusive programming approach. The program has supported the Ministry of Finance and National Planning to collaborate with a broad range of government departments including the Ministry of Agriculture and Cooperatives, the Ministry of Tourism, Environment and Natural Resources and the Ministry of Local Government and Housing as well as wider non-governmental stakeholders to implement adaptation programmes.

Building on existing efforts and relationships

In countries where the MDBs had already been working on programmes related to climate change, country counterparts had a more shared understanding of priorities and systems for the use of available funding. The Mexico CTF investment plan, for example, built on several development policy loans for climate change policy that had already been implemented by the IADB and World Bank in collaboration with the Ministry of Finance. Through these processes, the Banks had developed a better understanding of Mexico's circumstances and interests and how to engage in the national context. Similarly in Turkey, the EBRD and World Bank had good working relationships with counterparts related to energy sector programming that could be built on relatively quickly to develop the CTF investment plan. In some countries, however, such as Thailand, the Word Bank had no ongoing programme when the CTF programme began: indeed the

CTF represented an opportunity to engage a MIC that had not borrowed from the MDBs for several decades. As a consequence, however, there was less familiarity with the political context in which the MDB engagement would take place. This proved a barrier to the public sector lending initially proposed.

In retrospect, the level of institutional preparedness in Middle Income Countries receiving funding from the CTF may have been overestimated in many cases, which has resulted in substantial delays and implementation challenges. Even where countries had climate strategies and had identified related policies for their implementation, these were not well developed in the majority of cases, and stakeholders had limited awareness of the requirements of implementing proposed interventions. These challenges may be even more pronounced in least developed countries and in the case of adaptation. However, express efforts have been made to account for these limitations, for example by supporting the development of NAPAs and NAPs through the LDCF, and by making some up front investments in stakeholder engagement and planning to develop Strategic Programs on Climate Resilience in the case of the SPCR.

Climate funds are starting to work through national institutions

There has been interest in making greater use of national financial systems and working in direct partnership with recipient country-based institutions, as a way to strengthen ownership by working through entities that are more embedded in developing country realities, and to garner greater trust from national stakeholders. This has been a particular innovation of the AF, which has expanded the range of implementing partners through which it works to include institutions based in developing countries if they are nominated by the designated authority, and can demonstrate that they meet the agreed AF fiduciary standards (see Figure 23). In 2013 the AF also adopted environmental and social safeguard policies. As of 2014, 21 institutions have been accredited as national or regional implementing entities of the AF, including NGOs as well as government ministries. In many cases this has been a timeconsuming and expensive process for the agencies seeking accreditation. While this approach is expanding the range of partners in the delivery of climate finance, questions have been raised about whether the institutions that are being accredited are well placed to shape or help realise national priorities related to climate change. For example, several of the accredited entities include ministries of environment, or trust funds with links to these ministries, that may not be that well connected to national planning or infrastructure-related priorities.

Nevertheless, the approach has been pioneering: in 2011 the GEF launched a pilot programme to expand its implementation partners to include institutions in developing countries. The Development Bank of South Africa was recently approved to become an agency of the GEF, alongside several international NGOs including WWF US and the World Conservation Union (IUCN). For its part, the Green Climate Fund is to take a much more encompassing approach to accreditation, allowing countries to access its resources through multiple

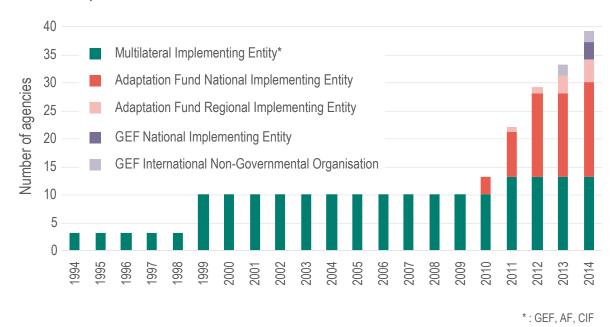


Figure 23: Public and private finance disbursements

Sources: Adaptation Fund (2014), GEF (2014), CIF (2014a)

Box 15: New opportunities for climate funds: greening South-South investment

The surge in South-South Cooperation is of particular relevance for finance for sustainable development. Annual concessional flows from emerging economies to low-income countries are estimated at \$12-\$15 billion, or 10-15% of the amount of aid (including other official flows) provided by developed countries (World Bank, 2013). To date South-South Cooperation has not focused on climate change, but this is changing. China, for example, promised to allocate \$10 million annually between 2011 and 2013 to help small- island developing states, lesser developed countries and African countries tackle climate change. As of 2013, China's Climate Change South-South Cooperation training programme had trained more than 700 officials in issues around renewable energy, climate change and forestry, and planned to train a further 2,000 (Clark, 2013). South-South Cooperation providers are increasingly interested in engaging on technical cooperation and knowledge sharing, including knowledge related to climate change.

Incorporating climate-change considerations into South-South development cooperation as a whole, however, is a major challenge. Much existing investment and collaboration has focused on conventional high-carbon infrastructure, and concerns have been raised over the environmental and social governance of these flows. The recent announcement of the New Development Bank jointly managed by the BRICS (Brazil, Russia, India, China and South Africa), which is to invest in infrastructure and 'sustainable' projects, has raised questions about whether major economies will scale up their investment in low-carbon and climate resilient options. The declaration announcing the New Development Bank also noted that 'while bearing in mind that fossil fuels remains one of the major sources of energy, we reiterate our belief that renewable and clean energy, research and development of new technologies and energy efficiency, can constitute an important driver to promote sustainable development, create new economic growth, reduce energy costs and increase the efficiency in the use of natural resources.'.

Note: The recent report of the expert working group on sustainable development finance recognises the need to strengthen environmental and social governance standards for all investments http://www.un.org/esa/ffd/documents/Report_ICEonSDF_8aug14_AUV.pdf

Source: BRICS Fortaleza Declaration Para 53 http://www.itamaraty.gov.br/sala-de-imprensa/notas-a-imprensa/vi-cupula-brics-declaracao-de-fortaleza.

implementing entities and intermediaries at sub-national, national, regional and international level.

These new developments suggest major new potential for international climate funds to work more closely with the key institutions financing infrastructure and other climate action in developing countries, including national and regional development banks. As South-South cooperation on such investment increases, this also presents important new opportunities to steer such financing towards climate-compatible development, and away from business as usual approaches (Box 15).

Deeper engagement of national stakeholders is needed

Recipient countries, in general, report a need for deeper engagement with national stakeholders in the development of programming approaches, and seeing through their execution. A 2012 review of CIFs programme experiences with engaging national stakeholders found that 'in the case of the CTF, establishment of country coordination mechanisms was not a focus in the development of most investment plans.' This is explained in part by the compressed period in which CTF investment plans were initially developed (Radner, 2010). There was often inadequate time for iteration and engagement with national stakeholders, and the partnering MDBs ended up playing a central role. On the one hand, it is a substantial advantage of the MDBs that they have may have the technical expertise and capacity to work with stakeholders to develop viable interventions. But the final responsibility for delivery falls, ultimately, to national stakeholders. A sound grounding of plans in their national contexts is, therefore, imperative.

'Docking' international climate finance in a national institution does not, in and of itself, assure deeper stakeholder engagement and ownership in programming. Indeed, the experience of the Amazon Fund (Box 16) and the Indonesian Climate Change Trust Fund (Box 17) suggests that the extent to which such arrangements become central to the national climate response (or the effort to address deforestation in the case of the Amazon Fund) is shaped by many factors. One is the scale of finance that is available, and whether it is sufficient to get the attention of key actors in relevant ministries or the private sector. Another is the approach that the anchor ministry takes to its operation: in many cases such funds have ended up

¹⁴ In addition, efforts are underway to strengthen monitoring of public finance more generally. The OECD-DAC is leading a new process to modernise the ODA definition. It is also developing a new measure of 'Total Official Support for Development' (TOSD), which will include less-concessional flows and those that are less directly focused on poverty reduction. Public climate finance that is not sufficiently concessional to be classified as ODA is likely to be covered by the new TOSD measure, and efforts by donors to leverage private finance may also be included (OECD, 2013). This could create greater incentives for donors to provide these forms of climate finance, and could improve accountability for the contributions made.

