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Harnessing the Power Shift

Governance options for international climate financing

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Contents

Abstract

The governance of finance is a major stumbling block to securing international co-operation on climate change. Debates are underway on raising resources, institutional channels, and final uses. This paper asks: how would different governance priorities affect the institutional arrangements for a credible financing mechanism in the climate regime? It recognises that there is a power shift in the climate regime with large developing countries becoming major investors in clean technologies and also exercising greater influence in negotiations. How to harness the power shifts while balancing the varied financial imperatives? The paper identifies six channels of climate finance and, within them, many separate funds. It explores the needs and priorities of different stakeholders. It then offers a common governance framework focused on four functions: making decisions, securing commitments, ensuring disbursements, and monitoring performance. Thirty-three funds are analysed along each function and several embedded criteria. The paper argues that the design of a finance mechanism will depend on which governance criteria receive greater priority. It ends by outlining four schematic institutional design options. None of the options is perfect, but each offers some gains to all parties.

List of acronyms

AAUs	Assigned Amount Units
ADB	Asian Development Bank
AfDB	African Development Bank
AMCs	Advance Market Commitments
AOSIS	Alliance of Small Island States
BASIC	Brazil, South Africa, India, China
BioCF	Bio-Carbon Fund (Tranche 1 – BioCF-1; Tranche 2 – BioCF-2)
BMU	German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
BNDES	Brazilian Development Bank
CBFF	Congo Basin Forest Fund
CCS	Carbon capture and storage
CCX	Chicago Climate Exchange
CDCF	Community Development Carbon Fund
CDM	Clean Development Mechanism
CenPEEP	Centre for Power Efficiency and Environmental Protection
CEP	Cool Earth Partnership
CERs	Certified Emissions Reductions
CFE	Carbon Fund for Europe
CIFs	Climate Investment Funds
COP	Conference of the Parties
CPF	Carbon Partnership Facility

CTF	Clean Technology Fund
CTIP	Climate Technology Implementation Plan
CTP	Climate Technology Partnership
DCC	Department of Climate Change (Australia)
DCF	Danish Carbon Fund
EBRD	European Bank for Reconstruction and Development
EIB	European Investment Bank
ETF-IW	Environmental Transformation Fund – International Window
EU-ETS	European Union Emissions Trading Scheme
FA	Fundo Amazônia
FAO	(United Nations) Food and Agriculture Organization
FCPF	Forest Carbon Partnership Facility
FIP	Forest Investment Program
GAFSP	World Banks Trust Fund for the Global Agricultural and Food Security Programme
GCCA	Global Climate Change Alliance
GCF	Copenhagen Green Climate Fund
GEEREF	Global Energy Efficiency and Renewable Energy Fund
GEF-TF	Global Environment Facility Trust Fund – Climate Change Focal Area
GHG	Greenhouse gas
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
HI	Hatoyama Initiative
ICF	Italian Carbon Fund
ICI	International Climate Initiative

IDB	Inter-American Development Bank
IEA	International Energy Agency
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IFCI	International Forest Carbon Initiative
IFFIm	International Finance Facility for Immunisation
IMF	International Monetary Fund
JBIC	Japan Bank for International Cooperation
JI	Joint Implementation
JICA	Japanese International Cooperation Agency
KfW	Kreditanstalt für Wiederaufbau (Reconstruction Credit Institute)
KPAF	Kyoto Protocol Adaptation Fund
LDC	Least developed country
LDCF	Least Developed Countries Fund
LULUCF	Land use, land-use change, and forestry
MDB	Multilateral development bank
MDGF	MDG Achievement Fund – Environment and Climate Change Thematic Window
MDTF	Multi-donor trust fund
MRV	Measurement, reporting, and verification
NAMAs	Nationally appropriate mitigation actions
NAPAs	National Adaptation Plans of Action
NCDMF	Netherlands CDM Facility

NECF	Netherlands European Carbon Facility
NEDO	New Energy and Industrial Technology Development Organisation (Japan)
NEXI	Nippon Export and Investment Insurance (Japan)
NSWGGRS	New South Wales Greenhouse Gas Reduction Scheme
NZEC	Near Zero Emissions Coal Initiative
ODA	Overseas development assistance
ODS	Ozone depleting substances
OECD	Organisation for Economic Co-operation and Development
OECD-DAC	Organisation for Economic Co-operation and Development – Development Assistance Committee
PCF	Prototype Carbon Fund
PPCR	Pilot Program for Climate Resilience
RGGI	Regional Greenhouse Gas Initiative
SCCF	Special Climate Change Fund
SCF	Strategic Climate Fund
SDRs	Special Drawing Rights
SIDS	Small Island Developing States
SpCF	Spanish Carbon Fund (Tranche 1 – SpCF-1; Tranche 2 – SpCF-2)
SPA	Strategic Priority on Adaptation
SREP	Scaling-Up Renewable Energy Program for Low Income Countries
TCAPP	US Technology Cooperation Agreement Pilot Program
UCF	Umbrella Carbon Fund
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme

UNFCCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UN-REDD	UN Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries
WHO	World Health Organization
WTO	World Trade Organization

Introduction

Securing a credible pool of climate finance is one of the lynchpins for successful negotiations in the climate regime. Several initiatives are already underway and more are being planned. However, existing mechanisms have failed to deliver the level of funding required for the task, even as developing countries have clearly expressed dissatisfaction with the governance of climate finance. The Copenhagen climate summit in December 2009 offered new promises, yet there is little clarity on how additional funds will be raised, the channels through which they will be disbursed, or the options for institutional design for the Copenhagen Green Climate Fund. This paper asks: how would different governance priorities affect the institutional arrangements for a credible financing mechanism in the climate regime?

Why focus on governance priorities? Debates about climate finance tend to proceed on multiple tracks. At one level are discussions about the scale of funding needed and alternative ways of generating the sums. Familiar splits between developed and developing countries are evident on this question. The former tend to rely on the use of market mechanisms to stimulate investments in cleaner technologies that can reduce emissions of greenhouse gases (GHGs) or more efficient ways of sequestering the gases generated in various sectors of the economy. The latter tend to focus on securing legal commitments under the United Nations Framework Convention on Climate Change (UNFCCC), demanding that much of the money ought to come through a predictable transfer of resources from rich to poor countries via public financing channels. The question is not necessarily one of choosing one or the other source, but rather how funds raised through multiple sources could be governed as part of an international regime.

A second set of debates centres on the issue of institutional channels for climate financing. Existing funding mechanisms span a wide array of institutions: multilateral development banks (MDBs), UN agencies, bilateral donor agencies, private firms, public-private investment vehicles, and various government initiatives that support investments. Each of these has different, although at times overlapping, governance arrangements. But they do not, as yet, fall under a common financing mechanism. The resulting milieu adds to the lack of transparency in tracking financial flows and undermines trust in climate negotiations. Once again, actors' priorities differ depending on which institution's governance they trust more and/or control more.

Thirdly, a financing mechanism under the climate regime is expected to channel funds for different purposes: mitigation activities focused on cleaner technologies, renewable energy, energy efficiency, transport systems, building materials, etc.; other mitigation activities concerned primarily with preventing deforestation or promoting afforestation; and adaptation to climate change, which could range from specific activities such as building flood barriers to more diffuse actions to build climate resilience across other sectors (including health care and education).

Perhaps the most important reason, however, for studying governance questions is that priorities change with shifting power dynamics. The climate regime now plays host to rich countries, large developing economies, and smaller, poorer nations. A credible financing mechanism means different things to different actors. For poor countries, it means financial resources of sufficient scale, available for both adaptation and mitigation, and delivered on a predictable basis. For large, emerging economies, it would mean not only access to new and additional funding but also greater control over its allocation. For rich countries, a financial mechanism would not be credible unless the deployment of funds is followed up with vigorous monitoring and evaluation to ensure that the funds are being used for their intended purposes. These are, of course, simplifications of the positions adopted by countries in climate negotiations. But they

signal the need to pay attention to the different governance functions that any climate finance mechanism would need to perform.

What kind of governance architecture would promote these varied objectives and priorities on so many different fronts? Is it even possible within a single mechanism? How can the power shifts be harnessed in a way that holds the climate regime together rather than fragments it into exclusive groups of powerful actors?

Climate negotiations will have to pay attention to all governance aspects. In order to have that discussion, a common framework is needed to identify and analyse governance priorities, evaluate the trade-offs that emerge in pursuing contradictory objectives, and then assess their implications for the design of a financing mechanism. That is the purpose of this paper.

The paper is structured as follows. Part 1 sets out the context for the debates on climate finance. It outlines the demands of scale, additionality, adaptation, mitigation, and technology development. It then explores how the economic crisis has put pressure on climate finance. It also argues that, despite the crisis, there is a noticeable power shift towards large developing countries in terms of their investments in clean technologies and their growing influence in climate negotiations. The purpose of Part 2 is to chart the landscape of climate finance mechanisms. It identifies six channels and, within them, many separate funds. It then explores the needs and priorities of different stakeholders. Based on this analysis, a governance framework is presented. This framework – with four component functions (making decisions, securing commitments, ensuring disbursements, and monitoring performance) – is used in Part 3 to evaluate 33 existing funds. Finally, Part 4 draws on lessons from financing mechanisms in other regimes before presenting four options for institutional design of a climate financing mechanism.

This paper does not claim to present a single solution as a panacea to the wide range of concerns articulated by different states. Instead, it argues that the design choice would depend on negotiators' decisions regarding the ranking of different governance priorities. This approach would force policy-makers to explicitly confront the trade-offs between different institutional design options, rather than persist in the quest for an overarching mechanism that promises everything to all parties, but fails to deliver in practice.

1. Crisis and coalitions: new drivers of a power shift?

What are the different issues that set the context for debates on climate finance? The first is that the scale of funding required is vastly greater than what the existing climate regime or other international environmental agreements have been able to generate so far.[1] The estimated funding requirements vary both for mitigation and adaptation spending and depending on the time scale under consideration (see Table 1). That said, the numbers are much higher than commitments under other regimes or disbursements under the current climate regime. The Copenhagen Accord, to which more than 130 countries have 'associated' themselves, promises 'new and additional resources' of $30bn for 2010–12 and aspires to a goal of $100bn a year by 2020.[2] While sizeable, this promise falls short of the estimates. Thus, a mechanism for climate finance will have to deliver funds that are not yet even an aspiration for climate negotiators.

Table 1: Estimates of annual financing required by developing countries ($ billion)

	Mitigation	Year	Adaptation	Year
African Group (2009)	200	2020	>67	2020
EC (2009)	94	2020	10–24	2020
McKinsey	175	2030		
Oxfam (2007)			50	
Project Catalyst (2009)			26–77	2030
Stern Review (2007)			4–37	Present
The Climate Group	~ 100	2030		
UNDP (2007)	25–50	Present	86	2015
UNFCCC (2008)	>65	2030	28–59	2030
World Bank (2009a)	139–175	2030	20–100	2030

Source: Author's compilation; also Moncel, McMahon, and Stasio (2009)

Secondly, funding is needed for both mitigation and adaptation. The less effort is taken to mitigate the emission of GHGs into the atmosphere, the more will have to be spent on adaptation activities due to the adverse consequences of climate change. The problem is that the burden of adaptation is expected to fall on countries that are not the primary sources of GHG emissions. The mechanism of climate finance has to take into account the possibility that, even with funding being made available for mitigation, the requisite actions might not be sufficient. In that situation, the burden of adaptation funding cannot fall disproportionately on the poorest countries.

A related third issue is additionality. On one hand, additional resources are promised under various provisions of the current climate regime: Article 4.3 of the UNFCCC; Article 11.2 of the Kyoto Protocol; paragraph 1(e) of the Bali Action Plan; and paragraph 8 of the Copenhagen Accord. But the question is, how will the funds be counted? If public resources leverage private

[1] According to www.climatefundsupdate.org less than $27 billion has been pledged, and $9 billion deposited since 2000.

[2] Copenhagen Accord, 18 December 2009, para. 8.

funding, will all of the private finances be considered towards assessing compliance by rich countries? Similarly, should transactions in the carbon market – say, the Clean Development Mechanism (CDM) – be included even though they are payments in lieu of mitigation actions in rich countries, rather than resources for additional reductions in poor nations? Further, the question of additional funding is particularly salient for adaptation funding. Developing countries have a legitimate concern that funds intended for development assistance will be reclassified as adaptation expenditure. Ascertaining that funding for adaptation is additional to existing ODA will be hard to prove credibly. And the quest for additionality further complicates matters when existing ODA flows are under stress thanks to the economic crisis and budget cuts in rich countries.

Fourthly, funds for mitigation activities are needed for deploying existing technologies as well as for developing new ones. According to one study, existing technologies, if deployed to their fullest efficiency, could reduce global carbon emissions by 5–10 gigatonnes (Gt) by 2030.[3] Developing low-carbon technologies that are likely to be commercially viable (solar and wind power, carbon capture and storage, and second-generation biofuels) can reduce emissions by another 10Gt. Finally, breakthrough technologies for zero-emission transport and power supply will need investments in an environment of great uncertainty. In other words, the vision is of a complete overhaul of national economic structures. High uncertainty brings with it high risk. The ability of countries and the resilience of economic entities to promote and endure such structural changes will depend on the finances and technical capacities available. Where these facilities are deficient, or are devoted to other pressing needs, the imperative of financing for technology transfer will also be great. In its absence there is the risk that, in pursuing an environmental goal by developing technologies for high-emissions countries, other countries will end up at the wrong end of a new technological divide.

Economic crisis puts pressure on climate finance

A fifth issue is the impact of market uncertainty on available funding. That a large proportion of the financing needed to meet the climate change challenge has to come from the private sector is widely recognised.[4] Existing mechanisms, like the CDM and region-specific emissions trading markets, already seek to leverage the market. The idea is that with an appropriate price on carbon, relative to the price of fossil-fuel sources, investors will begin to channel money towards cleaner and more efficient technologies. But the current economic crisis has also shown how market uncertainty can greatly affect investment flows.

From the point of view of the allocation of economic resources, the recession could have perverse consequences for the fight against climate change. Energy companies have cut back on new investments, either because of the lack of finance or because projects are no longer commercially viable. As a result, more efficient energy generation equipment is not being deployed and investments in R&D have also fallen. The International Energy Agency (IEA) expects that, if the recession persists and demand does not pick up, investments will flow into coal- and gas-fired generation and away from renewable energy sectors, which are more capital-intensive.[5]

Globally, there was a surge in investments for renewables-based energy from 2004 to 2007 (see Figure 1). The result is that renewable energy capacity in the world has increased: from 3.9 per cent of global power capacity in 2002 to 6.2 per cent in 2008. More significantly, whereas only 8 per cent of additional capacity in 2003 was in renewables, by 2008 this share had risen to 25 per cent.[6]

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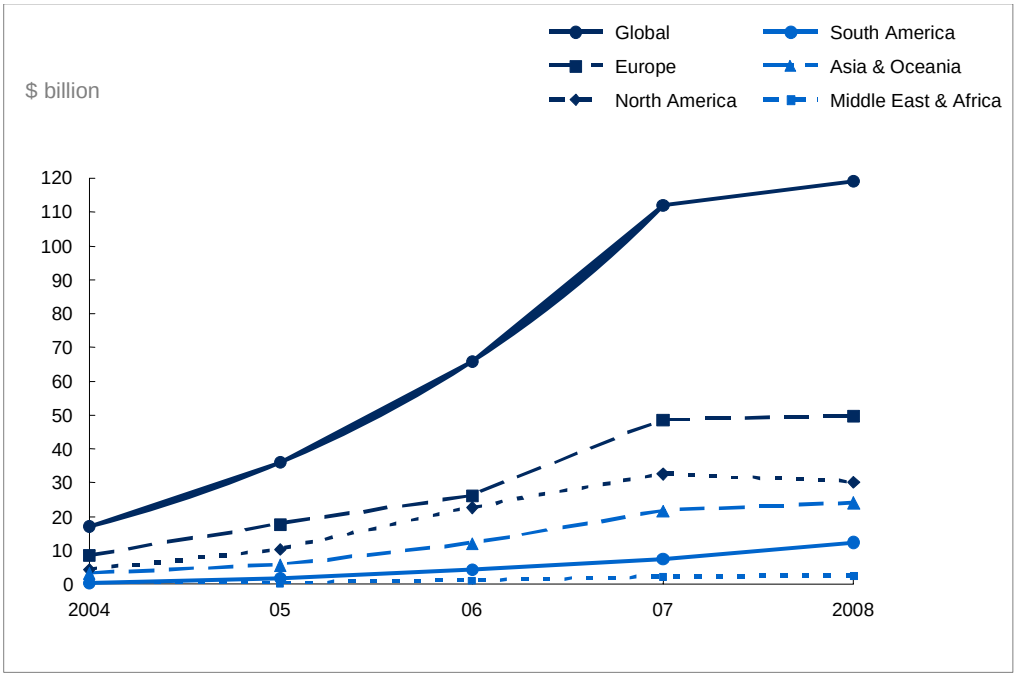
[3] IPCC (2007). Also Stern (2008), pp.32-34; and Stern (2009) pp.11-115, p.147.

[4] World Bank (2009a); Robins and Fulton (2009); Brinkman (2009).

[5] IEA (2009b). Power-sector demand has fallen 3.5 per cent worldwide and by 4.9 per cent in OECD countries.

[6] UNEP, Sustainable Energy Finance Initiative, New Energy Finance (2009). Also REN21 (2009).

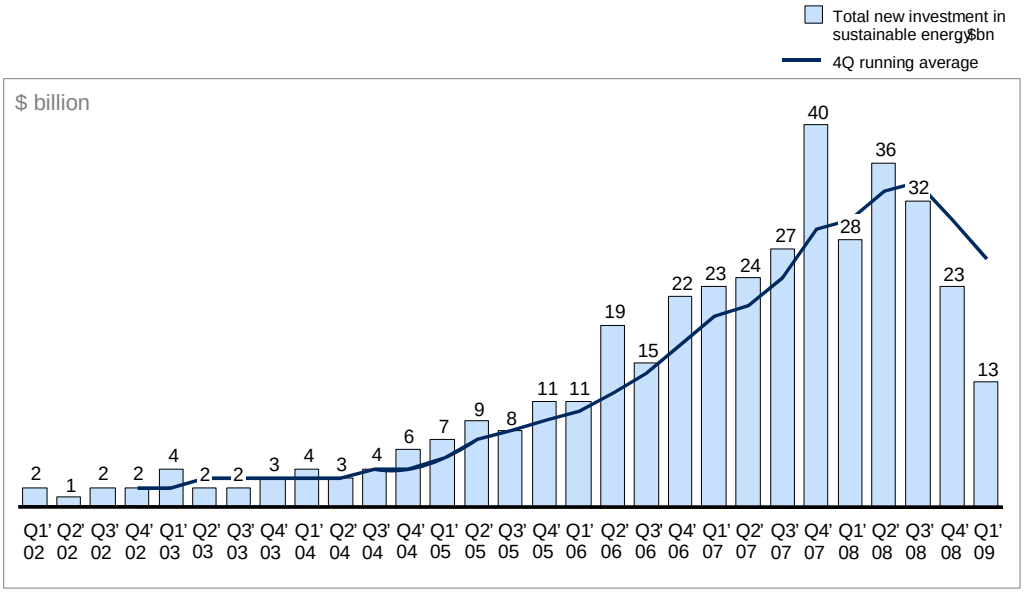
Figure 1. Surge in renewable energy investments until early 2008



SOURCE: UNEP, Sustainable Energy Finance Initiative, New Energy Finance (2009)

This upward trend was halted by the economic crisis. Although the crisis did not fully manifest itself until late 2008 and through 2009, quarterly investment data show that the slowdown in sustainable energy investments began early in 2008 (see Figure 2). By Q3 2008, the four-quarter moving average was on a downward trend. Estimates suggest that investments fell by at least 20 per cent in 2009.

Figure 2. Slowdown in sustainable energy investments began in early 2008



SOURCE: UNEP, Sustainable Energy Finance Initiative, New Energy Finance (2009)

While market-based funding has slowed down, public funding support has not filled the gaps. The economic crisis has put pressure on donor budgets, which makes transfers of

public money politically and financially much more difficult. In terms of their overall external financing needs, developing countries are estimated to have faced a shortfall of $690bn in 2009, with an additional $315bn in 2010. Moreover, two-thirds of the official flows to developing countries have been in the form of loans, which adds to their debt burdens.[7] Coupled with failures to deliver aid levels promised earlier (particularly at the G8's 2005 Gleneagles summit), these trends suggest that, notwithstanding the promises made at Copenhagen, climate financing is facing a crisis of confidence.

In sum, an overarching financing mechanism under the climate regime has to carry a heavy burden indeed. Not only does it have to raise, or facilitate raising, large sums of money, it also has to ensure that the funds are additional and that they are adequately available for both mitigation and adaptation activities. The design of the mechanism has to take into account the danger of widening the technological divide between rich and emerging economies on the one hand, and the poorest economies on the other. And the mechanism will have to anticipate and cushion the impacts of future economic crises, ensuring that if market-based price signals collapse, then sufficient funds will be available to shore up investments for climate-related purposes. This is a tall order, one with significant implications for governing such a unified mechanism under a legally binding climate regime.

New powers at the top table

Adding to the imperatives associated directly with climate finance is the bigger question of a power shift within the climate regime. Have the key actors changed and, if so, what are the implications for negotiations on climate finance?

One way to think about key actors is in terms of current and projected emissions levels. The recession could translate into a 5 per cent fall in global emissions in 2020 compared with the IEA's earlier reference scenario. But aggregate energy-related emissions will still rise by 11Gt by 2030 (relative to 2007), with all of the increase coming from countries that do not belong to the Organisation for Economic Co-operation and Development (OECD). More than three-quarters of this increase is expected to originate in China (6Gt), India (2Gt), and the Middle East (1Gt).[8] Such projections bolster those who argue that the distinction between Annex I and Non-Annex I countries in the climate regime is untenable in the medium to long run. Taking this argument to its logical end would imply that large developing countries should shoulder a significant part of the burden in curbing emissions, alongside the developed economies.

The narrative based on aggregate emissions projections is, however, modified when per capita numbers are considered. It is well known that China's (and even more so, India's) per capita CO_2 emissions are a small fraction of that of the world's leading cumulative polluters (see Figure 3). But the point needs to be repeated. Globally, some 1.6 billion people live without electricity and India has the largest share. Half of all rural households and 12 per cent of urban dwellings in India do not have access to electricity.[9] Growth in aggregate emissions cannot disguise the fact that, even for the world's fast-growing emerging economies, the imperative of combating climate change cannot displace other pressing needs of energy supply and, through this, poverty reduction, attainment of education, and gender equality.

