Development Perspectives for a Post-2012 Climate Financing Architecture

ORGANISATION FOR ECONOMIC CO-OPERATION
AND DEVELOPMENT

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ACRONYMS

AAU	Assigned Amount Unit
ADB	Asian Development Bank
AusAID	Australian Agency for International Development
CCS	Carbon Capture and Storage
CDM	Clean Development Mechanism
CDDE	Capacity Development for Development Effectiveness Facility
CER	Certified Emission Reduction
CMP	Conference of the Parties Serving as a Meeting of the Parties to the Protocol
COP	Conference of the Parties
CRS	Credit Reporting System
DAC	Development Assistance Committee
FDI	Foreign Direct Investment
GAVI	Global Alliance for Vaccines and Immunisation
GEF	Global Environment Facility
IEA	International Energy Agency
IHP+	International Health Partnership and related initiatives
IIASA	International Institute for Applied System Analysis
JICA	Japanese International Cooperation Agency
LDCF	Least Developed Countries Fund
LDCs	Least Developed Countries
MDG	Millennium Development Goal
MRV	Monitoring, Reporting and Verification
NAMA	Nationally Appropriate Mitigation Action
NAPA	National Adaptation Programme of Action
ODA	Official Development Assistance
OECD	Organisation For Economic Co-operation and Development
PEPFAR	The President's Emergency Plan for AIDs Relief
RAF	Resource Allocation Framework
REDD	Reducing emissions from deforestation and forest degradation in developing Countries
SCCF	Special Climate Change Fund
SDR	Special Drawing Right
SIDs	Small Island Developing States
SIDA	Swedish International Development Agency
STAR	System for a Transparent Allocation of Resources
TNA	Technology Needs Assessment
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change

EXECUTIVE SUMMARY

Financial support to developing countries for mitigation, adaptation, technology development and transfer and capacity-building is critical to the success of the negotiations for a new climate change agreement. This paper examines the multilateral funding mechanisms used to deliver finance to address climate change in developing countries. Specifically, the paper reviews:

- the existing multilateral funding mechanisms for climate change;
- the lessons learned from multilateral funding for climate change and other purposes;
- the issues that arise when disbursing funding for climate change;
- the fast-start finance promised by developed countries in the Copenhagen Accord; and
- the longer-term needs for climate finance.

Financial resources to address climate change in developing countries are currently provided through:

- the financial mechanism of the United Nations Framework Convention on Climate Change (UNFCCC or Convention);
- the mechanisms of the Kyoto Protocol; and
- bilateral and multilateral channels outside the Convention and its Kyoto Protocol.

This report focuses on the multilateral funding mechanisms, both under and outside the Convention.

As part of the financial mechanism of the Convention, the Global Environment Facility (GEF) Trust Fund supports (mainly) mitigation actions while the Special Climate Change Fund (SCCF) and Least Developed Countries Fund (LDCF), both managed by the GEF, fund mainly adaptation measures and some capacity-building and technology development and transfer activities.[1] The Clean Development Mechanism (CDM) under the Kyoto Protocol provides financial support, in the form of marketable credits, for mitigation actions. Two percent of the credits issued for most projects go to the Adaptation Fund. Multilateral funds outside the Convention focus mainly on mitigation.

Unfortunately, the climate-related funding currently provided to developing countries through the different channels cannot be determined accurately. The limited data available suggest that the climate-related financial resources for mitigation are of the order of USD 14 to 21 billion per year, mostly through the purchase of CDM credits and bilateral assistance. Only the adaptation funding provided through multilateral funds is known. It is of the order of USD 100 to 200 million per year. The number of projects that cannot obtain funding is a good indicator of the substantial shortfall in international financial support for adaptation.

Most of the existing climate funds have a limited history, so it is difficult to draw lessons from them except that delivery is fragmented and funding has been inadequate. Funds are disbursed bilaterally by

[1] Mitigation covers actions to reduce emissions of greenhouse gases to the atmosphere (such as switching from fossil fuels to renewables) and actions to increase removals of greenhouse gases from the atmosphere (such as reforestation). Adaptation covers actions to minimize the adverse impacts of climate changes (such as changes to water supply systems to cope with changes to precipitation patterns).

most members of the OECD Development Assistance Committee (DAC)[2] and by several multilateral funds whose respective roles are not clearly defined.

International funding for health care bears some similarities to international climate finance. The level of international funding is comparable to that currently provided for climate change, funds are provided through numerous bilateral and multilateral channels, private funds make up a substantial share of the total, and funding is targeted at specific objectives, such as AIDS and malaria, as well as integrated health care delivery which is analogous to funding targeted mitigation and adaptation actions or supporting implementation of climate resilient development strategies. Delivery of health care, like action to address climate change, involves numerous public and private institutions in each recipient country.

International health funding suffers from issues of harmonisation (co-ordination among donors), alignment (co-ordination with developing countries' development goals and policies) and coherence (coherence of the overall development agenda). Funds for specialised purposes can yield measurable short term results, but they may distort national priorities, disrupt existing institutions and systems, and impose additional administrative burdens on recipient countries. The multiplicity of funding sources has spawned efforts to co-ordinate funding and administrative requirements.

The Official Development Assistance (ODA) experience highlights the importance of developing country ownership of their development policies; donor support for national development strategies, institutions and procedures; harmonised, transparent and collectively effective actions; managing for results; and mutual accountability for development results which are the core principles of the Paris Declaration on Aid Effectiveness (Box 1).

Developed and developing countries have very different perspectives on international climate funding. Some developed countries consider climate finance to be ODA which leaves them considerable discretion over the amount of funding provided and the use of those funds. Some developing countries consider the funds received to be payments for agreed costs they have incurred to implement specified measures and reject their characterisation as ODA including references to the Paris Declaration on Aid Effectiveness.

Climate funding can be provided for specific projects – such as CDM projects – proposed programmes – such as a national adaptation programme of action (NAPA) – or a national development strategy that takes climate change into account. At present most climate funding is provided for specific projects. If the level of funding is significantly increased, funds will have to be provided to support adaptation or mitigation programmes or national development strategies. Such an approach to funding requires developing countries to prepare such programmes and/or strategies. This is happening in a growing number of countries.

All measures to address climate change have implications for regional and temporal equity. To the extent that the funds are provided for projects, the funding body must establish priorities and so implicitly or explicitly address regional and temporal equity. To the extent that the funds are provided for country programmes or national development strategies, regional equity is implicitly or explicitly addressed while priorities and their temporal equity implications are delegated to the national government.

The allocation of financial resources among mitigation, adaptation, technology development and transfer and capacity-building and across countries is a political decision because it involves an implicit regional distribution. The bodies that provide funds to address climate change – bilateral development

[2] The Development Assistance Committee (DAC) is a unique international forum where donor governments and multilateral organisations, such as the World Bank and the United Nations, come together to help partner countries reduce poverty and achieve the Millennium Development Goals (MDGs).

agencies, the governing bodies of multilateral funds outside the Convention, and the Conference of the Parties (COP) for funds under the Convention – make the allocation decisions.

The current UNFCCC negotiating text proposes the establishment of (1) a new climate fund under the Convention and (2) a mechanism to help co-ordinate the financial resources provided through different channels. Much remains to be negotiated with respect to a new fund, including governance, the size and composition of the board, how its members are selected, its powers and its rules of procedure. The two options to improve co-ordination across financing channels – (i) a "forum of entities" that would provide co-ordination and ensure consistency between difference sources of funding, or (ii) a "Finance Board", a new body under the COP – reflect different views on the scope of the co-ordination role.

In the Copenhagen Accord, developed countries committed to provide "new and additional" resources approaching USD 30 billion for the period 2010-2012 with balanced allocation between adaptation and mitigation. They also committed to a goal of mobilising USD 100 billion dollars per year by 2020 from a wide variety of sources – public and private, bilateral and multilateral – to meet the needs of developing countries. The mechanisms for monitoring, reporting and verifying those funds remain to be negotiated. And the institutions to be used to disburse the funds remain to be agreed.

Current "fast start" pledges for 2010-2012 are of the order of USD 30 billion. The types of financial resources covered by this commitment are not specified. The pledges include grants, concessional loans and private finance. There is no agreed baseline for assessing whether pledged funds are "new and additional", so each country will make its own judgment of the additionality of the pledges and whether the commitment has been fulfilled.

If much of the USD 30 billion is to be disbursed by 2012, existing funds and entities must play a major role. Current indications are that most of the funds will be allocated to mitigation and that most of the money will be disbursed bilaterally. This would represent a significant increase over the current bilateral assistance and the historic disbursement rates of the Clean Investment Funds and the REDD+ funds. Although it is not clear how much fast start finance they will receive, the existing adaptation funds under the Convention have queues of proposed projects that could quickly disburse additional funds.

Estimates of the financial resources that developing countries will need to address climate change in the longer-term are not available at present. The available information includes a few estimates of the incremental investment needed for mitigation in developing countries and several estimates of the cost of adaptation in developing countries. These are not the same as the resources that will need to be provided to developing countries, in part because much of the mitigation investment is for energy efficiency measures which have a quick payback. But, the limited information available suggests resources of several tens to hundreds of billions USD will be needed annually.

As recognised in the Copenhagen Accord, mobilising USD 100 billion dollars per year for climate finance by 2020 will require funds from a wide variety of sources. Countries and experts have suggested numerous options for generating additional financial resources to help address climate change. The High Level Advisory Group on Climate Change Financing established by the UN Secretary General assessed options for generating additional funds and concluded that it is challenging but feasible to meet that goal. Funding will need to come from a wide variety of sources, public and private, bilateral and multilateral, including alternative sources of finance.

The existing reporting system of the UNFCCC does not provide accurate information on climate finance. The monitoring, reporting and verification (MRV) system will need to be significantly improved to provide complete, accurate and timely information on the resources available that can be compared with estimates of the resources needed. But the MRV system cannot be designed and implemented until there is more agreement on the resource flows it should cover. The OECD's Creditor Reporting System could be part of a better MRV system for climate finance.

INTRODUCTION

This paper examines the multilateral funding mechanisms used to deliver finance to address climate change in developing countries. The focus is on the institutional framework and its governance, rather than the nature and quantity of the resources. The paper reviews issues being discussed in the on-going negotiations, but does not recommend specific changes to the institutional framework or its governance.

Developed countries have agreed to provide financial support to developing countries for various purposes. As part of the United Nations Framework Convention on Climate Change (UNFCCC or the Convention) developed country Parties agreed to provide "new and additional financial resources to meet the agreed full costs incurred by developing country Parties" to develop, implement and communicate various national policies (Article 4.3). They also agreed to cover the "agreed full incremental costs" of implementing mitigation measures (Article 4.3). And they agreed to "assist the developing country Parties that are particularly vulnerable to the adverse effects of climate change in meeting costs of adaptation" (Article 4.4). Finally, "the extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed country Parties of their commitments under the Convention related to financial resources and transfer of technology" (Article 4.7). A mechanism for providing financial resources is defined by Article 11. Financial resources may also be provided through bilateral, regional and other multilateral channels.

The Kyoto Protocol to the UNFCCC reaffirms these commitments of developed country Parties to provide financial resources to developing countries (Article 11). Use of the financial mechanism of the Convention as well as bilateral, regional and other multilateral channels to deliver the financial resources is also confirmed. "The implementation of these existing commitments shall take into account the need for adequacy and predictability in the flow of funds" (Article 11.2). The Protocol also established a Clean Development Mechanism (CDM) which awards credits for certified emission reductions achieved in developing countries. These credits can be purchased by entities and governments and can be used to help meet a developed country's national emissions limitation commitment under the Protocol. The CDM, then, establishes a market for credits that helps finance mitigation measures in developing countries.

The Kyoto Protocol limits the national emissions of developed country Parties for the period 2008-2012. In 2007 Parties to the Convention adopted the Bali Action Plan, "a comprehensive process to enable the full, effective and sustained implementation of the Convention through long-term co-operative action, now, up to and beyond 2012" (Paragraph 1). The goal was to negotiate a new legal agreement to address climate change by 2009. The Bali Action Plan calls for "enhanced action on the provision of financial resources and investment to support action on mitigation and adaptation and technology co-operation" (Paragraph 1(e)). The financial resources are to be "new and additional" and developing countries are to have improved access to "adequate, predictable and sustainable financial resources". The financial resources can come from public- and private-sector sources.

The goal of reaching a new legal agreement by 2009 was not achieved. But a voluntary agreement, the Copenhagen Accord, was concluded. It is now supported by 139 countries. Negotiations on a new legal agreement continue.

The Copenhagen Accord promises developing countries "scaled up, new and additional, predictable and adequate funding as well as improved access ... to enable and support enhanced action on mitigation, ... adaptation, technology development and transfer and capacity-building, for enhanced implementation of

the Convention" (Paragraph 8). Developed countries committed to provide new and additional resources approaching USD 30 billion for the period 2010-2012 with balanced allocation between adaptation and mitigation. They also committed to a goal of mobilising USD 100 billion dollars per year by 2020 to meet the needs of developing countries. This funding will come from a wide variety of sources – public and private, bilateral and multilateral – including alternative sources of finance.

The Copenhagen Accord proposes that a High Level Panel be established under the guidance of and accountable to the UNFCCC to study the contribution of the potential sources of revenue towards meeting this goal (Paragraph 9). It also proposes to establish a Copenhagen Green Climate Fund as an operating entity of the financial mechanism of the Convention (Paragraph 10) to manage a significant portion of the future funding (Paragraph 8). Finally the Accord proposes that the new multilateral funding for adaptation be delivered through effective and efficient fund arrangements, with a governance structure providing for equal representation of developed and developing countries (Paragraph 8).

In February 2010 the UN Secretary General established a High-Level Advisory Group on Climate Change Financing.[3] The Group is charged with developing practical proposals on how to significantly scale-up long-term financing for mitigation and adaptation in developing countries from various public and private sources and how best to deliver it consistent with paragraphs 8 and 9 of the Copenhagen Accord. The Group is focusing on new and innovative long-term sources of finance. Its final report was delivered in early November 2010 and the report identified potential sources of finance in four categories: public sources for grants, development bank type instruments, carbon market finance and private capital.

Developed countries, then, have repeatedly promised to provide new and additional financial resources to support mitigation, adaptation, technology development and transfer, and capacity-building in developing countries most recently in the Copenhagen Accord. Although the Copenhagen Accord is not legally binding, it suggests the financial resources will be increased significantly. These resources are to be delivered via multiple channels including the funds established under the Convention as well as bilateral, regional and multilateral channels outside the Convention.

Chapter 1 provides an overview of the existing multilateral mechanisms used to deliver climate finance. Lessons from existing climate funds, thematic global funds, and official development assistance are reviewed in Chapter 2. Models for disbursing financial resources to developing countries for climate change mitigation and adaptation are described in Chapter 3. Chapter 4 discusses issues related to disbursing the "fast start" finance promised in the Copenhagen Accord for 2010-2012. Issues related to longer-term climate finance are discussed in Chapter 5.

[3] The High Level Advisory Group is not the same as the High Level Panel proposed in the Copenhagen Accord. The Panel is to be "accountable to the UNFCCC" while the Advisory Group was established by the UN Secretary General outside the UNFCCC.

CHAPTER 1. EXISTING MULTILATERAL FUNDING MECHANISMS

1. Financial resources to address climate change in developing countries are currently provided through (1) the financial mechanism of the United Nations Framework Convention on Climate Change, (2) mechanisms of the Kyoto Protocol, and (3) bilateral and multilateral channels outside the Convention and its Kyoto Protocol.[4] This report focuses on the multilateral funding mechanisms, both under and outside the Convention.