Box 16: The Amazon Fund

The Amazon Fund aims to raise finance to support actions that prevent, monitor and combat deforestation, and to promote the preservation and sustainable use of forests in the Amazon Biome. The Amazon Fund's initial aim was to raise \$21 billion over 13 years (Goodman, 2008). With more than \$1 billion pledged, the Amazon Fund is the largest source of international climate finance in Brazil.

The Amazon Fund has attracted substantial international attention for its design and operation. It is seen to have demonstrated that an institution based in a developing country can lead and manage its own climate fund in an inclusive manner, and that its institutions – in this case, the Brazilian Economic and Social National Development Bank (BNDES) – can meet high standards of transparency and accountability in its operations. Devolved decision-making seeks guidance on how best to use the funds from a steering committee that includes representatives from local government, national ministries and civil society (including indigenous peoples, traditional communities, NGOs, industry and scientists). The Amazon Fund has also pioneered results-based finance for REDD+. A payment-for-performance model continues to be used to raise funds from international and domestic contributors, although it does not generate offsets in line with Brazil's approach to UNFCCC negotiations. Furthermore, project funding is decoupled from fundraising, so non-reimbursable grants reduce liability and risk for project implementers that range from federal ministries to local communities.

The Amazon Fund is grounded in a Brazilian policy commitment enshrined in law and its design was driven by leaders within the Brazilian Government. It is managed by a Brazilian financial institution that is well versed in domestic implementation realities. The fund has engaged diverse national stakeholders in both its governance as well in the delivery of programmes, working through NGOs, universities, state-government institutions, and municipal-government institutions among others. Nevertheless, it is shaped by political developments within Brazil, and the lack of clear political commitment to its objectives creates uncertainties about its role and purpose.

dominated by one institution (the Planning Ministry in the case of Indonesia, and the Ministry of Environment in the case of Brazil), and concerted efforts have had to be made to bring other relevant institutions into the process.

In Indonesia, the ICCTF remains one of the smallest actors in the domestic climate finance landscape, despite its original mandate and intention to coordinate and streamline international climate finance. Similarly in Brazil, the operations of the Amazon Fund have not been that closely linked to ongoing efforts to develop a national approach to continue to reduce deforestation and degradation, or to efforts to manage the implications of new economic policies, including infrastructure development, which will create immense new pressures on Brazil's forests.

There may also be a tension between the need to introduce new policy agendas (which may disrupt existing priorities that reinforce business as usual high-carbon and climate-vulnerable approaches to development) and the demands of 'ownership' that require building on pre-existing commitments and policies. This difficult tension raises complex issues of sovereignty and strategic engagement for international organisations and climate funds that have relied, historically, on their implementing agencies and intermediaries to navigate these trade-offs.

Developing countries stress, quite rightly, that they must have 'equitable access to sustainable development', but the world's largest emitters today include both Annex I

Box 17: The Indonesian Climate Change Trust Fund

The Indonesia Climate Change Trust Fund (ICCTF) is the first national trust fund to seek funding from multiple contributors to finance climate change policies and programmes. The ICCTF, which is anchored within the Indonesian Ministry for National Development Planning (Bappenas), aims to enhance national ownership and develop a structure to access and channel grants in response to climate change.

As such, the ICCTF provides an innovative model for countries around the world seeking better access to international support for their climate change response strategies through nationally driven institutions.

An elaborate arrangement for stakeholder engagement is emerging. The Vice Minister and the Deputy of Environment and Natural Resources of Bappenas leads the arrangement, which includes 11 members: the Deputy of Development Finance of Bappenas; the Ministry of Finance; the Coordinating Ministry of Economic Affairs and Ministry of People's Welfare; the head of National Council on Climate Change (DNPI); a representative of NGOs; a representative of the private sector; a representative of academia or experts; and three representatives of the UK, Denmark and Germany. Efforts to improve communication and public reporting are underway. To date, the ICCTF has focused on funding pilot projects. While Bappenas has led the development of Indonesia's climate change and adaptation plans, these plans have yet to translate into strategic spending priorities. UNDP has acted as the interim administrator of the Fund: this function is now to be taken over by the state-owned Bank Mandiri. Substantial time and effort has been invested in ensuring alignment with national financial-reporting systems for trust funds, and with international fiduciary standards that would allow it to access funds such as the Adaptation Fund. Meeting these standards has, however, been a major challenge.

In practice, operationalisation of the ICCTF has been slow. With a current capitalisation of \$11.4 million, it is a relatively small source of finance in a country that accesses hundreds of millions of dollars of concessional contributor support for climate related purposes from bilateral and multilateral sources. The ICCTF is now one of many actors in an increasingly complex domestic climate finance landscape.

and non-Annex I countries: the financial circumstances of countries no longer reflect the annexes of the UNFCCC. Finance mobilised in the context of UNFCCC commitments needs to harness and interact with expanded and diversified flows of wider finance to and within developing countries. So far, only a tiny fraction of the money flowing to developing countries targets opportunities to address climate change. It is imperative to make sure that wider international development finance also supports climate-compatible development.¹⁴

9. Conclusions and recommendations

Multilateral climate funds have been small but vital actors in global efforts to finance more sustainable approaches to development. The nine international funds reviewed in this report have approved about \$1 billion a year since 2008. This is a relatively small share of the total climate-related investment in developing countries from both the public and private sectors. The limited finance available to climate funds has placed severe constraints on what they are able to achieve directly, although the amount of funding approved has increased rapidly in recent years.

Despite this substantial constraint, this report finds that multilateral climate funds are making a difference. Well-established funds such as the GEF, LDCF and SCCF have helped international institutions and developing country stakeholders to grapple with the realities of what it takes to implement low-emission solutions and take more resilient approaches to development. New funds such as the CIFs have begun to change some of the rules of the game on climate finance by seeking to bring climate change considerations into the 'mainstream' of development (and to some extent private) finance, and testing new approaches that deploy finance at much larger scales than has been possible for previous funds. Even so, there are many things that each of the funds we have considered in this report could - and should - have done differently, and that they can do better in the future.

What has worked well?

Funds have been subject to considerable scrutiny from stakeholders including private sector and civil-society actors. Active civil society and private sector engagement with these institutions can help to bring new issues and perspectives to bear on the decisions that are being made. But sustaining substantive engagement from nongovernmental stakeholders takes continued commitment on their part, and may benefit from support.

Climate funds have spent money in places that need it, on activities that can reduce emissions and increase resilience to climate change.

Mitigation finance, in particular, has targeted middleincome countries, where emissions are already high and growing rapidly. In general, the top recipients of multilateral climate finance are the biggest GHG emitters with the highest mitigation potential for emissions reductions. While some of the largest flows of climate finance support mitigation projects, a number of the top 20 recipient countries over the past decade, such as Bangladesh and Niger, are engaging primarily with adaptation funds. These funds have targeted poor and vulnerable countries specifically, particularly in sub-Saharan Africa which is, by many measures, the region most vulnerable to climate change, including disasters. Larger funds, such as the CIFs, have engaged lead ministries responsible for strategic investment planning and financial-management decisions at country level. Historically, climate funds have been small actors involved in niche activities, commanding low levels of political attention. As such, they have struggled to bring climate finance into the mainstream of economic and development decision-making. But in some cases climate funds have supported new institutional arrangements that bring key ministries together to address climate change. There is, of course, an important role for ministries of environment in bringing expertise and insight on climate change issues to bear on these vital issues.

