Aligning Climate Finance and Development Finance for Asia and the Pacific: Potential and Prospects

Aid projects should contribute both to poverty alleviation and to addressing climate change. Since funding sources differ, development projects need to access climate funding and climate projects need to access development funding.

About the Asian Development Bank

ADB’s vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people. Despite the region’s many successes, it remains home to approximately two-thirds of the world’s poor: 1.6 billion people who live on less than $2 a day, with 733 million struggling on less than $1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

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ALIGNING CLIMATE FINANCE AND DEVELOPMENT FINANCE FOR ASIA AND THE PACIFIC: POTENTIAL AND PROSPECTS

Erik Haites

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Aligning Climate Finance and Development Finance for Asia and the Pacific: Potential and Prospects

Erik Haites

No. 33 | December 2014

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Unless otherwise noted, “$” refers to US dollars.
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ABSTRACT

Development projects may contribute to mitigation and/or adaptation. Mitigation and adaptation projects likewise may have development benefits. But development and climate change projects are not the same. All projects should, to the extent possible, contribute both to development and to climate change mitigation and/or adaptation. Alignment requires that development projects access climate funding and that climate projects access development funding.

Alignment implies two different roles for the Asian Development Bank (ADB): seeking climate finance for its development projects and serving as an implementing entity for climate projects in countries in Asia and the Pacific. The first role is best implemented using climate change funds from bilateral donors or from ADB’s own resources. ADB would need to continue to mobilize climate change funds for this purpose. The shifting institutional structure for climate finance creates challenges for ADB as an implementing entity. However, there will be relatively few competitors in many of the countries in the Asia and Pacific region where ADB operates.
ACKNOWLEDGMENTS