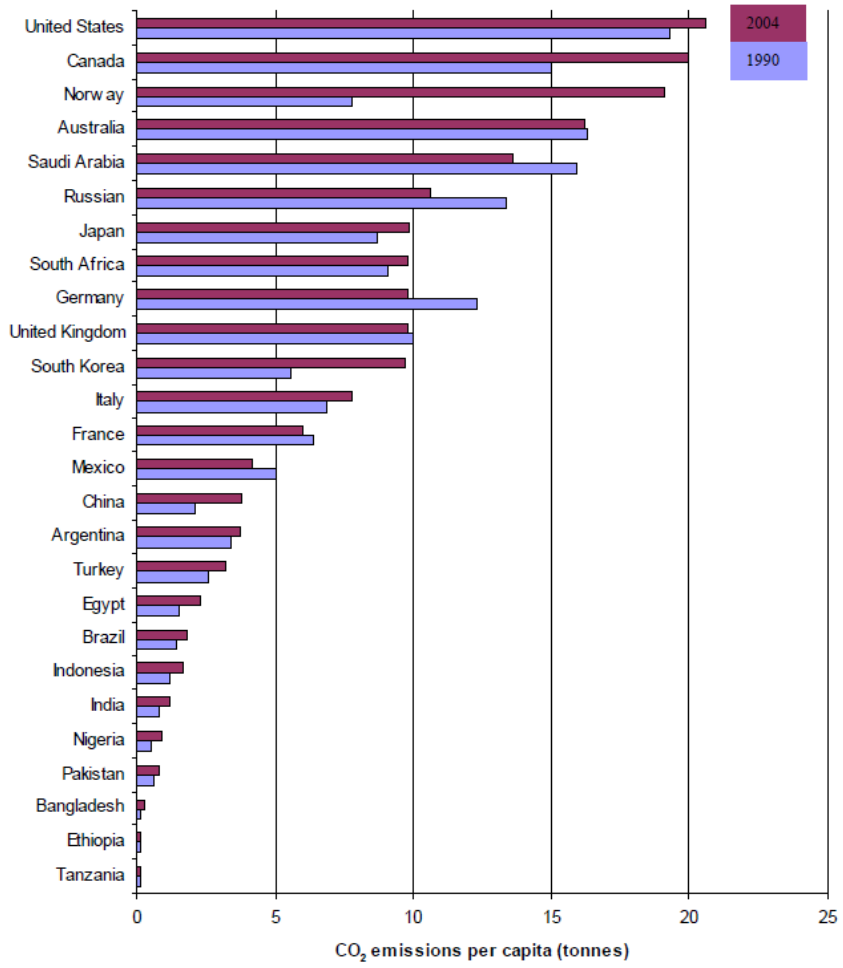
[7] Molina-Gallart (2010).

[8] IEA (2009a).

[9] UNDP (2007).

Note that this is not an argument for emerging economies to 'hide behind the poor'.[10] In addition to inter-country disparities, there is an equally serious issue of intra-country equity in access to energy sources and the extent of the carbon footprint of different sections of the population. Yet, from the global aggregate point of view, the populations of poor countries are starting from such a low base of energy consumption that projected increases will still be marginal. According to one estimate, if the bottom half of India's population were all to be provided with electricity (which they do not have at present), in the medium term these 78 million households would emit only 1–5 per cent of US emissions.[11] As one scholar argues, 'The Indian poor are unlikely to contribute greatly to global emissions'.[12] Moreover, even the top 1 per cent of Indians emit less than the global average of 5 tonnes of CO_2 equivalent (tCO_2e) per capita.[13]

Figure 3. A power shift?
The distinction between developed and developing countries still holds



SOURCE: UNDP (2007)

[10] Greenpeace India (2007).

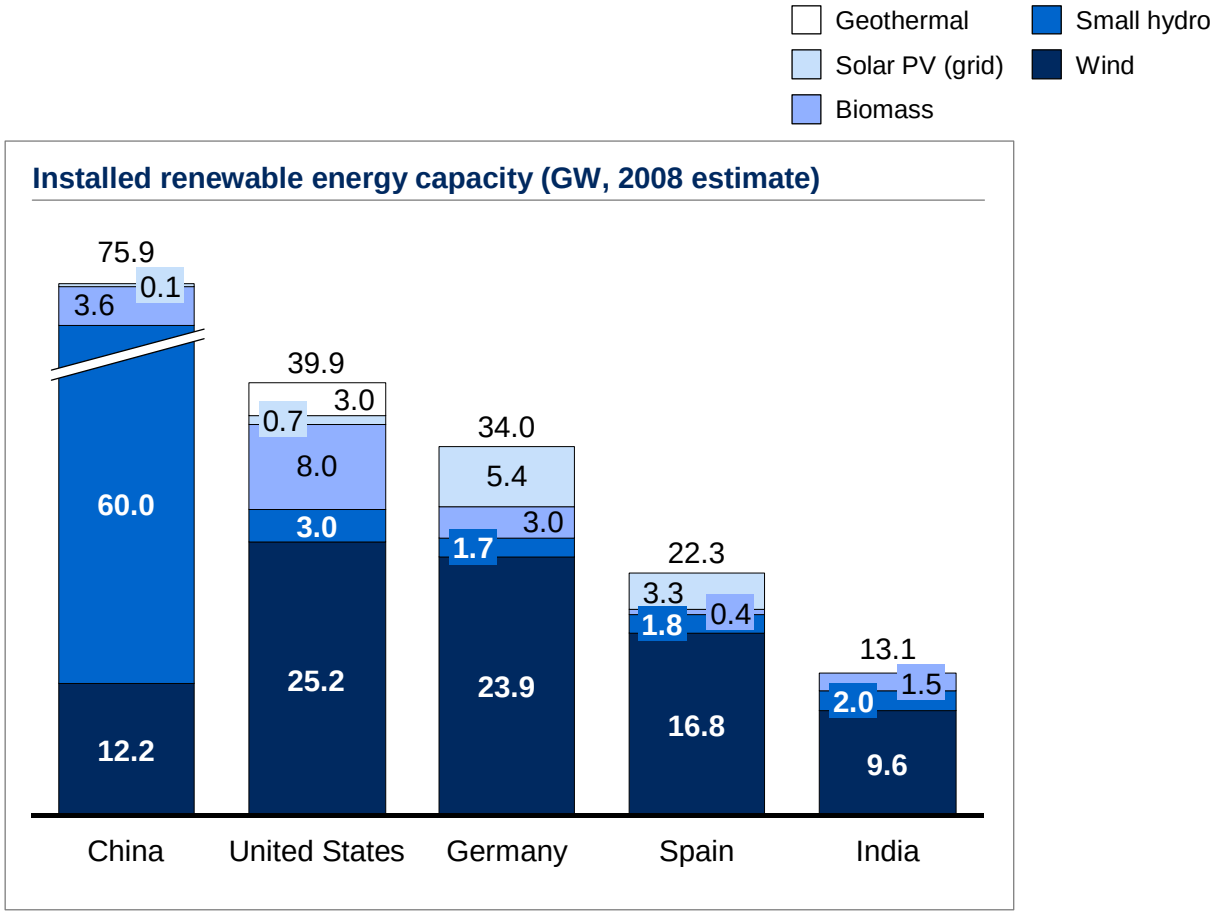
[11] Dubash and Bradley (2005).

[12] Dubash (2009b), p.4.

[13] Greenpeace India (2007), p.13.

Although they have not been major historical contributors to GHG emissions – and still have a low per capita footprint – emerging economies have become important actors in another respect, namely investments in clean technologies. China and India have the highest and fifth highest installed renewable energy capacity respectively (see Figure 4). During 2004–08, Brazil, China, and India experienced compound annual growth rates in renewable energy investments of 171 per cent, 104 per cent, and 52 per cent respectively.[14] As negotiations on climate finance proceed, the issue of financing for technology development and transfer will necessarily have to take these countries more seriously. These economies now offer some of the world's biggest potential markets for future investments in renewable energy. The Indian government has approved a plan to install 20 gigawatts (GW) of solar power by 2020, a plan that, if successful, would make India the world's biggest solar power producer. The message seems to be that, even as they negotiate together with (and on behalf of) other developing countries, emerging economies will not hold back their indigenous plans to be leaders in renewable energy infrastructure.

Figure 4. A power shift?
Countries with the highest renewable energy capacities include emerging economies.



SOURCE: REN21 (2009)

A third aspect of the potential power shift relates to the dynamics of negotiation. Although the Conference of the Parties (COP) – the governing body of the UN

[14] REN21 (2009).

Framework Convention on Climate Change – only took 'note of' it, the Copenhagen Accord could be read as a shift from a top-down approach to limiting and reducing emissions to an architecture that emphasises bottom-up, flexible commitments.[15] Recognising the need to limit the increase in global temperature to under 2°C, it calls for Annex I Parties to submit quantified economy-wide emissions targets for 2020 and for Non-Annex I Parties to list voluntary mitigation actions.[16] With no upfront negotiated agreement on commitments or actions, this approach could be seen as 'bottom-up', reflecting a political motivation to keep it deliberately flexible. Yet, because the signatories agreed to list national actions, to subject these to international scrutiny, and to offer funds for poor countries, it is hailed as a 'potentially significant breakthrough'.[17] For others, the Accord's weak form poses legal and procedural hurdles to implementation and fails to resolve deep differences on principles.[18] Nevertheless, the negotiations signalled the ability of emerging powers to co-ordinate their negotiating strategies and to drive a hard bargain. For India's environment minister, the success of the BASIC coalition (Brazil, China, India, and South Africa) was the 'single biggest achievement' of the Copenhagen meeting.[19]

The problem is that the Accord was negotiated by a small group of countries – 26 hand-picked by the Danish Prime Minister (although in the final hours, it was only the BASIC countries and the United States). Such a small group was not deemed representative of the UNFCCC's wider membership. Although more than 120 countries have so far agreed to associate themselves with the Accord, there remain misgivings about the process and the way that future negotiations might proceed.[20] Supporters of the Copenhagen Accord argue that it is proof that only a small group of countries can resolve the most intractable issues.[21] Opponents argue that even if that is the case, the group must be representative, and hence the UNFCCC must continue to be the dominant negotiating format.[22] The danger presented by the Copenhagen process is that if, in pursuit of a flexible set of agreements, major emitters strike bilateral and plurilateral deals, what incentives will they have to provide financing and technology to poorer countries? Further, even if such bargains had offers of side-payments to the poorest and most vulnerable economies (like the promises of financing embedded in the Accord), unless these offers are translated into legal obligations they would have little credibility of being enforced.

This discussion suggests that there has indeed been a power shift in the climate regime. The shift is not in legal terms (emerging economies remain steadfast in their opposition to changes in the classification of parties) but is evident by the independent and joint actions taken by leading developing countries. How will this power shift manifest itself in negotiations over the design of a climate finance mechanism? What and whose

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[15] For a detailed discussion on potential shifts in the climate regime's architecture and governance, see Ghosh (2010b). Alternative proposals for a more flexible climate architecture are found in Aldy, Barrett, and Stavins (2003); Aldy and Stavins (2007); Baumert et al. (2002); Bodansky, Chou, and Jorge-Tresolini (2004); Bodansky and Diringer (2007); Reinstein (2004); Victor (2008); and Wong (2009).

[16] Copenhagen Accord, 18 December 2009, paras. 4 and 5.

[17] Bodansky (2010). Also Doniger (2009).

[18] Rajamani (2010); Dubash (2009a).

[19] Jebaraj (2009a).

[20] Watts (2010).

[21] Levi (2010).

[22] South Centre (2010).

governance concerns will get priority? How can it be ensured that, with economic and fiscal pressures on the one hand and a shifting trajectory of clean investments on the other, the finance mechanism manages to include all parties to the climate regime?

2. How to assess the governance of climate finance?

Funding for climate-related activities comes from multiple sources (see Annex 1 for a timeline of climate financing). Some of these channels involve governments and intergovernmental institutions, others are solely driven by the private sector, and some have all these actors involved. With such diversity in the sources (and, as a result, governance) of climate finance, there is a need for a common governance framework to assess them.[23] Without such a framework, climate finance will remain a disparate landscape with little hope of creating a credible financing mechanism under the climate regime. One could even argue that a more integrated financing mechanism could reduce transaction costs and overlapping mandates, while ensuring that funds are allocated more efficiently and are monitored and evaluated more effectively. This section first outlines various existing channels and funds operating within them. It then explores the interests of different stakeholders towards climate finance in general, and alternative funding channels in particular. Finally, a set of governance criteria is developed to offer a common framework for assessing climate finance.

Identifying diverse sources of funding

Six categories can be identified as channels of climate financing. Each category, in turn, has numerous funds raised and managed by different countries and institutions. These are listed below (a summary description of each fund is given in Annex 2).

Multilateral development bank (MDB) funds

Multi-donor trust funds (MDTFs) are instruments that allow a number of donors to pool resources towards projects for specific purposes, but which are normally expected to support national priorities in a given issue area. By pooling resources, MDTFs are meant to raise more resources, offer a predictable stream of funding, and co-ordinate the delivery of assistance. In turn, recipient countries expect to face lower transaction costs and fewer reporting and administrative requirements when dealing with a single funding window. For climate-related funding, many MDTFs have been created and administered by multilateral development banks. These include:

- Climate Investment Funds (CIFs), with two trust funds, the Clean Technology Fund and the Strategic Climate Fund, managed by the World Bank:

a) Clean Technology Fund (CTF) for low-carbon technologies;

b) Strategic Climate Fund (SCF), which has three funds under its mandate: Pilot Program for Climate Resilience (PPCR) for adaptation; Scaling-Up Renewable Energy Program for Low Income Countries (SREP); and Forest Investment Program (FIP), which is focused on raising resources for reducing emissions from deforestation and forest degradation (REDD);

- Forest Carbon Partnership Facility (FCPF), managed by the World Bank;
- Congo Basin Forest Fund (CBFF), managed by the African Development Bank (AfDB);

[23] There is diversity and complexity in the climate regime itself. Keohane and Victor (2010) argue that climate change presents a regime complex of a 'loosely coupled set of specific regimes' that vary in functional, strategic, and organisational terms.

- Global Energy Efficiency and Renewable Energy Fund (GEEREF), managed by the European Investment Bank (EIB).

United Nations funds

Like the MDBs, several United Nations agencies are also involved in raising, disbursing, and managing trust funds:

- Kyoto Protocol Adaptation Fund (KPAF), administered by the Adaptation Fund Board;
- Global Environment Facility Trust Fund – Climate Change Focal Area (GEF-TF). The GEF has three Implementing Agencies, namely the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP), and the World Bank;
- Strategic Priority on Adaptation (SPA), which operates under the GEF-TF;
- Least Developed Countries Fund (LDCF), again managed by the GEF and focused on adaptation plans for least developed countries (LDCs);
- Special Climate Change Fund (SCCF), also managed by the GEF and focused on adaptation;
- MDG Achievement Fund – Environment and Climate Change Thematic Window (MDGF), managed by UNDP and funded by the Spanish government;
- United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (UN-REDD), a collaboration between UNDP, UNEP, and the Food and Agriculture Organization (FAO) and administered by UNDP.

Government-promoted funds

In addition to MDTFs managed by MDBs and UN agencies, there are also funds that are created and/or managed by individual countries or groups of countries:

- Environmental Transformation Fund – International Window (ETF-IW), sponsored by the UK government but with funding channelled through existing World Bank-managed funds;
- Fundo Amazônia (FA), managed by the Brazilian Development Bank;
- Global Climate Change Alliance (GCCA), initiated by the EU to seek consensus on a post-2012 climate agreement and to support climate-related activities;
- Hatoyama Initiative (HI), a Japanese initiative and the largest such fund (it replaced Japan's earlier Cool Earth Partnership (CEP) initiative);
- International Climate Initiative (ICI), promoted by Germany to leverage private sector investments towards climate-related activities;
- International Forest Carbon Initiative (IFCI), managed by Australia and targeted at REDD projects.

Public-private investment funds

While multilateral and bilateral funds collect and disburse predominantly public funding, there are other channels that combine both public and private financing within single investment vehicles. Some funds have multiple government contributors and others have only a single country's backing. In general, these public-private investment funds are managed by the World Bank, but have representation from public and private

contributors. The funds aim to leverage the carbon markets to scale up investments in and purchase of credits from climate-related activities.

- Bio-Carbon Fund, with two tranches of capital-raising so far (BioCF-1 and BioCF-2);
- Carbon Fund for Europe (CFE);
- Carbon Partnership Facility (CPF), which is still under development but is being structured for post-2012 investments;
- Community Development Carbon Fund (CDCF);
- Danish Carbon Fund (DCF);
- Italian Carbon Fund (ICF);
- Netherlands CDM Facility (NCDMF);
- Netherlands European Carbon Facility (NECF);
- Prototype Carbon Fund (PCF), the first of such funds, which started in 2000;
- Spanish Carbon Fund, again with two tranches of funding (SpCF-1 in 2005 and SpCF-2 in 2008);
- Umbrella Carbon Facility (UCF), which operates as a fund of funds to increase the scale of investments.

Carbon markets

Despite the absence of a global emissions trading or carbon market, regional markets have been operating for several years. In order to reduce the costs of compliance with emission caps in a particular jurisdiction, some of these mechanisms permit the purchase of credits (or offsets) from projects in developing countries:

- Clean Development Mechanism (CDM), which provides developed countries with the flexibility to meet GHG reduction commitments by buying in credit for emissions from projects implemented in developing countries;
- Joint Implementation (JI), which allows investments in projects in other Annex I countries (mainly economies in transition) to reduce the costs of complying with Kyoto Protocol targets;
- Voluntary Carbon Markets, which allow entities to voluntarily take on emission reduction obligations in an emissions trading scheme; they also allow parties that do not want to compulsorily participate to opt in voluntarily and to sell offset credits from emission reduction projects;
- Secondary CDM Market, whereby entities can purchase a guaranteed number of certified emission reductions (CERs) from a financial institution rather than secure them directly, which entails project and delivery risks;
- European Union Emissions Trading Scheme (EU-ETS), currently the world's largest emission trading scheme, which allows entities (since 2008) to cover a share of their emission reduction obligations by using credits earned in CDM and JI projects;
- New South Wales Greenhouse Gas Reduction Scheme (NSWGGRS), a mandatory emissions reduction trading scheme focused on the electricity sector;
- Chicago Climate Exchange (CCX), a voluntary but legally binding emissions reduction and trading system for North America, which also permits offset projects in developing countries;

- The Regional Greenhouse Gas Initiative (RGGI), involving ten US Northeast and Mid-Atlantic states, is a mandatory CO_2 emissions reduction programme and operates a cap-and-trade scheme for emissions from power plants (offset projects have to be located within the participating states);
- Assigned Amount Units (AAUs) are emission allowances issued to Annex B parties to the Kyoto Protocol (those with commitments under the Protocol) and are traded between these parties in seeking to comply with their obligations.

Unilateral fiscal support

The final source of funding is from governments to companies in their own countries. Such fiscal support can take many forms: direct subsidies to consumers to adopt low-carbon products (such as LED lightbulbs or hybrid cars); feed-in-tariffs as support to electricity utilities that sell renewables-based energy; tax breaks to innovators; insurance guarantees for project risk; and so forth.

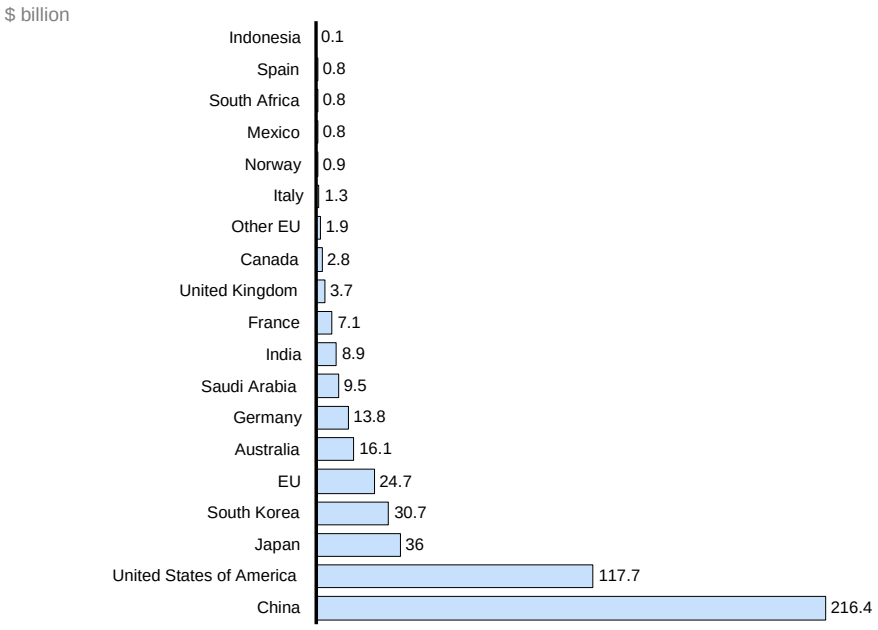
One indicator of unilateral fiscal support is the role of 'green stimulus' spending by governments in the midst of the current economic crisis. Such strategies serve two ends: increasing domestic demand in recessionary times and converting the crisis into an opportunity for undertaking an economic restructuring by promoting new industries and technologies. Globally, some $478bn has been committed to what can be broadly classified as 'green' investments, including energy efficiency, renewables-based power, and public transport systems. But there is significant variation even among the G20 countries, ranging from $3.7bn in the UK to about $9bn in India and $216bn in China (see Figure 5).[24]

Note that comparisons between countries are difficult, partly because the investments are expected to flow over several years and partly because countries classify 'green' projects differently. Moreover, actual spending levels are not available for all countries, though some estimates suggest that governments have struggled to spend the allocated sums so far.[25] Nevertheless, the numbers indicate that in order to maintain investment flows during a crisis, countries have so far had to rely on their own resources. The fiscal pressures that come with such a strategy raise the risk that either unspent sums will be allocated elsewhere or that countries without the money will lose out even further.

[24] Robins, Clover, and Singh (2009).

[25] Robins, Clover, and Saravanan (2010); Harvey (2010).

Figure 5. Globally, some $478bn has been committed to 'green' stimulus spending



SOURCE: Robins, Clover, and Singh (2009)

Note: Comparisons between countries are difficult, partly because the investments are expected to flow over several years. Actual spending levels are not available for all countries but some estimates suggest governments have struggled to spend the allocated sums so far.

Governments can also support national firms by establishing technology co-operation arrangements with other countries. In such cases, two or more countries contribute funds to initiatives for different technological functions, ranging from research and development to deployment and diffusion. Some examples include the US Technology Cooperation Agreement Pilot Program (TCAPP, 1999) and the Climate Technology Partnership (CTP, 2001), both of which incorporate technology transfer options. Another is the EU-led Climate Technology Implementation Plan (CTIP, 1995).[26] Carbon capture and storage (CCS) technology is being demonstrated in China under the EU-sponsored Near Zero Emissions Coal Initiative (NZEC). In India a joint project of the National Thermal Power Corporation and the US Agency for International Development established a Centre for Power Efficiency and Environmental Protection (CenPEEP) to demonstrate and disseminate technologies to reduce GHG emissions from power stations. The Asia-Pacific Partnership on Clean Development and Climate brings together a large group of countries, including the US, Australia, Japan, India, and China.