Climate funds are partnering with a growing diversity of international and developing country-based institutions, and helping them to do more to address climate change. The number of implementing agencies has expanded from the three original founding partners of the GEF i.e. the World Bank, UNDP and UNEP, to include around 40 institutions. Climate funds have helped international development-finance institutions, particularly multilateral development banks, do more to help their member countries respond to climate change and make climate a material issue for their investment choices. But perceptions of the institutions that anchor climate funds and deliver the programmes they fund shape perceptions of their legitimacy and effectiveness. Climate funds are now starting to partner directly with developing country-based financial institutions. This expansion results in great part from the Adaptation Fund's innovations to facilitate developing country-based institutions to have direct access to climate finance. The range of partners now includes regional development banks, international organisations, developing country ministries, trust funds and NGOs. The engagement of developing countries' development finance institutions is particularly noteworthy: the Development Bank of South Africa, and Brazil's FUNBIO are now implementing agencies of the GEF. The Amazon Fund sits within efforts to encourage the Brazilian Development (BNDES) to scale up sustainable investment and to improve the Bank's environmental and social impacts.

While attention once focused on incremental changes to address the additional costs of climate change, climate funds now aim to support paradigm shifts that reduce the emission footprints of development, and to increase resilience to the impacts of climate change. Climate funds are making efforts to work at requisite scales, to try new approaches and to engage private-sector investors and actors in the national climate-change response.

What needs to be done better?

Of course, funds have not been universally successful. There are many examples of programmes that were not designed to reflect national circumstances. Too often there has been a failure to consider how policy, regulations and institutional capacity will affect intended outcomes, and an inadequate framing of the objectives and goals that a fund will seek to realise. National stakeholders have often been resentful of programmes that are perceived to reflect the priorities of international implementing institutions and the donors that fund them, rather than responding to their national needs and circumstances.

The amounts of funding available have been very small, and complicated to access. And while funds have developed elaborate bureaucratic processes to ensure good programme quality, these have resulted in procedures that are extremely cumbersome. Furthermore, the capacity of countries to formulate creative and transformational ideas about how to maximise the impact of available finance has varied. There remains an urgent need to invest in the institutions and people in government, the private sector and civil society who can put this funding to the best possible use.

Funds have struggled to mobilise private investment, and effectively finance the private sector. Private sector set-aside programmes have been created to focus attention on these opportunities, but their impact remains unclear. It is also the case that the public sector still dominates key sectors in most developing countries, including infrastructure; and must be engaged.

It is clear, however, that a focus on the underlying policy, regulatory and enabling environment in developing interventions is needed alongside efforts to make large investments. A lack of strategic engagement that considers policies, regulations and institutional capacity can disrupt implementation. Even the national climate funds reviewed for this report have often been linked only loosely to the key policy and regulatory processes that shape climaterelated investment in their country and the links between their operations and domestic climate response efforts could be strengthened. We see a clear need for climate funds to take five key steps.

1. Take more risk, and support innovation.

Climate funds need to be more flexible and willing to take risks to foster greater innovation, including for the adoption and improvement of new technologies that can reduce emissions and increase resilience. Given the continued need to reduce the costs of low emission and climate resilient approaches, and to find better responses to climate change, this is a major shortcoming of the current system.

2. Support national stakeholders to strengthen policy, regulation, and institutional capacity. Climate finance needs to incentivise a wide range of actors to shift their investments in the most efficient ways possible. As such, climate funds should focus on strengthening national institutions and enabling environments, particularly in countries where a clear policy commitment to climate change is emerging, and where public financial-management systems allow the monitoring of progress.

3. Use the right types of finance for the appropriate purpose. Climate funds are increasingly focused on finding the most appropriate instruments to encourage low-carbon and climate resilient investment at the lowest possible cost. But in many cases, climate funds need to consider the full suite of financial options, including grant and concessional funding, as well as large-scale investments and how these options can support institutional capacity building, as well as create incentives that encourage investors to engage on new areas that they perceive to be higher risk. Even relatively small amounts of grant finance can complement the use of less concessional and non-concessional financial instruments, and greatly increase impact.

4. Create new incentives for the institutions, investors and businesses that are shaping infrastructure and development finance choices to do more on climate. Funds and the implementing entities through which they work need to find better ways to engage with national stakeholders, including domestic investors from the public and private sectors, and navigate domestic economic priorities and politics. There is an opportunity to extend the range of partnerships, particularly with the new infrastructure financiers (which include the development finance institutions of many developing countries). A wider range of partnerships, including with new and emerging sources of infrastructure finance, such as the anticipated BRICS New Development Bank or the Asian Infrastructure Investment Bank, may help these institutions realise their stated commitments to sustainable development by taking concrete action on climate change.

5. Understand impact, and set a high bar for the ambition of supported programmes. Climate funds need to set the bar high when it comes to impact, and support countries to identify investment opportunities that can really transform sectors and economies. These interventions may be more complex to design, as they require greater iteration and partnership with national stakeholders. While existing funds have focused on measuring results, the transparency and consistency of approaches has been less successful and there have been significant variations in how basic rules for GHG-emission accounting are used and applied, and in the quality of the data collection that underpins these estimates. Similarly, there is a recognised need to deepen metrics of resilience and to systematise approaches across actors in the global climate-finance architecture. Funds must adopt more consistent and transparent monitoring and reporting of results to enable a more robust understanding of what they are achieving.

While these findings are of relevance for all actors in the climate finance architecture, these are also opportunities that the newly created GCF has the potential to help address. As an operating entity of the UNFCCC it has unique legitimacy to provide finance for climate action

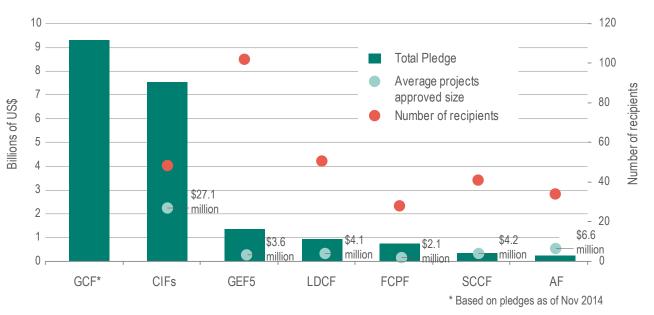


Figure 24: Initial pledges to the GCF are significantly higher than those made to existing funds

Source: Climate Funds Update (2014)

in both developed and developing countries, and has an inclusive governance model that gives developing countries, developed countries, civil society and private-sector actors input into decision making. As of November 2014, more than \$9 billion had already been pledged, making it nine times larger than the GEF and the largest multilateral fund in the world (see Figure 24).

With developing countries also making contributions to the Fund, it is taking on a more global character that may help to break some of the traditional divides between contributors and recipients. Of course, pledging is the easy part: it may take a long time for these pledges to be deposited, especially if legislative approvals are needed (as in the case of the US contribution). The experience of existing funds suggests that better efforts to deepen engagement with the right players within countries will be essential if funding is to be disbursed quickly, and it will be crucial to understand and align with national priorities. Nevertheless, the GCF is already well positioned to mobilise significant levels of finance and to take a different approach to many of the key challenges identified by our research (See Box 16).

It is time to simplify and consolidate the global climate-finance architecture, and scale up finance.

There are now a large number of multilateral climate funds, both under and beyond the UNFCCC convention that support adaptation and mitigation in developing countries. Each of these funds had a particular purpose and function at the time of their establishment, but there is now substantial overlap, and too little money available through these disparate channels.

The GEF's Climate Change Focal Area raised more than \$1 billion in 2014 for its 6th replenishment, which will run through 2018. Its strategy recognises the GEF's ability to support actions that cut across environmental objectives, and leverage the GEF's programming on biodiversity, desertification and chemicals. The GEF also serves as secretariat for three separate adaptation funds, each of which are accountable to the UNFCCC COP, but that together approve less than \$200 million a year. The Secretariats of these Funds, including the Adaptation Fund, have developed immense expertise on the mechanics of fund management and adaptation finance. Their systems, knowledge and networks have won the confidence of developing countries, and support from many developed countries too. The LDCF has ensured that the poorest countries in the world have the opportunity to access at least some finance to respond to climate change. But there is now an undeniable proliferation of adaptation funds, each with their own governance and administrative structures, and with very small amounts of funding.