The author would like to thank Asian Development Bank (ADB) staff, Preety Bhandari and Michael Rattinger for providing guidance and inputs, and reviewing the draft reports; as well as Susann Roth and Anuradha Rajivan for feedback. Constructive comments from two anonymous referees are also acknowledged. Errors and omissions that may remain are the author’s responsibility. The paper was conceptualized as part of ADB’s broader technical work on financing a post-2015 sustainable development agenda led by the Strategy and Policy Department in collaboration with the Regional and Sustainable Development Department. It is also an input to ADB’s joint work with the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), and United Nations Development Programme (UNDP) on the Millennium Development Goals. Preety Bhandari and Michael Rattinger designed the terms of reference for this working paper.
# ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
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<td>ADF</td>
<td>Asian Development Fund</td>
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<td>ADP</td>
<td>Ad Hoc Working Group on the Durban Platform for Enhanced Action under the UNFCCC</td>
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<td>AFD</td>
<td>Agence Française de Développement</td>
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<td>AfDB</td>
<td>African Development Bank</td>
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<td>CCF</td>
<td>ADB's Climate Change Fund</td>
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<td>CDM</td>
<td>Clean Development Mechanism</td>
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<td>CEFPF</td>
<td>ADB’s Clean Energy Financing Partnership Facility</td>
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<td>CERs</td>
<td>Certified Emission Reductions</td>
</tr>
<tr>
<td>CIF</td>
<td>Climate Investment Funds; comprises CTF and the SCF</td>
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<tr>
<td>CMP</td>
<td>Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol</td>
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<td>CO₂</td>
<td>Carbon dioxide</td>
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<td>COP</td>
<td>Conference of the Parties to the UNFCCC</td>
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<tr>
<td>CTF</td>
<td>Climate Technology Fund</td>
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<td>DAC</td>
<td>Development Assistance Committee of the OECD</td>
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<td>DARA</td>
<td>A vulnerability index compiled by DARA</td>
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<td>EBRD</td>
<td>European Bank for Reconstruction and Development</td>
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<td>EIB</td>
<td>European Investment Bank</td>
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<tr>
<td>ERPA</td>
<td>Emission reduction purchase agreement</td>
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<td>ERUs</td>
<td>Emission Reduction Units</td>
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<td>ESCAP</td>
<td>United Nations Economic and Social Commission for Asia and the Pacific</td>
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<tr>
<td>ETS</td>
<td>Emissions trading system (scheme)</td>
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<td>EU</td>
<td>European Union</td>
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<td>FDI</td>
<td>Foreign Direct Investment</td>
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<td>FIP</td>
<td>Forest Investment Program; a program of the SCF</td>
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<td>GAIN</td>
<td>Global Adaptation Index; a national vulnerability index</td>
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<td>GCF</td>
<td>Green Climate Fund</td>
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<td>GEF</td>
<td>Global Environment Facility</td>
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<td>GHG</td>
<td>Greenhouse gas</td>
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<tr>
<td>GNI</td>
<td>Gross national income</td>
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<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</td>
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<td>IDB</td>
<td>Inter-American Development Bank</td>
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<td>IFC</td>
<td>International Finance Corporation</td>
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<td>IMO</td>
<td>International Maritime Organization</td>
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<td>IPCC</td>
<td>Intergovernmental Panel on Climate Change</td>
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<td>JI</td>
<td>Joint Implementation</td>
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<td>JICA</td>
<td>Japan International Cooperation Agency</td>
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<tr>
<td>KfW</td>
<td>KfW Bankengruppe (Germany)</td>
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<tr>
<td>LDC</td>
<td>Least developed country as classified by the UN</td>
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<tr>
<td>LDCF</td>
<td>Least Developed Countries Fund managed by GEF</td>
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<td>MDB</td>
<td>Multilateral development bank</td>
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<td>MDG</td>
<td>Millennium Development Goal</td>
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<td>NAMA</td>
<td>Nationally appropriate mitigation action</td>
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<td>NAPA</td>
<td>National adaptation plan of action</td>
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<td>ODA</td>
<td>Official development assistance</td>
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<tr>
<td>Abbreviation</td>
<td>Description</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<tr>
<td>PPCR</td>
<td>Pilot Program for Climate Resilience; a program of the SCF</td>
</tr>
<tr>
<td>REDD+</td>
<td>Projects to reduce emissions from deforestation and forest degradation, foster conservation and sustainable management of forests, and enhance forest carbon stocks</td>
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<tr>
<td>SCCF</td>
<td>Special Climate Change Fund managed by GEF</td>
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<tr>
<td>SCF</td>
<td>Standing Committee on Finance under the UNFCCC</td>
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<tr>
<td>SCF</td>
<td>Strategic Climate Fund</td>
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<tr>
<td>SDG</td>
<td>Sustainable Development Goal</td>
</tr>
<tr>
<td>SPCR</td>
<td>Strategic Plan for Climate Resilience</td>
</tr>
<tr>
<td>SREP</td>
<td>Scaling up Renewable Energy Program; a program of the SCF</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
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<tr>
<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
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<td>WB</td>
<td>World Bank</td>
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<tr>
<td>Technical Terms</td>
<td>Definition</td>
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<tr>
<td>Adaptation to climate change</td>
<td>An adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.</td>
</tr>
<tr>
<td>Annex I Parties</td>
<td>Countries listed in Annex I to the UNFCCC; industrialized countries</td>
</tr>
<tr>
<td>Annex II Parties</td>
<td>Countries listed in Annex II to the UNFCCC; richer industrialized countries</td>
</tr>
<tr>
<td>Clean Development Mechanism</td>
<td>A mechanism created by the Kyoto Protocol that allows projects in non-Annex I countries to earn CERs that can be sold to firms and governments in Annex I countries and be used by them for compliance with domestic and Kyoto Protocol obligations.</td>
</tr>
<tr>
<td>Certified Emission Reductions</td>
<td>Tradable credits issued by the CDM Executive Board for verified emission reductions achieved by CDM projects in non-Annex I parties. One CER equates to an emission reduction of 1 ton of CO₂ equivalent.</td>
</tr>
<tr>
<td>Climate finance</td>
<td>In this report, financial support by industrialized countries for adaptation and mitigation actions in developing countries.</td>
</tr>
<tr>
<td>Emission Reduction Units</td>
<td>Tradable credits issued for verified emission reductions achieved by JI projects in Annex I parties. One ERU equates to an emission reduction of 1 ton of CO₂ equivalent.</td>
</tr>
<tr>
<td>Emissions trading system</td>
<td>An emissions trading system (scheme) caps aggregate emissions by specified entities during a given period (usually 1 year) by issuing a limited number of tradable emission permits (usually 1 tCO₂ per permit) and requiring the specified entities to submit units equal to their to their actual emissions during the period. Permits can be traded.</td>
</tr>
<tr>
<td>Financial mechanism of the UNFCCC</td>
<td>Financial mechanism established by the Article 11 of the UNFCCC for the provision of financial resources to developing country parties. Operating entities of the financial mechanism of the UNFCCC are the GEF and GCF.</td>
</tr>
<tr>
<td>Joint Implementation</td>
<td>A mechanism created by the Kyoto Protocol that allows projects in Annex I countries to earn ERUs that can be sold to firms and governments in other Annex I countries and be used by them for compliance with domestic and Kyoto Protocol obligations.</td>
</tr>
<tr>
<td>Mitigation (of climate change)</td>
<td>A human intervention to reduce the sources or enhance the sinks of greenhouse gases.</td>
</tr>
<tr>
<td>NAMA</td>
<td>Nationally appropriate mitigation action to reduce greenhouse gas emissions</td>
</tr>
<tr>
<td>NAPA</td>
<td>National Adaptation Programme of Action</td>
</tr>
<tr>
<td>Non-Annex I Parties</td>
<td>Countries not listed in Annex I to the UNFCCC; developing countries</td>
</tr>
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EXECUTIVE SUMMARY