1.1 The financial mechanism of the Convention

2. A mechanism for the provision of financial resources to address climate change on a grant or concessional basis is defined by Article 11 of the Convention. Operation of the financial mechanism is to be entrusted to one or more existing international entities. To-date the Global Environment Facility (GEF) is the only operating entity of the financial mechanism. If established, the Green Climate Fund proposed by the Copenhagen Accord would become a second operating entity of the financial mechanism of the Convention.

3. Operating entities of the financial mechanism, to-date only the GEF, function under the guidance of and are accountable to the Conference of the Parties (COP) which decides policies, programme priorities and eligibility criteria for climate-related financing. The Conference of the Parties is an annual meeting of all Parties to the Convention. It is the supreme body of the UNFCCC (Article 7). COP decisions are taken by consensus.

4. Article 11 of the Convention also allows developed countries to provide, and developing countries to avail themselves of, financial resources related to implementation of the Convention through bilateral, regional and other multilateral channels. Funds provided through these channels are not subject to the guidance or authority of the COP, so they can be considered as being outside the governance structure established by the Convention.[5]

5. A summary of the funds under the Convention and its Kyoto Protocol is provided in Table 1. The funding for mitigation is roughly ten times the funding for adaptation. This, in part, is due to the fact that the Global Environment Facility (GEF), which has focused on mitigation, has been in operation a decade longer than any of the other funds. In practice, the emphasis on mitigation is even more pronounced because the figures do not include the CDM, which probably provides more funding to mitigation projects in developing countries than all of the funds combined. The Adaptation Fund, which is funded mainly through a levy of 2% of the CERs issued for most CDM projects, is likely to become the largest of the three adaptation funds soon.

1.1.1 The Global Environment Facility Trust Fund

6. As an operating entity of the financial mechanism of the Climate Change Convention, the Global Environment Facility (GEF) receives guidance from the Conference of the Parties (COP) on policy, programme priorities, and eligibility criteria as well as on specific issues.[6] The GEF also serves as a financial mechanism for other multilateral environmental agreements.

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4 See Huhtala, Curto and Ambrosi, 2010 for a good overview of climate finance.

5 This does not mean that they are inconsistent with the Convention. Provision of financial resources via these channels is clearly foreseen by Article 11.5.

6 From 1995 through 2008 the COP adopted 160 decisions giving guidance to the GEF (GEF, 2010a, Table 6, p.19).

7. The GEF Trust Fund is replenished on a four-year cycle. The funds contributed to the GEF Trust Fund for climate change for the pilot phase and the first four replenishments total over USD 2.7 billion.[7] Pledges for the fifth replenishment of the GEF Trust Fund (2010 to 2014) total USD 3.47 billion.[8] of which USD 1.35 billion[9] is for climate change. Over 97% of the pledged contributions are from members of the OECD Development Assistance Committee.[10] Contributions to the GEF Trust Fund may be reported as official development assistance (ODA).

Table 1. Amounts pledged to, deposited with and disbursed by existing climate funds under the Climate Change Convention and its Kyoto Protocol
(USD million)

Fund	Start Date	Focus	Amount		
			Pledged (USD m.)	**Deposited** (USD m.)	**Disbursed** (USD m.)
Convention Funds					
GEF Trust Fund – 1991 – 2010[a]	1991	M	2 910[b]	2 743	2 743
Fifth Replenishment – 2010 – 2014[a]		M	1 350		
Least Developed Countries Fund	2001	A	221	169	135
Special Climate Change Fund	2001	A	148	94	92
		T		16	14c
Kyoto Protocol Mechanisms					
Adaptation Fund	2007	A		170	23
Clean Development Mechanism	2001	M	Annual financial support of USD 3 to USD 10 billion.		
Sub-total - mitigation			4 210[d]	2 693[d]	2 693[d]
Sub-total - adaptation			419[e]	433[e]	250[e]

Notes:
a Climate change focal area only.
b Estimate; for all focal areas $8 816 billion of $9 341 billion pledged has been received.
c Transferred to the Poznan Strategic Programme on Technology Transfer.
d Excludes the CDM and $50 million for the GEF's Special Priority for Adaptation.
e Includes $50 million for the GEF's Special Priority for Adaptation.

Sources: Sections 2.1.1 through 2.2 below.
Legend: GEF = Global Environment Facility; A = fund focuses on adaptation; M = fund focuses on mitigation; T fund focuses on technology transfer.

8. In response to recommendations of the third replenishment, the GEF Council agreed to implement a resource allocation framework (RAF) to increase the predictability of the financing available to a country and to reward good performance with higher allocations.[11] A known allocation of funds was expected to encourage countries to programme these resources in accordance with national priorities. A country's allocation was based on a benefits index and a performance index. Implementation of the RAF began in February 2007. A mid-term review in late 2008 found difficulties arising from the rigid design rules of the RAF as well as implementation problems.

7 GEF, 2010a, Table 3, p. 10. This covers the period from 1991 through 30 June 2009.
8 GEF, 2010b, p. 4.
9 GEF, 2010b, Table 8, p. 102.
10 Other countries that have pledged funds for the fifth replenishment of the GEF Trust Fund include Brazil, China, Czech Republic, India, Mexico, Nigeria, Pakistan, Russian Federation, Slovenia, South Africa and Turkey.
11 GEF, 2009c. The RAF took over four years to develop. The RAF was used to allocate almost USD 1 billion among 115 countries individually or in groups. The RAF allocations were similar to the historic allocations. Both the benefits index and the performance index were driven by a country's greenhouse gas emissions, so vulnerability and adaptation needs were not captured. Due to the weights there was little reward for good performance.

9. A revised System for a Transparent Allocation of Resources (STAR) will be used to allocate resources under the fifth replenishment.[12] STAR incorporates clear rules on which countries will receive access to a STAR allocation, specified exclusions and how they will be used, a premium for the poorest countries, refined Global Benefits Indices, and a revised Global Performance Index.[13]

10. Historically, most of the resources have been allocated to long-term mitigation projects, including renewable energy (36%), energy efficiency (30%), and low-greenhouse gas emitting technologies (13%).[14] The GEF Trust Fund finances the agreed incremental costs for delivering global environmental benefits. Many mitigation actions are able to meet this requirement; limiting climate change is a global benefit and the incremental costs can be calculated by comparing the measure with the cost of the conventional alternative.

11. In contrast, the benefits of adaptation measures – reduced damage due to the adverse impacts of climate change – tend to be local and the incremental costs can be difficult to estimate. In 2004 GEF established a Special Priority for Adaptation to test the support of adaptation projects. The USD 50 million budgeted has been allocated to 22 projects and evaluation of this adaptation initiative is now underway.

12. In 2008 the GEF created the Poznan Strategic Programme on Technology Transfer with a budget of USD 50 million, of which USD 15 million will come from funds pledged to the Special Climate Change Fund for technology transfer.

1.1.2 The Least Developed Countries Fund

13. The Least Developed Countries Fund (LDCF), established under the Convention in 2001, is managed by the GEF with the GEF Council serving as the LDCF/SCCF Council. The LDCF supports projects that address the urgent and immediate adaptation needs of the least developed countries (LDCs). Contributions to the LDCF are voluntary. As of 31 May 2010, USD 221 million had been pledged by 22 countries of which USD 169 million had been received.[15] Contributions to the LDCF may be reported as ODA.

14. Initially each of the 48 eligible least developed countries was given up to USD 200 000 to prepare a National Adaptation Programme of Action (NAPA). Forty-four NAPAs have been completed and countries are submitting proposals seeking funding for urgent adaptation projects.[16] Projects in thirty-six countries seeking funding of USD 123 million have been approved as consistent with the LDCF eligibility criteria.[17] That brings the total funding committed to USD 135 million.[18] Another six project proposals seeking funding of USD 28 million are in preparation.[19] They would virtually exhaust the available funds.

15. To-date only one project per country has been approved. A typical NAPA identifies about ten "urgent and immediate" adaptation projects; a review of 38 NAPAs identified 430 "urgent and immediate" adaptation projects, of which 385 had been costed.[20] The total cost of these projects, excluding a single

[12] GEF, 2010f.
[13] GEF, 2009a.
[14] UNFCCC, 2007, Table VIII-58, p. 167.
[15] GEF, 2010c, p. 6. Except for the Czech Republic all are members of the OECD Development Assistance Committee.
[16] GEF, 2010e, paragraph 3, p. 1.
[17] GEF, 2010e, Table 2, pp. 5-8.
[18] GEF, 2010c, paragraph 4, p. 1.
[19] GEF, 2010e, Table 2, pp. 8-9.
[20] UNFCCC, 2008, p. 25.

USD 700 million project, is over USD 800 million. Full implementation of the priorities identified in the 48 NAPAs is estimated to require at least USD 1.93 billion.[21]

16. The LDCF funds the additional cost, and in some instances the full cost, of adaptation to the adverse impacts of climate change.[22] The additional cost is calculated as the difference between the cost of a business-as-usual baseline and the cost of actions to adapt to the adverse impacts of climate change. Activities that would be implemented in the absence of climate change constitute a business-as-usual baseline. The additional cost of the adaptation measures needed to reduce vulnerability, build adaptive capacity, and an overall increase of resilience to climate change can be funded by the LDCF.

17. An evaluation of the LDCF concluded that disbursement of funds for priority projects has been of an insignificant scale compared to adaptation needs in LDCs.[23] The poor performance is due to the design and function of the LDCF and to dealing with a complex subject that is new to many stakeholders. Funding has been neither predictable nor adequate. The evaluation recommends that the UNFCCC reassess the role of the LDCF and, if it is retained, review the present institutional arrangements and delivery mechanisms, and provide sufficient funding to implement NAPA programmes rather than individual projects.

18. To address the issues raised by the evaluation, the GEF has simplified procedures for accessing funds from the LDCF, prepared a document on accessing funds from the LDCF, and financed workshops to build capacity to address climate change adaptation through the LDCF.[24]

1.1.3 The Special Climate Change Fund

19. The Special Climate Change Fund (SCCF), established under the Convention in 2001, is managed by the GEF with the GEF Council serving as the LDCF/SCCF Council. Its mandate is to finance activities, programs and measures relating to climate change that are complementary to those funded by the GEF and by bilateral and multilateral funding. The SCCF has four different windows:

- adaptation;
- transfer of technologies;
- energy, transport, industry, agriculture, forestry, and waste management;
- activities to assist developing countries whose economies are highly dependent on income generated from the production, processing, and export or on consumption of fossil fuels and associated energy-intensive products in diversifying their economies.

20. Initially, the GEF received guidance from the COP to craft funding guidelines for adaptation and transfer of technologies. In 2006 the COP provided guidance on how to operationalise a funding programme for the two remaining windows.

21. Contributions to the SCCF are voluntary. As of 31 May 2010, USD 148 million had been pledged by 14 countries, of which USD 110 million had been received.[25] Of the funds received, USD 94 million is for adaptation and USD 16 million is for technology transfer.[26] Contributions to the SCCF may be reported as ODA.

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[21] UNFCCC, 2009c, paragraph 7.
[22] GEF, 2010d, paragraph 48, p. 11.
[23] DANIDA and GEF, 2009, pp. 3-6.
[24] GEF, 2010d, pp. 8-9.
[25] GEF, 2010c, p. 9. All are members of the OECD Development Assistance Committee.
[26] GEF, 2010c, p. 10.

22. Most of the funds received for technology transfer are being disbursed as part of the GEF's Poznan Strategic Programme on Technology Transfer. The SCCF has approved three projects with a total funding commitment of USD 14 million.[27]

23. The adaptation programme had approved 22 projects with a cost of USD 92 million covering 35 countries (including 8 LDCs).[28] These projects must follow strategies set out in national communications or NAPAs. Priority areas include water, land management, agriculture, health, infrastructure development, fragile ecosystems, integrated coastal zone management, disaster risk management, and prevention.

24. The demand for SCCF adaptation resources significantly exceeds the funds currently available.[29] An increase in donor contributions is therefore urgently needed.

1.2 Mechanisms of the Kyoto Protocol

25. The Kyoto Protocol created a Clean Development Mechanism (CDM) that helps finance mitigation actions in developing countries through the sale of credits for the certified emission reductions achieved by the projects. The Protocol also established an Adaptation Fund to finance concrete adaptation projects and programmes in developing country Parties to the Protocol. Both are subject to the authority and guidance of the Conference of the Parties serving as a meeting of the Parties to the Protocol (CMP), the supreme body of the Kyoto Protocol (Article 13).[30]

1.2.1 The Clean Development Mechanism

26. The Clean Development Mechanism (CDM) helps finance mitigation actions in developing countries. The CDM is administered by the CDM Executive Board subject to guidance from the CMP. A proposed project must be approved by the host government and use a monitoring plan and methodology for calculating the emission reductions approved by the Executive Board before it can be registered with the Board. After a project is registered the emission reductions achieved are independently verified before the Executive Board issues the corresponding credits (CERs).[31] The credits can be sold to firms or governments in developed countries thus helping to fund the mitigation actions. The credits can be used by developed countries to help meet their national emissions limitation commitments under the Kyoto Protocol.

27. As of June 2010, 2221 projects had been registered and a further 2993 were at various stages of the registration process.[32] The most common project types are small hydro: 28% (22% of projected emission reductions), wind: 18% (12%), biomass energy: 13% (6%), and methane avoidance at wastewater treatment plants and manure operations: 11% (4%).[33] Although CDM projects have been approved or are under development in 76 developing countries, China and India dominate with 40% and 26% respectively of the projects and 56% and 17% respectively of the projected emission reductions. China and India have the largest potential and have established the capacity and institutions needed to develop CDM projects.

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[27] GEF, 2010e, Table 4, p. 13.

[28] GEF, 2010e, Table 3, pp. 11-13.

[29] GEF, 2010e, paragraph 19, p. 10.

[30] Like the COP, the CMP meets annually and takes decisions by consensus. Only Parties that have ratified the Kyoto Protocol participate in the CMP.

[31] One credit is issued for each tonne of CO_2 equivalent emissions reduced. Each credit has a unique serial number. Credits exist only in electronic form and are issued into an account in the CDM registry. When credits are sold they are debited from the seller's account and credited to the buyer's account in the CDM registry or the national registry of a developed country with a national emissions limitation commitment under the Kyoto Protocol.

[32] Data from the CDM Pipeline overview for 1 June 2010. Available at: http://cdmpipeline.org/

[33] Figures cover both proposed and registered projects. A small number (22) of projects to destroy HFC-23 generate 11% of the projected emission reductions.

28. Accurate data on the funds provided by developed country firms and governments to CDM projects in developing countries is not available.[34] Estimates of the investment in CDM projects are available by year and project status.[35] An unknown portion of the investment in CDM projects originates in the host countries, so the amount invested does not reflect funding provided by developed countries.[36] The funding provided to developing countries for CDM projects is driven by their emission reductions. The credits issued for the emission reductions achieved by each project is known and the market price of CERs is readily available, so it is possible to calculate the market value of the credits issued for each project. But buyers often contract to purchase credits generated over a number of years early in the life of a project, frequently before the project is registered. In such cases the purchase price is less than the market price, so the financial support received can differ both in timing and amount from the market value of the credits issued.