The CIFs, for their part, were always supposed to 'sunset' their operations once the GCF had been set up. It will be some time before the GCF is fully functional and able to fully substitute for the range of functions provided by the CIFs at present. Much of what the CIFs sought to pilot has informed the design of the GCF. A serious exploration of the mechanics of winding down the CIF is needed, recognising that the existing and already funded programmes will need continued oversight and potential adjustments. It is unclear whether the CIF should continue to approve new programmes in 2016 once the GCF is up and running, unless there is a very clear and

Box 18: Key Features of the GCF

- The GCF has adopted an active risk-management framework from the outset. Loan contributions will be complemented with a capital cushion that will be calibrated to help ensure the fund can make higher risk investments, even if it accepts loan contributions. This should give it the potential to offer the range of forms of finance required to target national needs. The proof will be in the implementation however, and the adequacy of the capital cushions that are actually paid into the Fund.
- The Fund and its stakeholders will also need to adopt a proactive approach to understanding the potential for diffuse innovation within its recipient countries: for example, the deployment of new technologies to provide early warning systems to vulnerable communities; further improvements in storage technologies for renewable energy; or new approaches to deployment that reduce costs through wide-scale procurement.
- A dedicated private sector facility can help the GCF meet the particular challenge of finding more effective ways to engage. This has been an area where all existing funds and their implementing entities have faced challenges. It is also an area where developing country board members have expressed grave concerns about the potential for private-sector agendas to be misaligned with their own, and reservations about the terms of engagement. A private sector advisory group has been constituted to provide practical guidance and input on how best to structure the Fund to succeed in mobilising private investment and action. It will be especially important for the fund to be able to take more risks and forge new partnerships.
- The Fund is also well placed to use a range of types of funding for capacity and institutional strengthening, and to support deeper engagement of national stakeholders. Its country programming division already administers a readiness programme to provide up-front investments in national processes and institutional capacities to make effective use of its resources, and to extend the range of partners through which it can deliver projects and programmes. The extent to which the investment framework will support appropriate priorities remains to be seen, however.
- The GCF accreditation framework allows it to work with a potentially vast range of implementing partners. But a major challenge will be to forge successful partnerships with the key development-finance institutions, private investors, businesses and communities that are most active in the countries it seeks to support, and to create incentives for them to do more on climate change. It will need to tap into the right networks of experts, and harness their experience and capacity to realise this potential. From the outset, however, the Fund will seek to work with developing country-based institutions accredited to the GEF and Adaptation Fund.

distinct niche for these programmes. Re-flows from the CIFs, where concessional loans are to be repaid for more than 40 years to come, could in principle be directed to the GCF.¹⁵ Indeed, the sunset clause of the CIF makes express provision for this possibility. Ultimately, developing countries will need to decide whether the programmes that have been developed with the MDBs for the CIF resources (but that have not yet been approved) should be prioritised for funding from the GCF.

The consolidation of these funds is a difficult undertaking, not least because each fund has its own system and legal personality. It would also be premature to close existing Funds before the GCF has funded its first round of programmes and demonstrated that it can deliver a vibrant portfolio of impactful programmes. Nevertheless, work to map the options and their implications is needed.

The disruptive effects of the experiment of setting up new funds in recent years have reshaped the climatefinance architecture. All actors in the architecture need to take steps to make the best of these different models: finding better ways to support national stakeholders and priorities; improving engagement with the private sector; offering flexible finance, and setting a high bar for programme implementation that reduces emissions and builds resilience to climate change.

¹⁵ The Governing Instrument of the CTF, for example, includes the following language: 'Following the date so specified in the Contribution Agreement, the Trustee, on behalf of each contributor, will endeavour to transfer the contributor's share to another fund, which has a similar objective as the CTF as determined by the CTF Trust Fund Committee, or otherwise transfer or return the share to such other place, as agreed between the contributor and the Trustee under the Contribution Agreement.'

References

Adaptation Fund (2014). Adaptation Fund website (www. adaptation-fund.org)

Adaptation Fund Board Secretariat (2011) Results Framework and Baseline Guidance. Washington, D.C.: Global Environment Facility.

Amazon Fund (2014) Amazon Fund website (http://www. amazonfund.gov.br/FundoAmazonia/fam/site_en/ Esquerdo/Projetos/)

Ballesteros, A., Nakhooda, S., Werksman, J., Hurlburt,K. (2010) Power, Responsibility, and Accountability:Re-Thinking the Legitimacy of Institutions for ClimateFinance. Washington, D.C.: World Resources Institute.

Barnard, S. and Nakhooda, S. (2014) The effectiveness of international climate finance: a review of the Scaling-up Renewable Energy in Low Income Countries Fund. London: Overseas Development Institute.

Barr, R., Fankhauser, S. and Hamilton, K. (2010)'Adaptation investments: a resource allocation framework'. Mitigation and Adaptation Strategies for Global Change, 15(8), pp. 843-858.

Bird, N. (2014) Fair Share: Climate Finance to Vulnerable Countries. London: Overseas Development Institute

Bloomberg New Energy Finance (2014) Global trends in renewable energy investment. Frankfurt: Frankfurt School, UNEP Collaborating Centre for Climate and Sustainable Energy Finance.

Bloomberg New Energy Finance (2012) Global trends in renewable energy investment. Frankfurt: Frankfurt School, UNEP Collaborating Centre for Climate and Sustainable Energy Finance.

Booth, D. (2011) Aid effectiveness: bringing country ownership (and politics) back in. ODI Working Paper 336. London: Overseas Development Institute.

Brown, J. and Jacobs, M. (2011) Leveraging private investment: the role of public sector climate finance. London: Overseas Development Institute.

Brown, J., Buchner, B., Wagner, G. and Sierra, K. (2011) Improving the effectiveness of climate finance: a survey of leveraging methodologies. London: Overseas Development Institute.

Buchner, B. K., Heller, T. C., Wilkinson, J. (2012a) Effective Green Financing: What have we learned so far? Venice: Climate Policy Initiative.

Buchner, B., Falconer, A., Trabacchi, C. and Wilkinson, J. (2012b) Public Climate Finance: A Survey of Systems to Monitor and Evaluate Climate Finance Effectiveness. Venice: Climate Policy Initiative.

Byrne, R., Schoots, K., de Coninck, H., Watson, J., Ockwell, D., Gallagher, K.S. and Sagar, A. (2012) Innovation Systems in Developing Countries. London: Climate Strategies.

Canales Trujillo, N., Nakhooda, S. and Barrett, S. (2014) The effectiveness of international climate finance: a review of the Pilot Program for Climate Reslience. London: Overseas Development Institute.

Canales Trujillo, N. and Nakhooda, S. (2013). The effectiveness of international climate finance: a review of the Adaptation Fund. London: Overseas Development Institute.

Clark, H. (2013) Speech at the High-Level Seminar on Addressing Climate Change in South-South Cooperation. 19 November 2013, COP19, Warsaw, Poland. (http://www.undp.org/content/undp/en/home/ presscenter/speeches/2013/11/19/helen-clark-speech-atthe-high-level-seminar-on-addressing-climate-change-insouth-south-co-operation-/)

Chaum, M., Faris, C., Wagner, G., Buchner, B., Falconer,A., Trabacchi C., Brown, J., Sierra, K. (2011) Improvingthe Effectiveness of Climate Finance: Key Lessons.Washington, D.C.: Brookings.

CIF (2014a) CIF website (www.climateinvestmentfunds.org)

CIF (2014b) SREP Semi Annual Operational Report, October 2014. Washington, D.C.: Climate Investment Funds.