But most of these arrangements have very small budgets. A month prior to the Copenhagen conference, China and the USA announced a series of energy and technology co-operation proposals – but they amounted to a joint contribution of just $150m over five years. The other problem is that the ambition for such initiatives is often limited to learning and small pilot projects, rather than raising significant funds towards supporting large-scale investments. For instance, the first phase of the NZEC programme involves establishing links between British and Chinese experts, modelling future energy requirements, building capacity to evaluate CO_2 storage potential, and developing a roadmap.[27] The final aim of the programme is a limited one: a single demonstration

[26] Barton (2007), p.3.

[27] http://www.nzec.info/en/what-is-nzec/

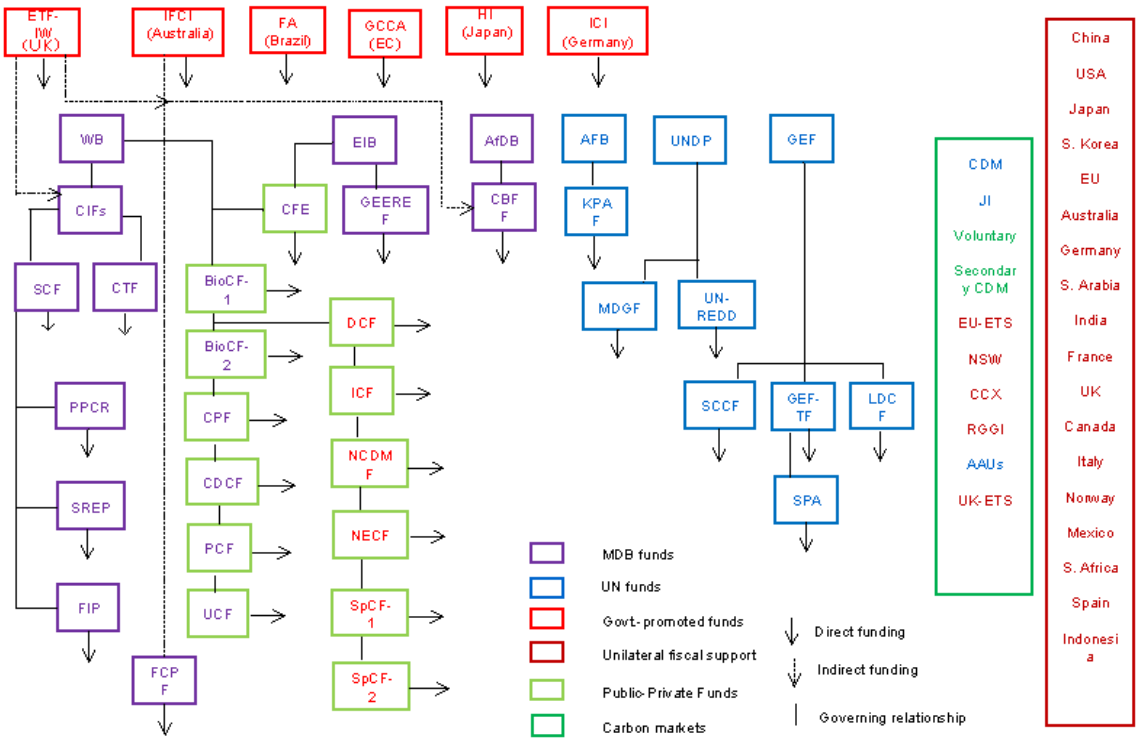
plant to be built by 2014.[28] From a climate change perspective these efforts are far too little, far too late.

Different sources but interwoven governance

Funding sources might be diverse, but in many instances their governance structures are linked and even overlapping. MDBs manage many of the multi-donor trust funds. But even those that are managed by UN agencies have some degree of MDB involvement (see Part 3). Government-supported funds are managed by donor ministries but some also route a portion of the funding via existing MDTFs. Further, public-private investment funds are often under MDB management, but representation in these funds varies depending on whether there is only one country contributing, or several. The different carbon markets have their own governance arrangements, but they do interact when credits are purchased in one market towards fulfilling obligations under other schemes. Only the unilateral fiscal support initiatives can be regarded as having entirely independent governance. The complexity of different sources of funding and the links between them are illustrated in Figure 6.

[28] http://sequestration.mit.edu/tools/projects/nzec.html

Figure 6. Funding sources are many but their governance is often interlinked



Source: Adapted from ClimateFundsUpdate.org: added to, modified and updated by author

Identifying stakeholder needs

What are the priorities for the parties to the climate regime as they navigate the complex world of climate finance? It is useful to think in terms of contributing and beneficiary countries rather than as donors and recipients in the standard aid parlance. This avoids, at least semantically, the political controversy over the perceived unequal relationship in disbursing official development assistance (ODA). It also recognises that there are legal obligations under the climate regime for some parties to provide funding to others. Nevertheless, any transfer of money from one set of countries to another will entail differing positions on the manner in which the funds are collected, disbursed, used, and monitored. These positions are discussed below.

Contributing countries

- **No free lunch:** Annex I countries are unwilling to contribute any money unless developing countries, particularly the large ones that are now also major emitters, also promise to undertake mitigation actions. The Copenhagen Accord succeeded in securing a commitment from Non-Annex I parties that they would 'implement mitigation actions ... communicated through national communications'.[29] But the Accord has no legally enforceable status under the UNFCCC. Therefore, developed countries insist that large developing countries must formally associate themselves with the Accord. In fact, even the money

[29] Copenhagen Accord, 18 December 2009, para. 5.

promised for the short term – $30bn during 2010–12 – is conditional on China and India backing the Copenhagen Accord. As Karl Falkenberg, director general for environment at the European Commission, argued earlier this year, 'It is not money for free.'[30]

The odd thing is that the sum was promised to the poorest and most vulnerable countries and not to China and India in the first place. So, now that these countries have formally backed the Accord,[31] the question is whether new conditions will be imposed before money begins to flow to the poorest countries. The dilemma for the poorest countries is that they do not seem to have any direct leverage; their gains are contingent on what the emerging powers do.

- **Competitiveness and transfers:** Developed countries also fear that flows of finance and technology to emerging economies will pose the risk of them losing their own competitive edge in clean technologies. Given the resources that some emerging economies have been able to summon to stimulate 'green' industries at home, such fears are further deepened. Another source of concern is 'leakage', or the fear that if some countries do not promise to reduce emissions then investment patterns will shift towards them (a 'race to the bottom')[32] and a rules-based climate regime could unravel.[33] Although there is some evidence on leakage for carbon-intensive industries (for trade goods it is small),[34] industrial policy support for such industries in rich countries has largely negated such competitive threats so far.[35]

That said, it remains uncertain whether domestic political pressures will allow rich country governments to sanction the flow of large sums of money to potential competitor countries. While the poorest countries are certainly intended beneficiaries, it is not clear if the larger developing countries will be able to dip into the promised funds. As US chief negotiator Todd Stern said in Copenhagen, 'I do not envision public funds, certainly from the United States, going to China.'[36] Technically, there is nothing in the Accord that prevents large developing countries from getting a share. But concerns about competitiveness might become the excuse behind which rich country governments will hide.

- **No new bureaucracy:** Rich countries are keen to use existing channels of funding rather than create new institutions. As the discussion on climate funds showed, many are managed either by the World Bank and other MDBs or by the government agencies of contributing countries. These arrangements serve rich countries well, allowing them to retain close control over disbursements thanks to the greater decision-making power they have in MDBs compared with the UNFCCC, which is dominated by developing countries.

Contributing countries also argue that creating new institutions will only add to the bureaucracy and transaction costs in disbursing money when the landscape is

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[30] Reuters India (2010).

[31] India and China agreed to be listed in the chapeau of the Copenhagen Accord on 8 and 9 March 2010 respectively. http://unfccc.int/meetings/items/5276.php

[32] Reinaud (2009), p.6.

[33] Frankel (2008), p.10.

[34] McKibbin and Wilcoxen (2008); Houser et al. (2008).

[35] World Bank (2007a), p.11.

[36] Naughton (2009).

already populated with so many funds. In a few cases this argument is sincere – for instance, in the UK choosing to route all its contributions to the ETF-IW via existing World Bank-managed funds. But in many other cases, bilateral funding channels will persist (such as with the HI or CEP of the Japanese government), thus adding to the unequal relationship between donors and recipients. The preference for no new international institutions is also seen in the preference for bilateral partnerships (discussed above) as opposed to contributions to multilateral funds, a pattern that is certainly visible in US contributions to climate financing.

- **Monitoring projects is critical:** Verifying that the money is being used for the purposes outlined in each fund and that the purported emissions reductions are both credible and additional remains a major concern for contributors. From the point of view of environmental integrity, this is valid. Otherwise billions of dollars might be poured into projects that deliver no net benefit, if the project fails to deliver or if emissions 'leak' from elsewhere. The concern for monitoring and verification is equally crucial for market-based mechanisms. Regional carbon markets cannot be sustained unless market participants credibly believe that the value of offsets will not collapse if projects and measurement methodologies are found to be wanting in future.

Rich countries secured gains on the monitoring front at Copenhagen. India wanted to submit national communications 'for information' alone and objected to any 'review of implementation' or 'review of the adequacy' of its commitment; China was agreeable only to 'explanation and clarification [of data]'.[37] In turn, the USA wanted one of four options: 'review', 'scrutiny', 'verification', or 'assessment'.[38] Eventually, negotiators agreed that internationally supported mitigation actions in developing countries would be subject to international measurement, reporting, and verification (MRV). In addition, even those actions that are unsupported will be subject to 'international consultations and analysis', while ensuring that national sovereignty is respected.[39] The procedures for such consultations have yet to be developed, but the issue of monitoring actions in developing countries is firmly on the agenda.

Beneficiary countries

- **Climate finance is not aid:** For Non-Annex I parties, the most important argument in climate finance negotiations is that financial flows cannot be treated as aid. There are both ethical and political reasons for this position. On ethics, the reasoning is that poor countries have not hitherto contributed to the problem of climate change but they are expected to bear the brunt of the adverse impacts of a rise in average temperatures. If they are now expected to help in confronting the challenge, they will need the additional financial resources to do so. Similarly, if poor countries – and communities – have to adapt to a changing climate, then the countries that polluted in the first place must pay compensation. In both ways, the payment would not be an act of voluntary charity by rich nations; instead it is their obligation, from an ethical perspective and legally under the UNFCCC.

The political reasoning draws upon the experience with ODA and a long history of unmet promises. Even after countries have met the preconditions imposed on them for the delivery of aid, donors have either reduced the sums disbursed or have altered the conditions to further delay the transfer of resources. With volatile and

[37] Jebaraj (2009b).

[38] Parsai (2009).

[39] Copenhagen Accord, 18 December 2009, para. 5.

unpredictable funding, it will be impossible for countries to develop mitigation and adaptation plans and execute them in a credible way.[40] So far, their actions under the climate regime require the support of technology and finance. Even if poor countries are not held legally accountable for failing to act because the money was not available, the delayed actions undermine the global goal of stabilising and lowering emissions sooner rather than later.

- **Climate finance must not displace aid:** A related concern for developing countries is that any money promised to them under the climate regime will come out of the contributing countries' ODA budgets. So, even if the transfer is not called 'aid', it will simply crowd out assistance for other development goals. This raises questions about how climate financing will be counted.[41]

Take the MDB, UN, and government-promoted funds, for instance. Some of them are scheduled to expire by 2012 or sooner, while others aspire to continue operations for up to a decade beyond that date. Will funds already committed under these schemes be counted towards the additional $100bn per year that was promised in the Copenhagen Accord? Further, public funds help leverage private financing. But will all of the leveraged funds be counted towards promised contributions? On the one hand, leveraging helps to significantly increase the sums available to countries; on the other, it is not a predictable or legally enforceable source of funding, subject as it is to market conditions. The issue is further complicated when public-private investment funds are considered. These funds, along with carbon market transactions, can also inflate projections for 'additional' funding. The payments are for credits towards developed countries' mitigation commitments, not additional reductions within developing countries.[42] Even if these accounting questions are resolved, there is still no guarantee that aid budgets will not be cut, adding to the deficit of trust that already exists between rich and poor nations.

- **A single mechanism to govern:** Unsatisfied with the operation of climate funds under MDB-controlled governing structures, developing countries demand a comprehensive financing mechanism under the UNFCCC. They want the mechanism to operate under the 'authority and guidance, and be fully accountable to the COP'.[43] Doing this would also ensure that developing countries enjoy more equitable representation in the mechanism's governance. Thus, it is the COP that will create specialised funds, establish expert and stakeholder advisory groups, and constitute independent assessment panels for the mechanism as a whole.

A single mechanism under the COP is attractive to developing countries not only for controlling its governance but in accessing the funds more directly. Developing countries want prompt access to funding that is immune to domestic political and economic fluctuations in contributing countries. They also do not want intermediary institutions (such as the World Bank) to influence the design of funds or the process of identifying, defining, and implementing climate-related projects without the input of beneficiary countries. In fact, the G77 and China have argued that, for the financing mechanism to be truly demand driven, any funds pledged outside the

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[40] Ghosh and Woods (2009a), pp.456-457; Ghosh and Woods (2009b), pp.158-160.

[41] Stadelmann, Roberts, and Huq (2010) outline eight ways to define the baselines above which contributions could be considered additional. Also see Brown, Bird, and Schalatek (2010), pp.3-6 on the implications for ODA of alternative definitions of 'additionality'.

[42] Roberts, Stadelmann, and Huq (2010).

[43] G77 and China (2008a).

UNFCCC should not be counted towards the fulfilment of commitments by rich countries under the UNFCCC's Article 4.3.

To be sure, despite the G77's official position, there are also different demands from large and small developing countries. The BASIC countries put forward a joint draft text just prior to the Copenhagen meeting and rejected the introduction of any differentiation between developing countries. However, separate proposals from the Alliance of Small Island States (AOSIS) and the African Group claimed that the least developed countries had 'special needs and priorities'. For the smallest and poorest countries, it was even more important to ensure that they had separate and adequate representation in governing climate finance.

In other words, participation and control over decision-making matter. It is not simply a procedural issue for negotiations, but the basis of legitimacy of and compliance with commitments in the climate regime. This position then begs the question as to what role existing agencies (MDBs, UN agencies, etc.) will play in collecting, disbursing, and monitoring financial flows. And if multiple agencies continue to operate, how will they be accountable to the climate regime's disparate membership?[44]

- **Adaptation is also an imperative:** Poor countries fear that financing for adaptation will be treated as an afterthought or a 'poor cousin of mitigation' in climate negotiations.[45] The Copenhagen Accord offered some positive signals, whereby there is meant to be a balanced allocation of the fast start funding of $30bn until 2012. It also suggests that funding for adaptation will be prioritised in LDCs, small island developing states (SIDS), and Africa.[46] But while the Accord puts a figure of $100bn per year by 2020 for 'meaningful mitigation actions', there is no figure ascribed to adaptation purposes beyond 2012.

Beyond the potential financing gap, there is also concern about financing channels. The Accord states that new funding is meant to be delivered through effective and efficient funding arrangements (which give equal representation to developed and developing countries). The Adaptation Fund gives developing countries an equitable voice (see discussion on decision-making in Part 3). The Fund, operationalised in late 2008, issued its first call for project proposals only in April 2010, but it promises direct access to funding that could reduce time lags. However, so far none of the pledges on financing for adaptation plan to use the Adaptation Fund as the preferred disbursement channel.[47] According to the chair of the Adaptation Fund Board, only $400m will be available even up to 2012, far less than the sums promised or needed.[48] Whether it is the amount of funding promised or the governance associated with it, adaptation finance remains a source of a wide trust deficit between rich and poor countries.

- **More grants, less conditionality:** Not only are the sources of climate finance varied – so are the instruments of disbursement. Funding can be delivered as

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[44] Ballesteros, Nakhooda, and Werksman (2010) expand on the concept of legitimacy by outlining three dimensions: the distribution of *power* to determine outcomes; the exercise of *responsibility* for an intended purpose; and *accountability* to ensure that power is exercised responsibly.

[45] Oxfam International (2009), p.3.

[46] Copenhagen Accord, 18 December 2009, para. 8.

[47] Ballesteros, Hurlburt, and Stasio (2010); Müller (2010).

[48] Climate-L (2010).

non-repayable grants, as concessional loans, as direct investments in projects, or as guarantees to insure against project risk. Some instruments are more appropriate for mitigation activities related to the diffusion of technology (say, concessional loans) and some for facilitating investments in new and risky environments (guarantees); others are more appropriate for activities promoting innovation in new technologies (upfront grants) or adaptation projects (grants), and still others to leverage private sector participation in carbon markets (direct investments). A new financing mechanism has to be flexible in order to offer a range of different financial products.[49]

But beneficiary countries do not want to become burdened by debt in order to undertake adaptation or mitigation actions. In normal ODA accounting practices, the full amount of loans is counted towards donor contributions, which is then reduced as the loans are paid back. Scholars argue that, for climate finance, new and additional funding should count only the concessional part of a loan or the grant element of contributions.[50] A related concern is about the kind of conditionality that might be imposed on beneficiary countries, depending on the type of financial instrument on offer. This concern is exacerbated if these countries do not have an equitable say in governing funds, hence the preference for a single overarching mechanism answerable to the COP.

- **Monitoring of funding is equally critical:** Conditionality-related questions often arise in discussions on monitoring and verification. But as the discussion above has shown, rich countries' preferences are for verifying the credibility of projects. For poor countries, monitoring the flow of funds (their scale, timeliness, and volatility) is equally important. The Bali Action Plan recognises that the nationally appropriate mitigation actions (NAMAs) taken by developing countries have to be 'supported and enabled by technology, financing and capacity-building, *in a measurable, reportable and verifiable manner*'.[51] From the point of view of developing countries, this provision not only makes their actions *contingent on* the funds provided but also means that the funds need to be monitored properly.

The methodology for tracking flows has not been agreed. The OECD's Development Assistance Committee (OECD-DAC) proposes that its 'Rio Markers' system be used for mitigation projects and 'Adaptation Markers' to track additional funding.[52] But the OECD-DAC's system gives donors the freedom to classify projects as climate-related, thus making the system open to abuse and therefore lacking in credibility. In March 2010 the UN Secretary-General constituted a High-Level Advisory Group on Mobilizing Climate Change Resources, but its mandate is restricted to studying potential sources of revenue, not how funds from different sources would be monitored. Such monitoring concerns plague other regimes as well. Developing countries have insisted that, even as the OECD tracks flows listed under Aid-for-Trade, the monitoring and review of the promised funds should take place in the Committee on Trade and Development at the World Trade Organization (WTO).[53] The climate regime also needs to answer the methodological and institutional

[49] Ghosh and Watkins (2009). Also see Yamin and Depledge (2004), pp.281-282.

[50] Roberts, Stadelmann, and Huq (2010).

[51] Bali Action Plan, Decision 1/CP.13, para. 1b(ii) (emphasis added).

[52] OECD (2009).

[53] Ghosh (forthcoming).

questions of monitoring both projects and funds and holding contributing countries accountable.

Identifying governance criteria

The contradictions among stakeholders' needs suggest that the governance of climate finance cannot necessarily satisfy all conditions for all parties. Yet, the priorities of the parties point towards specific governance functions that a financing mechanism ought to fulfil. These governance functions and the criteria embedded in each are outlined below.

Making decisions

The choice of institutions matters above all else because countries' say in and influence over decisions vary. There is a running controversy over the role of the GEF, for instance. It became an 'operating entity' of the UNFCCC by default because, at the time, there was no alternative channel.[54] Since then funding sources have expanded, the scale of funding required has increased, and the number of institutions involved in climate finance has multiplied. So, the GEF is not *the* financial mechanism *per se*, nor is any other institution currently. The evaluation of alternative institutions and funds with regard to how decisions are governed will be based on:

- Administration, or which agency has the authority to manage the funds;
- Representation, or which countries (or non-governmental actors) are members of the main decision-making body;
- Decision rules, whether by votes or consensus or a mix of both;
- Consultation, or whether experts, beneficiary countries, and other stakeholders are consulted in the design and operation of the funds.

Securing commitments

Although references to financing appear regularly in the climate regime's decisions, there is still no legally enforceable set of commitments that promise a certain amount of funding. The analysis of funding sources also shows that some of these sources depend on market conditions or on economic conditions within contributing countries, not to mention the political obstacles to large-scale transfers. In order to evaluate these sources in terms of securing commitments, four criteria can be identified:

- Adequacy, or the amount of funding that each source offers and whether it meets expected needs;
- Additionality, or whether resources will be additional to sums already committed in each fund;
- Predictability, or whether funds will be committed with guarantees so that contributing countries do not backtrack in future;
- Appropriateness, or whether the funds strike a balance between public and private sources and between the designated uses for the resources (mitigation versus adaptation).

Ensuring disbursements

The gap between commitments and disbursements has been a source of mistrust between contributing and beneficiary countries. The issue is not restricted only to the amount of funds

[54] Gomez-Echeverri and Müller (2009b).

provided. It also concerns the manner in which resources flow and under what conditions. Disbursements in a climate finance mechanism will have to be judged on the following:

- Scale, or whether resources tend to flow towards large or small projects or large or small countries;
- Instruments, or whether the funds deliver resources through one or several different financing instruments (investments, loans, grants, and guarantees);
- Modality, or the manner in which governments and private entities in beneficiary countries can access the funds (for projects, for sectoral programmes, or directly for government budgets);
- Conditionality, or the kind of pre-conditions that are imposed by contributing countries.

Monitoring performance

The last governance function relates to monitoring projects and financial flows, verifying and reviewing them, and the procedures for promoting compliance. As already discussed, these are politically fraught questions and no mechanism yet exists that performs all of these tasks. Nevertheless, it is useful to evaluate existing financing channels to see what alternative design options they offer:

- Reporting funds, or what kind of reporting format the fund adopts;
- Reporting performance, or who has the responsibility for reporting on project outcomes;
- Verification, or whether independent agencies are tasked with verifying reports and certifying projects;
- Review, or whether the funds also undertake political reviews and overall evaluations;
- Compliance, or whether there are any procedures in place to enforce commitments, both for providing resources and for meeting project aims.

Having identified the funding sources, the competing demands of contributing and beneficiary countries, and the governance functions and criteria of a financing mechanism, the next step is to evaluate how existing funds perform.