This technical working paper focuses on possible alignment climate finance and development finance.

A new climate change agreement is being negotiated with a target for adoption in December 2015 and entry into force by 2020. Climate finance is currently in transition with the capitalization of the Green Climate Fund, possible wind-up of the CIFs, the new biennial process agreed by the COP in 2013 and a developed country commitment to a goal of mobilizing jointly $100 billion a year by 2020. A new agreement it is likely to change climate finance further post 2020.

A proposed set of sustainable development goals has been developed for consideration by the United Nations General Assembly at its 68th session. Taking urgent action to combat climate change and its impacts is one of the proposed goals. Strengthening the means of implementation and revitalizing the global partnership for sustainable development is another. It recognizes that developing countries will need additional financial resources, but does not specify how they should be mobilized.

Development projects may contribute to mitigation and/or adaptation. Mitigation and adaptation projects likewise may have development benefits. But development and climate change projects are not the same. Conceptually projects can be difficulty to categorize. In practice a project funded by a climate finance institution and/or identified by a national climate change plan and/or requiring the approval of a national climate change coordinating body is a climate project.

All projects should, to the extent possible, contribute both to development and to climate change mitigation and/or adaptation. The question is how best to fund projects so that they contribute to both goals. Alignment requires that development projects access climate funding and that climate projects access development funding.

Recommendations

The Asian Development Bank's (ADB) mandate is to alleviate poverty in its developing member countries. Climate change does not change that mandate. But the overlap and interaction of development and climate change suggests that ADB attempt to enhance the climate benefits of its development projects and the development benefits of climate projects for which it is the implementing entity.

Enhancing the climate benefits of ADB’s development projects is best implemented using climate change funds from bilateral donors or from its own resources. Bilateral donors could be requested to provide additional funds for climate change purposes. To increase its own resources, ADB could merge its ordinary capital resources and the Asian Development Fund to increase the resources it can deploy and to use some of the additional resources for climate change purposes.

The shifting institutional structure for climate finance creates challenges for ADB as an implementing entity. However, there will be relatively few competitors in many of the smaller countries in the Asia and Pacific region where ADB operates. ADB also has the proven capacity to implement climate projects on a large scale. Where ADB serves as the implementing entity for a project funded by a climate finance institution, it could offer to ensure that the project also yields development benefits where possible and to provide finance for those development benefits if needed.

The effectiveness of this strategy is likely to be enhanced if ADB adopts complementary policies that aim to ensure all of its projects contribute, to the extent possible, to both development and climate change adaptation and/or mitigation.
1. INTRODUCTION

1.1 Background and Motivation

The Asian Development Bank (ADB) is working in collaboration with ESCAP and UNDP on a 2014/2015 Regional MDG Report which will, among other things, address financing challenges for a post-2015 development agenda.

The international community is in the process of articulating a globally shared post-2015 development agenda to succeed the MDGs. A proposed set of sustainable development goals (SDGs) has been developed for consideration by the United Nations General Assembly at its 68th session. Developing countries will need additional financial resources to achieve these goals. Financing the SDGs will be the subject of the third the International Conference on Financing for Development in 2015 or 2016.

Simultaneously a new climate change agreement is being negotiated. In 2011, the parties to the United Nations Framework Convention on Climate Change (UNFCCC) established the Ad Hoc Working Group on the Durban Platform for Enhanced Action to negotiate a legal agreement applicable to all Parties with a target for completion in 2015 and entry into force by 2020. Climate finance, financial support by industrialized countries for adaptation and mitigation actions in developing countries, will be central to the new agreement. Regardless of the new agreement, climate finance is evolving. The Green Climate Fund (GCF) is expected to receive its initial capital in 2014 and some existing climate funds may wind up their operations. In addition, industrialized countries have promised a substantial increase in the amount of climate finance for 2020.