CIF (2014c) Nepal Climate Change Program (CCP). Program Progress Report, August, 2014. Washington, D.C.: Climate Investment Funds.

CIF (2013a). CTF Semi-Annual Operating Report. (October, 2013). Washington D.C.: Climate Investment Funds.

CIF (2013b). PPCR Semi-Annual Operating Report. (April, 2013). Washington D.C.: Climate Investment Funds.

CIF (2012a) Strategic Programme for Climate Resilience, Bangladesh. Washington D.C.: Climate Investment Funds.

CIF (2012) Revised CTF Results Framework. Washington, D.C.: Climate Investment Funds.

CIF (2012) Revised SREP Results Framework. Washington, D.C.: Climate Investment Funds.

CIF (2012) Revised PPCR Results Framework. Washington, D.C.: Climate Investment Funds.

CIF (2010b). PPCR Zambia November 15-30, 2010 Mission Final Aide Memoire. Washington, D.C.: Climate Investment Funds.

CIF Evaluation Oversight Committee. (2014) Independent Evaluation of the Climate Investment Funds. Washington, D.C.: Climate Investment Funds.

CIF Evaluation Oversight Committee (2012) Independent Evaluation of the Climate Investment Funds Approach Paper. Washington, D.C.: Climate Investment Funds. Climate Funds Update website: www.climatefudnsupdate. org (reflecting data as of September 2014)

Climate Funds Update (2014) Climate Funds Update database (www.climatefundsupdate.org).

CPI (2013) The Global Landscape of Climate Finance 2013. San Francisco: Climate Policy Initiative.

De Nevers, M. (2013) Private Funding in Public-led Programs of the CTF : Early Experience. Washington, D.C.: Climate Investment Funds. DFID (2011) Multilateral Aid Review: Ensuring maximum value for money for UK aid through multilateral organisations. London: Department for International Development.

Diarra, G. (2011) 'Aid unpredictability and absorptive capacity: analyzing disbursement delays in Africa'. Economics Bulletin, 31(1), 1004–1017.

Dubosse, N. and Calland, R. (2011) Beyond the Jargon: The Governance of Climate Finance. Pretoria: Idasa.

EBRD (2013) EBRD and the GEF: Combining Capacity Building and Investment. London: European Bank for Reconstruction and Development.

Econoler (2013) Impact Assessment Report of Clean Technology Fund in Renewable Energy and Energy Efficiency Market in Turkey. Quebec: Econoler.

Ellis, J., Caruso, R. and Ockenden, S. (2013) Exploring climate finance effectiveness. Paris: Organisation for Economic Co-operation and Development.

EM-DAT (2014) The International Disaster Database. Center of Research on the Epidemiology of Disasters – CRED http://www.emdat.be/database

Falconer, A. and Frisari, G. (2012) San Giorgio Group Case Study : Ouarzazate I CSP. Venice: Climate Policy Initiative.

Fankhauser, S. and Burton, I. (2011) 'Spending adaptation money wisely'. Climate Policy, 11 (3), 1037-1049.

FAO (2010) Global Forest Resources Assessment 2010 (http://www.fao.org/forestry/fra/fra2010/en/). Rome: Food and Agriculture Organization.

MFSC (2013) Nepal Monitoring & Evaluation Framework for the REDD+ R-PP process. Kathmandu: Ministry of Forests and Soil Conservation, Government of Nepal.

FCPF Forest Carbon Partnership Facility (2013b) Annual Report

http://www.forestcarb2013, Washington, D.C.: The World Bank Group.onpartnership.org/sites/fcp/files/2013/ Dec2013/FCFP%20Annual%20Report_2013_0.pdf

Forstater, M., Nakhooda, S., Watson, C. (2013) The effectiveness of climate finance: A review of the Amazon Fund. London: Overseas Development Institute.

Frisari, G. and Falconer, A. (2013). San Giorgio Group Case Study : Ouarzazate I CSP Update. Venice: Climate Policy Initiative.

GEF (2014) GEF website (www.thegef.org)

GEF (2012) Request for CEO Endorsement for: Community Based Flood and Glacial Lake Outburst Risk. Washington, D.C.: Global Environmental Facility.

GEF EO (2010) 'GEF-5 Climate Change Mitigation Focal Area Strategic Framework'. Washington, D.C.: Global Environment Facility Secretariat. (http://www.thegef. org/gef/CC_mitigation_strategy)

GEF IEO (2014a) The Least Developed Countries Fund: Review of the implementation of NAPAs. Washington, D.C.: Global Environmental Facility - Independent Evaluation Office.

GEF IEO (2014) 5th Overall Performance Study of the GEF. Washington, D.C.: Global Environmental Facility -Independent Evaluation Office. GEF IEO (2013) Climate Change Mitigation Impact Evaluation: GEF Support to Market Change in China, India, Mexico and Russia. Washington, D.C.: GEF Independent Evaluation Office.b

Global Commission on the Economy and Climate (2014). Better Growth, Better Climate: The New Climate Economy Report. Stockholm: Global Commission on the Economy and Climate at the Stockholm Environment Institute. (Available at: http:// newclimateeconomy.net/)

Goodman, J. (2008) 'Brazil creates \$21 billion fund to slow Amazon deforestation', 1 August, Bloomberg. (http://www.bloomberg.com/apps/ news?pid=newsarchive&sid=ahDbiZfuCxZI)

GoE (2011) Ethiopia's Climate-Resilient Green Economy (CRGE). Addis Ababa, Ethiopia.

Gol/IBRD (2012) Project appraisal document: Super Energy Efficient Equipment Project (SEEP). Washington, D.C.: The World Bank Group.

GoN (2011). Climate Change Policy. Kathmandu: Government of Nepal.

GoN (2010) National Adaptation Program of Action (NAPA). Kathmandu: Government of Nepal.

Greenhill, R. and Prizzon, A. (2012) Who foots the bill after 2015? What new trends in development finance mean for the post-MDGs. London: Overseas Development Institute.

Halimanjaya, A. and Nakhooda, S. (2014) The effectiveness of international climate finance: a review of the Indonesia Climate Change Trust Fund. London: Overseas Development Institute.

High Level Advisory Group on Climate Change Financing (2010) Report of the Secretary-General's High Level Advisory Group on Climate Change Financing

http://www.un.org/wcm/webdav/site/climatechange/shared/ Documents/AGF_reports/AGF%20Report.pdf

Huhtala, A., Hoornweg, D., Benitex, P., Pandey, K.,Reichelt, H., Zelenko, I., Hussain, M., Ranade, M., AisaOtin, C. and Sander, K. (2010) Climate Finance in theUrban Context. Washington DC: The World Bank.

Hulova, D. (2012) Cashing in on climate change? Assessing whether private funds can be leveraged to help the poorest countries respond to climate challenges. Brussels: Eurodad.

IEG (2013) The World Bank Group's Partnership with the Global Environment Facility. Washington, D.C.: Independent Evaluation Group. (http://ieg. worldbankgroup.org/Data/reports/gef_vl1.pdf)

IPCC (2007) Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge: Cambridge University Press.

IPCC (1997) The Regional Impacts of Climate Change: An Assessment of Vulnerability. Cambridge: Cambridge University Press. IPCC WGI (2013) Climate Change 2013: The Physical Science Basis. Geneva: Intergovernmental Panel on Climate Change.

Jha, V. (2014) Institutional arrangements for coordinating climate finance in India. London: Overseas Development Institute.

Jones, L., Mitchell, T., Villanueva, P., Standley, S. (2012) Coding and tracking adaptation finance: lessons and opportunities for monitoring adaptation finance across international and national scales. London: Overseas Development Institute.

Kellet, J. and Caravani, A. (2013) Financing Disaster Risk Reduction: A 20 year story of international aid. London: Overseas Development Institute.