3. What governance failures and what lessons?

How well do existing institutions and funds meet the above governance criteria and satisfy stakeholder needs? For this analysis, this paper focuses on 33 funds (MDB-led, UN-managed, government-promoted, and with public-private contributions). Both primary fund-related documents and secondary sources were used to gather information on each of the governance criteria outlined in the previous section (details for each fund can be found in Annex 3.) In some cases, the available information is not sufficiently clear to draw conclusions. That caveat aside, the analysis reveals insights into how climate finance is governed at present. The patterns also indicate the shape that a financing mechanism could take in future, depending on which governance criteria are prioritised. The following discussion outlines these general patterns for each governance function.

Making decisions

There is a clear dominance of the World Bank in administering many of the funds. It manages all but two of the multi-donor trust funds, has a role in many of the GEF-managed UN funds, and is also responsible for the public-private funds, which have been otherwise sponsored by individual countries. Only the government-promoted funding channels are in the hands of donor agencies or other ministries.

Developing countries do have formal representation in many of the trust funds. In most cases, there are an equal number of contributing and beneficiary countries on the governing boards. The Kyoto Protocol Adaptation Fund has more developing country members on its board (ten plus two from transition economies) than developed country ones. Further, in two cases (CBFF and UN-REDD) civil society representatives are also included. Moreover, many of the funds have advisory boards that include experts and host annual consultations with non-governmental stakeholders.

The picture is different for the government-promoted funds and the public-private investment funds. For the former, except the UK's ETF-IW (which routes funds through MDTFs in any case), no other fund included beneficiary countries in its initial design phases. These countries are included in project development and implementation (an obvious point) but they have no formal representation in the governance of these funds. Although consultations are held with stakeholders, these funds primarily follow traditional bilateral donor channels.

The public-private funds, by and large, have only contributing countries and participating companies on the boards and have no formal representation from beneficiary countries. These funds invest in offset projects that offer a lower-cost alternative to reducing emissions at home. But apart from stakeholder consultations and technical advisory committees in some instances, developing countries have no say in their governance. This is noteworthy because the scale of funding offered by carbon markets and funds leveraging these markets is significantly greater than MDTFs. If these funding channels are counted towards developed country contributions to climate financing, then the gaps in representation will surely emerge as a source of tension.

There are some signs that this pattern might be changing. The Forest Carbon Partnership Facility is the only such fund that has equal representation of countries that will host REDD projects and of contributing countries and carbon market participants. The Carbon Partnership Facility, which has yet to be operationalised, also envisages a long-term partnership and balanced representation of buyers and sellers of carbon credits.

Even where representation might be more balanced, decision-making rules can hinder developing countries from having an effective voice in fund management. Most of the MDB and UN funds eschew voting in favour of consensus-based decision-making. This undermines the weight that developing countries might have if they were allowed to vote, instead of facing pressures to acquiesce to near-consensus decisions. By contrast, in the Adaptation Fund, failing consensus there is a provision for decisions by two-thirds majority. The FCFP adopts a simple majority rule, thus giving true meaning to the balanced representation on its board (see Table 2 for an overview of how decisions are governed in different funding channels).

Table 2: Few funds have equitable decision-making procedures

	Administration	Representation	Decision	Consultation
MDB	Mostly World Bank	Recent initiatives give beneficiary countries balanced representation	Mostly reliance on consensus	Partnership forums; expert groups
UN	World Bank also plays role in GEF	Only KPAF gives developing countries more seats; civil society in CBFF and UN-REDD	Consensus, in the absence of which voting rules vary	NGO networks; also indigenous people for forestry-based funds
Government-promoted	Contributing country agencies	Poor countries seldom involved in fund design	No voting rights for beneficiary countries	Consultation procedures vary
Public-private	World Bank manages most	Only contributing countries and private sector participants	No voting rights for beneficiary countries	Mostly expert advisory groups

Source: Author's analysis

The contradictions in representation, consultation, and decision-making arise from differing priorities of various constituencies. Take the case of the Clean Technology Fund. Its stated aim is to support 'country-owned' strategies that have the potential to lead to the 'demonstration, deployment and transfer of low carbon technologies with a significant potential for long-term greenhouse gas emissions savings'. It is also supposed to be 'technologically neutral', supporting options ranging from solar and wind power to nuclear and 'clean coal'. But there has been US Congressional opposition to the financing of coal-fired power stations, even if the projects are more efficient than a host country's existing power infrastructure and, as a result, promise significant cuts in emissions.[55] Critics claim that such plants do little to reduce emissions and will lock developing countries into a carbon-intensive pathway that is inconsistent with a commitment to mitigating climate change. Several commentators have argued that the technologies supported should be 'transformational', with an emphasis on 'zero carbon' renewable technologies.[56] Others counter that the alternative to these technologies is not wind

[55] The IFC's funding of the 4GW super-critical coal plant in Gujarat, India was particularly controversial. Wheeler (2008), pp.7-8.

[56] Werksman, (2008), pp.1-2.

power or solar power, but another generation of less efficient, sub-critical, and more polluting plants.

From the perspective of potential beneficiary countries of CTF financing, governments are concerned that what Northern environmental organisations see as 'transformational' renewable energy options may not meet rapidly rising demand for electricity at an affordable price and in a reliable manner. In turn, the World Bank is viewed with suspicion by many environmentalists. One reason for this is that World Bank projects and policy guidelines do not systematically incorporate measures to assess climate risks and mitigation opportunities.[57] Whatever the merits of both sides of the argument, it is clear that formal representation in fund governance is no guarantee that national priorities will prevail in funding allocation decisions.

Securing commitments

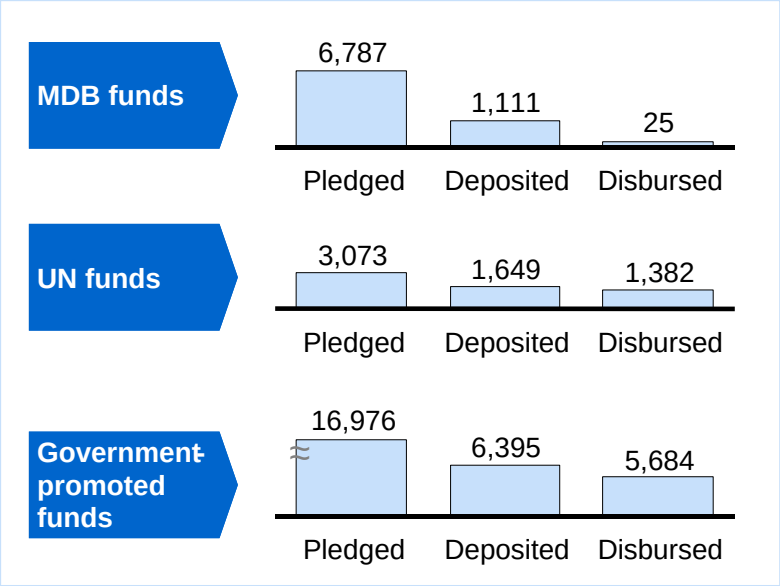
A single financing mechanism will have no credibility if the committed funds are not adequate for the task. Until late 2009, neither developed nor developing countries were keen on putting numbers in formal proposals for climate finance. The former did not want to commit sums without being satisfied that their other conditions (verifiable mitigation actions) were being met. The latter did not want to cap the responsibility for climate finance with a specific sum, given the inherent uncertainties associated with the burden of mitigation and adaptation that could fall on them in future.

These positions, combined with a lack of clarity on obligations and enforcement provisions for a post-2012 climate regime, have meant that so far ambitions for climate funds have been very low. MDB funds have received cumulative pledges of $6.8bn and UN funds had $3.1bn in pledges as of August 2010 (see Figure 7). Government-promoted funds had $17bn in pledges but most of it is from a single source, Japan's Hatoyama Initiative. Meanwhile, public-private investment vehicles have raised about $2.2bn cumulatively since the Prototype Carbon Fund was first launched in 2000 (see Figure 8). The past record suggests that securing commitments that add up to the $100bn goal for 2020 (or even the $10bn per annum goal for 2012), as promised in the Copenhagen Accord, will prove extremely difficult.

[57] Nakhooda (2008), p.14.

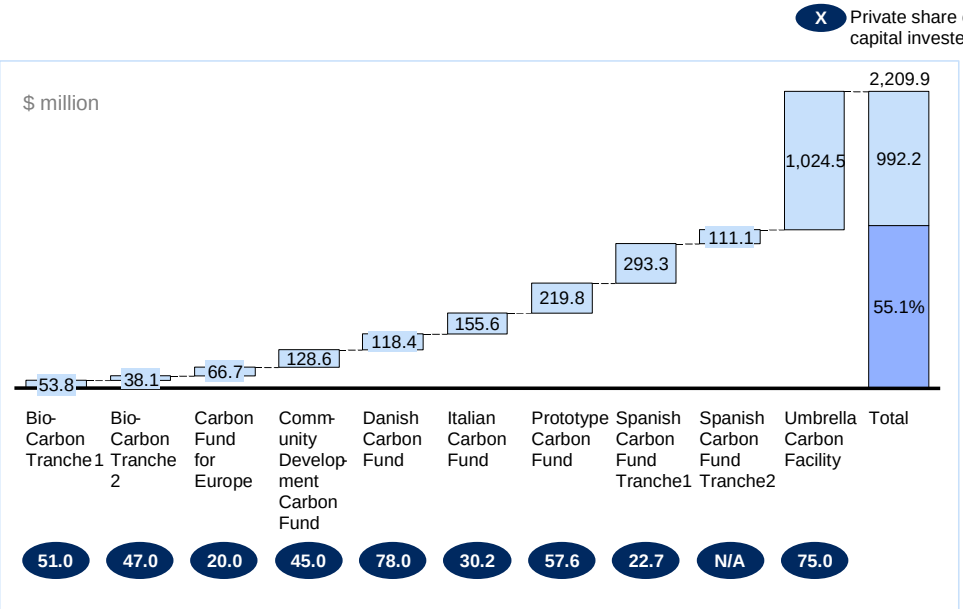
Figure 7. Many recent initiatives for climate financing but low ambitions so far

$ million, figures updated as of August 2010



Note 1: UK Environmental Transformation Fund – International Window: Funds channelled through CIFs, FCPF, and CBFF, hence not included separately.
Note 2: Strategic Climate Fund (MDB): Funds channelled through PPCR, FIP, and SREP, hence not included separately.
Note 3: For the Adaptation Fund (UN), the money raised from the monetisation of CERs is included under pledges.
Note 4: Funds for the Strategic Priority on Adaptation (SPA) are sourced from the GEF Trust Fund.
Note 5: For the GEF Trust Fund, only pledges/deposits under the climate change focal area for the fourth and fifth funding replenishments are included.
Source: Author's calculation based on data available at http://www.climatefundsupdate.org/graphs-statistics/pledged-deposited-disbursed; accessed 13 August 2010

Figure 8. Over $2.2bn has been raised via public-private investment vehicles



SOURCE: World Bank (2009b)

Most funding streams do not meet the 'additionality' criteria. This has much to do with how the funds would be classified in the OECD-DAC's database of donor contributions. As far as definitions go, contributions to the MDB-managed funds can be classified as ODA. This would mean that developing countries might insist that these funds cannot be counted as additional in a future climate finance mechanism. Contributions to most of the UN-managed funds are also counted as ODA, as are resources delivered through government-promoted funds. The GEF-affiliated funds have an unclear status for the post-2012 period, so again there is no guarantee of additionality (not to mention the tiny sums delivered so far through them). As regards public-private funds, although they might not be classified as ODA, they are still not additional. This is because the resources (while being invested in projects in developing countries) are intended for meeting developed countries' obligations under the Kyoto Protocol.

Additionality is one problem, predictability is another. Contributions to most of the MDB, UN, and government-promoted funds are voluntary. Given past experience with ODA flows, there is no reason for developing countries to believe that pledges will be kept or that the resources will flow in a consistent way.

An alternative is to rely on market-based mechanisms, namely carbon markets and the public-private funds that invest in them. By 2008 the value of transactions in all carbon markets had passed $126bn, with the EU-ETS dominating at $92bn (a scale of much greater magnitude than other climate funds). But the CDM market (a source of finance for projects in developing countries and, to a small extent, of new technologies) was worth only $6.5bn (a fall of 12 per cent from the previous year).[58] A serious problem with the CDM framework is its project focus. Carbon finance provided through the scheme is typically linked to verifiable actions by companies, rather than to whole sectors or energy programmes. Currently, around 400 projects are approved annually, with each process of validation and registration taking almost one year. The combination of high transaction costs and relatively small financial flows remains a major handicap.[59]

The price of carbon is another concern. The IEA estimates that the price of emissions permits will need to rise to $50 per tonne by 2020 ($110 by 2030) in rich nations and to $30 by 2020 (and $50 by 2030) in poor countries.[60] As discussed earlier, the economic crisis has affected investments in clean energy and other climate-related activities. Since the carbon price is correlated with the price of fossil fuel commodities, it is difficult to rely entirely on carbon markets for additional and predictable funding. This also affects non-carbon market funds, such as the Adaptation Fund (which is funded via a 2 per cent levy on the value of CDM transactions) and the Global Climate Change Alliance (which partly relies on EU-ETS transactions). While these are innovative financing schemes, without a floor under the carbon price, economic fluctuations will undermine the predictability of climate financing.[61]

Lastly, the appropriateness of funding is also called into question. If the preference were for negotiated commitments for public financing, then promises might be additional, but without a compliance mechanism it is quite likely that resource flows will still not be predictable. If instead the preference were for incentive-based private financing, then resources would also flow towards mitigation projects rather than adaptation programmes. This is indeed the case with all the public-private investment funds. Adaptation also figures in the government-promoted funds (with the attendant donor relationship problems) and in some of the MDB funds (PPCR) and UN funds (KPAF, GEF-TF, LDCF, SCCF, SPA, MDGF). Putting together MDB, UN, and government-promoted funds, 73.6 per cent of the disbursements are for

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[58] UNEP-RISØ (2010). The secondary CDM market escalated to $26bn.

[59] Government Accountability Office, United States (2008) p.7; Ellis and Kamel (2007).

[60] Hoyos and Crooks (2009).

[61] Ghosh (2010a).

mitigation projects, 4.2 per cent for REDD-related mitigation projects, and only 22.2 per cent of pledges are for adaptation projects.[62] On all counts of additionality, predictability, and appropriateness, adaptation loses out in current funding structures (see Table 3 for an overview).

Table 3: Pledges unlikely to be additional or predictable, especially during an economic crisis

	Adequacy	Additionality	Predictability	Appropriateness
MDB	Level of ambition low so far	Not if counted as ODA or if concessional loans are discounted	Depend on voluntary contributions	Mostly for mitigation
UN	Very low pledges	Unclear status for GEF funds post-2012	Depend on voluntary contributions; KPAF depends on CDM market	Greater number of funds for adaptation but very low pledges
Government-promoted	Mostly because of HI	Counted as ODA	Purely voluntary contributions	Mix of adaptation and mitigation
Public-private	Low	Not ODA but not for additional actions in developing countries	Depend on state of carbon markets, level of carbon price	Unlikely to flow to LDCs; private sector leverage during crisis is difficult

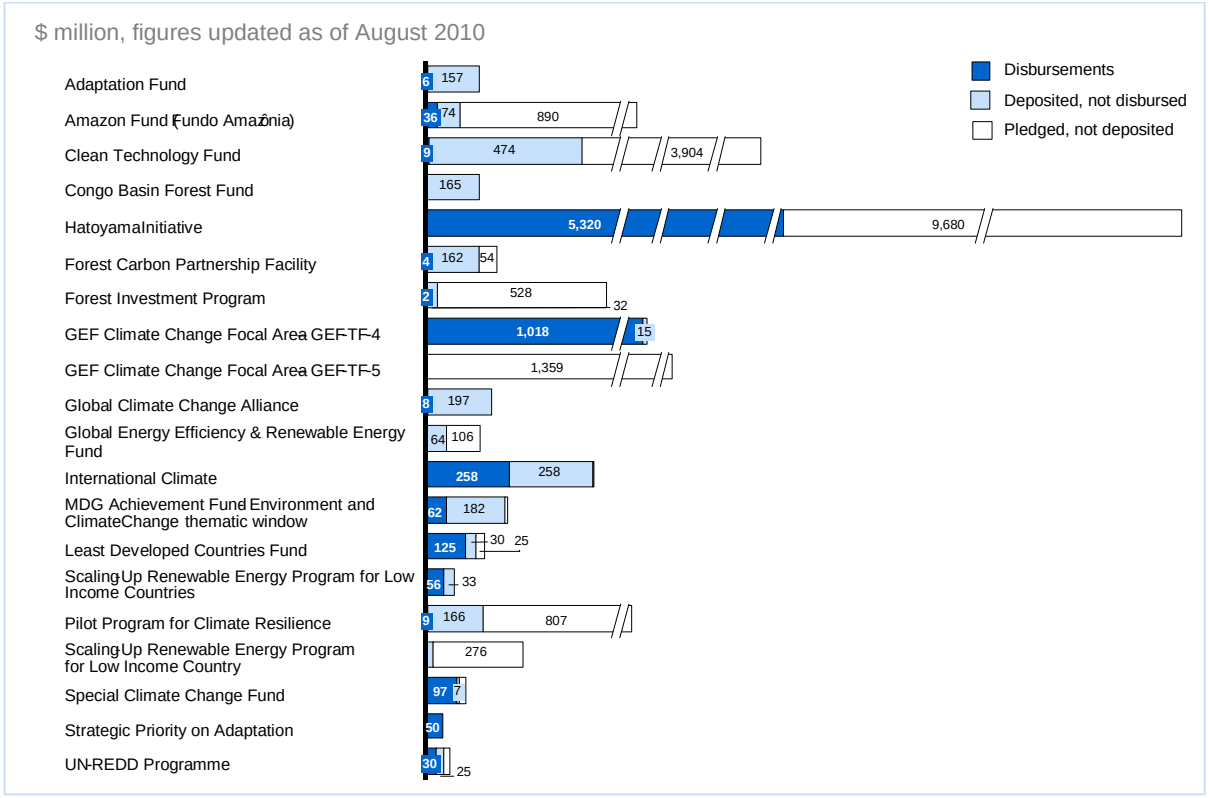
Source: Author's analysis

Ensuring disbursements

If the governance of climate finance were judged on the single metric of the scale of resources put to actual use, the result would indicate a near complete failure. Deposits and disbursements for all categories of funds are a fraction of pledged amounts (see Figure 7). In fact, some of the largest funds in terms of pledges are also the ones lagging behind in disbursements (see Figure 9). At an extreme, the Cool Earth Partnership's $10bn pledge was not backed up by any deposits at all. It was finally replaced by the Hatoyama Initiative in 2010, which now has about $5bn deposited. Checking for deposits against pledges for 36 countries to analyse whether promises are backed up with real funds shows that deposits were below half the pledged amounts for 25 countries (see Figure 10), half of which are Annex I parties. The picture looks worse when it is noted that some of the world's largest economies and leading polluters (France, Germany, Italy, Japan, and the USA, among others) are on this list of laggards.

[62] ClimateFundsUpdate.org (2010). http://www.climatefundsupdate.org/graphs-statistics/areas-of-focus; accessed 13 August 2010. The distribution of actual spending has been calculated based on project-wise data received from fund administrators. Therefore, some funds are not included in the calculation either because data on disbursements are not available (CBFF, GEEREF) or because project-wise breakdowns of disbursements are not available (HI, ICI, IFCI).

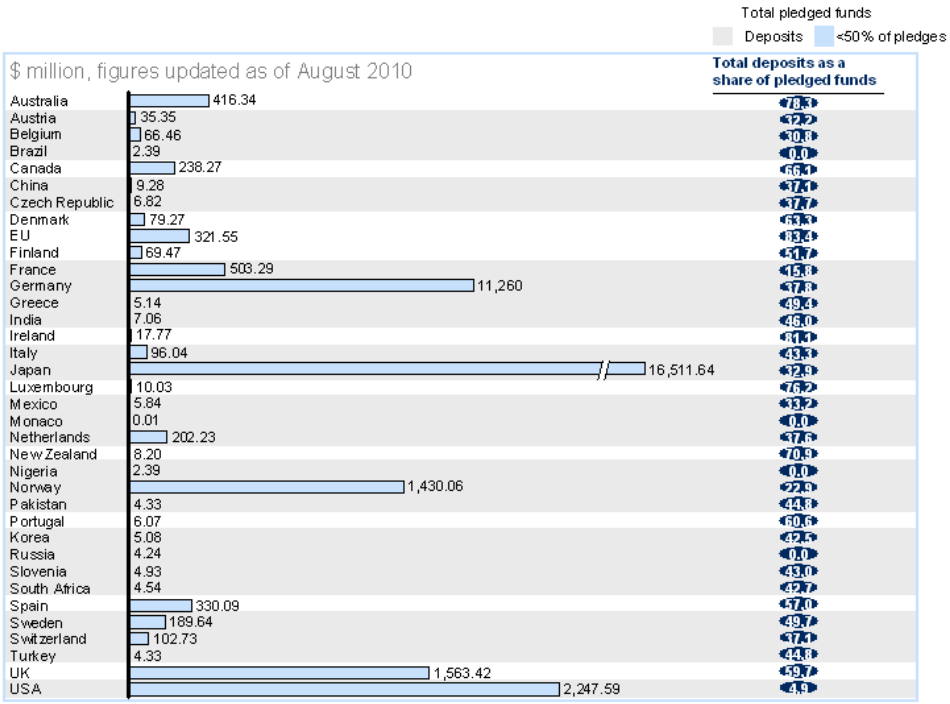
Figure 9. Inadequate pledges, small deposits, smaller disbursements



SOURCE: http://www.climatefundsupdate.org/graphs-statistics/pledged-deposited-disbursed; accessed 13 August 2010

Note 1: UK Environmental Transformation Fund – International Window: Funds channelled through CIFs, FCPF, and CBFF, hence not included separately.
Note 2: Strategic Climate Fund (MDB): Funds channelled through PPCR, FIP, and SREP, hence not included separately.
Note 3: Hatoyama Initiative replaces the original Japanese Cool Earth Partnership (2008-10) and includes the $10bn pledged under the CEP.
Note 4: For the Adaptation Fund (UN), the money raised from the monetisation of CERs is included under pledges.
Note 5: Funds for the Strategic Priority on Adaptation (SPA) are sourced from the GEF Trust Fund.
Note 6: For the GEF Trust Fund, only pledges/deposits under the climate change focal area for the fourth and fifth funding replenishments are included.