29. The market value of the CERs issued during the 12 months ending 1 June 2010 was over USD 2 billion.[37] The market value of the expected emission reductions for all proposed and registered projects as of 1 June 2010 was almost USD 12 billion.[38] Since finance would have been provided for projects in addition to those that received CERs but at less than the market price, the funding currently provided for mitigation action in developing countries through the CDM price is likely to be USD 3 to 10 billion per year.

30. A developed country may provide funds on concessional terms to a CDM project and report those funds as ODA. However, if the government receives credits from the project in return for the funds, the market value of the credits must be reported as a repayment when the credits are received. A small minority of CDM projects report that they have received aid for preparatory activities such as capacity building. No project has yet reported giving credits to a developed country government in return for such financial assistance.

1.2.2 The Adaptation Fund

31. The Kyoto Protocol created an Adaptation Fund to finance concrete adaptation projects and programmes in developing country Parties to the Protocol, especially those that are particularly vulnerable to the adverse effects of climate change. It is supervised by the Adaptation Fund Board under the authority and guidance of the CMP. The GEF serves as the secretariat and the World Bank as the trustee for the Adaptation Fund.

32. The Adaptation Fund is financed mainly by a levy of 2% of the credits (CERs) issued for CDM projects with exemptions for some project types. The revenue received by the Adaptation Fund depends on the quantity of CERs issued and the price of CERs. As of 31 July 2010, the Fund had received over 8 million CERs of which 6.6 million had been sold generating revenue of USD 112 million.[39] This

[34] Corfee-Morlot, Guay and Larsen, 2009, Section 3.2.1.

[35] Corfee-Morlot, Guay and Larsen, 2009, Section 3.2.1. Investment estimates are now reported monthly by the CDM Pipeline.

[36] Several studies, including UNFCCC 2007 and IEA 2009, estimate the investment needed for mitigation measures in developing countries. The investment in CDM projects is of interest because it contributes to meeting that estimated need.

[37] The CDM Pipeline overview reports 288 million CERs issued as of 1 June 2009 and 418 million issued as of 1 June 2010, for an issuance of 130 million CERs. The average (monthly closing) market price on the BlueNext. exchange during this period was about € 12.54 or USD 16.30 (Tendances Carbone, No. 49, July 2010), so the issued CERs had a market value in excess of USD 2 billion.

[38] The CDM Pipeline overview reports the expected annual emission reductions of all registered and proposed projects as 724 million tonnes of CO2 equivalent (CERs). At a market price of USD 16.30 per CER, that represents a market value of almost USD 12 billion per year.

[39] Adaptation Fund, 2010b, Table 1a, p. 3.

accounts for most of the USD 170 million collected to-date. The projected funding available for the Adaptation Fund to December 31, 2012 ranges from USD 318 million to USD 434 million.[40]

33. Countries may also contribute to the Adaptation Fund. Denmark, Finland, France, Japan, Netherlands, Norway, Sweden and Switzerland had contributed USD 1.6 million for administrative expenses. Spain (EUR 45 million) and Monaco (EUR 10 000) have contributed funds that can be disbursed for adaptation projects. Contributions may be reported as ODA.

34. At its March 2010 meeting the Adaptation Fund Board approved an invitation to eligible Parties to submit project and programme proposals. The invitation attracted eight proposals seeking USD 56 million from the Fund. At its June meeting the Board approved the proposals from Senegal, Nicaragua, Pakistan and Solomon Islands for funding of USD 23 million. About USD 137 million is available to fund additional adaptation projects and programmes.[41]

35. A developing country can submit a proposed project and, if approved, receive funding through an accredited "national implementing entity" or a multilateral institution such as the World Bank or UNDP. To be accredited, a national implementing entity must meet fiduciary standards and other criteria established by the Adaptation Fund Board. The option for a developing country to access the fund's resources directly, without having to go through a multilateral agency, is an innovative feature developed by the Board.[42]

36. The Adaptation Fund Board is working on a policy for allocating its available resources.[43] It is considering a list of eligible countries, a funding cap per eligible country, an allocation per region, and criteria to prioritize eligible projects. At present all developing country Parties to the Kyoto Protocol are eligible. Various options for establishing the country caps, regional allocation and project priorities are under consideration. The caps would set the maximum funding each country could receive during a specified period.

1.3 Multilateral climate funds outside the Convention

37. Article 11.5 of the Convention allows developed countries to provide, and developing countries to avail themselves of, financial resources related to implementation of the Convention through bilateral, regional and other multilateral channels. Funds provided through these channels are not subject to the guidance or authority of the COP.

38. Financial information on the existing multilateral climate funds outside the Convention is summarised in Table 2. Some of these multilateral climate funds are operated by multilateral financial institutions. This section is limited to the climate funds and does not address other climate change financing by multilateral financial institutions. The table is limited to funds that both receive resources from, and disburse funds to, multiple countries. Thus the table excludes funds supported by a single country/region because they are essentially a vehicle for delivering bilateral assistance.[44] The table also

[40] Adaptation Fund, 2010b, p. 10.

[41] Adaptation Fund, 2010b, Table 1, p. 2. Cumulative receipts less cumulative disbursements and commitments of USD 23 million for approved projects.

[42] The Senegalese project will be implemented by a national implementing entity.

[43] Adaptation Fund, 2010a.

[44] Australia's International Forest Carbon Initiative, the European Union's Global Climate Change Alliance and , Global Energy Efficiency and Renewable Energy Fund, Germany's International Climate Initiative and Japan's Hatoyama Initiative fall into this category.

excludes funds established by a single country to receive funds from multiple contributors because they are essentially a mechanism for administering funds received by the country.[45]

Table 2. Amounts pledged to, deposited with and disbursed by existing multilateral climate funds outside the Climate Change Convention
(USD million)

Fund	Start Date	Focus	Amount		
			Pledged (USD m.)	**Deposited** (USD m.)	**Disbursed** (USD m.)
Climate Investment Funds	2008				
Clean Technology Fund		M	4 388	484	9
Forest Investment Program		M	562	34	2
Scaling-up Renewable Energy		M	300	24	
Pilot Programme for Climate Resilience		A	982	175	9
Congo Basin Forest Fund	2008	M	165	165	
Forest Carbon Partnership Facility	2007	M	221	166	4
MDG Achievement Fund[a]	2007	A	90[a]	90[a]	56[a]
UN-REDD Programme	2008	M	74	54	30
Sub-total - mitigation			5 710	927	45
Sub-total - adaptation			1 072	265	65

Sources: Climate Funds Update – http://www.climatefundsupdate.org/listing – and websites for individual funds.

Legend: A = fund focuses on adaptation; M = fund focuses on mitigation.
Note: an Environment and climate change thematic window.

39. Climate Funds outside the Convention are newer than those under the Convention and focus primarily on mitigation. The funding will be disbursed over several years, so the USD 5.7 billion pledged for mitigation represents funding of less than USD 2 billion per year. The Climate Investment Funds dominate in terms of pledged funding and funds received, but little money has yet been disbursed. The funds will be channelled through the African Development Bank, Asian Development Bank, European Bank for Reconstruction and Development, Inter-American Development Bank, and World Bank Group.

40. REDD+ activities are supported by the Congo Basin Forest Fund, Forest Investment Program, Forest Carbon Partnership Facility, UN-REDD, bilateral initiatives by Australia, Germany, Norway and the United Kingdom and the Amazon Fund in Brazil. Australia, France, Japan, Norway, the United Kingdom and the United States have collectively pledged nearly USD 3.5 billion in initial funding for REDD+ over the period 2010-2012. How those funds will be allocated among the various bilateral and multilateral channels is not yet known.

41. As with the funds under the Convention, mitigation receives far more funding than adaptation. Outside the Convention funding for adaptation action is limited to the Pilot Programme for Climate Resilience and the Environment and climate change thematic window of the MDG Achievement Fund. The former has not yet disbursed any funds while the latter is expected to wind up at the end of 2010. The USD 1.1 billion pledged for adaptation represents funding of less than USD 400 million per year.

42. Funds contributed to any of these multilateral climate funds may be reported as Official Development Assistance.

[45] Bangladesh's Multi-Donor Trust Fund and Brazil's Amazon Fund fall into this category. See Gomez-Echeverri, 2010 for a review of funds established by recipient countries.

1.4 Bilateral and multilateral flows

43. Although this report focuses on multilateral funding mechanisms to address climate change, the climate component of bilateral and multilateral assistance is discussed briefly to put the multilateral climate finance flows into context. Developed country Parties are expected to provide information on the bilateral and multilateral assistance they provide in their national communications under the Convention.[46] Due to gaps and inconsistencies in reporting approaches in the third and fourth national communications, it is not possible to calculate the financial assistance provided using information from these documents.[47] The information provided relates to different periods (fiscal and calendar years), a mix of pledges and disbursements, and combinations of bilateral and multilateral support.

44. The OECD Development Assistance Committee Creditor Reporting System (CRS) gathers harmonised data annually for most types of financial flows from member countries and from a number of multilateral agencies. The CRS includes "markers" for the Rio Conventions including the climate change convention.[48] The markers identify the assistance provided for activities that have climate change mitigation is a "principal" or "significant" objective. Although reporting is incomplete,[49] bilateral assistance for projects that had climate change mitigation as a "principal" objective averaged about USD 3.3 billion per year for 2006 through 2008.[50] Projects for which climate change mitigation was a "significant" objective added almost USD 2.5 billion per year over the same period.[51] The total of USD 5.8 billion per year was about 6.1% of total bilateral ODA during the period. Data on adaptation relevant development assistance will be reported for the first time for 2010 and be published in 2011.[52]

45. It is important to note that there is no internationally agreed methodology for tracking the share of aid activity expenditure that contributes to climate change mitigation or adaptation. This is particularly true for adaptation given its intricate linkages with development. Absent such a methodology, the markers allow only an approximate quantification of the amount of aid that targets climate change concerns, but not the exact amount of aid specifically directly to helping developing countries mitigate or adapt to climate change.

46. Other bilateral flows, including loans and guarantees by export credit agencies in developed countries, foreign direct investment, asset finance and commercial loans, typically have little or no concessional component. These flows fluctuate significantly from year to year but averaged USD 210 billion for 2006 through 2008.[53] Only limited information on the climate change relevant portions of those flows is available.[54]

47. International financial institutions, such as the multilateral development banks, United Nations agencies and other multilateral organisations also provide concessional aid. Their concessional aid averaged USD 49 billion for 2006 through 2008.[55] How much was climate related in not known. Assuming that, like bilateral aid, 6.1% had climate change mitigation as a "principal" or "significant" objective the

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46 Tirpak et al., 2010 reviews existing reporting systems.

47 UNFCCC, 2007, p. 162.

48 See section 6.5 below for more information on the climate change markers.

49 When analysing marker data, it is necessary to verify the coverage of donors' reporting. Donors are requested to screen each aid activity reported to the CRS, though data gaps still exist for some donors.

50 OECD, 2010a, annual commitments, USD million, constant 2008 prices. The amounts for 2006, 2007 and 2008 were respectively USD 2.0, 2.5 and 5.4 billion.

51 OECD, 2010a, annual commitments, USD million, constant 2008 prices. The amounts for 2006, 2007 and 2008 were respectively USD 2.5, 1.9 and 3.1 billion.

52 Germany's International Climate Initiative has committed USD 140 million for adaptation projects.

53 OECD, 2010b, Table 2, Private flows at market terms. The amounts for 2006, 2007 and 2008 were USD 196, USD 312 and USD 121 billion respectively.

54 Corfee-Morlot, Guay and Larsen, 2009, Sections 3.1.4 and 3.2.2, pp. 21 and 27.

55 OECD, 2010b, Table 17. The annual values for 2006 through 2008 were USD 69, USD 38 and USD 39 billion respectively.

climate related assistance would be about USD 3 billion per year. As in the case of the bilateral assistance, this would be the total value of the projects which have a climate change mitigation component.

1.5 Summary: Current levels of funding for climate change

48. Unfortunately, the climate change funding flowing to developing countries for mitigation, adaptation, technology development and transfer and capacity-building through the different channels cannot be accurately determined. Previously OECD had estimated about USD 8 billion for mitigation via ODA channels alone in 2007.[56] The World Bank estimated the total at approximately USD 10 billion per year including adaptation funding of less than USD 1 billion per year.[57] A Stockholm Environmental Institute report estimated the climate finance channelled through four bilateral and multilateral agencies during 2008 to be about USD 10 billion - €1 270 million of non-ODA finance and €6 820 million of ODA finance, of which €2 244 million was for adaptation.[58] Roberts Weissberger and Peratsakis estimated total climate related aid during 2007 – bilateral and multilateral for both mitigation and adaptation – at almost USD 15 billion with a five-year average, from 2003-2007, of over USD 11 billion per year.[59]

49. The available data suggest that the climate-related finance currently provided to developing countries for mitigation is as follows:

- mitigation spending by the Global Environment Facility (GEF) Trust Fund of less than USD 0.3 billion per year;
- revenue from the sale of certified emission reductions (CERs) issued for Clean Development Mechanism (CDM) projects estimated at USD 3 to 10 billion per year part of which is a financial benefit to the host countries;[60]
- multilateral assistance through climate funds outside the Convention of less than USD 2 billion per year;
- multilateral assistance through international financial institutions, UN agencies and other multilateral institutions amounting to an estimated USD 3 billion for projects with a climate change mitigation component;
- bilateral assistance of USD 5.8 billion for projects with a climate change mitigation component.

50. Although these amounts sum to USD 14 to 21 billion, the financial resources provided for climate change mitigation would be substantially less than this amount; probably USD 10 to 15 billion as estimated by the sources cited above. The sum includes over USD 9 billion of bilateral and multilateral projects for which mitigation is a "principal" or "significant" objective; the mitigation funding would be less. The sum also includes USD 10 billion for the CDM, when only part of the revenue is an economic benefit. With these considerations a range of USD 10 to 15 billion per year seems reasonable.

51. Purchases of CERs by developed country governments and entities is of the same order of magnitude as the funds provided by developed country governments through bilateral and multilateral

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56 Corfee-Morlot, Guay and Larsen, 2009, p. 6.

57 World Bank 2010, Figure 6.2, p. 263 shows USD 9 billion in 2005 dollars and the text states "roughly $10 billion" presumably current dollars.

58 Atteridge, et al., 2009, Table E1, p. viii. The four agencies are Agence Française de Développement (AFD), the German Development Bank (KfW), the Japan International Co-operation Agency (JICA) and the European Investment Bank (EIB).

59 Roberts Weissberger and Peratsakis, 2010, p. 24. The figures are 2009 dollars. Most of the aid is for mitigation.

60 CDM projects incur costs to reduce greenhouse gas emissions. The revenue from the sale of credits generally exceeds the costs incurred, although by how much is not known, so there is an economic benefit to the host countries. Developed countries also benefit because the cost of meeting their national emissions limitation commitments is reduced.

channels. The financing provided by the CDM is concentrated in a few countries – over 70% of the estimated emission reductions are in China and India. The geographic distribution of bilateral and multilateral assistance, including the GEF, is spread more uniformly across more countries.

52. The financial resources currently provided to developing countries for adaptation are much smaller. The available data for adaptation funding are limited to multilateral climate funds; data on bilateral assistance for adaptation will not be available until 2011. To date a total of less than USD 1 billion has been collected for adaptation and a little over half has been committed/disbursed; of the order of USD 100 to 200 million per year. Funds collected (committed/disbursed) are as follows:

- GEF strategic priority on adaptation – USD 50 (50) million;
- Special Climate Change Fund (SCCF) – USD 94 (92) million;
- Least Developed Countries Fund (LDCF) – USD 169 (135) million;
- Adaptation Fund – USD 170 (23) million;
- Pilot Programme for Climate Resilience – USD 175 (9) million; and
- Millennium Development Goals (MDG) Achievement Fund environment and climate change thematic window – USD 90 (56) million; and

53. Most of the funds have been contributed by developed country governments, but almost 15% has been raised for the Adaptation Fund through the levy on CERs issued. This percentage could rise over the next few years. If all of the pledged funds are received and the CDM continues to issue credits at its current pace, adaptation funding from these sources could rise to about USD 400 million per year.