Lefevre, B. (2013) 'Qualitative testing and framework development'. Presentation: World Resources Institute, Research Collaborative, Work Stream 2, Part B – 13 November, 2013. (www.oecd.org/env/ researchcollaborative/WRI-COP19-SideEvent.pdf).

Levine, S., Ludi, E., Jones, L. (2011) Rethinking Support for Adaptive Capacity to Climate Change. London: Overseas Development Institute.

Milner, H.V. and Tingley, D. (2012) 'The choice for multilateralism: Foreign aid and American foreign policy'. The Review of International Organizations 8(3): 313-341.

GOB (2009) Bangladesh Climate Change Strategy and Action Plan 2009. Ministry of Environment and Forests, Government of Bangladesh http://www.moef.gov.bd/ climate_change_strategy2009.pdf

MOFED (2010) Ethiopia's Growth and Transformation Plan (GTP), 2011/12-2014/15. Addis Ababa, Ethiopia: Ministry of Finance and Economic Development.

Montmasson-Clair, G. (2013) Tracking Climate Finance Inflows to South Africa. OECD discussion document prepared for the Climate Change Expert Group Global Forum. Paris: Organisation for Economic Co-operation and Development. (Available at: http://www.oecd. org/env/cc/Tracking%20climate%20finance%20 inflows%20to%20South%20Africa.pdf)

Naidoo, C. (2014) An evaluation of the clean technology fund loan in promoting the acceleration of clean technologies in South Africa. MPhil thesis, April 2014. Stellenbosch: Stellenbosch University.

Nakhooda, S. (2013) The effectiveness of international climate finance. London: Overseas Development Institute.

Nakhooda, S. (2010) The Clean Technology Fund: insights for development and climate finance. Washington, D.C.: World Resources Institute.

Nakhooda, S. and Amin, A. (2013) The effectiveness of climate finance: a review of the Clean Technology Fund. London: Overseas Development Institute.

Nakhooda, S. and Forstater, M. (2013) The effectiveness of international climate finance: a review of the Global Environment Facility. London: Overseas Development Institute.

Nakhooda, S., Fransen, T., Kuramochi, T., Caravani, A., Prizzon, A., Shimizu, N., Tilley, H., Halimanjaya, A. and Welham, B. (2013) Mobilising international climate finance: lessons from the fast-start finance period. London: Overseas Development Institute.

Nakhooda, S. and Jha, V. (2014) Getting it together: institutional arrangements for coordination and stakeholder engagement in climate finance. London: Overseas Development Institute.

Nakhooda, S. and Tirpak, D. (2010) 'WRI comments on the Indonesia CTF Investment Plan'. Washington, D.C.: World Resources Institute.

ND-GAIN (2011) University of Notre Dame Global Adaptation Index (http://index.gain.org/ranking/vulnerability).

Norman, M. and Nakhooda, S. (2014) The State of REDD+ Finance. Washington, DC: Center for Global Development.

ODI and HBF (2014) Ten things to know about climate finance in 2013. London: Overseas Development Institute and Heinrich Böll Foundation. (http://visual. ly/10-things-know-about-climate-finance)

OECD (2012b). Development Perspectives for a Post-2012 Climate Financing Architecture. Paris: OECD.

OECD (2003) Development and Climate Change in Nepal: Focus on Water Resources and Hydropower. Paris: Organisation for Economic Co-operation and Development.

OECD/DAC Database: http://www.oecd.org/dac/stats/ idsonline.htm

ODI (2014) Understanding the effectiveness of international climate funds. London: Overseas Development Institute.

Polycarp, C., Brown, L.H. and Fu-Bertaux, X. (2013)
Mobilizing Climate Investment: The Role of
International Climate Finance in Creating Readiness
for Scaled-Up, Low-Carbon Energy. Washington, D.C.:
World Resources Institute.

Porter, G., Bird, N., Kaur, N., and Peskett, L. (2008) New Finance for Climate Change and the Environment. Washington DC: WWF and Heinrich Böll Stiftung.

Radner, J. (2010) Looking Ahead for Lessons in the Climate Investment Funds a Report on Emerging Themes for Learning. Washington, D.C.: CIF Partnership Forum 2010.

Rai, N. (2013a) Climate Investment Funds: understanding the PPCR in Bangladesh and Nepal. London: International Institute for Environment and Development.

Rai, N. (2013b). How PPCR supports 'mainstreaming climate resilience' in developing countries. London: International Institute for Environment and Development.

Rai, N., Kaur, N., Fikreyesus, D. and Kallore, M.E. (2013)
Climate Investment Funds – Scaling up Renewable
Energy Program (SREP) in Ethiopia – a status review.
September 2013. London: International Institute for
Environment and Development.

Shepherd, A., Mitchell, T., Lewis, K., Lenhardt, A., Jones, L., Scott, L. and Muir-Woods, R. (2013) The geography of poverty, disasters and climate extremes in 2030. London: Overseas Development Institute.

Siegel, J. R., and Strong, A. (2011) 'Harnessing Energy-Technology Innovation in Developing Countries to Achieve Sustainable Prosperity. Background Paper'. World Economic and Social Survey 2011, pp. 1–37.

Sierra, K. (2011) The Green Climate Fund: options for mobilizing the private sector. London: Climate and Development Knowledge Network.

Sierra, K., Roberts, T., de Nevers, M., Langley, C., Smith, C. (2013) First Steps Toward a Quality of Climate Finance Scorecard (QUODA-CF): Creating a Comparative Index to Assess International Climate Finance Contributions. Washington, D.C.: Brookings Institute.

Steer, A. and Mason, J. (1995) 'The Role of Multilateral Finance and the Environment: A View from the World Bank'. Indiana Journal of Global Legal Studies 3(1): 35-45.

Trabacchi, C. and Stadelmann, M. (2013) Making Adaptation a Private Sector Business: Insights from the Pilot Program for Climate Resilience in Nepal. Venice: Climate Policy Initiative.

UNEP (2014) The Emissions Gap Report 2014: A UNEP Synthesis Report. Nairobi: UNEP.

UNFCCC (2014, forthcoming) 2014 biennial assessment and overview of climate finance flows. Bonn: United Nations Framework Convention on Climate Change.

UNFCCC (2013) Report of the Global Environment Facility on the progress made in carrying out the Poznan strategic programme on technology transfer. Bonn: United Nations Framework Convention on Climate Change.

UNFCCC (2012) Report on the workshops of the work programme on long-term finance. Bonn: United Nations Framework Convention on Climate Change.

UNFCCC (2007) CP.13 Fourth review of the financial mechanism. Bonn: United Nations Framework Convention on Climate Change.

UNFCCC (1998) Decision 3/CP.4 Review of the financial mechanism. Bonn: United Nations Framework Convention on Climate Change.

Vandeweerd, V. Glemarec, Y. and Billet, S. (2012). Readiness for climate finance: a framework for understanding what it means to be ready to use climate finance. New York: United Nations Development Programme

Watson, C., Nakhooda, S., Caravani, A., Schalatek, L. (2012)The practical challenges of monitoring climate finance:Insights from Climate Funds Update. London: OverseasDevelopment Institute and, ODI/ Heinrich Böll Foundation.

Whitley, S., Chiofalo E. and Barnard S. (2014) The role of multilateral climate funds in mobilising private investment: A review of the CTF, GEF, SREP, PPCR and GEEREF. London: Overseas Development Institute.

World Bank (2014) World Bank Open Data website. (http://data.worldbank.org/)

World Bank (2013) Financing for Development Post-2015. Washington, D.C.: The World Bank Group.

World Bank (2012) Project Appraisal Document - Super Energy Efficient Project. https:// www.climateinvestmentfunds.org/cif/sites/ climateinvestmentfunds.org/files/SEEP%20PAD_CTF.pdf

WRI (2011) CAIT 2.0: WRI's climate data explorer (http://cait2. wri.org/wri). Washington, D.C.: World Resources Institute.