Figure 10. Many countries fail to live up to their pledges



SOURCE: Author's calculation based on data available at http://www.climatefundsupdate.org/graphs-statistics/pledges-by-country and http://www.climatefundsupdate.org/graphs-statistics/deposits-by-country; accessed 13 August 2010

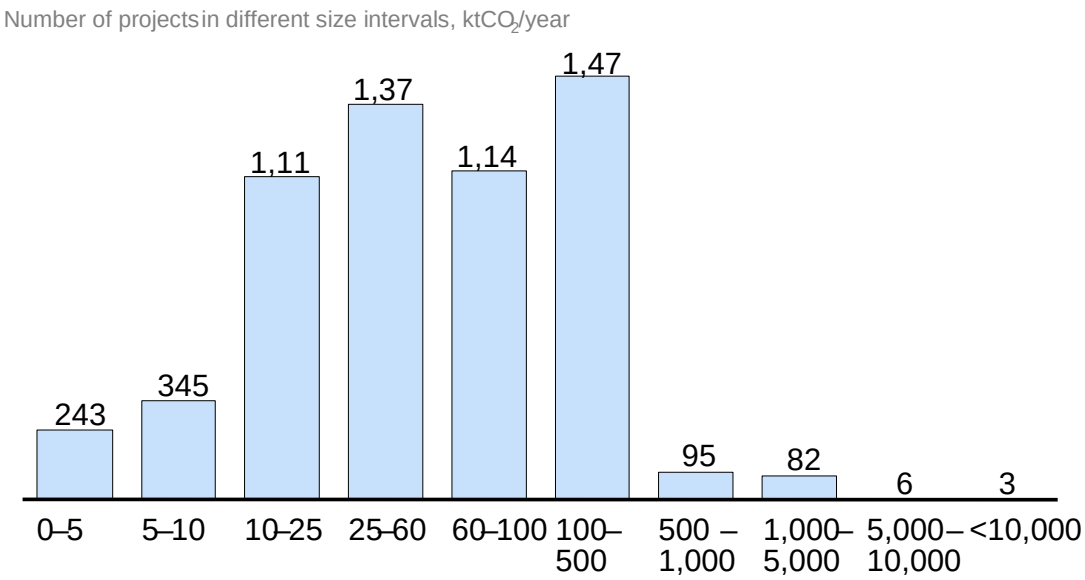
In terms of the geographical allocation of resources to projects (for MDB, UN, and government-promoted funds), Asia accounts for the lion's share with 41 per cent of the funds. Africa accounts for half that share (19 per cent), Europe for 16 per cent, North America (including the Caribbean) and South America for about 8 per cent each, and the Middle East for 6 per cent.[63]

The size of projects is also a concern. Small developing countries cannot offer the scale that might make projects attractive to investors. Although some funds are specifically focused on promoting small-scale or high-risk projects (GEEREF, CDCF, PCF), there are equally others that have a mandate to target large-scale projects that can deliver greater environmental benefits or more carbon offsets (CIFs, CPF, UCF, NCDMF, among others).

In fact, when the carbon markets are considered, the bias towards large-scale projects or a handful of countries becomes more evident. Take the CDM, for example, where the highest number of projects in the pipeline (as of March 2010) was in the category of 100,000–500,000 tonnes of CO_2 emission reductions per year (see Figure 11). Moreover, just ten countries account for nearly 90 per cent of CDM projects and the share of certified emissions reductions (CERs) (see Figure 12). On one hand, this tendency might indicate that investments flow where the greatest environmental (and by extension monetary) benefits are expected to accrue. On the other hand, it exposes the limited scope of climate finance for a vast majority of potential beneficiary countries. Furthermore, the economic crisis worsens the situation because, with a drop in carbon prices, investors prefer to allocate resources to fewer but large-scale projects where the transactions costs would be low and the regulatory mechanisms are already in place.

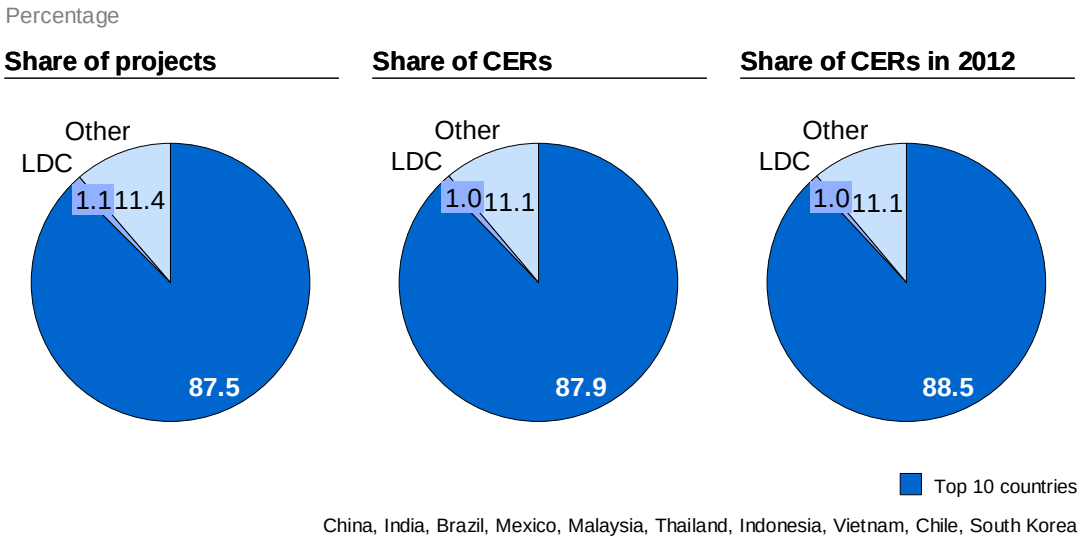
[63] ClimateFundsUpdate.org (2010).

Figure 11. Investors prefer large CDM projects



SOURCE: UNEP-RISØ (2010)

Figure 12. A few countries dominate the CDM



SOURCE: UNEP-RISØ (2010)
Note: CERs are certified emissions reductions.

Funding instruments are mostly a mix of grants and concessional loans for the MDB, UN, and government funds. Public-private funds undertake direct investments and a few funds (CTF, HI) also offer risk guarantees and insurance. The modality of funding is mostly project-based for all categories of funding. Only a few funds offer programmatic support (CIFs, Adaptation Fund, GCCA, CPF, and UCF) and even for these such support is envisioned but not guaranteed. Budget support is planned for only a handful of funds. Fund conditionality is difficult to ascertain for climate funds. Many are very recent initiatives and disbursements have been very low so far. Also, most fund documents note that projects would be 'country-driven' or have 'national ownership'. These are of course notable goals, but they can only be fulfilled if beneficiaries also have representation and effective voice in decision-making (see Table 4 for an overview of disbursement-related issues).

Table 4: Disbursements low and a mix of loans and grants, mostly for projects				
	Scale	**Instrument**	**Modality**	**Conditionality**
MDB	Tiny fraction of pledges	Grants and concessional loans	Projects but programmatic and budget support also envisioned for CIFs	Recipient-developed strategies
UN	Greater disbursements but scale is small	Mostly grants	Mostly projects; KPAF can support programmes	Meant to be country-driven; but also bureaucratic hurdles
Government-promoted	The largest funds see few disbursements	Mix of loans and grants	Mostly projects	Mostly through normal bilateral channels, or for specific countries
Public-private	Bias towards large projects or a few large countries	Investments and guarantees	CPF and UCF aim for programmatic support	Technical competence of host country important; CDCF focus on small countries; CFE preference for short lead times
Source: Author's analysis				

The example of the GEF shows much of what is wrong with climate financing currently. Developing countries view the GEF with considerable suspicion, claiming that its governance structures give undue weight to the influence of developed countries and institutions – such as the World Bank – in which these countries are major shareholders. In institutional terms, the GEF has been a lynchpin in the UNFCCC framework for technology transfer and yet a lack of legal clarity between the Conference of the Parties to the UNFCCC and the GEF has undermined accountability.[64] The overall record has been unimpressive. Since 1991 the GEF has allocated $2.5bn to climate projects and claims to have leveraged another $15bn in co-financing. While some projects have been highly innovative, the GEF has clearly not financed technology transfer or capacity-building on the scale required. For the poorest countries, even the GEF's meagre resources seem to be unavailable. In recent years one-third of the funding has gone to China, India, and Brazil, while the 49 poorest countries received less than one-seventh.[65] In frustration, the G77 representative argued that the Least Developed Countries Fund could also be called the Least Developed Fund.[66]

[64] Ballesteros, Nakhooda, and Werksman (2010).

[65] Vidal (2009).

[66] Hoffmaister and Ling (2008).

Monitoring performance

As they currently operate, climate funds place more emphasis on monitoring the performance of projects than the flow of funds from contributing countries and private participants. For the reporting of funds, the main World Bank-led and GEF-led multi-donor trust funds provide details through annual reports to trust fund committees. The GEF also has an interactive online database for more detailed project-wise information. For most of the government-promoted funds, reporting patterns are unclear or *ad hoc*, with updates expected when available. For the public-private funds, some project data are provided in World Bank annual reports but they are not at all comprehensive.

By contrast, reporting performance is taken seriously, although the development of common reporting formats and methodologies varies. The CIFs allow each MDB involved in implementing projects to use its own monitoring and evaluation criteria; GEF projects are monitored both by the Secretariat and the implementing agencies. For some (the Australia-sponsored IFCI and the public-private Bio-Carbon Fund), developing rigorous methodologies is one of the key aims of the funds. On verification, for many funds independent evaluation or third-party verification and certification of emissions reduction are built into the system. But for many others these procedures are unclear or the information is unavailable. Again, review procedures are primarily concerned with programme evaluations every few years. Information on compliance procedures is spotty. Since many of the funds involve voluntary contributions, there are unlikely to be any compliance-promoting measures for funding.[67]

As is evident, while monitoring the performance of projects is important, little attention is paid to regularly tracking how funds are contributed, whether countries self-report their contributions as additional, or whether there is independent verification of financing claims. Further, there seem to be no procedures for political reviews of the record of contributions against pledges. Even under the GEF, which is meant to be the operating entity of the UNFCCC, there is no way to enforce compliance (see Table 5 for an overview).

Table 5: Little attention to monitoring and enforcing financial flows

	Reporting funds	Reporting performance	Verification	Review	Compliance
MDB	Annual reporting but lags in data	Each MDB follows its own M&E procedure	Unclear	Three-yearly impact evaluation	Unclear
UN	Online database for GEF	Secretariat and agencies monitor GEF	Evaluation Office but no separate verification of fund contributions	M&E results to GEF Council	Unclear but unlikely any compliance procedure for funding
Government-promoted	Ad hoc	Monitoring capacity is key criterion	Unclear	Unclear	Voluntary contributions, so no compliance procedure
Public-Private	Some data in World Bank reports but not comprehensive	Some funds help build methodologies	Independent verification for many funds but no separate verification of fund contributions	Unclear	Many are single country-led, so no compliance mechanism

Source: Author's analysis

[67] An exception is the public-private CDCF, in which the trustee announces defaulting participants.

4. Plus ça change, plus c'est la même chose?

When the climate regime was created in 1992, funding options were few and channels were fewer. Much has changed since then. Market-based mechanisms are underway in several countries. These sources are also meant to feed into funds dedicated for adaptation activities. Innovative financing schemes are being considered that would combine upfront public funds with downstream private financing. New sectors, especially forestry, are now within the purview of funding channels. There are also attempts to create new funds that would support programmes rather than projects and take a long view on investments to encourage broader participation.

Yet some things have not changed. Stakeholders continue to have outstanding concerns about the governance of climate finance. For contributing countries the preference is for more and more private financing, so that the burden on their treasuries is lessened. They also want projects to be credibly monitored in beneficiary countries and prefer to route their funds through existing institutions. Beneficiaries, in turn, argue that for all the innovative schemes that are in the pipeline, there is still no guarantee of additional and predictable funds of sufficient scale that would give them an effective say in the allocation of resources and would be bolstered by some kind of compliance mechanism.

How to break this impasse? This section argues that negotiators have to recognise that all parties cannot secure all their aims in the governance of climate finance. The design of a single financing mechanism will depend on which governance criteria parties choose to prioritise. The discussion below first draws lessons from financing mechanisms in other regimes. It then outlines four schematic institutional design options. None of them is perfect. Instead, the aim is to present objective options for all parties, explicitly recognising the gaps that will remain if one or the other is pursued.

Lessons from other regimes

Although governance failures persist in climate finance, other regimes have had relatively more success in designing funding mechanisms that have offered financial resources while also satisfying governance priorities of contributing and receiving countries.

Multilateral Fund of the Montreal Protocol

The Montreal Protocol has been called 'one of the most successful amongst international treaties related to global environmental problems'.[68] But when it was negotiated in 1987 its provisions included a loose undertaking to 'facilitate access to environmentally safe alternative substances and technology' to developing countries and provide them with 'aid, credit, guarantees or insurance programmes' (Article 5). The original Protocol did not specify the degree of assistance or the means to provide it. The lack of assurance to developing countries meant that many chose not to sign the Protocol, among them China and India.

Three years later, the London Amendment to the Protocol included a specific provision to compensate developing countries for the 'incremental costs' of participation. A new Article 10A called for the transfer of 'the best available, environmentally safe substitutes and related technologies ... under fair and most favourable conditions'. The preamble was modified to recognise the importance of R&D cooperation, keeping in mind the needs of developing countries. More importantly, developing countries were expected to

[68] UNEP and World Meteorological Organization in Bove (2002–03), p.410.

comply with measures to control ozone-depleting substances (ODS) *only if* the funding available was adequate.

The Multilateral Fund was designed to provide resources for developing both country programmes (which set out a country's plan for compliance) and work programmes (which were collections of projects and activities of a certain scale). Incremental costs were, in turn, defined as those incurred for developing ozone-safe substitutes, use of such substitutes as inputs in manufacturing, and destroying ODS.[69] Contributions were voluntary but were expected to be additional to other development assistance. Provisions were made for the transfer of $160m–240m for the initial period of 1991–93. By 2001, contributions to the Multilateral Fund amounted to $1.22bn.[70]

The Fund's governance is similar to the models adopted for a number of climate finance initiatives. It is managed by an Executive Committee (ExCom) supported by the World Bank, UNDP, UNEP, and UNIDO. Its membership is evenly divided between developed and developing countries. UNEP was tasked with research, data-gathering, and treasury functions; UNDP had the responsibility of conducting feasibility studies; and the World Bank was given direct charge of administering and managing the Fund with oversight by the ExCom. A Sub-Committee on Monitoring, Evaluation and Finance was created in 1997 to consider draft business plans and submit recommendations to the ExCom. In addition, a Sub-Committee on Project Review has also operated since 1994. Poor countries have had representation in both. Since 1997 the Secretariat (based independently in Montreal) has also been given the additional task of monitoring and evaluating projects.

However, the Fund has had to encounter several operational and governance-related challenges. First, the promise of technology transfer needed more specification because the R&D was driven by private firms and, therefore, intellectual property concerns were high. For poor countries, this meant that financing also had to cover IPR costs and ensure that both the hardware and embedded skills in the technology were transferred. The fear was that technology transfer would amount only to some workshops and training programmes and nothing more substantive.[71] Secondly, determining the definition of incremental costs was left to the ExCom. Generally, it would include capital costs of conversion plus incremental operational costs relative to available alternatives. But this proved more difficult than expected because of the politics of pricing rather than simply calculating incremental costs.[72]

Thirdly, there was a real risk of falling short of funding requirements. The first round of funding raised capital only for three years. But the bigger challenge was of ensuring that contributing parties met their annual funding commitments. By end-1994 funding shortfalls were already affecting projects and approvals; during the period 1994–2001 no contributing party met its annual contribution requirements. The Fund has never received full contributions for any of the budget periods. With no sanctions available for failure to do so, the ExCom could only make requests for payments. Qualifying developing countries also delayed matters by imposing taxes and duties on imported equipment or failing to enact appropriate domestic legislation or create co-ordinating institutional arrangements.[73]

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[69] Patlis (1992), p.198.

[70] Barrett (2005), p.347, p.349.

[71] Patlis (1992), pp.203-208.

[72] Bove (2002–03), p.429.

[73] Ibid., pp.424-425, p.436, p.440.

A fourth and another finance-related challenge was disagreement over the terms of funding. Poor countries did not want World Bank conditionality for loans to be applied to grants under the Fund. Meanwhile, rich countries favoured concessional loans when projects were expected to incur a financial benefit. The ExCom deliberately skirted the issue so that a vote would not be called and so that it could claim that decisions were taken by consensus.[74] Finally, the Fund's monitoring and evaluation systems suffered from information gaps between implementing agencies and the ExCom, slow reporting of funding delays, and inflated project costs that undermined confidence in implementing agencies as well as recipient countries.[75]

Notwithstanding these challenges, the Fund satisfied many political demands for rich and poor countries – one reason why the Montreal Protocol has been called a success. First, the parties did not entertain the idea of a separate fund only for the large developing countries that had the potential to produce ODS, while ignoring other countries. Such a move would have gravely undermined the legitimacy of the regime. Secondly, initial proposals in 1992 to subsume the Fund within the GEF were ultimately rejected even by donor countries. As a result, rich and poor countries had balanced representation in fund governance, setting a precedent for future environmental agreements. One caveat is that consensus-based decision-making gave each donor a veto over the allocation of funds.[76] Thirdly, qualifying recipient countries could expect direct and concessional funding. The focus was on programmatic funding where developing countries prepared reports on overall funding needs, even though disbursements were on a project basis.

Vertical funds in global health: the Global Fund and GAVI Alliance

There has been a surge in vertical funding models in global health since the early 1980s and certainly since the mid-1990s. Horizontal funding focuses on long-term funding for integrated systems. Vertical funding strategies concentrate on specific interventions and technologies that can deliver measurable and more immediate results. By 2008 more than 90 global health partnerships supported disease-specific interventions,[77] the result of private philanthropic donors (such as the Bill and Melinda Gates Foundation) seeking the most effective and measurable results for their money, along with governments hoping to leverage private capital for development assistance.[78]

Global Fund for HIV/AIDS, Malaria and Tuberculosis (Global Fund)

Established as a Swiss foundation in 2001, the Global Fund is supported by a number of other institutions. The World Health Organization offers administrative assistance and the World Bank disburses funds to Principal Recipients in each country. So far, $14.9bn has been committed to 140 countries, although disbursements have a time lag of 9–11 months.[79]

Although it is a public-private fund, most funds have come from rich country donors. Proposals are reviewed by a Technical Review Panel (about 40 per cent of proposals are recommended to the Board for funding). Programmes are evaluated every two years based on performance criteria relating to operational and grant performance, systems

[74] Ibid., p.450.

[75] DeSombre and Kauffman (1996).

[76] Ibid., p.103, pp.105-106.

[77] McColl (2008).

[78] Sridhar and Tamashiro (2009), p.4.

[79] Ibid., p.6.

effects, and impacts on the targeted diseases. The Board comprises 24 members with equal representation for developing countries and donors plus civil society, private sector, and Gates Foundation representatives. A secretariat of 250 staff consumes less than 3 per cent of donor contributions.

The Fund uses Country Coordinating Mechanisms (CCMs), which are in-country partnerships that determine needs and priorities, submit proposals, and oversee implementation of successful grant applications. Although CCMs include representatives from governments, NGOs, donors, disease-affected communities, faith-based organisations, academics, and the private sector, the responsibility for the grant resides with a Principal Recipient (often a government agency). Independent auditors such as PriceWaterhouseCoopers and KPMG audit and evaluate the capacity of Principal Recipients to administer the grant. In turn, the CCMs can suffer from the absence of a clearly defined role, inadequate or inappropriate representation of civil society, lack of control over appointments, conflicts of interest, inadequate financial and technical resources, and improper evaluation. A separate NGO, Aidspan, publishes the Global Fund Observer newsletter to report and monitor financing flows, comment on disbursements and implementation, and give guidance to stakeholders.[80]

GAVI Alliance

GAVI is also a public-private partnership, between developed and developing countries, research institutions, vaccine industries in rich and poor countries, civil society organisations, philanthropic foundations, WHO, UNICEF, and the World Bank. All these actors have representation on the GAVI Board.[81] Contributions ($3.8bn by end-2008) are a combination of direct donations, long-term pledges, and support for developing and manufacturing vaccines. GAVI, in turn, funds countries with an annual per capita income of less than $1,000. Like the Global Fund, GAVI proposals are evaluated by an Independent Review Committee of experts, and applications go through multiple rounds of revisions before getting approval.

In the first phase (2000–05), GAVI funds were directed at under-used vaccines (Hib, hepatitis B, and yellow fever) and for improving vaccine systems. In the second phase (2005–10), GAVI channelled funds for health system strengthening (HSS). It also had to respond to challenges facing long-term funding. Thus, it introduced co-financing by recipient countries with the expectation that the co-financing share could increase by 15 per cent annually. GAVI also provides cash rewards for immunisation services support (ISS) as a source of flexible resources for countries to improve their immunisation performance.[82]

Moreover, GAVI has also relied on leveraging resources from the private sector. It uses advance market commitments (AMCs), whereby donors pledge resources to guarantee a price for vaccines once they have been developed. Such a long-term guarantee is expected to stimulate private investment in vaccines. In addition, the International Finance Facility for Immunisation (IFFIm) uses long-term, legally binding aid pledges by donors to issue bonds to generate upfront capital that can be used to frontload investments and maintain a predictable stream of financing. The mechanism has mobilised $1.2bn to date is projected to mobilise around $4bn over the next ten years.[83] An estimated 83 per cent of GAVI funds are channelled to grant programmes, with the

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[80] http://www.aidspan.org

[81] Sridhar and Tamashiro (2009)., p.18.

[82] Lob-Levyt (2009).

[83] GAVI Alliance (2008), pp.1-68.

remainder of the resources allocated to its work plan, interest fees for the IFFIm, and administrative costs for the Secretariat, which is based in Geneva and Washington, DC.

World Bank's Trust Fund for the Global Agricultural and Food Security Programme (GAFSP)

Another recent fund was approved by the World Bank's board in January 2010 to scale up agricultural assistance to low-income countries. The idea for the Fund developed out of the G8-'plus' meetings in July 2009 when more than $20bn was pledged for agriculture and food security. In designing the fund, the World Bank received inputs from the African Union, UN agencies, MDBs, donors, and civil society organisations. GAFSP funding is directed towards increasing agricultural productivity, linking farmers to markets, lowering risks and vulnerabilities, supporting non-farm livelihoods, and offering technical assistance.[84]

Like some of the health-related funds, the GAFSP aims to provide direct and immediate funding to developing countries, with their governments in charge of designing and implementing plans. Funding commitments so far have reached $900m, again from governments and philanthropic organisations. The Fund was formally launched in April 2010 and by June 2010 Bangladesh, Haiti, Rwanda, Sierra Leone, and Togo had already been selected for funding.[85]

The funds can be channelled through both public windows (via a World Bank trust fund) and private routes (via an IFC trust fund). A Steering Committee (with equal representation of contributing and receiving countries) will determine resource allocations under the World Bank trust fund, but even the IFC will have to report to it. The Steering Committee follows a consensus-based decision-making rule. Project proposals are further screened by an independent Technical Advisory Committee. The Steering Committee also has representatives from FAO, IFAD, other MDBs, and WFP, but civil society groups cannot vote. Unlike the health-focused funds, however, the GAFSP is not designed as a vertical fund, thus eliminating the need for additional and separate staff or creating new appraisal procedures.