The only multilateral funding devoted to technology transfer is the GEF's Poznan Strategic Programme on Technology Transfer with a budget of USD 50 million and spending of USD 15 to 20 million per year.

CHAPTER 2. LESSONS FROM EXISTING FUNDS

54. This section summarises lessons from climate funds and other resource transfers for disbursement of financial resources.

2.1 Lessons from existing climate funds

55. Most of the existing climate funds have a limited history, so it is difficult to draw lessons from them except that delivery is fragmented and the historic funding levels have been inadequate. The discussion in this section focuses on funds with multiple contributors and multiple recipients; funds supported by a single country/region and funds that support activities in a single country are not addressed.

2.1.1 Mitigation

56. To-date the financial resources provided to developing countries to address climate change have focused mainly on mitigation. The multilateral funds that support mitigation actions are:

- the GEF Trust Fund – less than USD 300 million per year;
- the Clean Technology Fund of the Climate Investment Trust Funds – about USD 25 million per year, although this is likely to increase significantly;
- the UN-REDD[61] Programme – about USD 15 million per year; and
- the Forest Carbon Partnership Facility – less than USD 5 million per year.

57. The resources provided by the CDM and bilateral assistance are much larger, so these funds represent only a small fraction of the total annual funding for mitigation.

58. Market mechanisms, such as the CDM, are not effective for some types of mitigation measures. The CDM has few agriculture, tidal and CO_2 capture projects. Public funds are likely to be needed to support mitigation measures that do not respond well to price incentives and measures with emission reduction costs higher than the market price. The CDM also has few afforestation and reforestation projects due, in part, to the fact that they cannot be used for compliance in the EU emissions trading scheme.

59. The financial resources provided by the CDM are highly concentrated. Over 70% of the emission reductions by CDM projects are expected to occur in China and India, so most of the financial resources provided by the CDM will flow to those countries. The geographic distribution of bilateral and multilateral aid, including the GEF, is much broader. Public funds, then, partly fill gaps in the geographic distribution of private funds.

60. REDD+ is being addressed by several multilateral – Congo Basin Forest Fund, Forest Carbon Partnership Facility, UN-REDD – and bilateral – Australia, Germany, Norway, the United Kingdom and the United States – initiatives whose roles are not always clearly distinguished.

[61] REDD means reducing emissions from deforestation and forest degradation in developing countries. REDD+ also includes sustainable management of forests and enhancement of carbon stocks.

61. How to best to scale-up provision of financial resources for efficient and effective mitigation action in developing countries for mitigation is not evident. The GEF Trust Fund disburses only a tiny share of the public funds. The funds available for mitigation under the Convention could increase significantly if a new fund is established, as proposed by the Copenhagen Accord, and is adequately funded. Market mechanisms, currently the CDM, focus on cost-effective mitigation measures in selected countries.[62] The financial resources they provide will depend on the stringency of the future emission limitation commitments of developed countries.

62. Most public funds for mitigation are provided outside the Convention as bilateral assistance. The multilateral funds outside the Convention may continue to be larger than those under the Convention. Large sums have been pledged to Climate Investment Trust Funds (CIF), although much remains to be collected and disbursement is just beginning. No institutions exist to co-ordinate the allocation of public funds across the multiple bilateral and multilateral sources or their use to complement funding through market mechanisms.

2.1.2 Adaptation

63. Despite the fact that the funding for adaptation is much smaller than that for mitigation, there are just as many multilateral funds focused on adaptation. In contrast to mitigation, most of the adaptation funds – the GEF strategic pilot approach to adaptation, Special Climate Change Fund, Least Developed Countries Fund and Adaptation Fund – are under the Convention. Only the MDG Achievement Fund and Pilot Programme for Climate Resilience are outside the Convention. As with mitigation funding, bilateral and multilateral aid probably provides much more funding for adaptation than the multilateral funds.

64. Most of the funds have been contributed by developed country governments, but almost 15% has been raised for the Adaptation Fund through the levy on CERs issued. Adaptation requires financial support since there is no market mechanism for adaptation measures. Most of the financial support has to be grants since few adaptation measures generate a cash flow than can repay a loan.

65. Too few adaptation projects have been completed yet to assess the effectiveness of the existing funding channels. There is clear evidence, in the form of identified but unfunded projects, of a substantial shortfall in international financial support for adaptation.[63] The respective roles of the existing multilateral funds are not clearly defined. Clearer definition of their roles, better co-ordination, or consolidation of some of the multilateral funds, as suggested by the evaluation of the LDCF, might be appropriate.

2.1.3 Technology development and transfer

66. The only funding mechanism dedicated to technology transfer is the Poznan Strategic Programme on Technology Transfer created by the GEF late in 2008 with a budget of USD 50 million. It will provide financial and technical support to assist 35 to 45 developing countries in developing and/or updating their technology needs assessments (TNAs).[64] As well the Programme will fund 14 technology transfer pilot projects at a cost of USD 36.8 million with an additional USD 21.2 million requested from the GEF Trust Fund. Results of this initiative are not yet available, so it is not yet possible to assess its effectiveness.

67. Although it is not an explicit objective, the CDM contributes to technology transfer by financing emission reduction projects using technologies not available in the host countries. Several studies have

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[62] Other possible market mechanisms, such as sectoral agreements and nationally appropriate mitigation actions (NAMAs) that can earn credits, have been proposed for inclusion in a future agreement.

[63] The unfunded projects indicate a need for almost USD 1 billion – USD 700 million for projects identified by NAPAs and USD 242 million for projects on the SCCF waiting list.

[64] GEF, 2009b. 39 proposals seeking funding of USD 81 million from the technology transfer window were submitted of which 14 were selected.

analysed the technology transfer in the CDM based on the statements by project proponents.[65] They find that roughly 35% of the projects accounting for about 60% of the annual emission reductions claim to involve technology transfer. Technology transfer is more common for larger projects and projects with foreign participants. The rate of technology transfer is highly variable across project types. Technology transfer also varies significantly by host country. As the number of projects of a given type in a host country increases, technology transfer spreads beyond the individual projects.

2.2 Lessons from the Montreal Protocol and Health Care

68. Lessons relating to the international generation and disbursement of funds can be drawn from the Multilateral Fund of the Montreal Protocol and health care.

2.2.1 The Multilateral Fund of the Montreal Protocol

69. The Montreal Protocol seeks to phase out production and consumption of chemicals that deplete the stratospheric ozone layer. The Multilateral Fund of the Montreal Protocol pays the agreed incremental costs of developing country action plans to phase out specified uses of ozone-depleting substances. It is funded through assessed contributions by developed countries.[66] The Fund is replenished triennially. A portion of a country's assessed contribution may take the form of bilateral funding. The contributions are considered ODA by OECD's Development Assistance Committee. The Multilateral Fund is widely considered to be successful.

70. The Montreal Protocol operates with a much smaller and simpler institutional structure than is needed to address climate change. The financial resources needed range from USD 110 to 210 million per year.[67] All of the funds come from developed country governments whose contributions are based on the UN scale of assessment. Although some of the funding is bilateral, most of the funding flows through the Multilateral Fund. The Fund pays the agreed incremental cost of national plans and projects to phase out specified uses of ozone depleting substances. There are no other international funding sources.

71. Although the Multilateral Fund of the Montreal Protocol has been successful, it probably is not a relevant model for climate-related funding. The scale of the financial resources needed is much smaller, funding is limited to a narrower range of actions, and the institutional structure is much simpler. The operation of the Multilateral Fund might serve as a model for the operation of a specialised climate-related fund, such as a fund focused on REDD+ or another specific mitigation option or a technology transfer fund.

2.2.2 International funding for health care

72. International funding for health care has more similarities to the situation for climate-related funding than the Multilateral Fund. The level of international funding is comparable to that currently provided for climate change, funds are provided through numerous bilateral and multilateral channels, private funds make up a substantial share of the total, and funding is targeted at specific objectives, such as AIDS and malaria, as well as integrated health care delivery.[68] The choice between targeted and integrated delivery is analogous to funding targeted mitigation and adaptation actions or supporting implementation of climate resilient development strategies. Health care, like action to address climate change, involves numerous public and private institutions in each country.

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[65] See Seres, Haites and Murphy, 2009; Haites, Duan and Seres, 2006; Seres, 2007; Dechezlepretre, Glachant and Meniere, 2007; De Coninck, Haake and van der Linden, 2007; and Seres, 2008.

[66] Parties not operating under paragraph 1 of Article 5, which sets a threshold of per capita emissions in 1990 below which countries may delay compliance with the control measures.

[67] TEAP, 2008.

[68] Integrated health care delivery seeks to address all health care needs. Targeted, specialized, vertical, global, or thematic funds focus on a small number of specified health care needs.

73. Bilateral and multilateral aid for health has grown rapidly over the past two decades and in 2006 was estimated to be about USD 14 billion.[69] These figures cover funding for health, population, water and sanitation, but not emergency response. Private funding has also grown rapidly and now is estimated to account for about one-quarter of the international support for health.[70] One characteristic of the increased funding, both public and private, is the establishment of funds, such as the Global Fund to Fight AIDS, Tuberculosis and Malaria, the Global Alliance for Vaccines and Immunization (GAVI), and the President's Emergency Plan for AIDS Relief (PEPFAR), to address specific goals.[71]

74. These specialized funds are controversial.[72] There are numerous studies and reports on the effectiveness of the targeted delivery strategies relative to integrated service delivery.[73] But most are not sufficiently rigorous to support clear conclusions about when targeted approaches are desirable.[74] Briggs and Garner identified only five published studies of reasonable quality that evaluated integrated care.[75] Based on those studies they concluded there is no clear evidence that integrating targeted programmes into primary health care improved service delivery or people's health status in low- or middle-income countries.

75. Proponents of targeted delivery claim they have generated unprecedented amounts of money and attention for needy causes and have achieved impressive results – concentrating the available resources on a few, well-focused interventions is more effective than attempting to achieve the same result through changes to the health system.[76] Critics claim specialised funds can distort national priorities, disrupt delivery systems, impose additional administrative burdens on recipient countries, have a limited chance of sustainability and generate negative spillover effects on health systems and non-targeted populations.

76. Aid for the health sector is characterised by a few large projects and many small projects.[77] From 2002 to 2006 there were 20,485 health and population projects. Fewer than 1000 of those projects involved assistance of more than USD 10 million each yet these large projects accounted for over 65% of total health ODA commitments during the period. Most of the projects, over 13,800, were smaller than half a million dollars each and together accounted for less than 5% of health ODA. A few large funds account for most the resources disbursed by specialised health funds.[78]

77. From an aid-effectiveness perspective, health is a complicated sector because: (1) well over 100 major organisations are active at the global level each with its own processes, procedures, and priorities; (2) much of the funding needed is for long-run recurrent costs (such as salaries and drugs), while aid projects are typically short-term; (3) health is multisectoral and outcomes are generally difficult to measure; and (4) in poor countries, most of the spending and a sizable proportion of service delivery is through the private sector, which is generally not part of the policy dialogue.[79]

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69 Scheiber, et al., 2007 and McCoy, Chand and Sridhar, 2009. The latter cites reports indicating that development assistance for health grew from about USD 2.5 billion in 1990 to USD 8.5 billion in 2000 and about USD 14 billion in 2005.

70 Bloom, 2007.

71 Each of these funds disburses more than USD 500 million per year.

72 They are also referred to as global, vertical or thematic funds.

73 Literature is available at www.who.int and www.aideffectiveness.org/index.html

74 Atun, Bennett and Duran, 2008, p. 8, identified four published reviews that explored the evidence on the effectiveness of horizontal and vertical programmes. Only one, by Briggs and Garner, was a systematic review.

75 Briggs and Garner, 2006. These studies compared: (1) integrating care by adding a service to an existing service; (2) integrated services versus single special services; and (3) packages of enhanced child care services (IMCI) versus routine child care.

76 Goodwin, 2008, p. 14.

77 Goodwin, 2008, p. 14. Based on OECD DAC figures cited in the "Health as a Tracer Sector on Aid Effectiveness" document prepared by WHO and OECD for the Third High Level Forum on aid effectiveness.

78 Goodwin, 2008, p. 14.

79 Scheiber, et al., 2007, p. 928.

78. This plethora of funding sources and associated application procedures and administrative requirements has led to a call for mechanisms to co-ordinate health care funding initiatives.[80] Developing countries suffer from duplication, fragmentation, high transaction costs, heavy reporting requirements, fierce competition for scarce health workers, and multiple separate channels for funding and financial management, drug procurement, laboratory support, monitoring, and evaluation.[81]

79. The International Health Partnership and related initiatives (IHP+) was created in 2007 to address these problems. The IHP+ seeks to achieve better health results by mobilising donor countries and other development partners around a single country-led national health strategy, guided by the principles of the Paris Declaration on Aid Effectiveness and the Accra Agenda for Action.[82] The development partners – 23 countries, 13 organisations and civil society – agree to support a single, costed, results-oriented national health plan delivered by existing in-country mechanisms. It is perceived as shifting the balance of power to the donors and creating new strings without providing a significant increase in funding.[83]

80. In short delivery of international health funding suffers from issues of harmonisation (co-ordination among donors), alignment (co-ordination with developing countries' development goals and policies) and coherence (coherence of the overall ODA agenda). The advice from the World Bank and the OECD to those who are considering a new targeted programme is to "think twice" whether such a new initiative has any value added. A more direct suggestion would be: for every new initiative, two existing, malfunctioning initiatives or organisations must be shut down.[84]

81. The health care experience suggests that funds for specialised purposes – energy efficiency, renewables, REDD+, adaptation for different sectors, technology transfer, capacity building, etc. – can yield measurable short term results. But they may distort national priorities, disrupt existing institutions and systems, and impose additional administrative burdens on recipient countries. To be effective in the longer term those mitigation and adaptation measures need to be integrated into the development strategies of developing countries.

82. The multiplicity and diversity of funding sources to address climate change is similar to that for health care. Dozens of bilateral and multilateral funding sources already exist for climate change and more are being proposed. The scale of the funding expected to be needed is even larger than for health care. A few large sources – the Clean Investment Funds, the bilateral programs of Japan and the United States and possibly the proposed Copenhagen Green Climate Fund – may provide a large share of the funding. But the large number of funding sources and the diversity of their activities suggest that a co-ordination mechanism may be desirable, even essential.

2.3 Lessons from Official Development Assistance (ODA)

83. The lessons learned from ODA are reflected in the Paris Declaration on Aid Effectiveness and the Accra Agenda for Action. The Paris Declaration has the following core principles: ownership, alignment, harmonisation, managing for results and mutual accountability (Box 1).

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80 Scheiber, et al, 2007; OECD, 2008; Chan 2009; and Sridhar, 2009. Many donors still insist on using their own fiduciary systems even where country systems are of good quality (OECD, 2008, p. 13). An estimated 14 000 separate donor missions were conducted in 55 recipient countries during 2007 with Vietnam fielding an average of three per working day (OECD, 2008, p. 15).