Climate finance has grown rapidly in recent years and further increases are anticipated. Thus, if it is possible to align them, climate finance could contribute to achievement of broader development goals. Achievement of development goals, equally, may yield climate change adaptation or mitigation benefits.

The 2014/2015 Regional MDG Report will include a chapter on Financing for a Post-2015 Development Agenda that will propose a financing framework for the post 2015 agenda. The chapter will provide an updated picture of potential sources of funds that developing countries might tap, domestically and internationally from public and private sources. In that context, one of the issues to be addressed by the chapter is the potential to align climate finance and development finance to achieve both climate change and development objectives.

This technical working paper focuses on possible alignment climate finance and development finance with recommendations for the Asian Development Bank. Its findings will be integrated into the chapter on Financing for a Post-2015 Development Agenda for the 2014/2015 Regional MDG Report.

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1 See http://unfccc.int/key_steps/durban_outcomes/items/6825.php
1.2 Climate Finance in the Context of Post-2015 Financing for Development

There is no agreed definition of climate finance. Consequently, accurate data on international climate finance are not available. Data on bilateral and multilateral flows are available, but they involve some double counting. In some cases the data reflect the total financial commitment to a project that has adaptation or mitigation benefits rather than the share of the project cost attributable to the climate objective. As discussed in Chapter 2, current bilateral and multilateral flows are each approximately $20 billion per year for an annual total of $40 billion. The few estimates available place the private climate finance flows from industrialized to developing countries at between $25 billion and $125 billion per year so private finance could represent over half of the total.

Currently, as shown in Table 6, climate finance accounts for 10% to 15% of the development assistance provided by multilateral institutions and about 20% of the bilateral development assistance. The uncertainty in the private climate finance flows means that they represent between 10% and 40% of the private development assistance. Although private grants for development assistance, at about $30 billion per year, are substantial, no data are available on private grants for climate purposes.

Climate finance under the UNFCCC also is not well defined. Under the UNFCCC wealthier industrialized countries (Annex II parties) committed to provide “new and additional” financial resources to cover agreed costs incurred by developing countries (non-Annex I parties) for adaptation, mitigation and other specified purposes. The UNFCCC established a financial mechanism to provide financial resources to developing country parties. But financial resources may also be provided through bilateral, regional and other multilateral channels.

Annex II parties report the financial resources they provide to developing countries in their national communications and, more recently, in their biennial reports. Although detailed comparisons are not available, they probably report many of the same projects to the OECD Development Assistance Committee (DAC) where aid projects can be labelled as supporting adaptation or mitigation projects (or both). The total amount reported in the biennial reports is 20% to 30% less than the total amount reported by the DAC for the same countries and year.

The financial mechanism of the UNFCCC presently disburses well under $1 billion per year through four funds, the GEF Trust Fund for mitigation and three adaptation funds each of which disburses an average of less than $100 million annually. So the institutions of the financial mechanism account for only a small share of the climate finance provided to developing countries, although capitalization of the Green Climate Fund, which is expected to occur during the latter part of 2014, could change this situation significantly.

In 2009, industrialized countries committed to a goal of mobilizing jointly $100 billion per year by 2020 to address the climate finance needs of developing countries. This includes all sources of climate finance; public and private, bilateral and multilateral. This commitment is not operationally defined. Developing countries have advocated a clear definition and interim targets, such as minimum of $70 billion per year by 2016, but industrialized countries are not prepared to agree to these requests.

In 2013, a process for biennial climate finance reviews was agreed for the period 2014 through 2020. The Standing Committee on Finance (SCF) will prepare biennial assessments of climate finance, not just climate finance under the Convention. Industrialized countries will provide biennial submissions
on their strategies for scaling up climate finance. A high level ministerial dialogue on climate finance will consider these reports and other relevant information. The ministerial dialogues may lead to decisions on climate finance under the Convention.

1.3 Outline

An overview of current climate finance is provided in Section 2. The focus is on international climate finance which, like development assistance, involves financial support by industrialized countries for adaptation and mitigation actions in developing countries. Although an operational definition of climate finance has not yet been agreed, several sources provide data on financial flows to developing countries for climate purposes via different channels. The data on the current flows via each channel are discussed.