Lessons for climate finance

What lessons do the initiatives discussed above offer for climate finance?

First, multiple funding sources are necessary but not sufficient. These funding initiatives have all had the aim of significantly increasing the scale of funding available while making sure that it is additional to other development assistance. The main advantage of vertical funds is the ability to raise more resources through both public and private sources. Moreover, contributors to the Global Fund and the GFASP include large, developing, and emerging economies as well.

Nevertheless, the sustainability of funding remains in doubt even when private sources are tapped. GAVI's AMC initiative has garnered $1.5bn, whereas $35bn is needed for its programmes until 2015.[86] The long-term commitments needed to raise bonds under the IFFIm increase the likelihood of default by donor countries when fiscal pressures mount.[87] Moreover,

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[84] More details at http://siteresources.worldbank.org/NEWS/Resources/GAFSPQuestionsAnswers_ext042210.pdf.

[85] Newsroom America (2010).

[86] Chokshi and Kesselheim (2008).

[87] Muraskin (2004).

the funding requirements remain high: assumptions that vaccine prices would drop over time have proved wrong, which makes it harder for cash-strapped poor countries to take on a greater proportion of funding responsibilities.[88] The Montreal Protocol has also suffered delays in funding, but its problems pale in comparison with the level of funding needed for climate change. Tackling ozone depletion involved focused interventions in identified industrial plants. By contrast, climate change requires strategies that touch every area of energy generation and consumption.

Secondly, targeting funds improves outcomes but also reduces flexibility. The relative success of these funds is at least partly due to their focus on specific diseases or technologies – but there are caveats. Whereas the Montreal Protocol targeted one specific set of pollutants, the UNFCCC covers a wide range of greenhouse gases. Moreover, the technologies required for combating ozone depletion were relatively simple, low-cost, and – crucially – already developed. When it comes to GHG mitigation, many of the key technologies are complex, high-cost, and still under research and development.

At the same time, vertical funds are generally criticised because they target specific diseases or pollutants at the cost of under-funding systemic infrastructure. For instance, investment in health systems is often seen as a bottomless pit (about 35 per cent of resources from the Global Fund are used to strengthen health systems). Under GAVI, for instance, where health systems support has recently been provided, recipient countries are further burdened by the need to prepare additional plans to secure funding. Further, vaccine requirements in one country might not be the same as those in another. If the available funding is tied to policy shifts, then recipient countries face a great deal of uncertainty about the long-term feasibility of their vaccination programmes.

Thirdly, direct access to funding is achievable. The GAFSP's main lesson for climate finance is its focus on providing funds much more quickly than existing bilateral and multilateral cycles. Such funding is also expected to be more flexible, giving countries a chance to restructure their programmes midway, depending on outcomes. In both ways, the programme hopes to make aid flows more predictable, something that the various climate funds have not achieved. The Montreal Protocol's fund also permitted programmatic funding, which allowed for a more strategic orientation away from ozone-depleting substances.

Fourthly, the legitimacy of governance depends on both rules and practice. All the funds have balanced representation of rich and poor countries and many also formally include other actors such as international organisations and civil society representatives. Yet tensions persist on the terms of funding and regarding decision-making rules. Recipient countries remain sceptical of concessional loans as opposed to grants, fearing the conditionalities attached to them and the size of the potential debt burden. In climate change, where estimates of funding requirements vary widely, even low-interest loans can become burdensome. The lessons from the health-related funds show that while private sector participation can increase the available funds, there is no easy transition to recipient countries taking on larger co-payment obligations. Balanced representation on boards and expert committees can create an illusion of legitimacy if consensus-based voting rules ensure that contributing countries still maintain effective vetoes over the allocation of resources.

Fifthly, monitoring and evaluation remains a key concern even for targeted funds. The use of performance-based indicators as the basis of reward schemes has led to the perverse outcome of inflating immunisation figures in GAVI recipient countries.[89] There have been calls for independent monitoring and tracking of vaccination coverage.[90] Others suggest that, in order

[88] Sridhar and Tamashiro (2009), p.32.

[89] Sternberg (2008).

[90] Lim et al (2008).

to reduce administrative burdens, the Global Fund and GAVI could co-ordinate common reporting structures and support health information systems in developing countries.[91] Monitoring and evaluation has also remained a problem with the Montreal Protocol, due to inflated project costs and lack of independent audits.

Notwithstanding their challenges, however, these funds show that combining higher funding commitments with improved governance is possible. As the chief US negotiator for the Montreal Protocol has argued, many of the practices underpinning the treaty retain a powerful resonance for climate change.[92]

Key concerns and priorities

Based on the analysis of different funding sources and channels both within and outside the climate regime, it is useful to briefly recapitulate the key concerns and priorities that remain for the parties.

- Beneficiary countries have low representation in decision-making for most mechanisms.
- MDBs manage many of the existing funds; there is a preference against creating new institutions and additional bureaucracy.
- Traditional sources of financing are too low, often non-additional, and volatile, and direct access to funding is often limited.
- However, innovative finance and market-based schemes need more certainty – of regulation, potential demand, and expected prices.
- At the same time, innovative financing is needed both for large-scale and small-scale projects, as well as for large and small developing countries.
- Adaptation has received less attention but needs more programmatic and budget support to integrate plans into overall development strategies.
- Climate finance needs institutionalised MRV, not only of projects and programmes but also to track funds against commitments.
- However, compliance with commitments will be harder to guarantee or enforce the more market-based instruments are used.

Options for institutional design

Noting the lessons learned in other regimes and the outstanding concerns of parties in the climate regime, this section outlines four institutional architectures for the governance of climate finance (summarised in Table 6). These schematic options have one principle in common, namely explicit recognition of the trade-offs between different priorities in climate change financing. The following discussion sets out the key elements of each design option, its merits and demerits, and its implication for the Copenhagen Green Climate Fund (GCF), envisaged in the Copenhagen Accord and through which a 'significant portion' of new and additional funding will flow.[93]

The Accord also states that the GCF will be established as an operating entity of the financial mechanism under the UNFCCC. It is expected to fund projects, programmes, policies, and other activities related to mitigation (including REDD-plus), adaptation, capacity-building, and

[91] Aiga et al. (2008).

[92] Benedick (2001), pp.71-76.

[93] Copenhagen Accord, 18 December 2009, para. 8.

technology development and transfer.[94] The GCF needs a COP decision to be established but, as an operating entity, it can be housed elsewhere.[95] The question is how far different design options will fulfil alternative priorities for raising funds, allocating them, monitoring flows and activities, and giving contributors and recipients a say in its governance.

[94] Ibid., para. 10.

[95] Rajamani (2010).

Table 6: Options for institutional design for governing climate finance

	A: Consolidate and specialise	B: Create and legitimise	C: Innovate and de-bureaucratise	D: Separate and indigenise
Focus	Voice Coordination	Scale of funding Voice	Scale of funding	Hastening actions Adaptation is key
Elements	No new institutions Reform of MDBs Aim for budget support MRV under UNFCCC	New Low Carbon Global Fund Increased voice Upfront financing commitments Programmatic support with flexible, project financing MRV by public-private agencies	Innovative financing MDBs face competition Mainly project financing MRV by market actors	No overarching mechanism Self-reliance and innovative finance MDBs underwrite risk Legal commitments for adaptation funding under UNFCCC MRV needs domestic capacity
Merits	Beneficiaries get more voice Contributors' preference for existing agencies maintained	G77 and China's formal demands met Contributors might accept if precedents from Montreal Protocol, Global Fund, GAVI, and GAFSP are noted	Contributors do not have to contribute greater public funds if private markets fill the gap Emerging economies secure greater financial flows for technological upgrading	Political feasibility high, especially for a deal between rich and emerging countries Adaptation finally gets separate attention – poorest countries' demands met
Demerits	Innovative financing limited	Political feasibility low given funding requirements	UN-centred governance declines Adaptation funding suffers	Small countries potentially lose in technology race
Implications for Green Climate Fund	GCF resembles GEF GCF answerable to COP COP determines equitable allocation	LCGF morphs into GCF: legitimacy rises LCGF more a vertical fund for mitigation and technology transfer: sub-set of GCF remit	Less voice Limited role as operating entity: most funds through private channels Challenge of counting 'new and additional' resources under GCF	GCF primarily as operating entity for adaptation/capacity-building financing Reduced role of GCF in mitigation

Source: Author

Option A: Consolidate and specialise

This option prioritises two governance concerns: more voice or decision-making power for beneficiary countries, and coordination among existing institutions. It will have four key elements.

- **No new institutions:** Instead of creating more institutions, better co-ordination between existing institutions will be the norm. Of course, this is exactly what the GEF was supposed to do (a tripartite arrangement between UNDP, UNEP, and the World Bank). The difference is that, in this case, the funds promised will be significantly greater and will be linked to a compliance mechanism under the UNFCCC. The various institutions could also specialise in funding particular sectors or activities to reduce overlaps in mandates and programmes. The resources counted under this mechanism could be all of the $100bn promised under the Copenhagen Accord. In that case, the share of private financing would have to be agreed because it will be less predictable, depending on market conditions. Alternatively, a smaller but guaranteed sum from public sources could be counted (there are many ideas for raising these resources).[96] These funds will be channelled through MDBs and UN agencies only (bilateral channels will not be permitted).
- **Reform MDBs:** The other difference with current arrangements will be much greater voice for beneficiary countries in all funding channels. This means not only representation on the governing boards of funds but also voting rules that do not discriminate against beneficiaries (i.e. no double majority voting). Consultations with beneficiaries and stakeholders will take place in designing the funds, not just for discrete projects. Public-private investment vehicles will also give representation to countries that are intended targets for investments.
- **Aim for budget support:** In order to reduce transaction costs for contributing countries and increase voice for beneficiaries, attempts will be made to provide more programmatic and budget support rather than focusing only on projects. For this arrangement to be credible, reporting and transparency will be critical and monitoring capacity will have to be increased in beneficiary countries.
- **MRV by specialised bodies with UNFCCC reviews:** Instead of each MDB and UN agency adopting its own monitoring and evaluation criteria, common reporting formats will be devised. The reporting will be directed to the UNFCCC rather than the MDB, so that information on all funding allocations is collected at a centralised location. A technical committee at the UNFCCC will then independently verify the allocations and report to its political principals. The UNFCCC will undertake a political review (not just a technical one) of contributing countries fulfilling their funding commitments. Even if a formal compliance procedure is not in place, independent reporting, verification, and review of financial flows will be a step change from the current opaque arrangements in place.
- **Disadvantage – innovative finance is limited:** This option satisfies beneficiaries' demand for voice and contributors' preference for funding through existing channels. As a result, it maintains a plethora of different institutions that would be involved in climate financing. It is unlikely that such a design will stimulate innovative financing models to raise private capital, which require a long time horizon, more stable carbon prices, and more flexible monitoring provisions.

[96] These include auctioning international permits (Norway's proposal), levies on aviation and maritime transport (LDC proposal), taxes on international financial transactions (India's proposal), and selling IMF bonds in global markets, among others.

Here, innovative financing mainly refers to new private funding sources or ways to leverage public funds for greater private investments. Notwithstanding the potential to raise additional funding from public sources (such as aviation or maritime levies, green bonds, auctioning emission allowances, etc.), the scale of the effort still requires significant private financing. Even with greatly improved co-ordination among MDBs and other agencies, there will be bureaucratic obstacles and mixed regulatory signals, which undermine private investments. Also, if private sources of finance are capped or bilateral funding is not counted, then the climate regime's finance mechanism will have a lesser share of new funding streams flowing through it.

- **Implication for Green Climate Fund:** By not creating any new institutions, under this option the GCF will look more like the GEF. The expectation would be that co-ordination between multiple funds (serving as implementing agencies) will improve. More importantly, by establishing MRV and reviews under the UNFCCC, the GCF will be directly answerable to the COP. The allocation of funds for different projects can be determined by technical committees, but the COP will deliberate on the overall balance of financial flows between mitigation, adaptation, capacity-building, and technology transfer.

Option B: Create and legitimise

Like Option A, this option also relies largely on public funding, but aims to create a wholly new global fund that would increase the legitimacy of any deal on climate finance in the international negotiations. The governance priorities here are both the scale of funding as well as increasing the voice of developing countries in the management of such a fund. However, the tension between scale and voice is expected to remain.

- **New low-carbon global fund:** A dedicated new facility – the Low Carbon Global Fund (LCGF) – will be charged with mobilising resources and building capacity to cover the incremental cost of achieving specified GHG reduction goals.[97] 'Incremental' would be defined as costs over and above those envisaged in current energy strategies, with an explicit target of lowering the emissions trajectory of beneficiary countries. Detailed metrics and verification procedures would be developed to compare current emission pathways with lower-carbon pathways, with the LCGF financing the costs of transition. In so doing, the model draws on the experience of the Montreal Protocol, whose membership increased once developing countries were guaranteed a fund that would cover their costs.
- **Legitimacy via increased voice:** Developing countries are unlikely to accept a governance and decision-making structure dominated by rich countries. Even with modified governance rules for the numerous trust funds, major developing countries are unlikely to accept MDB-led financing schemes. But for developed countries the legitimacy of the UNFCCC will hinge critically on perceptions of its capacity for overseeing compliance. The proposed LCGF will be overseen by a separate Executive Board comprising equal numbers of developed and developing countries, with additional representation of civil society and private sector representatives. The Executive Board will be headed by a respected international figure. MDBs will have only specialised operational tasks, such as assistance in data collection, analysis, and framing country programmes.
- **Legitimacy via upfront commitments:** The new global fund will secure upfront financing commitments in five-year tranches, as has been the case with the GAVI

[97] For a similar proposal for a Low Carbon Technology and Finance Facility, see Ghosh and Watkins (2009).

Alliance. Further, following the example of the Global Fund for HIV/AIDS, Malaria and Tuberculosis, eligibility for direct access to financing will be determined through a three-step process. First, developing countries will estimate the financing requirements of moving towards their own national mitigation targets. The incremental costs will be over and above current plans for efficiency gains. Second, the proposals will be submitted to a technical panel constituted under the LCGF, which will make recommendations to the Executive Board for the release of finance. Third, resources will either be released promptly if the proposal is accepted or withheld subject to further clarification if there is a negative vote.

- **Programmatic support with flexible project funding:** The primary role of the LCGF will be to tap into public financing to subsidise and/or insure the upfront capital expenditure for low-carbon transition programmes. Countries vary in the type of finance and support they require. As with the new agricultural fund (the GAFSP), funding support could be provided through parallel public and private funding windows. Low-income countries are likely to need highly concessional finance, including grants. For middle-income countries, especially those with high levels of private investment in the energy sector, trade finance and commercial risk mitigation through loan guarantees, insurance, and other instruments may be more relevant. For energy utilities, whether public or private, subsidised risk insurance, advance payment guarantees, and performance bonds can significantly reduce the costs of construction and technology. This is an area in which the World Bank's International Finance Corporation has extensive experience. One option might be for the IFC to manage the subsidy element in commercial risk provision.
- **MRV by specialised, public-private agencies:** Any system that develops metrics for plant performance and not financial transfers would not be credible in the eyes of developing countries. Any system that measures and reports financial flows and not the efficiency of new plants would not get the support of developed countries. Only a partnership model of joint implementation and monitoring can satisfy the demands and concerns of all groups of countries. In order to increase the legitimacy of the process, the services of independent private auditors can also be used (a recent example was the use of PricewaterhouseCoopers for tracking and auditing relief funding after the 2005 Indian Ocean tsunami).
- **Disadvantage – political feasibility declines with funding requirements:** The main disadvantage of this model is that, in the middle of a severe economic crisis, it is unlikely that contributing countries will make upfront financial commitments of sufficient scale. The Montreal Protocol, under which financial requirements were much smaller, suffered shortfalls within three years of commencing operations. Even the use of innovative public-private mechanisms, under the GAVI Alliance, for instance, has not generated a lot of funds compared with the needs. In seeking to strike a balance between greater voice and greater funding, the legitimacy of the Low Carbon Global Fund will always be contingent on wider economic and political conditions.
- **Implication for Green Climate Fund:** If a Low Carbon Global Fund were to morph into the Green Climate Fund, it would perhaps have the greatest legitimacy among a majority of UNFCCC parties. To be sure, the Copenhagen Accord explicitly seeks funding from a mix of public and private sources as well as multilateral and bilateral channels. Therefore, the LCGF will probably only serve as a sub-set of the overall financing mechanism under the UNFCCC. That said, the LCGF has the advantage of leveraging upfront public funds for greater sums of private investment. Its decision-making structure also offers voice to

developing countries while MRV by independent, private agencies could increase confidence among contributing countries. There is a danger, however, that the LCGF will be viewed more as a vertical fund focused on mitigation and transfer of specific technologies. If that were to happen, then the GCF's commitment to adaptation and capacity-building could be called into question.

Option C: Innovate and de-bureaucratise

In this option, the priority is to significantly increase the scale of funding to ensure that climate financing is adequate for the purpose. Conversely, the other priority is to reduce administrative barriers to increasing the flow of resources.

- **New innovative mechanisms:** The model here will rely much more on innovative market-based financing mechanisms. These could include upfront financing from public sources to stimulate investments in cleaner technologies (or what is called Advanced Market Commitments), green bonds issued by the IMF,[98] programmatic CDM, integrated carbon markets, etc. Whatever the mix of funding sources, a likely outcome will be a much reduced share of public financing though a potentially large pot of money for beneficiaries.
- **MDBs part of the mix, but face competition:** MDBs and UN agencies will not be replaced; some are already in the process of creating innovative funds. But they will no longer be the primary or default managers for climate financing. Instead they will have to compete with several other possible modes, such as bilateral public-public technology partnerships, regional or plurilateral public-private arrangements, private-private transactions via voluntary carbon markets, etc. Thanks to such competition, these agencies will also have to streamline bureaucratic procedures for funding approvals, implementation, monitoring, and verification.
- **Programmatic support possible but mostly projects:** Although programmatic and budget support can be conceived under this model, the dominant modality will be for projects. Funds will flow to countries and projects that are able to offer quick returns or guarantee markets or minimum prices for longer-term investments.
- **MRV largely by market actors:** In order to reduce transaction costs, the burden of monitoring and verifying projects will fall on private actors. Either this will be done by project developers themselves or jointly with investors or by specialised third-party verifiers. The point is that the stability of the markets will depend on the credibility of projects operating in particular jurisdictions. It will be up to the investors to ensure that offset credits are credible.[99]
- **Disadvantage – UN-centred governance declines:** As is evident, this model will not appeal to many developing countries because of the reduced role of the UNFCCC. There will be little guarantee of the actual amount of money available (contingent on economic conditions) or an equitable allocation of resources to small and large developing countries (contingent on a UN-led process). UNFCCC members will also have less oversight over financial flows and, consequently, little leverage over contributors to comply with funding commitments. The only reason why countries might still accept this option is if the upside of scale of funding is significantly large. In numerical terms, the projections would have to be in the hundreds of billions of dollars. In governance

[98] Bredenkamp and Pattillo (2010). The Green Fund could be partly financed by the issuance of additional Special Drawing Rights (SDRs).

[99] For more on a buyer liability system, see Keohane and Raustiala (2008).

terms, some form of public finance guarantee for a minimum amount of funding per year might be necessary.

- **Disadvantage – adaptation funding suffers:** The other downside is that market-based mechanisms do not offer funding at scale for adaptation. There are signs that private sector funding for adaptation could be leveraged (for instance, through micro-finance products) but a number of institutional preconditions will have to be fulfilled.[100] Further, if most governance functions are relegated to market participants, climate regime members will have little influence in pressing for more funds to be channelled to adaptation activities. One could argue that the Adaptation Fund's resources could increase (with levies on CDM and perhaps other carbon market transactions). Given the experience so far, however, this will be a big risk for highly vulnerable countries and communities to shoulder.

- **Implication for Green Climate Fund:** Under this design option, the Green Climate Fund will not fulfil its objectives of balanced representation or allocation of resources between countries or between different types of climate-related activities. The GCF's role as an operating entity will also be limited since most of the funds will flow through private channels. To the extent that MDBs will be part of the funding mix, the GCF could co-ordinate their activities. The most difficult challenge for the GCF will be counting 'new and additional' resources, depending on how it treats carbon market transactions or purely private sector-led investment flows. If parties can agree on a baseline and a formula to count private funds, then the potential scale of funding under this option might still give the GCF some credibility under the UNFCCC.

Option D: Separate and indigenise

The fourth model squarely confronts the shifting power trajectories in climate negotiations and in investments in the development of clean technology. Its focus is on prioritising actions now rather than later by leveraging what leading economies are doing already. Although this makes it a variant of option C, its other distinguishing priority is to significantly increase funding for adaptation. This option might appeal to rich and emerging economies, reducing the former's public financing obligations and allowing the latter to secure finance and technology-based bilateral and plurilateral deals with rich countries. For the poorest economies, a legally binding financing commitment on adaptation might also be an attraction.

- **No overarching financing mechanism:** Negotiations on an overarching vertically integrated finance mechanism have continued for a long time. For various reasons discussed in this paper (fiscal pressure, economic uncertainty, governance failures, conflicting priorities), there is no reason to expect that a new mechanism will be agreed soon or, if it is, will generate sufficient resources within a short period of time. Instead, like Option A, the preference here will be to better co-ordinate the work of existing funds. What is different, however, is that the regime will draw a clear distinction between mitigation and adaptation and will be structured accordingly. It will not try to govern both through a single mechanism and risk adaptation becoming a lesser priority. At the same time, a separate focus on mitigation will prioritise the environmental integrity purpose of the climate regime, namely stabilising, sequestering, storing, and reducing GHG emissions in order to keep average temperature increases to less than 2°C.

[100] Atteridge (2010).