81 Scheiber, et al, 2007; Chan, 2009; Sridhar, 2009.

82 See: www.internationalhealthpartnership.net/en/home. The Paris Declaration on Aid Effectiveness and Accra Agenda for Action are discussed in the next section. Isenman, 2008 finds a clear commitment by most global programs – agriculture, education, health, and other – to take account of the Paris Declaration, but with differing degrees of priority.

83 Sridhar, 2009.

84 Delph, 2008, p. 9.

Box 1. The principles of the Paris Declaration

1. Ownership

Ownership is the foundation principle of the Paris Declaration. Development is something that must be done by developing countries, not to them. Policies and institutional reforms will be effective only so far as they emerge out of genuinely country-led processes. External assistance must be tailored towards helping developing countries achieve their own development objectives, leaving donors in a supporting role.

2. Alignment

Under the Paris Declaration, the principle of alignment refers to two importance changes to aid practice. The first is that donors should base their support on the partner country's development priorities, policies and strategies ('policy alignment'). The second is that aid should be delivered as far as possible using country systems for managing development activities, rather than through stand-alone project structures ('system alignment').

3. Harmonisation

Harmonisation refers to cooperation between donors to improve the efficiency of aid delivery. Donors are aware that multiple initiatives by different donors, each with their rules and procedures, can be very draining for developing country administrations. To reduce the transaction costs of aid, donors have been developing a range of new approaches, including programme-based approaches, pooled funding arrangements, joint country plans and other common arrangements.

4. Managing for results

Managing for results is a general principle of management that involves using information about results systematically to improve decision-making and strengthening performance. In the development field, it means ensuring that all development activities are oriented towards achieving the maximum benefits for poor men and women. It means ensuring that all initiatives, from individual aid projects through to national development strategies, are designed so as to generate performance information and use it for continuous improvement.

5. Mutual accountability

Mutual accountability is perhaps the most controversial of the Paris Principles, and the most difficult to put into practice. It suggests that, in a true development partnership, there are commitments on both sides of the relationship, and both donors and partner countries should be accountable to each other ('mutual' accountability) for meeting those commitments. However, there are also many other accountability relationships involved in the development process that need to be taken into account.

One of the innovative aspects of the Paris Declaration is that the commitments are reciprocal in nature, applying both to donors and to developing countries. This is an advance on its predecessor, the Rome Declaration, where the commitments were all on the donor side, and to traditional aid practices where the obligations were mostly on recipients. Reciprocal commitments create for the first time the possibility of mutual accountability.

84. In 2006 the OECD agreed a Declaration on Integrating Climate Adaptation into Development Co-operation. This commits OECD members to "work to better integrate climate change adaptation in development planning and assistance, both with their own government and in activities undertaken with partner countries". It specifically mentions the Paris Declaration as the benchmark for providing such assistance (OECD, 2009c). In 2009, this commitment was further articulated through policy guidance that reinforced the relationship between external climate change finance and the international commitments to aid effectiveness.

85. Some developing countries believe climate change funding by developed countries is a commitment under the UNFCCC to reimburse developing countries for the incremental costs incurred to implement agreed mitigation and adaptation measures. They object to anything that would tend to characterise the funding as Official Development Assistance, including references to the Paris Declaration on Aid Effectiveness.

86. Various processes under the UNFCCC and Kyoto Protocol help create developing country ownership of projects to be funded. These processes include National Adaptation Programmes of Action

(NAPAs) for urgent adaptation needs, Technology Needs Assessments (TNAs) for technology transfer needs, the requirement for host government approval of CDM projects and proposals stemming from the Bali Action Plan to fund nationally appropriate mitigation actions (NAMAs). Countries receive funding to prepare NAPAs and TNAs to identify priority projects.[85] It is too early to assess how well these processes are working. Only a few adaptation projects have yet been funded and no TNA identified projects have been funded.

87. Even if the processes mentioned above are effective in creating ownership, it is not yet clear how well the priorities and projects they identify will be aligned with countries' national development strategies. NAPAs, for example, focus on urgent adaptation needs. Some adaptation money might be better spent making long-lived facilities more climate resilient. To assess such trade-offs climate-related funding would need to be integrated into the national development strategies of developing countries. Developing country pressure for 'direct access' can be interpreted as mechanism for better aligning implementation of climate-related actions with national development strategies.[86] Budget support can be interpreted as a way to align funding with national priorities. Budget support forms an increasing share of development aid.

88. The lesson from the health sector is that funding should promote country ownership and be aligned with national systems. This will be difficult for climate change given that the resources come from numerous funds and, in the case of mitigation, also through market mechanisms. Climate-related funding often will be only part of the total, so harmonisation with the requirements and procedures of other funding sources may be a challenge. There are already multiple funding sources for adaptation, mitigation, and REDD+ without clearly defined roles.

89. Bilateral and multilateral funding sources routinely evaluate the effectiveness of their efforts. It is likely, then, that the effectiveness of public funds provided through bilateral and multilateral will be evaluated periodically.[87] It is easier to assess the impact of the funding provided if it is tied to specific activities or results, such as installation of a wind turbine or distribution of drought-resistant seeds to farmers in a specified region. Assessing the impact of funds provided for budget support in terms of their contribution to broad objectives such as greenhouse gas mitigation or enhanced climate resilience will be challenging. If the results of the funding can't be assessed, justifying the level of future funding needed becomes more difficult.

90. In principle, mutual accountability is achieved for the financial mechanism of the Convention since it functions under the guidance of and is accountable to the COP.[88] Some developing countries believe this has not worked well in the case of the GEF, the only operating entity of the financial mechanism to date. They believe that the GEF Council has selectively implemented the COP guidance. Many developing countries, therefore, will want the Copenhagen Green Climate Fund and any other operating entity of the financial mechanism to be governed by a board elected by the COP. Many developed countries believe the management of a new operating entity could be delegated to an existing international institution through a legal agreement. The board for the operating entity could then be chosen through a process established by that institution.

91. At present most climate-related funding flows through channels outside the financial mechanism of the Convention. If most new resources come from innovative sources and flow through new operating

[85] Procedures for preparing NAMAs and associated funding arrangements have not yet been agreed.

[86] Direct access means that a designated institution in a developing country may access the financial resources of a multilateral fund directly. This has been agreed for the Adaptation Fund. A 'national implementing entity', such as the Ministry of Finance, that meets the established fiduciary standards may request funds for adaptation projects or programmes. All other climate funds require a developing country to work with an international entity, such as UNEP, UNDP or the World Bank, to submit requests for funding and to implement approved projects.

[87] The Bali Action Plan specifies monitoring, reporting and verification of the mitigation actions implemented by developing countries and the funding provided by developed countries.

[88] This is true of the Adaptation Fund as well since it subject to the authority and guidance of the CMP.

entities, such as the proposed Copenhagen Green Climate Fund, the financial mechanism of the Convention could cover most of the public funding. That would be comparable to the Multilateral Fund of the Montreal Protocol. To create such a situation, some developing countries argue that only funds channelled via the financial mechanism of the Convention should count toward developed country commitments. If most climate-related funding remains outside the Convention, a co-ordination mechanism may be needed.

92. Although the applicability of the Paris Declaration on Aid Effectiveness to climate-related funding is contested, the substance of most of the principles can be addressed.

93. Mobilising and governing climate change financing from the developed countries is only part of the story. Equally challenging is how developing countries could enhance their capacities to effectively utilise both fast start and long term climate change financing and how to ensure the financing sources and mechanisms are best designed to support development outcomes. Partner countries felt that given the commitments being made towards financing for climate change at the global level and the need to establish modalities for delivering finance from the international community, it would be pertinent for partner countries to reflect on their experience at the country level, identify knowledge gaps and work together to ensure that views and perspectives on managing finance for climate change from the country level are fed to decision makers at the international level. OECD DAC is working with the Capacity Development for Development Effectiveness Facility (CDDE), as well as other partners are already stepping into this topic and providing such support to developing countries.

94. Some recommendations concerning the modalities of developing countries in receiving the in flow of climate change financing were contained within the Bangkok Call for Action[89], which were developed at the Asia-Pacific Climate Change Finance and Aid Effectiveness dialogue help on 19-20 October 2010 in Bangkok.

Box 2. Making the most of climate change finance: Partner country recommendations for their own governments

- Governments should strengthen their capacities for a whole-of-government response to climate change. A coordinated response with clear roles and responsibilities for different agencies and a common approach to external financing should be operationalised;
- Wherever possible, existing institutional arrangements and policy frameworks for managing international cooperation, including development assistance, should be built upon;
- Where appropriate, governments should strengthen their capacities to access external climate finance;
- Governments need to improve overall coordination of the climate change response in country – including climate finance – by clarifying roles and responsibilities, in particular harmonising agencies at central level and ensuring effective communication, coordination and appropriate financial transfers of climate finance to sectors and sub national levels;
- Governments will need to strengthen their policy, planning and financial management to include policy frameworks and clearly articulated national priorities for the climate change response;
- Financing frameworks will need to be established to include external and domestic sources of public finance as well as resources from the private sector. Where appropriate, external sources should be integrated into

[89] The recommendations contained within the Bangkok Call for Action were developed at the Asia-Pacific Climate Change Finance and Aid Effectiveness dialogue held on 19-20 October 2010 in Bangkok. The dialogue was facilitated by the CDDE and brought together over 75 participants representing the seven governments of Bangladesh, Cambodia, Lao PDR, Nepal, Indonesia, Philippines and Vietnam, as well as the Pacific Islands Forum Secretariat, eight development partners and international agencies (ADB, AUSAID, JICA, OECD, SIDA, UNDP, UNEP, World Bank) and representatives from parliaments and civil society.

national budgets and public financial management systems used to track expenditures;

- Alongside managing publicly provided funds, governments will need to establish an enabling environment for private sector investment to support climate resilient low-carbon growth and the transition to a green economy.

Source : Bangkok Call for Action, 2010

2.4 Differing perspectives on the nature of the financial commitments

95. Negotiators for some developed and some developing countries have very different views of the commitments to provide financial support for climate-related activities. While these views are not shared by all countries in each group, the need for consensus means that an agreement can be reached only if a compromise acceptable to countries that hold these views can be found.

96. Some developing countries view developed country commitments under the Convention, the Kyoto Protocol and any new agreement as contractual obligations by the governments of those countries. They believe the payments fulfill legal commitments to cover the agreed costs incurred by developing countries to implement mitigation, adaptation, technology development and transfer and capacity-building measures. Developing countries are not obligated to implement mitigation measures, but they may implement mitigation measures with financial and technical support. Thus developing countries view the payments as reimbursement of (the incremental) costs incurred for the mitigation measures implemented.

97. These developing countries interpret financial support for adaptation as a contractual obligation to pay for adaptation measures they are forced to implement.[90] International financial support for technology development and transfer and capacity-building is viewed as repayment of costs incurred by developing countries for those activities since developed countries have agreed to promote, facilitate and finance, as appropriate the transfer of environmentally sound technologies and to support the development and enhancement of developing country capacities and technologies.

98. Some developed countries believe the payments are analogous to ODA because they are concessional financial flows to developing countries. They believe decisions concerning the amount of funding provided should be voluntary. The donor country should be able to choose the channel(s) through which to provide the funding – bilateral, regional or multilateral channels or funds under the Convention. And that the donor country should be able to choose the purposes for which the funds are used – mitigation, adaptation, development and transfer and capacity-building, etc. – as well as the recipient countries. Some developed countries prefer to use development institutions, such as their bilateral aid agencies and the multilateral development banks, to disburse most of their contributions. Contributions may be reported to the OECD as ODA.

99. Developing countries that believe the provision of funds by developed countries is a contractual obligation resist the characterisation of climate finance as ODA. These developing countries believe the funds are a repayment of agreed costs, not a voluntary act of charity. And they believe that priorities for the use of funds should be established by the COP not the contributors. For these countries, this means that most, if not all, of the financial resources should flow through funds under the Convention. They also argue that financial flows outside the Convention, such as private sector flows, should not count toward the governmental obligations of developed countries. Finally, these countries object to anything that would characterise the resources as ODA, such as references to the Paris Declaration on Aid Effectiveness and the Accra Agenda for Action.

[90] It is considered a legal obligation because it is part of the Convention and the Kyoto Protocol. Developing countries believe this obligation is appropriate because the adverse impacts are largely due to past emissions by developed countries and because developed countries are wealthier and so are better able to bear these costs.

100. Compromises on these issues will be needed if the negotiations to establish a new fund under the Convention and a forum or body to co-ordinate international climate finance are to be successful.[91]

[91] See section 4.5 below.

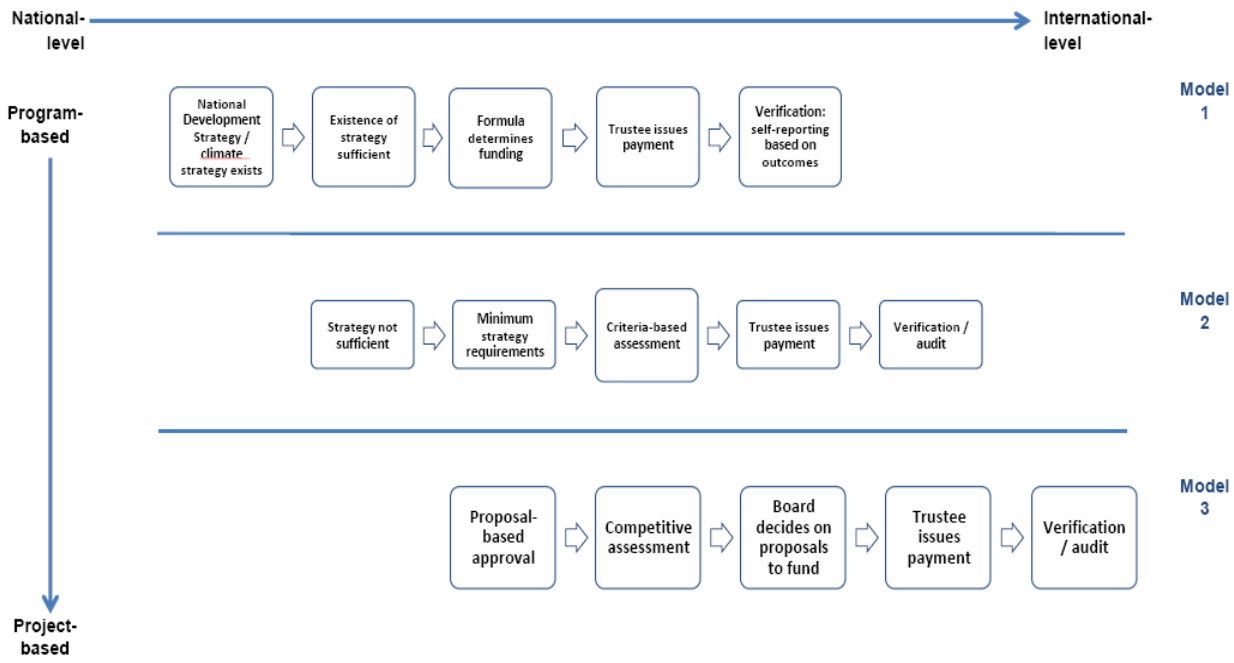
CHAPTER 3. DISBURSING FINANCE TO ADDRESS CLIMATE CHANGE

101. This section discusses issues related to the disbursement of financial resources to address climate change in developing countries.