Options for increasing the flows of climate finance to developing countries are discussed in Section 3. Industrialized countries have committed to a goal of mobilizing $100 billion per year by 2020 to support climate change actions in developing countries. Options for meeting this goal together with recent institutional developments, including creation of the Green Climate Fund and establishment of national climate funds by several developing countries, and changes to UNFCCC processes relating to climate finance are reviewed.

The Asia and the Pacific’s experience with international climate finance is discussed in Section 4. Comprehensive data on international climate finance for the region is not available. Almost every national government has a climate change plan and many have institutional arrangements to coordinate climate change actions. This section also considers ADB’s climate finance experience.

The paper concludes, in Section 5, with a discussion of possible alignment of climate finance and development finance from the perspective of a development institution like ADB.

2. OVERVIEW OF CURRENT CLIMATE FINANCE

There is no agreed definition of climate finance. The term “climate finance” is applied both to financial resources devoted to addressing climate change globally and to flows from industrialized countries to assist developing countries in addressing climate change. Some researchers focus on the measures needed to limit climate change to a 2°C increase in global average temperature and the associated financial resources. For them the financial resources devoted to climate change, especially to mitigation measures, globally is an important indicator of progress. The total, rather than the origin or point of use, of the resources is what is important.

Other researchers and negotiators focus on financial flows from industrialized to developing countries for adaptation and mitigation purposes. These flows are of interest for efficiency and equity reasons. Many mitigation actions in developing countries are less costly than those in industrialized countries. Various equity criteria, including historic responsibility and ability to pay, also argue for provision of financial assistance for adaptation and mitigation actions in developing countries. Some of these flows also address commitments under the UNFCCC.

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2 Haites 2011; Buchner et al. 2012.
The scope of this paper is possible alignment of climate finance and development finance. This section, therefore, will focus on international climate finance because, like development assistance, it involves flows from industrialized to developing countries. Climate finance is not systematically tracked; rather information on international climate finance flows must be assembled from a variety of disparate sources. This section presents information on the climate finance currently provided to developing countries by multilateral, bilateral and private organizations.

Some industrialized countries—Annex II parties to the UNFCCC—have commitments under that Convention to provide financial resources to developing country parties for adaptation, mitigation and other purposes. The resources devoted to meeting these obligations are a subset of international climate finance. Some of the UNFCCC climate finance flows through multilateral funds that are part of the financial mechanism of the Convention and the balance flows through other channels. This section also summarizes the UNFCCC climate finance provided through different channels.

A short summary of current global climate finance is presented first to provide context. The bulk of the section is devoted to presentation of data on current climate finance flows from industrialized to developing countries, first in total and then under the UNFCCC. It is important to remember that climate finance is not systematically tracked, so data must be collected from a variety of sources. As a result there are gaps and overlaps.

2.1 Global Climate Finance

Global climate finance focuses on the resources devoted to implementing adaptation and mitigation measures throughout the world regardless of where those resources originate or where they are deployed. The estimates of global climate finance are presented here simply to provide a context for the scale of international climate finance; the focus of the section.

The most comprehensive estimates of global climate finance are provided by the annual Global Landscape of Climate Finance reports. The estimates for recent years range from $343 billion to $385 billion per year. Recent estimates of investment in energy efficiency suggest the total could be $100 billion to $270 billion per year higher, raising the estimate of global climate finance to between $340 billion and $650 billion per year. Most of the climate finance is private finance for mitigation measures.

The Landscape reports use a variety of data sources to compile their estimate. Across these sources, the scope of the climate activities covered differs, geographic coverage varies, and time periods do not coincide. In most cases the data are commitments for finance rather than disbursements. Often, the amount is the total investment for a project rather than the portion attributable to climate change; for example, the total cost of a wind turbine rather than the incremental investment.

Due to the limitations of the sources it draws upon, the only geographic disaggregation provided in the Landscape report, for the first time in 2013, is the between industrialized and developing countries. Of the $177 billion invested in industrialized countries, $144 billion (81%) originated domestically. Of the $182 billion invested in developing countries, $131 billion (72%) came from domestic sources.