Zewdu, E., Simane, B., Tebeje, G., Negatu, W., Amsalu, A., Berhanu, A., Bird, N., Welham, B. and Canales Trujillo, N. (2014). Climate Finance in Ethiopia. London: Overseas Development Institute.



Annex 1: Global ranking of climate finance

Annex I presents the first comprehensive rank of the 135 countries receiving multilateral climate finance in the last decade. It shows that Morocco, Mexico, Brazil, South Africa and India are the top beneficiaries, each receiving over half a billion dollars, largely as loans. The pool of funds available for climate change adaptation is smaller: Bangladesh, Nepal and Niger have been the most successful low-income countries, each receiving more than \$110 million to invest in early warning systems and other resilience enhancing activities.

While multilateral climate funds have supported activities in over 135 countries to date, finance has been fairly concentrated among the top recipients, with 50% of the \$7.6 billion approved in 10 countries, and 70% of funding supporting 20 countries. The remaining 30% of approved finance supports both climate mitigation and adaptation activities in more than 115 recipient countries and therefore, some countries have been left behind. Fragile states such as the Ivory Coast and South Sudan, gained much smaller sums - \$350,000 and \$700,000 - respectively, reflecting the difficulty of spending funds in these environments. Several middle income countries, highly vulnerable to the impacts of climate change, such as Namibia, El Salvador and Guatemala also received much smaller volumes of finance, less than \$5 million. Saudi Arabia and Oman, with high per capita incomes, have benefited least from climate funds: indeed Saudi Arabia is at the bottom of ODI's ranking.

Climate Finance Approved Rank	Country*	Countries by Income	Climate Finance Approved (USD mn)	Financial Instrument	Mitigation Finance Approved (USD mn)	Total GHG Emissions Rank (WRI CAIT - 2011)	Adaptation Finance Approved (USD mn)	Vulnerability Rank (ND Gain 2013)
1	Morocco	Lower - Middle	606.96	Grant (4%) Concessional loan (96%)	587.64	65	17.05	90
2	Mexico	Upper - Middle	591.11	Grant (12%) Concessional loan (88%)	582.65	10	4.50	133
3	Brazil	Upper - Middle	533.46	Grant (94%) Concessional loan (6%)	525.93	6		155
4	South Africa	Upper - Middle	466.47	Grant (5%) Concessional loan (95%)	457.92	19	3.54	130
5	India	Lower - Middle	463.69	Grant (20%) Concessional loan (75%) Guarantee (5%)	444.86	3	9.82	65
6	Indonesia	Lower - Middle	364.92	Grant (11%) Concessional loan (89%)	352.81	5	7.61	93
7	Turkey	Upper - Middle	301.36	Grant (4%) Concessional loan (96%)	301.01	23		140
8	Ukraine	Lower - Middle	292.35	Grant (6%) Concessional loan (94%)	292.35	24		131
9	Philip- pines	Lower - Middle	217.47	Grant (9%) Concessional loan (70%) Guarantee (21%)	211.45	49	6.02	85

Climate Finance Approved Rank	Country*	Countries by Income	Climate Finance Approved (USD mn)	Financial Instrument	Mitigation Finance Approved (USD mn)	Total GHG Emissions Rank (WRI CAIT - 2011)	Adaptation Finance Approved (USD mn)	Vulnerability Rank (ND Gain 2013)
10	Thailand	Upper - Middle	181.33	Grant (8%) Concessional loan (92%)	179.41	25	0.87	111
11	Chile	High	172.51	Grant (7%) Concessional loan (93%)	170.01	64	2.50	157
12	Egypt	Lower - Middle	168.75	Grant (17%) Concessional loan (83%)	150.04	31	18.71	106
13	China	Upper - Middle	133.75	Grant	121.47	1	5.00	153
14	Kazakh- stan	Upper - Middle	133.73	Grant (12%) Concessional loan (88%)	132.88	30		151
15	Nepal	Low	132.21	Grant (69%) Concessional loan (31%)	45.96	97	86.25	50
16	Bangla- desh	Low	129.34	Grant (61%) Concessional loan (39%)	8.71	45	120.18	38
17	Niger	Low	117.40	Grant (57%) Concessional loan (43%)		123	117.40	4
18	Vietnam	Lower - Middle	109.25	Grant (20%) Concessional loan (80%)	100.93	33	7.97	64
19	Colombia	Upper - Middle	103.63	Grant (80%) Concessional loan (20%)	88.54	37	12.74	138
20	Mozam- bique	Low	99.89	Grant (74%) Concessional loan (26%)	3.80	79	96.09	36
21	Zambia	Lower - Middle	94.24	Grant (81%) Concessional loan (19%)		52	94.24	45
22	Cambo- dia	Low	91.72	Grant (74%) Concessional loan (26%)	5.10	89	86.62	42
23	Demo- cratic Republic of Congo	Low	90.64	Grant	72.03	29	18.61	20
24	Tajikistan Russian	Low	74.64	Grant (80%) Concessional loan (20%)		136	74.64	79
25	Federa- tion	High	58.25	Grant	58.25	4		175
26	Samoa	Lower - Middle	58.02	Grant		173	58.02	
27	Burkina Faso	Low	48.16	Grant	30.25	103	17.91	19
28	Bolivia	Lower - Middle	47.50	Grant (24%) Concessional loan (76%)	00.20	48	47.50	102
20 29	Ethiopia	Low	46.90	Grant	35.49	47	11.41	34
30	Maldives	Upper - Middle	43.27	Grant	28.18	165	15.09	

Climate Finance Approved Rank	Country*	Countries by Income	Climate Finance Approved (USD mn)	Financial Instrument	Mitigation Finance Approved (USD mn)	Total GHG Emissions Rank (WRI CAIT - 2011)	Adaptation Finance Approved (USD mn)	Vulnerability Rank (ND Gain 2013)
31	Yemen	Lower - Middle	41.27	Grant	0.30	108	40.12	16
32	Lao PDR	Lower - Middle	40.93	Grant	21.38	94	19.55	37
33	Honduras	Lower - Middle	38.67	Grant (48%) Concessional loan (52%)	29.20	91	8.62	61
34	Nigeria	Lower - Middle	33.94	Grant (26%) Concessional loan (74%)	32.09	16		51
35	Kenya	Low	33.67	Grant (78%) Concessional loan (22%)	27.17	81	6.50	33
36	Mali	Low	31.20	Grant	17.76	102	12.94	7
37	Jamaica	Upper - Middle	30.47	Grant (67%) Concessional loan (33%)	1.25	132	28.37	87
38	Sudan	Lower - Middle	29.62	Grant	7.91	42	21.71	11
39	St Lucia	Upper - Middle	28.31	Grant (47%) Concessional loan (53%)	1.00	167	27.31	113
40	Rwanda	Low	27.65	Grant		153	27.65	13
41	Gambia	Low	26.14	Grant	1.82	146	24.32	17
42	Madagas- car	Low	25.65	Grant	2.86	70	22.79	21
43	Djibouti	Lower - Middle	25.64	Grant	6.04	161	19.60	26
44	Maurita- nia	Lower - Middle	24.57	Grant	1.27	138	22.95	18
45	Timor Leste	Lower - Middle	24.35	Grant	1.74		21.61	24
46	Malawi	Low	24.21	Grant	1.73	119	22.48	31
47	Senegal	Lower - Middle	24.15	Grant		110	24.15	39
48	Angola	Upper - Middle	23.62	Grant	4.62	32	19.00	41
49	Argentina	Upper - Middle	23.30	Grant	13.06	21	9.94	137
50	Dominica	Upper - Middle	23.04	Grant (61%) Concessional loan (39%)	1.73	174	21.31	97
51	Benin	Low	22.85	Grant		109	22.50	14
52	Afghani- stan	Low	22.84	Grant	1.74	115	21.10	10
53	Myanmar	Low	21.83	Grant	2.73	34	19.10	47