3.1 Funding models: aligning national with international priorities

102. Figure 1 presents three simplified models of programme or project cycles of multilateral funds. cycles that start closer to the left-hand side tend to rely more closely on national-level decision-making, while those that end closer to the right rely more on international decisions. Models closer to the top of the figure are more likely to provide programme funding while those at the bottom fund specific projects.

Figure 1. Funding models of multilateral funds cycles



Source: OECD, 2009b, p. 7.

103. Model 1, at the top of Figure 1, builds on a country ownership process. A country has a national development strategy that integrates climate change actions, or a national climate change strategy, that is a sufficient basis for funding decisions by the fund's board. The financial resources provided to support implementation of the strategy may be determined by a formula. The formula might take into account the country's population, national income, vulnerability/expected emission reductions, domestic funding, global environment benefits, resources available, and other factors. The trustee issues the payment(s). Verification that the resources were used for the intended purpose is based on outcomes at the country level and relies heavily on self-reporting by participants and national fiduciary systems.

104. Model 2, in the middle, is still country-driven, but more of the decision-making process takes place at the international level. The country specifies a proposed programme based on a sectoral strategy, such as a nationally appropriate mitigation action (NAMA), national adaptation programme of action

(NAPA), technology needs assessment (TNA). The proposed programme is assessed against specified criteria, often by a panel of experts. Final approval rests with the fund's board. The trustee issues the payment(s). Verification usually takes the form of both an internal and external audit and evaluation. If the strategy identifies specific projects rather than a programme or the fund's resources only allow specific projects to be funded, the funding process follows model 3.

105. In model 3, at the bottom, resources are allocated to projects selected through a competitive process. The projects submitted must be approved by the government. A link to a country-owned strategy may improve the chances that a proposed project will be selected, but a national, sectoral or other strategy is not a requirement for project funding. The fund's board makes the final decision on which projects to support, often based on expert recommendations. The trustee issues the payment. Evaluations and audits are generally undertaken or commissioned by the fund.

106. Funds seeking the best value for money may prefer this third model since it will, in principle, reward the best project proposals among those submitted. But it is a relatively complex, transaction-intensive process with higher administrative costs than the other models. And the projects funded may differ from the measures funded if climate change is addressed as part of a national development strategy. The projects often have a shorter term focus than sectoral or national development strategies.

107. At present most climate-related funding sources follow model 3. The GEF Trust Fund, LDCF, SCCF and Adaptation Fund all fund specific projects. A funding mechanism for NAMAs, such as that discussed below, would be an example of model 2. Funding adaptation programmes, rather than individual projects, based on NAPAs would be another example of model 2. The lessons learned from development aid and health funds suggest that model 1 is the most effective in the long run. If climate-related funding sources are to move to model 1, countries must integrate climate change actions into their national strategies and the funds must develop appropriate decision making processes. These issues, in the reverse order, are discussed next.

3.2 Funding mitigation and adaptation actions in developing countries

108. The Bali Action Plan indicates that nationally appropriate mitigation actions (NAMAs) in developing countries will be supported and enabled by technology, financing and capacity-building.[92] How to match financial support from developed countries with the mitigation opportunities identified by developing countries is not specified. A matching mechanism is needed.[93] On the action side, key goals could be to integrate NAMAs into national development plans (or at least a national mitigation strategy) and to address a significant portion of a country's mitigation potential. On the support side, important goals could be cost-effectiveness and how to prioritise spending.

109. A matching mechanism to provide financial support for NAMAs might seek to: ensure the emission reduction performance of NAMAs; identify support needs; target support to NAMAs in a cost-effective manner; steer financial and other support where it is needed most; strengthen domestic capacity and enabling environments for low-carbon investments; and ensure procedural efficiency and equity in the provision of support. For a matching mechanism to successfully achieve these goals, both the actions and the support would need to be measurable, reportable and verifiable (MRV).

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[92] Some NAMAs may be implemented by developing countries with no international support (autonomous or unilateral). Although there is no agreement yet, NAMAs that seek international financial support could receive funds from bilateral or multilateral sources and/or credits for the emission reductions achieved. See Jung, et al., 2010. Only the provision of funds for NAMAs that receive international financial support is considered here.

[93] A conceptual framework for matching action with support is described by Kim, Corfee-Morlot and de T' Serclaes, 2009.

110. The institutional arrangements for matching are important. They determine who makes or influences the decisions on support.[94] The institutional arrangements must channel multiple sources of international public finance to mitigation actions in developing countries in a strategic way. Multiple funds each making their own funding decisions leads to a decentralised structure. A single fund, or multiple funds with a co-ordinated process for funding decisions, leads to a centralised structure. A centralised structure increases consistency and possibly transparency.

111. Each decision making process needs to establish eligibility criteria for mitigation actions, such as the existence of a low emission development strategy and the recipient country's level of development.[95] If requests exceed the available funds, a means to prioritise the eligible projects is needed. Prioritisation could be based on criteria such as the recipient country's mitigation potential or level of development, sectors with cost-effective mitigation potential, or the mitigation actions' ability to leverage private investment.

112. Adaptation measures should be an integral part of, or at least consistent with, a national development strategy that takes climate change into account. Most adaptations will yield benefits even if the climate does not change and are unlikely to be implemented solely to adapt to climate change.[96] The benefits of adaptation measures are usually local, so the priorities established have implications for regional equity within the country. Adaptation measures also involve temporal equity; balancing action to address immediate problems with investments to reduce future adverse impacts. Such equity choices are better made by national governments than international funding institutions. This suggests that adaptation be funded through national programmes, model 1 or 2, if possible.

113. Mitigation actions can be assessed in terms of the emissions reduced. Assessing the effectiveness of adaptation measures is more difficult. What would the damages have been in the absence of the measures implemented? How should impacts expected to be avoided in 10 years be treated? These difficulties exist regardless of whether adaptation is funded on a project or programme basis. Despite the difficulties, some monitoring, reporting and review of the adaptation actions funded will be needed to evaluate how well the funds are deployed.

114. As in the case of NAMAs, funding arrangements for adaptation programmes require eligibility criteria and prioritisation criteria. The process can be decentralised – multiple funding sources each making their own funding decisions – or centralised – a co-ordinated process for funding decisions across all funders.

3.3 Integrating climate change efforts at the country level

115. International funding processes cannot use model 1 until developing countries prepare national climate change strategies or integrate actions to address climate change into their national development strategies. Some developing countries, including Bangladesh, Ghana, Indonesia and Mexico, are already launching national action on climate change.[97] Bangladesh, Ghana and Mexico have taken the approach of developing climate change strategies, which are closely linked to national development policy and sectoral policies. Indonesia is integrating climate change into its 2010-2014 Mid-Term Development Plan, rather than creating a separate climate change strategy.

116. In Bangladesh the National Climate Change Strategy and associated Action Plan (2008) are linked to the 2008-2011 Poverty Reduction Strategy. The Action Plan covers 37 government programmes in six thematic areas – food security, social protection, disaster management, mitigation / low carbon

94 Kim, Ellis and Moarif, 2009.
95 Kim, Corfee-Morlot and de T'Serclaes, 2009.
96 UNFCCC, 2007, p. 99.
97 OECD, 2009b, pp. 4-5.

development, and capacity development. A Multi-Donor Trust Fund co-ordinates external resources and blends these with domestic resources to implement the national climate change strategy.

117. In Ghana there is a focus on defining targets and measuring results for climate change and monitoring progress towards these. The Performance Assessment Frameworks of the sectors engaged in delivering climate change actions serve to track progress, thus facilitating monitoring and evaluation of specific activities. National budget allocations are fully integrated in the Medium Term Expenditure Frameworks of the sectors involved in implementing climate change actions.

118. Indonesia has established the Indonesia Climate Change Trust Fund which allows international funds to be delivered "horizontally" across a range of sectors consistent with the national budget. As international finance for climate change is scaled-up in the future, it will be important to use and strengthen partners' public financial management systems so that they can absorb larger amounts of funding and enhance their climate change efforts.

119. In Mexico, all 32 states are preparing a State Climate Change Strategy, as are the major cities. There, decentralised planning complements national planning and ensures broad ownership and a focus on local priorities. Genuine country ownership of the plans and strategies, regardless of the form chosen, is essential to their success. Tailoring the planning process to a country's needs and institutions, rather than using a standardised approach, can increase ownership and ensure that plans are translated into action.

120. All four countries found that sustained capacity development was necessary for people working directly on climate change, people engaged in sectors affected by climate change and people involved in public financial management, monitoring and reporting.[98] A country's capacity to address climate change and make the most of any opportunities it offers (through, for example, the carbon market) depends on the skills of a broad cross-section of government, the private sector and civil society.

121. A growing number of countries are establishing "national funding entities" to manage international and domestic climate change funding and to help mainstream programmes and projects into national development strategies and plans at the country level.[99] Existing funds include:

- Amazon Fund of Brazil
- Bangladesh Climate Change Resilience Fund
- Brazil National Fund on Climate Change
- China CDM Fund
- China Funds for the Environment
- Ecuador Yasuni ITT Trust Fund
- Guyana REDD Investment Fund
- Indonesia Climate Change Trust Fund
- Maldives Climate Change Trust Fund
- Thailand Energy Efficiency Revolving Fund

In addition, funds are being developed or in the process of being established in Costa Rica, Nigeria, India, Indonesia and the Philippines.

122. National action plans solely motivated by a Convention obligation to address climate change are rarely successful.[100] A more effective approach is to integrate climate change into a national planning process that involves active participation by central and line ministries, civil society and the private

[98] OECD, 2009b, p. 5.
[99] Gomez-Echeverri, 2010
[100] Sharma, A., 2009.

sector.[101] OECD policy guidance on Integrating Climate Change Adaptation into Development Co-operation proposes the use of a climate lens to examine the risks arising from climate variability, the vulnerabilities and opportunities associated with new policies, plans or projects, and how to adapt existing policies and plans to address these risks and opportunities.[102]

123. It is too early to evaluate the impact of these approaches on reducing emissions and increasing climate resilience. A key challenge is to develop a national strategy with broad ownership and a focus on local priorities. The short-term development priorities need to take into account the longer-term implications of climate change. And mechanisms for focusing domestic and international financial resources on implementation of climate change actions need to be established. These mechanisms must be able to handle the scaled-up resources expected post-2012 and to provide robust monitoring, reporting and evaluation of supported mitigation and adaptation actions.

3.4 Allocating resources among countries

124. How to allocate the available financial resources will be a major on-going challenge. Funds will need to be allocated among mitigation, adaptation, technology development and transfer and capacity-building. The establishment of separate funds with dedicated revenue sources, such as the 2% levy on CERs issued for the Adaptation Fund, may appear to address the allocation issue. But the assignment of dedicated revenue sources is really an allocation of funds. If a mitigation fund has a persistent surplus while an adaptation fund is continuously unable to support proposed actions, there is likely to be pressure to change the assignment of revenue sources.

125. Within a given objective – mitigation, adaptation, technology development and transfer and capacity-building – funds will need to be allocated among different purposes. Mitigation spending might need to be divided among energy efficiency, renewables, REDD+, carbon capture and storage (CCS), and other mitigation actions. Adaptation spending might need to be divided among provision of health care, support for irrigation systems, coastal protection, reduction of the impacts of extreme weather events, etc. Technology funds may need to be split among co-operative research, demonstration projects, and diffusion of available technologies.

126. Every allocation decision implicitly involves a regional distribution of spending. Funding for REDD+, for example, has a different regional distribution than funding for CCS or energy efficiency. Every allocation decision has an implicit temporal dimension as well. Funding measures to reduce the impacts of extreme weather events should yield savings in the future, but it may reduce the money available to deal with immediate priorities, such as health care. Allocating funds for technology research means less money is available for diffusion of available technologies thus sacrificing short-term mitigation for potential longer-term benefits. These choices may be implicit or explicit, but they cannot be avoided.

127. Financial resources can be disbursed for specific projects or country programmes. To the extent that the funds are provided for projects, the funding body must establish priorities and so implicitly or explicitly address regional and temporal equity. To the extent that the funds are disbursed by country, regional equity is implicitly or explicitly addressed while priorities and their temporal equity implications are delegated to the national government.

128. A country allocation, whether explicit or implicit, is likely to be contentious. It may be possible to agree on general criteria, such as "developing countries that are particularly vulnerable to the adverse effects of climate change, especially the LDCs, SIDS and countries in Africa affected by drought, desertification and floods" (Bali Action Plan, paragraph 1(c)(i)). Translating such general criteria into allocations to specific countries is difficult. The regional distribution of projects is a perennial issue for the

[101] Sharma, A., 2009.
[102] OECD, 2009c.

CDM. The resource allocation framework (RAF) adopted by the GEF had design and implementation problems.[103]

129. A country allocation system may set the maximum or actual amount available to each country and may vary the amount based on the country's performance. The Adaptation Fund is considering options for establishing country caps.[104] The GEF will replace the RAF with a System for a Transparent Allocation of Resources (STAR) to allocate resources under the fifth replenishment.[105] STAR will adjust country allocations based on performance.[106]

130. Mitigation actions yield essentially the same climate change benefits regardless of where they are located. On that basis it could be argued that mitigation funds should be allocated internationally to equalize the cost per tonne of CO_2 equivalent reduced taking into account differences in the permanence of the reductions. Technology research and development likewise has substantial global benefits since successful technologies are likely to be implemented in many countries. This suggests that the fund allocation be made internationally based on the anticipated global benefits. In contrast, the impacts of adaptation and capacity-building are largely local suggesting that funds be allocated to countries based on need and equity. This suggests different country allocations for mitigation, adaptation, technology development and capacity-building rather than a single allocation formula.[107]

131. The allocation of financial resources is ultimately a political decision.[108] The allocation of funds among mitigation, adaptation, technology development and transfer and capacity-building is a political decision because it involves an implicit regional distribution that is politically sensitive. The allocation of funds among countries, whether implicit or explicit, also is politically sensitive. These decisions, therefore, will be made politically – by the funders of bilateral assistance, the governing bodies of multilateral funds outside the Convention, by the COP for funds under the Convention, and the CMP for the Adaptation Fund.

3.5 Governance of international funds

132. Financial resources to address climate change in developing countries are likely to be provided through multiple channels under, and outside, the Convention. The financial resources will include both private funds and public funds. Public funds will be provided through one or more operating entities of the financial mechanism of the Convention; as well as bilateral, regional and other multilateral channels.

133. The bilateral, regional and multilateral channels will establish their own governance processes. Operating entities of the financial mechanism of the Convention are subject to the guidance of and accountable to the COP. But the guidance to these operating entities could take cognizance of the funds provided through other channels. The COP regularly provides guidance to the GEF relating to the climate focal area of the GEF Trust Fund, the LDCF and the SCCF. The CMP provides guidance to the Adaptation Fund Board.

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[103] GEF, 2009c.
[104] Adaptation Fund, 2010a.
[105] GEF, 2010f.
[106] GEF, 2009a.
[107] For mitigation it could be argued that funds should be allocated among countries so as to maximize the emission reductions. Conceptually, a country allocation that maximizes the (local) benefits of adaptation measures has some appeal. It practice, it would be very difficult to value or otherwise compare the benefits of different adaptation measures.
[108] The allocation of resources is conceptually similar to the allocation of national emission limitation commitments under the burden-sharing agreement in the European Union but with many more countries. The EU used a triptych approach to develop an initial estimate of each country's commitment. These estimates were then modified through political negotiation. Similarly estimates of a country's allocation for mitigation, adaptation, technology development and capacity-building could be modified through political negotiation.