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4 See IEA 2013 and 2014. Estimates of the annual investment in energy efficiency range from $130 billion to $300 billion per year. The Landscape estimates already include $30 billion for energy efficiency, so the total could rise by $100 billion to $270 billion.
2.2 International Climate Finance for Developing Countries

International climate finance focuses on financial flows from industrialized countries to developing countries to assist them with the costs of implementing adaptation and mitigation measures. There is no agreed definition of international climate finance. Conceptually climate finance is finance provided to developing countries to cover the incremental cost of implementing adaptation and mitigation actions. Estimating the incremental cost of adaptation and mitigation actions is very complex.

The incremental cost of an adaptation/mitigation measure is the present value of the investment, operating and maintenance costs for the measure over its expected lifetime less the present value of the investment, operating and maintenance costs for the alternative measure it replaces. Many mitigation measures, such as energy efficiency and renewables, have a higher capital cost and lower operating costs than the measures displaced. The incremental cost, then, depends on projected capital and operating costs and the discount rate. Incremental cost estimates are uncertain because they depend on future developments, such as technological change and fossil fuel prices, that affect the costs of chosen measure and the hypothetical alternative measure.

Estimating the incremental cost of adaptation measures is especially challenging because there is no operational definition of adaptation. Some projects, such as modifying port facilities to cope with sea level rise, can readily be classified as adaptation measures. A potable water supply system could be a development project or, if the future climate is expected to be drier, an adaptation project. In either case the incremental cost is the additional cost of building and operating the system for the projected future climate rather than the current climate. Data on the incremental costs of adaptation and mitigation measures is not routinely published.

The data on financial resources provided to developing countries to address climate change often reflects the total, rather than the incremental, investment or cost. For example, data is available for the entire investment in a wind turbine rather than the portion attributed to the greenhouse gas emission reductions. Similarly, information is on the cost of a new water supply system is usually available while the extra costs incurred to modify it for the future climate are often not known. Investment figures usually reflect commitments rather than disbursements so the amount and timing of the actual financial flows may be different.

While information on the financial resources provided to developing countries for climate change purposes via most public channels is available, flows of private climate finance are not tracked. For bilateral and multilateral public flows information is often available on the instruments (grants, concessional loans, commercial loans, project equity, balance sheet finance), the recipients (government, private firm, NGO), the purpose (adaptation or type of mitigation action) and the geographic distribution (recipient regions or countries). Given the growing interest in climate finance, many public institutions are revising their information systems to provide better data and the OECD is studying options for collecting better data on private climate finance.

2.3 Institutional Arrangements for International Climate Finance

Many institutions are involved in channeling funds from industrialized countries to adaptation and mitigation projects in developing countries. Figure 1 illustrates the complexity of the institutional structure. It is not complete, especially in relation to private financial flows. The figure highlights two messages. First, the number of institutions is too large to discuss individually. Instead international
climate finance must be discussed for categories of institutions—MDBs, multilateral climate funds, bilateral institutions and private finance. Second, considerable care must be exercised to avoid double counting.


Dedicated bilateral initiatives: FSF = Fast Start Finance (Japan), ICF = International Climate Fund (UK), ICFI = International Climate Forest Initiative (Norway), ICI = International Climate Initiative (Germany), IFCI = International Forest Carbon Initiative (Australia).


The rest of this chapter reviews estimates of climate finance flows from industrialized to developing countries. The next subsection reviews estimates of the total. This is followed by estimates of the climate finance channeled to developing countries by MDBs (Section 2.4.1), multilateral climate funds (Section 2.4.2), and bilateral flows (Section 2.4.3). Multilateral and bilateral finance may flow under or outside the UNFCCC. Climate finance under the UNFCCC is discussed in Section 2.5. Estimates of private finance flows from industrialized to developing countries are summarized in Section 2.6.

### 2.4 Estimates of International Climate Finance

Only a few estimates of total climate finance flowing from industrialized to developing countries are available. As presented in Table 1, the 2013 Landscape of Climate Finance estimates the flows from industrialized countries to developing countries at $39 billion to $62 billion for 2011/2012. While not specifically mentioned in the report, data from the previous year’s Landscape suggest a net flow to developing countries on the order of $40 billion to $60 billion for 2010/2011. The only other estimate values the flow from industrialized to developing countries at $70 billion–$120 billion per year based on 2009/2010 data. Most of the difference is due to higher estimates of private flows. In all cases the amounts are dominated by data on the total investment in mitigation measures, such as renewable energy projects, by both public and private entities. Geographic detail is limited to the industrialized and developing country totals.