- **Self-reliance and innovative finance:** In pursuit of the mitigation goals, the regime will recognise that a large portion of funds will have to flow to large developing countries, where the emissions reduction potential is the greatest. It will also recognise that these countries are now at the forefront of investing in R&D and capacity for cleaner technologies. The substantial resources that these countries have already committed (through subsidies, stimulus packages, etc.) and are planning to commit through their national plans on climate change should be a signal of their seriousness. In turn, innovative finance will flow towards these countries through private-private collaborations or public-private arrangements. This does not absolve rich countries from their responsibility to contribute funds. Instead, it creates a clear market opportunity to devote funds in those countries that offer the scale to develop new technologies and generate the greatest returns on investments.
- **MDBs (and bilateral funds) play an important role in underwriting risk:** Existing funding institutions will increasingly play a facilitating role rather than directly investing in projects. That role will focus on underwriting project risk, offering concessional trade finance for the flow of environmental goods and technologies, covering insurance costs, etc. They could also offer upfront guarantees to stimulate greater private sector investments.
- **Adaptation funding with legal commitments under UNFCCC:** Meanwhile, rich countries will undertake legally binding commitments to provide adaptation finance. These funds will be deposited with the Adaptation Fund and its Board will determine the allocation of resources based on some formula (say, based on potentially vulnerable population, incidence of natural disasters, levels of poverty, etc.). Non-compliance with these commitments will be reviewed by the UNFCCC. Sanctions could take the form of an allocation of the contributing country's share of IMF Special Drawing Rights (SDRs) to the Adaptation Fund until it provides the money. Each contributing country will be free to devise its own fund-raising scheme (auctioning permits, taxing fossil fuels, etc.). Each beneficiary country will develop indigenous plans for adaptation. By separating adaptation and mitigation, this model also has the advantage of reducing potential domestic political obstacles to transfers of money to competitor developing countries. At the same time, large, developing countries will also partake of adaptation funding since they, too, have large vulnerable populations.
- **MRV depends on robust domestic capacity:** For large developing countries to attract more investments in cleaner technologies, they will also need to improve their domestic monitoring and enforcement capacity. This means not only federal-level institutions but strengthening governance at the provincial and local levels as well. The use of satellite technology will also be crucial to monitor emission sources and target investments where the maximum returns can be expected.
- **Disadvantage – small countries lose out on technology:** Despite its political feasibility, the main disadvantage of this model is that many small countries might lose out in the technological race. The fear of a widening technology divide (already driven by the concentration of mitigation projects or patents in just a few countries) will be exacerbated if there is no multilateral mechanism to guarantee the sharing of new technology. The Copenhagen Accord envisages a Technology Mechanism and the Indian government has proposed creating a network of innovation centres. However, past experience in the climate regime does not offer reason for optimism. If this model were to be pursued, the climate regime will need a better strategy for ensuring technology transfer than has been attempted so far.

- **Implication for Green Climate Fund:** Here, the GCF would become the operating entity primarily for adaptation-related funding. Compared with past experience, this in itself will be a major responsibility and a source of legitimacy under the UNFCCC. Funding for capacity-building could also conceivably be channelled through the GCF. Contributing and recipient countries will continue to have a say in the allocation of these funds, which will be reviewed both at the national level and by the COP. However, the GCF will have a much reduced role in mitigation if this option is followed. It might still have a role in technology transfer if funds are earmarked for that purpose and dedicated for the poorest countries, although it is unclear whether guaranteed public funds will be made available.

These are not ideal options, but they offer a change from the status quo. Of course, the climate regime could continue pursuing an overarching financing mechanism. But in that pursuit of the ideal, if it fails to offer something to all parties, there is a real risk that larger parties will unilaterally pursue their own financing and technology strategies. The GCF, promised under the Copenhagen Accord, might suffer a similar fate if parties do not recognise the trade-offs between voice, co-ordination, scale, and the different kinds of actions that are necessary to confront climate change. That, too, will be a change of sorts, compared with what the regime has failed to accomplish for nearly two decades. However, such a development will exclude a majority of the regime's membership. In that sense, it will be a change for the worse.

5. Conclusion

Climate finance is due for an upheaval. For far too long, parties to the climate regime have tinkered with funds and facilities, spending years negotiating over miniscule resources that come nowhere close to meeting the global challenge. In reality, the concern has been less over the scale of resources and more over who gets to control, collect, disburse, and monitor them. Put differently, the governance of finance is a major stumbling block to securing international co-operation on climate change. This situation is unsustainable.

Meanwhile, changes have been taking place outside the scope of negotiations but which are relevant to the debates. First, the economic crisis has put pressure on fiscal balances and has also undermined the viability of carbon markets to attract and sustain investments in cleaner technologies. Secondly, large developing countries are posting the fastest rates of growth in clean energy investments, whether measured by installed capacity or by support offered unilaterally (for example, through stimulus packages). Thirdly, these same countries are now a force to reckon with in climate negotiations. While they remain wedded to the G77 (the grouping of 130 developing countries), the BASIC countries are now at the top table. This raises several ethical dilemmas, both for how negotiations ought to be organised and also for the extent to which these countries (or the G20 as another forum) can truly represent the interests of many poorer economies.

Fourthly, growing attention is being paid to innovative financing schemes to increase the scale of funding available and to attract investors. However, fifthly, in the process adaptation funding is being ignored. The promises to offer quick start funding under the Copenhagen Accord (with balanced allocations for adaptation and mitigation) have yet to materialise. The question for the governance of climate finance is clear: how to harness these power shifts while balancing the varied financial imperatives?

This paper offers a common framework to assess governance. It identifies six different funding channels – multilateral development bank-led, UN-led, government-promoted, public-private, carbon markets, and unilateral support – to highlight how their governance is often interlinked. It also analyses the competing priorities of different stakeholders. The analysis forms the basis of a governance framework focused on four functions: making decisions, securing commitments, ensuring disbursements, and monitoring performance.

Thirty-three climate funds have been analysed along each function and with regard to several embedded criteria. The result: formal representation does not guarantee effective voice in decision-making; funding commitments have been very low and unpredictable; resource allocation has been worse and directed to a sub-set of countries; and there is little standardised monitoring, evaluation, or review of financial flows.

Looking ahead, the results suggest that it is unlikely that a single finance mechanism will meet all governance criteria in ways that will satisfy all parties and stakeholders. The design of the finance mechanism will depend on which governance criteria receive greater priority. This paper offers four schematic institutional design options.

The first option – consolidate and specialise – prioritises voice in decision-making for beneficiary countries and improved co-ordination among existing institutions. It eschews new financial structures in favour of governance reform. It also pushes for budget support so that beneficiary countries have the freedom to allocate resources to priority sectors. And it transfers monitoring authority to specialist bodies accountable to the UNFCCC. The downside is that innovative financing is limited.

The second option – create and legitimise – prioritises both increasing voice as well as scale of funding. It proposes the creation of a new Low Carbon Global Fund (LCGF) with its own independent Executive Board, with equal representation for developed and developing countries. The LCGF will also increase its legitimacy by securing upfront funding commitments in five-year tranches, with clear rules for the submission, evaluation, and approval of country programmes and project proposals. Monitoring and evaluation will also occur through public-private partnerships by using independent auditors to increase credibility on all sides. Unfortunately, such an option might decline in political feasibility as the scale of required funding rises and beneficiary countries have to commit more funds during an economic crisis.

The third option – innovate and de-bureaucratise – prioritises raising the scale of funding significantly. It relies on innovative financing schemes that leverage public and private funds. In turn, development banks are no longer the sole arbiters of climate funding and are forced to become more efficient and better co-ordinated. Funding flows primarily to projects that offer the best returns but the responsibility of monitoring these projects falls mostly on market participants. The main demerit is that this option reduces the power of member countries in the UNFCCC to govern funds and it also undermines actions on adaptation.

The fourth option – separate and indigenise – prioritises actions now rather than in the future. Therefore, it leverages what leading economies are already doing with regard to clean investments and mitigation actions and it separates adaptation finance to give it more prominence. In this scheme there is no overarching finance mechanism. Instead, for mitigation large developing countries rely on their own resources but also offer big market opportunities for foreign investors and rich country governments to collaborate on developing and deploying new technologies. Multilateral banks switch to largely underwriting risks. Meanwhile, adaptation finance receives legal commitments from rich countries, actionable and enforceable via the UNFCCC. The risk is that, while mitigation and adaptation both get separate attention, small developing countries might lose out in a race for new technologies.

In an imperfect world, the pursuit of ideal-type solutions can only delay action. As power shifts in climate negotiations, it is important to find ways to ensure that leading countries do not exit the playing field entirely, leaving the smaller players with neither money nor technology. Instead, different design options can offer some gains to all parties. The upshot: compromises will be necessary, but they will have to be honest and upfront if a modicum of trust has to be restored in climate negotiations. And the best must not become the enemy of the good.

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Annex 1. Timeline of climate financing

Table A1.1: A timeline of climate financing

	Negotiations, initiatives, and announcements
June 1992	UN Conference on Environment and Development in Rio – UNFCCC signed
1994	GEF Trust Fund Climate Change Focal Area launched
December 1997	Kyoto Protocol adopted
April 2000	World Bank launches pioneering Prototype Carbon Fund
November 2001	Marrakech Accords at COP-7 established operational rules for international emissions trading and for the CDM and JI flexibility mechanisms under the Kyoto Protocol
March 2002	UK Emissions Trading Scheme launched as a pilot for the EU Emissions Trading Scheme
May 2002	Netherlands CDM Facility launched
October 2002	GEF launches Least Developed Countries Fund
	GEF launches Special Climate Change Fund
January 2003	New South Wales Greenhouse Gas Reduction Scheme commences
March 2003	Community Development Carbon Fund launched
October 2003	Chicago Climate Exchange starts trading
March 2004	Italian Carbon Fund launched
May 2004	Bio-Carbon Fund Tranche 1 launched
July 2004	GEF announces Strategic Priority on Adaptation
August 2004	Netherlands European Carbon Facility launched to tap JI projects
January 2005	EU Emissions Trading Scheme launched
	Danish Carbon Fund launched
February 2005	Kyoto Protocol comes into force, launching the flexibility mechanisms (CDM and JI)
March 2005	Spanish Carbon Fund Tranche 1 launched
August 2006	Umbrella Carbon Facility launched
2007	International Forest Carbon Initiative launched
	Spain announces MDG Achievement Fund – Environment and Climate Change Thematic Window
March 2007	Bio-Carbon Fund Tranche 2 launched
	Carbon Fund for Europe launched
2008	Cool Earth Partnership announced
	Global Climate Change Alliance launched
	International Climate Initiative launched
April 2008	Spanish Carbon Fund Tranche 2 launched
June 2008	US Congress holds hearings on whether to fund coal-based projects under CTF
	Forest Carbon Partnership Facility launched
	Congo Basin Forest Fund launched

July 2008	Clean Technology Fund launched
	Environmental Transformation Fund – International Window launched
	World Bank launches Strategic Climate Fund with the Forest Investment Program and Pilot Program for Climate Resilience
August 2008	Fundo Amazônia becomes operational
September 2008	UN-REDD programme launched
November 2008	G77 and China submit proposal for a financial mechanism under UNFCCC
	Global Energy Efficiency and Renewable Energy Fund launched
	IPCC launches Fourth Assessment Report
December 2008	Bali Action Plan agreed
January 2009	Adaptation Fund operationalised
	First compliance period of Regional Greenhouse Gas Initiative begins
May 2009	Scaling-Up Renewable Energy Program for Low Income Countries launched
November 2009	Commonwealth Launch Fund announced for 'fast start funding' of $10bn by 2012
December 2009	Copenhagen Accord – $30bn for 2010–12 and $100bn by 2030; Green Climate Fund envisaged
March 2010	UN Secretary General creates High-Level Advisory Group on Mobilizing Climate Change Resources
April 2010	Adaptation Fund Board invites first project proposals
October 2010	Final report from High-Level Advisory Group on Climate Change Finance expected

Source: Author's compilation

Annex 2. Summary descriptions of climate funds

Multilateral Development Bank Funds[101]

World Bank Climate Investment Funds (CIFs)[102]

In July 2008 the World Bank's board approved the CIF funding programme to serve as a source of interim financing until the climate regime was able to create a new financing mechanism for the post-2012 period. The CIFs comprise two trust funds, each with a governance structure that gives balanced representation to developed and developing countries.

Clean Technology Fund (CTF)[103]

One of the trust funds under the CIFs, the CTF is administered by the World Bank but includes the African Development Bank (AfDB), the Asian Development Bank (ADB), the European Bank for Reconstruction and Development (EBRD), and the Inter-American Development Bank (IDB) as implementing agencies. The primary purpose of the CTF is to scale up investments in low-carbon technologies in developing countries through a variety of mechanisms: demonstration projects, funding low-carbon programmes in national plans, leveraging MDBs to raise additional capital and offer concessional loans, and sharing learning and experience in developing and implementing low-carbon technologies.

Strategic Climate Fund (SCF)[104]

The SCF is the other mechanism under the CIFs and serves as an umbrella facility to collect and disburse donor funds to more sector-specific funds. Like the CTF, its broad purpose is to generate additional financing for addressing climate change. The difference is that it focuses on both mitigation and adaptation activities. By using MDBs (and co-financing with existing funding channels), the SCF hopes to support sustainable development by making developing economies more resilient to climate change in general, and to strengthen and expand their natural ecosystems that serve as carbon sinks in particular. As per the CIF mandate, the SCF also has a sunset clause that depends on the outcome of a new financing mechanism in the climate regime.

Pilot Program for Climate Resilience (PPCR)[105]

The PPCR is one of three funds under the SCF and is focused on adaptation to climate change. Its aim is to fund pilot projects that can demonstrate how assessments of climate risk can be integrated into a country's overall development strategies. As with other

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[101] More details on funds managed by MDBs, UN agencies, or donor country agencies available at: http://www.climatefundsupdate.org/listing. Also see Porter, Bird, Kaur, and Peskett (2008).

[102] http://www.climateinvestmentfunds.org/cif/

[103] http://www.climateinvestmentfunds.org/cif/node/2

[104] http://www.climateinvestmentfunds.org/cif/node/3

[105] http://www.climateinvestmentfunds.org/cif/ppcr

funds, the PPCR is expected to complement other activities already underway and to facilitate knowledge exchange across countries and regions.

Scaling-Up Renewable Energy Program for Low Income Countries (SREP)[106]

SREP is the second of the SCF funds that is expected to support investments in renewable energy. In addition to increasing energy access in low-income countries, SREP also aims to achieve co-benefits such as greater technology diffusion, reduced local air pollution, and of course lower GHG emissions. SREP financing is intended for programmatic support (in addition to projects) to build on national plans for developing and deploying renewable energy.

Forest Investment Program (FIP)[107]

The last of the SCF funds, FIP aims to increase investments to reduce deforestation and forest degradation and improve forest management so that they serve as effective carbon sinks. FIP's strategy is, firstly, to stimulate changes in forest-related policies and practices in developing countries by helping them build capacity for national-level planning, improve conservation practices, and better enforce forest laws. Secondly, FIP aims to raise additional resources for reducing emissions from deforestation and forest degradation (REDD). Thirdly, pilot projects are expected to be generate results and learning that can feed back into UN discussions on REDD.

Forest Carbon Partnership Facility (FCFP)[108]

One of the newest World Bank-managed funds, the FCFP is targeted at REDD projects in developing countries. Its aim is to offer positive incentives per tonne of CO_2 reduced by targeting drivers of deforestation and forest degradation.

Congo Basin Forest Fund (CBFF)[109]

The CBFF, managed by the African Development Bank, aims to support local communities in the Congo Basin region to develop livelihoods that simultaneously protect and preserve the area's forests. In addition to grant funding, the CBFF also hopes to support access to carbon markets for additional funding.

Global Energy Efficiency and Renewable Energy Fund (GEEREF)[110]

Moving away from the World Bank-managed funds, GEEREF is a public-private partnership initiative of the European Commission and is managed by the European Investment Bank (EIB). The idea is to significantly leverage public finance for private funding, offer attractive returns, and speed up the deployment of energy efficiency and renewable energy technologies in developing and transition economies. The choice of technologies will be determined by those with a proven track record (such as small hydro, biomass with on-shore wind, co-firing coal and bagasse). Most of GEEREF's resources are meant to offer risk capital for private investments, with about 10–20 per cent of the fund allocated to capacity-building and technical assistance activities.

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[106] http://www.climateinvestmentfunds.org/cif/srep

[107] http://www.climateinvestmentfunds.org/cif/node/5

[108] http://www.forestcarbonpartnership.org/fcp/; http://www.forestcarbonpartnership.org/fcp/sites/forestcarbonpartnership.org/files/Documents/PDF/FCPF_Info_Memo_06-13-08.pdf

[109] http://www.cbf-fund.org/

[110] http://www.geeref.eu/

United Nations Funds

Kyoto Protocol Adaptation Fund (KPAF)[111]

Operationalised in late 2008, the KPAF is supposed to finance adaptation projects and programmes in developing countries that are also party to the Kyoto Protocol. It is administered by the Adaptation Fund Board. It has an innovative channel to raise funds, namely a levy of 2 per cent on all certified emissions reductions (CERs) issued for projects under the Clean Development Mechanism (CDM). The KPAF also receives funds from other sources. Its remit is to support a broad range of adaptation activities, including land and water management, agriculture, health, and various types of ecosystems (including coastal zones). It can also support monitoring and early-warning activities for disease control, capacity-building for disaster reduction plans and activities, and national and regional information networks for extreme weather events.

Global Environment Facility Trust Fund – Climate Change Focal Area (GEF-TF)[112]

The GEF-TF for climate change is one of the six focal areas supported by the GEF. Its aim is to help developing and transition economies to reduce the risks and adverse impacts of climate change. Operating through three Implementing Agencies[113] and, since 1999, seven Executing Agencies,[114] GEF grants are given for mitigation and adaptation activities. These include support for deployment of renewable energy (both on-grid and off-grid) by creating policy frameworks and financing mechanisms; energy efficiency technologies for industry and buildings; low-GHG energy technologies; low-emissions and public transport systems; vulnerability studies for adaptation assessments; pilot projects on adaptation; helping developing countries build capacity for monitoring and reporting national communications, national inventories of GHGs, and technology needs assessments to the UNFCCC.

Strategic Priority on Adaptation (SPA)

The SPA is a three-year pilot programme operating under the GEF-TF with the aim of helping to integrate adaptation planning and assessment activities into national policy and in National Adaptation Programmes of Action (NAPAs). The idea is also to increase the adaptive capacity of vulnerable communities and ecosystems.

Special Climate Change Fund (SCCF)[115]

The SCCF is another trust fund managed by the GEF, again with the objective of implementing adaptation measures. Towards that end, the SCCF primarily funds projects with a long-term focus on strategies and policies. It is also expected to facilitate additional resource mobilisation from other sources for projects that fulfil at least two of three criteria: integrate risk reduction strategies into specific sectors (such as water, land management, agriculture, infrastructure, fragile ecosystems); implement adaptation activities; and build institutional capacity.

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[111] http://adaptation-fund.org/

[112] http://www.thegef.org/gef/node/1267

[113] UNDP, UNEP, World Bank.

[114] AfDB, ADB, EBRD, FAO, IDB, IFAD, UNIDO.

[115] http://www.gefweb.org/interior.aspx?id=192&ekmensel=c57dfa7b_48_60_btnlink

Least Developed Countries Fund (LDCF)[116]

The LDCF is also managed by the GEF with the aim of helping LDCs develop national plans for adaptation (NAPAs). The NAPA preparatory phase includes synthesising information, making participatory assessments of risks, identifying and prioritising response measures, and outlining specific projects that need support. During the implementation phase, the LDCF is meant to financially support these projects and integrate them into national development plans, by leveraging additional finance and working with relevant implementing agencies.

MDG Achievement Fund – Environment and Climate Change Thematic Window (MDGF)[117]

Funded by Spain and managed by the United Nations Development Programme (UNDP), the MDGF has climate change as one of eight thematic areas. It supports projects for environmental management, building capacity for adaptation and mainstreaming environmental concerns in national planning frameworks, and is also meant to help countries access other sources of funding.

United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (UN-REDD)[118]

UN-REDD is a trust fund based on a collaboration between the United Nations Environment Programme (UNEP), UNDP, and the Food and Agriculture Organization (FAO), and is aimed at reducing GHG emissions from deforestation and forest degradation. It is administered by UNDP. The purpose of the fund is to use finance and capacity-building support that can change incentives towards preserving forests and improving the ecosystems services derived from them. The fund helps developing countries to implement national REDD strategies and also develops standardised practices that can be linked to the UNFCCC.

Government-promoted funds

Environmental Transformation Fund – International Window (ETF-IW)

The ETF-IW is a UK government initiative, which channels much of the funding through other multi-donor trust funds, namely the World Bank-managed CIFs, the CBFF, and the Forest Carbon Partnership Facility (FCPF). The broad aim of the ETF-IW is to promote projects that increase confidence among developing countries that low-carbon growth paths and adaptation to climate change are consistent with and possible within their overall development aims. More specifically, it also seeks to improve co-ordination and coherence in the climate financing system, as well as to leverage additional resources from other donors and the private sector.

Fundo Amazônia (FA)[119]

Managed by the Brazilian Development Bank, the FA is oriented towards preserving the Amazon rainforest in Brazil (which accounts for 60 per cent of the forest's total). The fund's capital is raised through donations (from governments, multilateral institutions,

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[116] http://www.gefweb.org/interior_right.aspx?id=194

[117] http://www.mdgfund.org/

[118] http://www.un-redd.org/

[119] http://www.amazonfund.gov.br/

private firms, and NGOs) and net returns from cash investments. Investments via non-reimbursable grants are intended for forest management, environmental monitoring, the creation of activities for sustainable forest use, ecological and economic zoning, preservation of biodiversity, and recovery of deforested areas.

Global Climate Change Alliance (GCCA)[120]

As an initiative of the European Union, the aim of the GCCA is to create a platform for a political dialogue between the EU and developing countries on climate issues. Its work is channelled through the European Commission's existing channels for bilateral co-operation. In addition to seeking consensus on a post-2012 climate agreement, the GCCA aims to offer financial support for adaptation (in vulnerable countries, for water and agriculture); REDD (capacity for monitoring, forest law enforcement); increasing participation in the CDM (capacity for project development in LDCs and SIDS); disaster risk reduction (monitoring and forecasting capacity, preparedness, and response); and to help countries integrate climate-related measures into development plans (NAPAs and poverty reduction strategies, institutional capacity).

Hatoyama Initiative (HI)[121]

A Japanese initiative, the HI is a bilateral funding mechanism for those countries deemed to be already making some effort towards reducing GHG emissions. It is the largest such fund and aims to support 250 projects worldwide. More than 95 per cent of the fund is for mitigation activities, including renewable energy; the remainder is for REDD+ activities such as forest surveys and management, and for adaptation, particularly increasing capacity to cope with natural disasters. The funds are meant to be channelled mostly through concessional loans and bank guarantees, investment insurance and support for trade risks, direct government support, and private funding. The HI replaces the earlier Cool Earth Partnership,[122] which ran during 2008–10 with $10bn of commitments, but almost no disbursements. The HI is now scheduled to be operational during 2010–12.

International Climate Initiative (ICI)[123]

The ICI is managed by Germany and offers support for mitigation (mainly cleaner energy), adaptation, and climate-related biodiversity (primarily forest conservation) projects. The idea behind the fund is that such financial support will, in turn, leverage much greater investments from the private sector.