134. The Copenhagen Accord proposes to establish a Copenhagen Green Climate Fund as an operating entity of the financial mechanism of the Convention (Paragraph 10) to manage a significant portion of the future funding (Paragraph 8). It also proposes that a High Level Panel be established under the guidance of and accountable to the UNFCCC to study potential sources of revenue (Paragraph 9). The most recent draft of the negotiating text includes a new fund established as an operating entity of the financial mechanism of the Convention.[109] The text contains two options to improve co-ordination across financing channels - a "forum" of entities that provide financial support and a "new body" under the COP.[110]

135. The Copenhagen Accord does not enumerate the functions of the High Level Advisory Panel it proposes. Others suggest a key role of the panel would be to ensure transparency, oversight and evaluation on how much is actually paid, where the funding is going and what it is being used for.[111] The "forum" would serve as a platform to encourage operating entities and other delivery channels to increase the flow and exchange of information, to avoid duplication of efforts and to harmonise application, measurement and reporting procedures.[112] Possible functions of the "new body" could be to:

- provide guidance to, and ensure accountability to the COP of, all operating entities of the financial mechanism;
- improve coherence, co-ordination, efficiency and effectiveness by encouraging all operating entities and other delivery channels to avoid duplication of efforts and to harmonise application, measurement and reporting procedures;
- assess the needs for international finance to support activities to address climate change and study the contribution of the potential sources of revenue, including alternative sources of finance, towards meeting these needs;
- recommend a balanced allocation of funding across thematic areas of the operating entities of the financial mechanism based on the information provided by all operating entities;
- recommend to operating entities modalities that provide simplified, improved, effective and equitable access to financial resources in a timely manner, including direct access; and
- recommend modalities to measure, report and verify the support provided to developing country Parties for enhanced action in developing countries.[113]

136. The UN Secretary-General has established a High Level Advisory Group on Climate Change Financing to study the potential sources of revenue for financing mitigation and adaptation activities in developing countries and to submit its findings to the next Conference of the Parties. This Group was not established under the guidance of and accountable to the COP so it is not the High Level Advisory Panel proposed by the Copenhagen Accord. But its mandate is the same as that of the Panel, so it could be argued to eliminate the need for the Panel proposed by the Copenhagen Accord at least until another review is needed.

137. Each of the existing funds under the Convention has a board – The GEF Council for the GEF Trust Fund, the GEF Council serving as the LDCF/SCCF Board, for the LDCF and SCCF, and the Adaptation Fund Board for that fund. The GEF has been implementing reforms aimed at improving its effectiveness and efficiency.[114] The current draft of the negotiating text further proposes that Parties agree

[109] UNFCCC, 2010, paragraph 8, p. 24.
[110] UNFCCC, 2020, paragraphs 13 and 14, pp. 24-25.
[111] Roberts, Stadelmann and Huq, 2010.
[112] UNFCCC, 2010, paragraph 13, p. 24.
[113] UNFCCC, 2010, paragraph 14, p. 25.
[114] GEF, 2010g.

to revise the institutional arrangements between the financial mechanism of the Convention and the Global Environment Facility to ensure a more effective response to the needs of developing countries.[115]

138. Any new fund that is an operating entity of the financial mechanism of the Convention probably would have its own board functioning under the guidance of and accountable to the COP which would decide on it policies, programme priorities and eligibility criteria.[116] The board of the new fund could have the following functions:

- develop, and revise as appropriate, criteria for implementing entities, including developing country entities, eligible to receive money from the fund;
- adhere to guidance provided by the COP on the allocation of funds among adaptation, mitigation, technology development and transfer and capacity-building and other purposes;
- adhere to guidance provided by the COP on the allocation of funds among countries / regions;
- ensure independent evaluation and auditing of activities supported by the fund; and
- undertake any other functions assigned to it by the COP.

139. Much remains to be negotiated, including the size and composition of the board, how its members are selected, its powers and its rules of procedure. The board, for example, could have the power to establish expert panels to review applications or to provide advice on strategies for different funding windows.[117]

140. The current negotiating text proposes that the board of the new fund shall have an "equitable and balanced" or "equal" representation of developed and developing country Parties and that they be nominated by the COP.[118]The Copenhagen Accord proposes equal representation of developed and developing countries for the board of the Copenhagen Green Climate Fund (paragraph 8).

141. Developing countries sought 'direct access' to resources from funds under the Convention. Direct access means that a designated institution in a developing country may access the financial resources of a fund directly. This has been agreed for the Adaptation Fund, as well as of direct access for countries to implement national communications and portfolio planning under the fifth replenishment period of GEF. All other funds under the Convention require a developing country to work with an international entity, such as UNEP, UNDP or the World Bank, to submit requests for funding and to implement approved projects. The Adaptation Fund allows direct access for developing countries with an accredited 'national implementing entity', such as the ministry of finance, that meets the fiduciary standards it has established. This is also a proposal for the new fund in the current negotiating text.[119]

[115] UNFCCC, 2010, paragraph 15, p. 25.
[116] This would apply to the Copenhagen Green Climate Fund proposed by the Copenhagen Accord as well as the unnamed new fund proposed in the current draft of the negotiating text.
[117] The current negotiating text addresses these issues in paragraphs 8 and 10 on page 24 (UNFCCC, 2010).
[118] UNFCCC, 2010, paragraph 9, p. 24.
[119] UNFCCC, 2010, paragraph 11, p. 24.

CHAPTER 4. DISBURSING ADDITIONAL FUNDS FOR 2010-2012

142. In the Copenhagen Accord, developed countries committed to provide fast-start finance of new and additional resources approaching USD 30 billion for the period 2010-2012 with balanced allocation between adaptation and mitigation. This chapter reviews information on the funds pledged to meet this commitment and the disbursement of those funds.

4.1 Definition of fast-start funds

143. The sources and character of the funds that comprise the collective commitment of USD 30 billion in the Copenhagen Accord are not well defined.[120] For example: does the commitment include only funds from developed country governments or private entities as well? Does the commitment include only funds provided on concessional terms or loans provided on commercial terms as well?

144. Project Catalyst assumes fast-start finance is "public monies used to finance the incremental cost of mitigation and adaptation activities in developing countries, including costs associated with capability building and other critical enablers."[121] Since publicly pledged funds include both grants and loans, it estimates the 'grant element' of the loans to calculate the amount of concessional funding pledged.

145. In the absence of an agreed definition, each country's pledge can be viewed as reflecting its interpretation of the commitment.

4.2 Amounts pledged to-date

146. Several organisations have tabulated announced pledges. To-date the pledges total USD 27 to 33 billion.[122] Later tabulations tend to be higher since they reflect more pledges. Assumptions also contribute to the differences. The American pledge for 2012 is not yet known, but Project Catalyst assumes it will be equal to the amount budgeted for 2011. Some tabulations include only the announced pledges of EU member states while others use the EU pledge of USD 3.36 billion per year.

147. Almost all of the pledges are public funds, but the Japan's pledge includes USD 4 billion of private funds. A substantial part of the financing pledged by Japan, Germany, France and the UK is in the form of loans. Project Catalyst estimates that loans constitute almost one-third of the current pledges. The estimated grant-equivalence of the loans is about 70% so the grant equivalence of the funding is about USD 3 billion less than the amount pledged.

4.3 Additionality of the pledged funds

148. The Copenhagen Accord states that the financial resources provided by developed countries will be "new and additional".[123] This seeks to address the developing country concern that some of the financial resources will be shifted from poverty alleviation and other development goals to meeting commitments

[120] See Roberts, Stadelmann and Huq, 2010; and Schalatek, Bird and Brown, 2010.
[121] Project Catalyst, 2010, p. 11.
[122] Climate Funds Update, 2010 estimates USD 29 billion; Fallasch and De Marez, 2010 estimates USD 32.6 billion; Project Catalyst, 2010 estimates USD 28 billion; World Development Movement, 2010 estimated USD 27.5 billion and World Resources Institute, 2010 estimates USD 31.32 billion. A partial list of pledges and commitments is also available at: http://www.faststartfinance.org/content/contributing-countries
[123] The Convention, Kyoto Protocol and Bali Action Plan also pledge new and additional resources.

under climate agreements. There is no agreed way to assess whether financial resources provided for climate change are "new and additional".

149. Possible baselines to assess whether pledged funds are "new and additional" include:[124]

- a baseline defined by each contributor – no agreed baseline;
- previously announced climate finance – any new climate finance is additional;
- the current level of climate finance – climate finance in excess of the current level is additional;[125]
- the current level of ODA – climate finance in excess of the current level of ODA is additional;
- projected ODA – climate finance in excess of projected ODA is additional;
- ODA equal to 0.7% of GNI – climate finance in excess of ODA of 0.7% of GNI is additional;
- a maximum share of ODA – climate finance may include a maximum of x% (10%) of ODA;
- only funding that is not reported as ODA is additional;
- only funds provided through funds under the Convention are additional;
- only funds generated by new sources are additional.

150. Each of the possible baselines has strengths and weaknesses. Using the baseline defined by each contributor, the total amount pledged is additional. Using the baseline of funds provided through funds under the Convention, virtually none of the amount pledged is additional. Some baselines that climate finance can be reported as ODA while others imply that climate finance cannot be reported as ODA if it is to be considered additional.

151. There is no agreement on the most appropriate baseline for assessing the additionality of the fast-start financing pledges. Without an agreed baseline it is not possible to state definitively whether the fast-start pledges are "new and additional".[126] Each country will assess whether the developed country pledges are "new and additional" and hence whether the Copenhagen Accord commitment to provide new and additional resources approaching USD 30 billion for the period 2010-2012 has been fulfilled.

4.4 Uses of pledged funds

152. The Copenhagen Accord promises a balanced allocation between adaptation and mitigation for the fast start finance (Paragraph 8). As noted in Chapter 3 above, most of the funding has been for mitigation. Project Catalyst notes that historically over 80% of climate finance has been directed to mitigation (including REDD) but that this share could change substantially as contributor countries increasingly focus on adaptation needs.[127]

4.5 Deployment of pledged funds

153. Project Catalyst estimates that most of the pledged funds will be disbursed bilaterally and that the Climate Investment Funds will deploy most of the resources that flow through multilateral funds.[128] Although the fast-start pledges of Austria and Sweden include part of their commitment to the fifth

[124] See Brown, Bird and Schalatek, 2010; Project Catalyst, 2010, Exhibit 4, p. 14; and Stadelmann, Roberts and Huq, 2010, and Stadelmann, Roberts and Michaelowa, 2010.

[125] The "current" level could be defined as a specific year or average of several recent years.

[126] Project Catalyst, 2020, p. 14, states "it is clear from our preliminary analysis that only a share of this total funding will be new and additional." Fallasch and De Marez, 2010, p. 3 states that "only a fraction of this amount can be seen as additional…". WRI states that "[a] number of pledges are restated or renamed commitments already made in the past." (http://www.wri.org/stories/2010/02/summary-climate-finance-pledges-put-forward-developed-countries)

[127] Project Catalyst, 2010, p. 17.

[128] Project Catalyst, 2010, p. 17.

replenishment of the GEF Trust Fund, relatively little fast start finance is likely to be deployed through funds under the Convention.[129]

154. Each contributor country will decide how to distribute the funds it decides to deploy bilaterally, so the discussion below is limited to deployment of pledged funds through multilateral channels.

4.5.1 Mitigation

155. Fast start funding for mitigation could be USD 5 to 7 billion per year.[130] Current indications suggest that of this amount, USD 2 to 4 billion per year might be deployed bilaterally.[131] This USD 2 to 4 billion additional bilateral flow is quite a significant increase compared to the current bilateral mitigation assistance of USD 5.8 billion calculated using the Rio Marker on climate change mitigation. The rest of the fast-start finance for mitigation – USD 3 to 4 billion per year – would go through multilateral funds, mostly the Climate Investment Funds.

156. Deploying those multilateral funds faces two challenges. First, mitigation actions that need additional funding need to be identified. Second, the selected funds need to channel the resources to those mitigation actions.

157. Suitable mitigation actions are relatively easy to identify; they include energy efficiency, REDD+ and probably several others that yield low cost emission reductions but do not attract sufficient funding from the existing mechanisms. Project Catalyst estimates that, excluding China, fast-start finance of USD 4 to 9 billion is needed for REDD+ and USD 12 to 26 billion is needed for other mitigation actions.[132] Funding could be directed to countries that are not well served by the CDM and private investment. These categories of mitigation actions probably could absorb additional spending of USD 5 to 7 billion per year.

158. The capacity of existing multilateral funds to deploy resources on the scale proposed almost immediately is a bigger challenge. The existing multilateral funds for mitigation are the Climate Investment Funds, several funds devoted to REDD+, and the GEF Trust Fund. Little fast start finance is expected to be channelled through the GEF Trust Fund.[133] The Climate Investment Funds are expected to receive about USD 3 billion per year.[134] If the fast start funds are additional to the funds previously pledged to the Climate Investment Funds, the CIF would need to at least double its projected rate of disbursement.

159. Roughly USD 4 billion of initial funding for REDD+ has been pledged for 2010-2012. How those funds will be allocated among the Congo Basin Forest Fund, Forest Carbon Partnership Facility, UN-REDD, and bilateral initiatives by Australia, Germany, Norway, and the United Kingdom is not yet known. Regardless, it represents a significant increase from the historic disbursement of less than USD 100 million per year for REDD+.

160. In summary, the funds pledged to multilateral climate funds represent a significant increase over the historic disbursement rates of the Clean Investment Funds and the REDD+ funds.

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[129] GEF, 2010b, p. 150.
[130] Estimate based on Project Catalyst analysis of pledges (Project Catalyst, 2010, p. 17).
[131] Estimate based on Project Catalyst analysis of pledges (Project Catalyst, 2010, p. 17).
[132] Project Catalyst, 2010, p. 19. The Informal Working Group on Interim Finance for REDD+ (IWG-IFR), 2009, pp. 2-3, estimates that if financing of €15-25 billion were made available for the 2010-15 a 25% reduction in annual global deforestation rates may be achievable by 2015.
[133] Estimate based on Project Catalyst analysis of pledges (Project Catalyst, 2010, p. 17).
[134] Project Catalyst, 2010, p. 17.

4.5.2 Adaptation

161. Fast-start funding for adaptation could be USD 3 to 5 billion per year. Current indications are that most of this amount will be deployed bilaterally. Perhaps USD 0.5 to 1.0 billion per year might be deployed through multilateral funds.[135] To put these figures into perspective, Project Catalyst estimates the fast-start finance needed for adaptation at USD 9 - 24 billion over three years.[136]

162. The existing multilateral adaptation funds have project pipelines that could be used to quickly deploy fast-start funds. The SCCF has a pipeline of projects it is currently unable to fund and the LDCF is currently funding one project per country rather than all projects identified in the NAPAs due to limited funds. The projects in the SCCF and LDCF pipelines probably could absorb up to USD 2 billion of additional funding, enough to absorb all of the fast-start finance likely to be delivered through multilateral channels.[137]

163. In summary, although it is not clear how much fast start finance will be provided to the existing adaptation funds under the Convention, they may be able to deploy a substantial part of the fast-start finance for adaptation to be delivered through multilateral channels. Clarifying the respective roles of those funds would better enable them to fulfil this role.

4.5.3 Co-ordination across delivery channels

164. With bilateral deployment of a substantial share of the fast-start finance, co-ordination of funding activities becomes a concern. There could be about 20 country programs and another dozen multilateral climate funds. Some will be quite specialised while other bilateral and multilateral programs will cover a range of mitigation and adaptation activities.