Climate Finance Approved Rank	Country*	Countries by Income	Climate Finance Approved (USD mn)	Financial Instrument	Mitigation Finance Approved (USD mn)	Total GHG Emissions Rank (WRI CAIT - 2011)	Adaptation Finance Approved (USD mn)	Vulnerability Rank (ND Gain 2013)
54	Lesotho	Lower - Middle	21.61	Grant	3.50	159	18.11	28
55	Solomon Islands	Lower - Middle	21.05	Grant	1.16	160	19.89	2
56 57	Tonga Uganda	Upper - Middle Low	20.20 19.16	Grant Grant	3.77	172 93	20.20 15.39	48 15
58	Tanzania	Low	18.59	Grant	5.28	44	13.31	40
59 60	Ghana Comoros	Lower - Middle Low	18.42 17.73	Grant Grant	13.85	77 169	4.22 17.73	55 49
61	Guinea	Low	17.54	Grant	2.65	101	14.89	29
62	Liberia	Low	17.27	Grant	5.05	125	12.21	6
63	St Vin- cent & Grena- dine	Upper - Middle Upper -	17.00	Grant (82%) Concessional loan (18%)	1.73	176	15.27	70
64	Lebanon	Middle	16.78	Grant	1.45	120	15.01	73
65	Grenada	Upper - Middle	16.47	Grant (50%) Concessional loan (50%)		162	16.47	89
66	Nicara- gua	Lower - Middle	15.80	Grant	3.80	92	11.50	82
67	Sierra Leone	Low	15.55	Grant	1.77	133	13.78	9
68	Bhutan	Lower - Middle	15.13	Grant		183	15.13	44
69	Haiti	Low	14.88	Grant		141	14.88	30
70	Togo	Low	14.84	Grant		126	14.49	27
71	Belize	Upper - Middle	14.00	Grant		129	14.00	78
72	Ecuador	Upper - Middle	13.99	Grant	2.69	50	10.45	107
73	Pakistan	Lower - Middle	13.71	Grant	6.50	27	7.21	67
74	Uruguay	High	13.68	Grant	3.39	127	9.97	129
75	Sao Tome and Principe	Lower - Middle	13.51	Grant		175	13.51	52
76	Sri Lanka	Lower - Middle	12.90	Grant	1.79	88	11.11	94
77	Guyana	Lower - Middle	12.60	Grant	8.80	143	3.80	46

Climate Finance Approved Rank	Country*	Countries by Income	Climate Finance Approved (USD mn)	Financial Instrument	Mitigation Finance Approved (USD mn)	Total GHG Emissions Rank (WRI CAIT - 2011)	Adaptation Finance Approved (USD mn)	Vulnerability Rank (ND Gain 2013)
78	Georgia	Lower - Middle	12.32	Grant	0.85	137	10.62	75
79 80	Malaysia Burundi	Upper - Middle Low	12.20 12.00	Grant Grant	11.34	20 98	12.00	150 3
81	Vanuatu	Low Lower - Middle	12.00	Grant	0.45	170	12.00	25
82	Costa Rica	Upper - Middle	10.89	Grant	5.54	144	5.00	116
83	Mauritius	Upper - Middle	10.57	Grant	1.45	147	9.12	92
84	Peru	Upper - Middle	10.48	Grant	10.13	46		110
85	Central African Republic	Low	10.32	Grant	0.20	61	10.12	32
86	Mongolia	Lower - Middle	10.31	Grant	2.96	83	7.00	105
87	Came- roon	Lower - Middle	9.63	Grant	5.60	40	4.03	56
88	Tunisia	Upper - Middle	9.56	Grant	3.55	107	5.60	103
89	Guate- mala	Lower - Middle	9.03	Grant	3.60	87	5.43	62
90	Cuba	Upper - Middle	8.81	Grant	2.74	96	6.07	98
91 92	Seychelles Somalia	Upper - Middle Low	8.23 8.20	Grant Grant	1.77	166	6.46 8.20	152 1
93	Chad	Low	8.18	Grant	0.67	84	7.51	5
94	Papua New Guinea	Lower - Middle	7.68	Grant		63	7.68	12
95	Kiribati	Lower - Middle	7.65	Grant		179	7.65	
96	Tuvalu	Upper - Middle	7.40	Grant			7.40	
97	Algeria	Upper - Middle	6.81	Grant	6.81	43		112
98	Eritrea	Low	6.72	Grant		149	6.72	8
99	Azerbai- jan	Upper - Middle	6.59	Grant	3.57	75	2.70	86

Climate Finance Approved Rank	Country*	Countries by Income	Climate Finance Approved (USD mn)	Financial Instrument	Mitigation Finance Approved (USD mn)	Total GHG Emissions Rank (WRI CAIT - 2011)	Adaptation Finance Approved (USD mn)	Vulnerability Rank (ND Gain 2013)
100	Belarus	Upper - Middle	6.44	Grant	6.14	57		128
101	Moldova	Lower - Middle	6.41	Grant	1.30	135	4.26	68
102	Serbia	Upper - Middle	6.00	Grant	5.15	184		99
103	Guin- ea-Bissau	Low	5.94	Grant	1.74	152	4.20	22
104	Bosnia & Herzego- vina	Upper - Middle	5.85	Grant		105	5.00	117
105	Republic of Congo	Lower - Middle	5.54	Grant	5.54	121		35
106	Uzbeki- stan	Lower - Middle	5.42	Grant		36	5.42	119
107	Cook Islands	N/A	5.38	Grant		178	5.38	
108	Cape Verde	Lower - Middle	5.12	Grant	1.92	168	3.20	60
109	Antigua And Bar- buda	High	5.00	Grant		164	5.00	126
110	Kyr- gyzstan	Lower - Middle	5.00	Grant		182	5.00	108
111	Zimba- bwe	Low	4.96	Grant		78	4.96	59
112	Venezuela	Upper - Middle	4.66	Grant	4.66	22		143
113	El Salva- dor	Lower - Middle	4.65	Grant	3.80	130		63
114	Suriname	Upper - Middle	4.60	Grant	4.60	139		122
115	Equatori- al Guinea	High	3.70	Grant	3.50	114	0.20	84
116	Montene- gro	Upper - Middle	3.44	Grant	3.09	154		58
117	Namibia	Upper - Middle	3.40	Grant		118	3.05	54
118	Paraguay	Lower - Middle	3.05	Grant	2.20	56		120
119	Turkmen- istan	Upper - Middle	2.93	Grant		58	2.93	76
120	Albania	Upper - Middle	2.83	Grant	0.93	148	1.90	69

Climate Finance Approved Rank	Country*	Countries by Income	Climate Finance Approved (USD mn)	Financial Instrument	Mitigation Finance Approved (USD mn)	Total GHG Emissions Rank (WRI CAIT - 2011)	Adaptation Finance Approved (USD mn)	Vulnerability Rank (ND Gain 2013)
121	Armenia	Lower - Middle	2.80	Grant	2.45	140		91
122	Botswana Trinidad	Upper - Middle	2.63	Grant	2.63	124		71
123	& Toba- go	High	2.55	Grant	2.55	95		115
124	Iraq	Upper - Middle	2.23	Grant	2.23	11		57
125	Jordan	Upper - Middle	2.00	Grant		116	2.00	80
126	Panama	Upper - Middle	1.93	Grant	1.93	122		109
127	Barbados	High	1.73	Grant		155		160
128	Macedo- nia	Upper - Middle	1.72	Grant	1.40	131		114
129	Swazi- land	Lower - Middle	1.67	Grant		157	1.67	23
130	Domin- ican Republic	Upper - Middle	1.30	Grant	1.30	104		72
131	Kuwait	High	0.85	Grant		41		77
132	Oman	High	0.85	Grant		62		134
133	South Sudan	Lower - Middle	0.70	Grant	0.50		0.20	
134	Cote d'Ivoire	Lower - Middle	0.35	Grant		76		43
135	Saudi Arabia	High	0.35	Grant		15		118



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