International Forest Carbon Initiative (IFCI)[124]

Managed by the Australian government, the IFCI is targeted at REDD projects. It plans to route funding through existing bilateral and multilateral channels. Its three main objectives are to increase forest carbon monitoring and accounting capacity (particularly by using remote sensing technology), support demonstration projects for reducing emissions from deforestation and including them within the climate regime (forest

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120 http://europa.eu/legislation_summaries/development/sectoral_development_policies/r13016_en.htm

121 http://www.mofa.go.jp/region/africa/ticad/ticadfollow-up/report/status/PR000216.html

122 http://www.mofa.go.jp/policy/economy/wef/2008/mechanism.html

123 http://www.bmu-klimaschutzinitiative.de/en/results

124 http://www.climatechange.gov.au/en/government/initiatives/international-forest-carbon-initiative.aspx

management, law enforcement, regulations), and promote market-based approaches to avoid and control deforestation. More directly, it also aims to support the World Bank's Forest Carbon Partnership Facility and the Forest Investment Programme.

Public-private investment funds[125]

Bio-Carbon Fund[126]

This fund is managed by the World Bank and has raised capital in two tranches, BioCF-1 in 2004 and BioCF-2 in 2007. The former invested in projects that sequestered carbon in forest and agro-ecosystems as well as a few pilot projects for REDD. The latter invests in similar projects plus those that sequester carbon in soils.

Carbon Fund for Europe (CFE)[127]

Managed by the European Investment Bank, the CFE is aimed entirely at European countries to help them meet their obligations under the Kyoto Protocol and to purchase assets acceptable under the European Union Emissions Trading Scheme.

Carbon Partnership Facility (CPF)[128]

The CPF is the newest fund, proposed by the World Bank, to reduce emissions and support their purchase beyond 2012, when the current regulatory period of the Kyoto Protocol ends. It is one of the few funds designed for beyond 2012, precisely because uncertainty over the fate of the climate regime has stalled investments beyond that date. In other words, the purpose of the CPF is to promote large-scale investments over the long term and in pursuit of programmatic and not just project-based support. Towards that end, it embodies two trust funds: a Carbon Asset Development Fund to prepare emission reduction programmes; and a Carbon Fund, which will purchase credits from the pool of such programmes.

Community Development Carbon Fund (CDCF)[129]

The CDCF is also a World Bank-managed public-private fund aimed at projects in poorer parts of the developing world that invest in clean energy and are expected to have community development benefits.

Danish Carbon Fund (DCF)[130]

As the name indicates, the DCF is managed by the Danish government to purchase emission reduction credits under the Kyoto Protocol's Clean Development Mechanism and Joint Implementation schemes.

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[125] More details available in World Bank (2009b).

[126] http://wbcarbonfinance.org/Router.cfm?Page=BioCF&ItemID=9708&FID=9708; http://wbcarbonfinance.org/docs/52129_WorldBank_BioCarbonBooklet_Lowres.pdf

[127] http://wbcarbonfinance.org/Router.cfm?Page=CFE&ItemID=30444&FID=30444; http://wbcarbonfinance.org/docs/CFE.pdf

[128] http://wbcarbonfinance.org/Router.cfm?Page=CPF&ItemID=41756&FID=41756; http://wbcarbonfinance.org/docs/CPF2B_May_2009.pdf

[129] http://wbcarbonfinance.org/Router.cfm?Page=CDCF&ItemID=9709&FID=9709; http://wbcarbonfinance.org/docs/CDCF_Amended_and_Restated_10_28_08_ac_public_access.pdf; http://wbcarbonfinance.org/docs/CarbonFundweb.pdf

[130] http://wbcarbonfinance.org/Router.cfm?Page=DCF&ItemID=9713&FID=9713

Italian Carbon Fund (ICF)[131]

The ICF invests in projects that offer cost-effective emissions reduction opportunities.

Netherlands CDM Facility (NCDMF)[132]

The NCDMF invests in projects in developing countries that can generate credits under the CDM.

Netherlands European Carbon Facility (NECF)[133]

Also managed by the Dutch government, the NECF invests in projects that generate credits via the Joint Implementation mechanism operating in economies in transition.

Prototype Carbon Fund (PCF)[134]

The PCF started in 2000 and is a partnership between 17 companies and six governments. It was the pioneer investment fund managed by the World Bank that sought out projects that could reduce GHG emissions and simultaneously promote sustainable development.

Spanish Carbon Fund (SpCF)[135]

Governed by Spain, this fund has had two tranches of investments (SpCF-1 in 2005 and SpCF-2 in 2008). It also uses the Kyoto Protocol's flexibility mechanisms but focuses on projects for energy efficiency and renewable energy.

Umbrella Carbon Facility (UCF)[136]

The UCF is also managed by the World Bank and pools resources from other Bank-managed funds and other participants in carbon markets to purchase credits for emissions reductions in developing countries.

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[131] http://wbcarbonfinance.org/Router.cfm?Page=ICF&ItemID=9710&FID=9710; http://wbcarbonfinance.org/docs/ICF_Eng.pdf

[132] http://wbcarbonfinance.org/Router.cfm?Page=NCDMF&ItemID=9711&FID=9711

[133] http://wbcarbonfinance.org/Router.cfm?Page=NECF&ItemID=9712&FID=9712

[134] http://wbcarbonfinance.org/Router.cfm?Page=PCF; http://wbcarbonfinance.org/docs/PCF_Instrument_06-09-08.pdf

[135] http://wbcarbonfinance.org/Router.cfm?Page=SCF&ItemID=9714&FID=9714

[136] http://wbcarbonfinance.org/Router.cfm?Page=UCF&ItemID=9715&FID=9715

Annex 3. Governance criteria and characteristics of climate funds

Table A3.1: Making decisions

Fund and type		Operation	Administration	Representation	Decision	Consultation
MDB	**CTF**	2008	WB	8 donors; 8 recipients; 1 WB; 1 MDB	Consensus	Partnership Forum
	FIP	2008	WB	Up to 6 donors and 6 recipients; 2 civil society	Unclear	Expert Group (8); indigenous peoples
	PPCR	2008	WB	5 donors; 7 recipients	Consensus	Expert Group (8); KPAF Board
	SREP	2009	WB	Up to 6 donors and 6 recipients	Consensus	Ad hoc experts
	FCPF	2008	WB	Participants' Committee: 14 REDD countries; 14 donors and carbon fund participants	Simple majority	Stakeholder participation key principle; Technical Advisory Panel
	CBFF	2008	AfDB	2 co-chairs; 1 each from civil society, CEEAC, COMIFAC, AfDB, donor, UNEP, Norway, UK, CBFP	--	Civil society participation to some degree
	GEEREF	2008	EIB and EIF	Investment Committee: EC, Germany, Norway	Board and Investment Committee	Public-private model
UN	**KPAF**	2009	AF Board	10 developing; 4 developed; 2 E. Europe	Consensus, failing which 2/3 majority	--
	GEF-TF	1994	GEF	14 developed; 16 developing; 2 transition; Quadrennial Participants' Assembly	Consensus, failing which 60% double majority	GEF-NGO network and consultations
	LDCF	2002	GEF	14 developed; 16 developing; 2 transition; Quadrennial Participants' Assembly	Consensus, failing which 60% double majority	GEF-NGO network and consultations
	SCCF	2002	GEF	14 developed; 16 developing; 2 transition; Quadrennial Participants' Assembly	Consensus, failing which 60% double majority	GEF-NGO network and consultations
	SPA	2004	GEF	14 developed; 16 developing; 2 transition; Quadrennial Participants' Assembly	Consensus, failing which 60% double majority	GEF-NGO network and consultations
	MDGF	2007	UNDP	National Steering Committee: 1 Spain, 1 recipient, 1 UN	--	Only after concept note approved

	UN-REDD	2008	UNDP	Policy Board: UNEP, UNDP, FAO, donors, WB plus possibly UNFCCC, GEF, CBD, UNPFII, CRN, CGIAR, IUCN, NGOs	--	Initial and ongoing consultations, including with indigenous peoples
Government	**ETF-IW**	2008	UK – DECC-DFID	Cross Whitehall Board; Recipients involved in design, deciding use of CIF funds and building plans	--	DFID holds public meetings with civil society; annual meeting with UK NGOs
	FA	2008	BNDES	Guidance Committee – 3 blocks (federal, state, civil society)	Each block 1 vote; each member 1 vote within block	Civil society has equal say in decision-making
	GCCA	2008	EC – EuropeAid	Recipients not involved in design; but assistance strategies with partner countries	--	Consultations with NGOs including parliament hearing
	HI	2010	Japan	Five ministerial committee	--	Experts Panel but only Japanese
	ICI	2008	Germany – BMU, GTZ, KfW	Recipients involved in development and implementation of projects	All funding decisions by BMU	International Advisory Group; no consultations before fund created
	IFCI	2007	Australia – DCC and AusAID	No formal representation of recipients	Decisions by DCC and AusAID in consultation with partner governments	Consultations with NGOs on REDD
Public-Private	**BioCF-1**	2004	WB	4 countries; 10 companies	5-member Participants' Committee; no host country	Advisory Group for fund design
	BioCF-2	2007	WB	2 countries; 5 companies	--	Advisory Group for fund design
	CPF	~2012	WB	Envisaged balanced for buyers and sellers	--	Host countries and donors participate in advisory capacity
	CDCF	2003	WB	8 countries; 16 companies: Annual participants' meeting	1 vote per $100,000 contribution; mostly simple majority; Host Country Observer has no votes	Advice from 6-member Participants' Committee; 9-member Advisory Group; Host Country Committee
	PCF	2000	WB	6 countries; 17 companies: Annual participants' meeting	1 vote per 1% of participant's contribution; mostly simple majority	Advice from 7-member Participants' Committee; Advice from Host Country Committee
	UCF	2006	WB	5 carbon funds plus 11 companies	--	--
	CFE	2007	WB-EIB	3 countries; 1 province; 1 company	--	--

	DCF	2005	WB	Ministry of Climate and Energy plus 4 companies	--	--
	ICF	2004	WB	Italy plus 6 companies	5-member Participants' Committee; no host country	--
	NCDMF	2002	WB	--	--	--
	NECF	2004	IBRD-IFC	--	--	--
	SpCF-1	2005	WB	2 ministries plus 11 companies	8-member Participants' Committee; no host country	
	SpCF-2	2008	WB	2 ministries	--	--
Source: Author's analysis						

Table A3.2: Securing commitments

Fund and type		Period	Adequacy, $ millions (disbursements in brackets)	Additionality	Predictability	Appropriateness	
						Source	*Purpose*
MDB	**CTF**	2008–12+	4,387.75 (9.3)	Not if counted as ODA	Voluntary	Pub.	M
	FIP	2008–	562.1 9 (2)	Not if counted as ODA	Voluntary	Pub.	R
	PPCR	2008–12	981.84 (9)	Not if counted as ODA	Voluntary	Pub.	A
	SREP	2009–	300.13	Not if counted as ODA	Voluntary	Pub.	M
	FCPF	2008–12	220.64 (4.42)			Pub.; Pvt.	R
	CBFF	2008–18	165	Not if counted as ODA	Voluntary	Pub.	R
	GEEREF	2008–23	169.5 (0)	Not if counted as ODA	Mixed	Pub.; Pvt.	M
UN	**KPAF**	2009–	162.57 (5.98)	Yes	Depends on CDM transactions	2% CDM levy	A
	GEF-TF	1994–	2,392.3 (1017.88)*	Unclear for next phase	Voluntary	Pub.	M, A
	LDCF	2002–	180.81 (125.21)	Unclear for next phase	Voluntary (13)	Pub.	A
	SCCF	2002–	123.09 (97.15)	Unclear for next phase	Voluntary (13)	Pub.	A
	SPA	2004–07	50 (50)	Via GEF-TF	Voluntary	Pub.	A
	MDGF	2007–10	89.5 (56.2)	ODA but additional	Voluntary	Pub.	M, A
	UN-REDD	2008–	74.44 (29.52)	Counted as ODA	Voluntary	Pub.	R
Government	**ETF-IW**	Like CIFs	(£300)	Not if counted as ODA	Voluntary	Pub.	M, A
	FA	2008-	1,000 (36.22)	Yes (including returns on investments)	Voluntary	Pub.; Pvt.	M, A, R
	GCCA	2008–10	204.15 (8.1)	Counted as ODA	Partly voluntary; also depends on ETS transactions	EU-ETS auction revenues; IFFIm-style	M, A, R, P
	HI	2010–12	15,000 (5,320)	Partly ODA; partly other official flows	Voluntary	ODA; Pvt.; JBIC; NEDO; NEXI	M, A, R+
	ICI	2008–11+	519.6 (258.02)	Counted as ODA	Mostly voluntary	EU-ETS allowance sales	M, A
	IFCI	2007–12	252.07 (61.88)	Counted as ODA	Voluntary	Pub.	R
Public-private	**BioCF-1**	2004–05	53.8	Not ODA but for AI party KP obligations	Depends on carbon market	Pub.; Pvt.	L, R
	BioCF-2	2007–	38.1	Not ODA but for AI party KP obligations	Depends on post-2012 agreement	Pub.; Pvt.	L, R
	CPF	At least up to 2022	€5,000 envisaged	Possibly since it is for beyond 2012	Depends on negotiations, carbon market, and contributions	Pub.; Pvt.	M
	CDCF	2003–20	128.6	Not ODA but for AI party KP obligations	Depends on carbon market	Pub.; Pvt.	M
	PCF	2000–	219.8	Not ODA but for AI party KP obligations	Depends on carbon market	Pub.; Pvt.	M
	UCF	2006–	1024.5	Not ODA but for AI party KP obligations	Depends on carbon markets	Pub.; Pvt.; Fund of funds	M
	CFE	2007–	66.7	Not ODA but for EU party KP obligations	Depends on carbon markets	Pub.; Pvt.	M
	DCF	2005–	118.4	Not ODA but for Denmark's KP obligations	Depends on carbon markets	Pub.; Pvt.	M
	ICF	2004–06	155.6	Not ODA but for Italy's KP obligations	Depends on carbon markets	Pub.; Pvt.	M
	NCDMF			Not ODA but for AI party KP obligations		Pub.; Pvt.	M
	NECF			Not ODA but for AI party KP obligations		Pub.; Pvt.	M
	SpCF-1	2005–	293.3	Not ODA but for Spain's KP obligations	Depends on carbon markets, including EU-ETS	Pub.; Pvt.	M
	SpCF-2	2008–	111.1	Not ODA but for Spain's KP obligations	Depends on carbon markets, including EU-ETS	Pub.	M

Notes: For purpose of funds => M = mitigation; A = adapation; L = Land use, land-use change and forestry; R = reducing emissions from deforestation and forest degradation; P = poverty reduction.
Under adequacy, figures in brackets are disbursements.
** => GEF-TF pledges and disbursements for fourth (2006–10) and fifth (2010–14) funding replenishments.*
Source: Author's analysis. Figures on capital raised for public-private funds from World Bank (2009b). Figures on MDB, UN, and government-promoted funds (pledged and disbursed) from: http://www.climatefundsupdate.org/graphs-statistics/pledged-deposited-disbursed.

Table A3.3: Ensuring disbursements

Fund and type		Scale	Instrument				Modality			Conditionality
			Investment	*Loans*	*Grants*	*Guarantees*	*Project*	*Programme*	*Budget*	
MDB	**CTF**			Concessional	Yes	Yes	Yes	Yes		
	FIP			--	--	--	Yes			Recipient develops investment strategies
	PPCR			50% Concessional	50% grants for project preparation			Yes	Possible	Joint mission country-led w/MDBs; loans optional
	SREP		Investment finance; trade finance	Concessional	Yes			Yes	Yes	Output-based aid
	FCPF				Yes		Yes			REDD strategy and monitoring system necessary
	CBFF				Yes		Yes			Concept notes by clients
	GEEREF	< €10m; risk: 30% high, 50% medium, 20% low	Equity capital				Yes			Private sector engagement; little recipient involvement
UN	**KPAF**				Yes		Yes	Yes		Country-driven; direct access
	GEF-TF				Yes		Yes			Focal points; country-driven
	LDCF				Yes		Yes			Proof of additional cost beyond development baseline; NAPAs country-driven; but heavy bureaucracy
	SCCF				Yes		Yes			Proof of additional cost beyond development baseline; NAPAs country-driven; but heavy bureaucracy
	SPA				Yes		Yes			Vulnerable regions but decided by GEF; multiple benefits across GEF focal areas
	MDGF				Yes		Yes			National ownership
	UN-REDD				Yes		Yes			National ownership
Government	**ETF-IW**	Large-scale as per CIFs		Concessional	Partially		Yes		Yes	Regular IFI procedures and lending criteria
	FA				Yes		Yes			National and local ownership
	GCCA				Yes			Possible	Possible	For LDCs and SIDS
	HI			Concessional	Yes	Trade risk insurance for Japanese exporters of clean tech	Yes			Normal bilateral aid channels; memorandum of understanding; country strategy paper

	ICI			Concessional	Yes		Yes			High potential for emissions reduction; country ownership necessary
	IFCI				Yes		Yes			Mainly Indonesia and Papua New Guinea
Public-Private	**BioCF-1**		Yes				Yes			Focus on Africa
	BioCF-2		Yes				Yes			--
	CPF	Large-scale for energy efficiency, urban development, gas flaring, and power sector	Yes				Yes	Yes		--
	CDCF	Small-scale projects	Yes				Yes			Seek countries not benefiting from carbon market; at least 25% in LDCs
	PCF	Criteria for diverse portfolio by size, country, and technology	Yes				Yes			Consistent w/KP and UNFCCC, national and WB criteria; technical competence of host
	UCF	Focus on large projects	Yes				Yes	Yes		
	CFE		Yes				Yes			Preference for projects with short lead time to maximise credits
	DCF		Yes				Yes			
	ICF		Yes				Yes			
	NCDMF	Skewed towards large projects in China	Yes				Yes			
	NECF		Yes				Yes			
	SpCF-1		Yes				Yes			
	SpCF-2		Yes				Yes			

Source: Author's analysis

Table A3.4: Monitoring performance

Fund and type		Reporting funds	Reporting performance	Verification	Review	Compliance
MDB	**CTF**	Annual reporting to Trust Fund Committee	Each MDB follows own M&E procedures; criteria under dev't	Unclear	Independent impact evaluation after 3 years	Unclear
	FIP	Annual reporting to Trust Fund Committee	Each MDB follows own M&E procedures; criteria under dev't	Unclear	Independent impact evaluation after 3 years	Unclear
	PPCR	Annual reporting to Trust Fund Committee	Each MDB follows own M&E procedures; criteria under dev't	Unclear	Independent impact evaluation after 3 years	Unclear
	SREP	Annual reporting to Trust Fund Committee	Each MDB follows own M&E procedures; criteria under dev't	Unclear	Independent impact evaluation after 3 years	Unclear
	FCPF	Annual report	Programme M&E system for REDD a precondition		Calls for independent evaluation (by IEG) of the entire facility	Unknown
	CBFF	Some projects listed but no comprehensive database of deposits	Procedure unclear	Unclear	Governing Council reports to Congo Basin Forest Partnership; mid-term review in 2012	Unclear
	GEEREF	Registered as ODA under OECD-DAC	Procedure unclear	Unclear	Independent evaluation after 5 and 10 years	Mutual accountability under Paris Declaration
UN	**KPAF**	Ethics and Finance Committee to provide annual report on status of portfolio	Board to develop results framework; Implementing Entities to ascertain capacity to monitor	Terminal evaluation of projects by independent evaluator	Board reserves right to undertake independent reviews	Unclear
	GEF-TF	Online database	Secretariat and agencies monitor projects	Evaluation Office	M&E results reported to GEF Council	Unclear
	LDCF	Online database	Secretariat and agencies monitor projects	Evaluation Office	M&E results reported to GEF Council	Unclear
	SCCF	Online database	Secretariat and agencies monitor projects	Evaluation Office	M&E results reported to GEF Council	Unclear
	SPA	Online database	Secretariat and agencies monitor projects	Evaluation Office	M&E results reported to GEF Council	Unclear
	MDGF	One time grant	Progress reports, annual reports; 24 indicators	Certified financial statement	Mid-term and final report; impact evaluations	Voluntary contribution, so no compliance procedure
	UN-REDD	Commitments and disbursements will be posted online when available; Secretariat to monitor allocations	Technical Secretariat for M&E	Third-party verification of emissions reductions (but not of funding flows)	UN Resident Coordinator facilitates evaluation	Unclear

Government	**ETF-IW**	CIFs administrative unit reports to Trust Fund Committees; quarterly and annual report	Each MDB follows own M&E procedures; criteria under dev't	Unclear	Independent impact evaluation after 3 years	Voluntary contribution, so no compliance procedure
	FA	Income from donations and investment returns – reporting unknown	Unknown	Technical Committee to certify emissions count from deforestation	Unknown	Public-private mechanism; no formal compliance
	GCCA	Updates expected on dedicated website	Regular reports by Support Facility; annual reports to Council	Unknown	Unknown	Voluntary contribution, so no compliance procedure
	HI	Unknown	Unknown	Unknown	Unknown	Unknown
	ICI	Reported as ODA	Unknown	Evaluation by research institutes	Unknown	Voluntary contribution, so no compliance procedure
	IFCI	Annual AusAID report	Monitoring is a key objective of the fund	Unknown	Unknown	Voluntary contribution, so no compliance procedure
Public-private	**BioCF-1**	Unknown	Contributed to developing LULUCF methodology for CDM	Several CDM LULUCF projects have been validated and/or registered	Unknown	Unknown
	BioCF-2	Unknown	Contributed to developing LULUCF methodology for CDM	Several CDM LULUCF projects have been validated and/or registered	Unknown	Unknown
	CPF	Fund under development	Objective to monitor technologies/sectors rather than projects	Fund under development	Fund under development	Fund under development
	CDCF	Unclear	Fund Management Unit monitors project construction	Independent verification report; independent entity certifies GHG reductions & community benefits	Unclear	Trustee announces defaulting participants; others can purchase its interest in the fund
	PCF	Some data in annual reports	UNFCCC methodologies for calculating emissions reductions; systematic monitoring part of risk management strategy	GHG reductions DOEs or Independent Third Party	Unknown	Unknown
	UCF	Some data on projects in annual reports	Unknown	Unknown	Unknown	
	CFE	Some data on projects in annual reports	Unknown	Unknown	Unknown	
	DCF	Some data on projects in annual reports	Unknown	Unknown	Unknown	Single country-led, so no compliance mechanism

	ICF	Some data on projects in annual reports	Unknown	Unknown	Unknown	Single country-led, so no compliance mechanism
	NCDMF	Some data on projects in annual reports	Unknown	Unknown	Unknown	Single country-led, so no compliance mechanism
	NECF	Some data on projects in annual reports	Unknown	Unknown	Unknown	Single country-led, so no compliance mechanism
	SpCF-1	Some data on projects in annual reports	Unknown	Unknown	Unknown	Single country-led, so no compliance mechanism
	SpCF-2	Some data on projects in annual reports	Unknown	Unknown	Unknown	Single country-led, so no compliance mechanism

Note: M&E = monitoring and evaluation

Source: Author's analysis

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