165. Most of the fast-start finance is expected to flow through channels outside the Convention. None of the bilateral programs and multilateral funds will have a mandate to co-ordinate the funding provided through different channels. And the incentive for voluntary co-ordination will be weak. Yet the benefits of co-ordination, in the form of more effective deployment of the available funds, are potentially large. That has been the experience of the numerous funds and bilateral programs focused on health issues.

166. The potential benefits of co-ordination are recognised in the current draft negotiating text. As discussed in section 4.5, the text contains two options to improve co-ordination across financing channels - a "forum" of entities that provide financial support and a "new body" under the COP.[138] There appears to be agreement that co-ordination is desirable, but very different views on how co-ordination should be implemented.

[135] Estimate based on Project Catalyst analysis of pledges (Project Catalyst, 2010, p. 17).
[136] Project Catalyst, 2010, p. 19.
[137] UNFCCC, 2009c, paragraph 7.
[138] UNFCCC, 2010, paragraphs 13 and 14, pp. 24-25.

CHAPTER 5. LONGER-TERM CLIMATE FINANCE

167. In the context of meaningful mitigation actions and transparency on implementation, developed countries commit to a goal of mobilising jointly USD 100 billion dollars a year by 2020 to address the needs of developing countries.[139] It is not clear whether the USD 100 billion is meant just for mitigation or to address climate change financing needs of developing countries. This chapter reviews estimates of the how much financial support may be needed in the longer term, options for generating those financial resources and measurement, reporting and verification of the resources.

5.1 How much financial support is needed?

168. How much financial support is needed by developing countries to address climate change? Unfortunately, the answer to that question is not known. The limited information available suggests the resources of several tens to hundreds of billions USD will be needed annually, broadly consistent with the Copenhagen Accord pledge of USD 100 billion annually by 2020. To put that figure into context, total ODA is currently about USD 120 billion per year.[140]

169. The available information includes a few estimates of the incremental investment needed for mitigation in developing countries and several estimates of the cost of adaptation in developing countries. As explained below these estimates are not equivalent to the financial resources that need to be provided to developing countries for mitigation and adaptation. No estimates are available of the financial resources that need to be provided to developing countries to address climate change.

5.1.1 Mitigation

170. The UNFCCC estimated the incremental investment and financial flows for mitigation in developing countries in 2030 to return global greenhouse gas emissions to current levels at roughly USD 65 billion.[141] About half was for energy-related emissions and the balance was for agriculture and forestry emissions.[142] Investment in fossil fuel supply was about USD 32 billion lower due to greater energy efficiency. In the power sector increased investment in lower emitting generation technologies was offset by savings due to lower demand. Incremental investment of about USD 68 billion is needed for efficiency measures in the energy consuming sectors. The energy efficiency measures have a quick (less than 5 years) payback.

171. The IEA estimated the incremental investment needed in developing countries to reduce energy-related CO_2 emissions consistent with a 450 ppm scenario.[143] The incremental investment needed in 2020 is USD 189 billion.[144] Most of this – USD 137 billion – is for energy efficiency measures. The amounts are much higher than the UNFCCC estimates even though they are for 2020 rather than 2030. The IEA figures do not reflect lower investment needs for fossil fuel supply. The incremental investment for energy efficiency is still recovered quickly from energy cost savings.

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[139] Copenhagen Accord, Paragraph 8.
[140] OECD, 2010b, Table 1 for 2008.
[141] UNFCCC, 2007, section 9.2.2, p. 172. Amounts in 2005 dollars.
[142] The incremental investment needed to reduce energy-related emissions was based on the International Energy Agency's World Energy Outlook 2006.
[143] IEA, 2009, Chapter 8.
[144] IEA, 2009, Table 8.1, p. 295. The total for Other Major Economies and Other Countries less the amount for Russia. Amounts in 2008 dollars.

172. Estimates of the cost of reducing deforestation and forest degradation also vary widely. The UNFCCC estimated the cost of eliminating deforestation at USD 12 billion in 2030.[145] Estimates of the cost to halve the rate of deforestation by 2020 by the International Institute for Applied Systems Analysis (IIASA) and European Commission are USD 17 to 28 billion and USD 20 to 33 billion respectively. And the estimated financing needed to reduce the rate of deforestation by 25% by 2015 is €3 to 5 billion per year.[146]

173. The World Bank compilation of climate funding estimates distinguishes between estimates of mitigation financing needs and estimates of mitigation costs.[147] Estimated financing needs range from USD 264 to 563 billion in 2030, while mitigation cost estimates range from USD 139 to 175 billion for the same year. The financing needs include energy efficiency investments while the cost estimates reflect energy cost savings associated with the efficiency investments.

174. The financial resources that need to be provided to developing countries for mitigation are difficult to determine even with such estimates. The reduced investment in fossil fuel supply is unlikely to be used to fund mitigation investments in other sectors or countries. Although energy efficiency investments provide a quick payback, support may be needed to fund implementation of energy efficiency policies and to help finance the efficiency measures.[148] And countries that provide energy subsidies probably should not receive additional financial support to offset the effect of the subsidies.

5.1.2 Adaptation

175. Several estimates of the costs of adaptation in developing countries are available.[149] The estimates use different methodologies, are for different dates, and cover different sectors. The estimates, all of which cover only some adaptation needs, range from USD 10 to over 100 billion per year. Adaptation needs are likely to rise over the course of the next several decades as more climate change impacts are realised. A major difficulty in preparing such estimates is the absence of an operational definition of adaptation, so the studies differ in terms of the adaptation measures (implicitly or explicitly) included in the estimate.

176. As for mitigation, the financial resources that need to be provided to developing countries are difficult to determine from such estimates. The adaptation estimates are generally gross figures since there are few cost or investment savings. But some adaptation measures may be cost-effective for private investors. The incremental cost of constructing buildings to withstand more intense storms, for example, may be recovered through lower insurance premiums and reduced damage. And coastal protection measures may increase the market value of adjacent properties. In such cases international financial support might need to cover only part of the cost.

5.1.3 Technology Development and Transfer

177. Estimates of the costs of meeting the technology development and transfer and capacity-building needs of developing countries are similarly sparse. These needs could be addressed by institutional arrangements that range from enhancement of existing and emerging financing arrangements to a

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145 UNFCCC, 2007, section 9.2.2, p. 174. Amounts in 2005 dollars.

146 Informal Working Group on Interim Finance for REDD+ (IWG-IFR), 2009, pp. 2-3.

147 World Bank, 2010, Table 6.2, p. 260.

148 Thus using the UNFCCC figures, the "gross" requirement of (USD 65 billion plus the USD 32 billion savings for energy supply sector investment =) USD 97 billion is probably a better starting point. But due to the quick payback for energy efficiency measures, international financial support probably would need to cover only a small part of the USD 68 billion of incremental investment for energy efficiency. That suggests international financial support of the order of USD 30 billion mainly for agriculture, forestry and implementation of energy efficiency programmes.

149 See World Bank 2010, Chapter 6; UNFCCC, 2009b; and Agrawala and Fankhauser, 2008 for reviews.

comprehensive new international technology financing scheme.[150] The cost of establishing a network of innovation centres is estimated at less than USD 100 million per centre per year.[151] The resources needed for these purposes are probably significantly lower than those required for adaptation and mitigation.

5.2 Possible sources of financial resources

178. If the need, and the goal, is to provide financial resources of the order of USD 100 billion annually by 2020, how can those resources be generated? Countries and experts have suggested various options for generating financial resources for climate change. The High Level Advisory Group on Climate Change Financing established by the UN Secretary General assessed those options.

179. The Advisory Group estimated the potential revenue that could be generated by each option under a carbon price in the range of USD20-25 a tonne of CO_2 equivalent in 2020. The estimates are shown in Table 3.[152] The potential revenue estimated for the different categories – the gross flow – is a mix of grants, loans, offset payments and equity investments. The net flow estimates the grant-equivalent value of concessional public flows and the net benefit to developing countries for non-concessional public and private flows.

180. The Advisory Group also assessed each option in terms of its efficiency, incidence, equity, practicality, reliability and political acceptability. The Group concluded that some of the potential instruments examined, such as a carbon export optimisation tax and a globally coordinated Special Drawing Rights based climate fund are unlikely to be feasible sources of climate finance.

181. The Advisory Group concluded that a combination of sources likely will be required to achieve the target of USD 100 billion per year. Different sources will be needed to effectively address different types of climate actions; for example, grants and highly concessional loans are crucial for adaptation in the most vulnerable developing countries. The Group notes that the estimated revenue potentials cannot be summed because of spillover effects and potentially diminishing political appetite for mobilizing multiple instruments.

Table 3. Estimates of potential revenues from different categories of sources in 2020

(assuming a carbon price in the range of USD20-25 per tonne of CO_2 equivalent)

Category	Specific Instruments	Gross Contribution (USD bn/year)	Net Contribution (USD bn/year)
Public Finance	auctions of carbon emission or carbon tax	30	
	redeployment of fossil-fuel subsidies, financial transaction tax, etc	10	
	carbon pricing on international transport	10	
	scale-up existing public instruments channeled through direct budget contributes to complement revenue	n/a	n/a
Multilateral Development Bank		30-40	11
Carbon Market		30-50	10*
Private Capital		100-200	10-20**

[150] UNFCCC, 2009a.
[151] Carbon Trust, 2008.
[152] See Haites, 2008, Table 6, p. 35 for an earlier compilation of estimates.

Notes:

* Net value is calculated based on expectation of lower investor returns in exchange for lower risk.

** Net value is calculated based on difference between the average cost of the mitigation measure and the comparable market price.

Source: Compiled from United Nations, 2010.

5.3 Additionality of financial resources

182. As discussed in section 5.3, there are many possible baselines against which to assess whether climate finance is "new and additional" but no agreement on which baseline to use.

183. Financial resources generated by new mechanisms, such as credits purchased through the CDM and the share of proceeds levied on CDM credits for adaptation, are widely accepted as being new and additional because those mechanisms previously did not exist.[153] Thus financial resources generated by the innovative options under consideration by the High Level Advisory Group – financial transaction tax, use of Special Drawing Rights, a levy on international air fares, revenue generated through regulation of international aviation and shipping emissions, internationally auctioned allowances – are likely to be considered new and additional since these mechanisms currently do not exist.

184. The additionality of financial resources generated through existing mechanisms, such as budgetary contributions, will be more difficult to assess due to lack of agreement on the baseline.

5.4 Measurement, reporting and verification (MRV) of financial resources

185. The Bali Action Plan states that financial and other resources provided to support mitigation actions by developing countries should be measurable, reportable and verifiable (Paragraph 1(b)(ii)). Existing reporting systems need improvement.[154] Developed country Parties are expected to provide information on the financial assistance they provide in their national communications. Due to gaps and inconsistencies in reporting approaches in the third and fourth national communications, it is not possible to calculate the financial assistance provided using information from these documents.[155]

186. Better measurement, reporting and verification must start with a precise definition of which financial resources to count.[156] Do the financial resources include private flows or only developed country government contributions? Are the resource flows to be measured as pledges or disbursements? Is the amount the total amount of finance provided, the total amount that meets a minimum concessional threshold, or only the concessional portion of the finance provided? Or is it the total cost of projects and programmes that receive some concessional finance including leveraged funds? Until the financial resources have been defined, it will not be possible to measure them.

187. An MRV system for climate finance, then, might need to measure resources provided by:

- Bilateral assistance;
- Multilateral financial institutions;
- Other official flows that do not meet ODA-eligibility criteria, such as export credit flows;

[153] Roberts, Stadelmann and Huq, 2010, notes that the CDM is part of the Kyoto Protocol so financial flows generated by the CDM are not new and additional for 2010-2012.
[154] See Tirpak et al., 2010.
[155] UNFCCC, 2007, p. 162.
[156] See Roberts, Stadelmann and Huq, 2010.

- Resource flows generated by market mechanisms, such as the Clean Development Mechanism;
- Climate-related resource flows generated by any new options implemented; and
- Private finance flows, such as funding for renewable energy projects in developing countries and climate-related foreign direct investment (FDI) in developing countries.

A strengthened framework for reporting could be developed and layered into the existing system.[157] Data gaps and reporting frequency could be corrected through a common reporting format and National Communication guidelines. Verification procedures for the data reported could be strengthened; reported information could be cross checked with other sources and recipient countries could report the funds received.

5.5 Rio Markers for climate change

188. The OECD's Creditor Reporting System (CRS) could be part of a better MRV system for climate finance. Since 1998, the OECD has monitored aid targeting the objectives of the three Rio Conventions, including the UN Framework Convention on Climate Change, by integrating the "Rio markers" into its Creditor Reporting System as detailed in Box 1. To-date reporting has focused on mitigation; adaptation funding will be reported for the first time in 2010 and be published in 2011. The data for mitigation funding are incomplete;[158] a few countries do not yet use the markers when they report.

[157] Corfee-Morlot, Guay and Larsen, 2009, pp. 7-8.
[158] Michaelowa and Michaelowa, 2010 and Roberts, Weissberger and Peratsakis, 2010.

Box 3. Criteria for eligibility for flows marked with the climate change mitigation and adaptation markers

Mitigation

An activity should be classified as climate-change-related if "it contributes to the objective of stabilisation of greenhouse gas (GHG) concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system by promoting efforts to reduce or limit GHG emissions or to enhance GHG sequestration."

The activity contributes to:

1. The mitigation of climate change by limiting anthropogenic emissions of GHGs, including gases regulated by the Montreal Protocol; or
2. The protection and/or enhancement of GHG sinks and reservoirs; or
3. The integration of climate change concerns with the recipient countries' development objectives through institution building, capacity development, strengthening the regulatory and policy framework, or research; or
4. Developing countries' efforts to meet their obligations under the Convention.

Source : Definitions of Rio Markers - Extract from CRS Directives [Annex 7]

Adaptation

An activity should be classified as adaptation-related if "it intends to reduce the vulnerability of human or natural systems to the impacts of climate change and climate-related risks, by maintaining or increasing adaptive capacity and resilience". This encompasses a range of activities from information and knowledge generation, to capacity development, planning and the implementation of climate change adaptation actions.

An activity is eligible for the climate change adaptation marker if:

1. The climate change adaptation objective is explicitly indicated in the activity documentation; and
2. The activity contains specific measures targeting the definition above.

Source : Reporting Directives for the Credit Reporting System - Addendum on the climate change adaptation marker [Annex 7]

189. The CRS tracks the assistance provided for activities for which climate change mitigation (and adaptation beginning reporting in 2010) is a "principal" or "significant" objective. All of the assistance provided for those activities is classified as climate change mitigation assistance; when there are multiple objectives no attempt is made to apportion the funding among the different objectives. There is no internationally agreed methodology for tracking the exact share of aid activity expenditure that contributes to climate mitigation or adaptation. This is particularly true for adaptation given its intricate linkages with development. Absent such a methodology, the markers allow only an approximate quantification of the amount of aid that targets climate change concerns, but not the exact amount of aid specifically directed to helping developing countries mitigate or adapt to climate change.

190. Projects that had climate change mitigation as a "principal" objective averaged about USD 3.3 billion per year for 2006 through 2008. Projects for which climate change mitigation was a "significant" objective added almost USD 2.5 billion per year over the same period. The total of USD 5.8 billion per year was about 6.1% of total bilateral ODA during the period.

191. To date, over 90% of all aid flows from OECD countries and multilateral organisations are reported to the CRS, the work is ongoing to expand its coverage to all relevant countries and agencies, as well as collecting data on other official financing flow for climate change mitigation and adaptation.

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