#### Table 1: Climate Finance Provided by Industrialized Countries to Developing Countries Amounted to at Least $39 billion–$62 billion for 2012

<table>
<thead>
<tr>
<th>Channel</th>
<th>Low Estimate ($ billion)</th>
<th>High Estimate ($ billion)</th>
<th>Comments/Scope/Caveats</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Multilateral</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multilateral Development Banks</td>
<td>15.0</td>
<td>22.0</td>
<td>High estimate is total climate commitments to developing countries. Low estimate is the industrialized countries’ share of MDB ownership applied to the total commitments.</td>
</tr>
<tr>
<td>Multilateral Climate Funds</td>
<td>1.4</td>
<td>1.4</td>
<td>Capital investment costs and grants</td>
</tr>
<tr>
<td><strong>Bilateral</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government Bodies</td>
<td>4.0</td>
<td>11.0</td>
<td>Low estimate is ODA where climate change is the “principal” objective. High estimate also includes projects with climate change as a “significant” objective.</td>
</tr>
<tr>
<td>Bilateral Finance Institutions</td>
<td>14.0</td>
<td>14.0</td>
<td>Total climate commitments to developing countries by these institutions.</td>
</tr>
<tr>
<td><strong>Private</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Investment in Renewables</td>
<td>4.0</td>
<td>13.0</td>
<td>Low and high estimates based on different sources</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>39.0</td>
<td>62.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Buchner, et al. 2013a, Box 2.

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5 The “net flow” is the flow from developed to developing countries less the flow from developing to developed countries, neither of which is known. Buchner et al. (2013b) estimate that developed countries mobilized $213 billion to $255 billion climate finance per year during 2010 and 2011 while $160 billion to $208 billion climate finance had been committed to climate change projects in developed countries. Developing countries mobilized $120 billion to $141 billion climate finance per year during 2010 and 2011 and $162 billion to $202 billion had been committed to climate change projects in developing countries. Those figures suggest a “net flow” to developing countries of the order of $40 billion to $60 billion per year.

6 Clapp et al. 2012.
2.4.1 Multilateral Climate Finance Flows to Developing Countries

Seven multilateral development banks (MDBs), including ADB, reported climate finance commitments of about $24.0 billion and $26.8 billion in 2011 and 2012 respectively. The reporting is activity-based, which allows funding for entire projects or relevant project components to be counted. Recipient countries include developing countries and 13 EU member states. Funding can take the form of a grant, loan, guarantee, equity, or performance-based instrument. Funding is not required to include a grant component. The value of the commitments covers MDBs' own resources as shown in Table 2 plus $1.572 billion to $2.138 billion of external resources managed by the MDBs.7

Table 2: Multilateral Development Banks Committed $22 billion to $25 billion of Their Own Resources for Climate Purposes, Mainly Mitigation, during 2011 and 2012 ($ million)

<table>
<thead>
<tr>
<th>MDB</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adaptation</td>
<td>Mitigation</td>
</tr>
<tr>
<td>AfDB</td>
<td>593</td>
<td>859</td>
</tr>
<tr>
<td>ADB</td>
<td>585</td>
<td>2,196</td>
</tr>
<tr>
<td>EBRD</td>
<td>181</td>
<td>3,400</td>
</tr>
<tr>
<td>EIB</td>
<td>225</td>
<td>2,417</td>
</tr>
<tr>
<td>IDB</td>
<td>288</td>
<td>1,531</td>
</tr>
<tr>
<td>IFCa</td>
<td></td>
<td>1,664</td>
</tr>
<tr>
<td>WB</td>
<td>2,304</td>
<td>6,180</td>
</tr>
<tr>
<td>Total</td>
<td>4,176</td>
<td>18,247</td>
</tr>
</tbody>
</table>


a IFC began tracking adaptation finance in 2013.


The data reflect the financing committed to projects or components, subcomponents or elements within projects that provide mitigation or adaptation cobenefits rather than the entire project cost.8

In both 2011 and 2012, approximately $19 billion, roughly 80% of the total, funding was for mitigation. Renewable energy took the largest share of the mitigation funding with 36% of the total in 2012. Of the 2012 adaptation funding, 36% went to the infrastructure, energy, and built environment sector and 33% went to support increasing the resilience to climate change of the agriculture sector.9 On a regional basis, the 32 countries of the Asia and Pacific region received the largest share of the 2012 funding, 39%.10

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7 The external resources include funds from the GEF, CIFs, and other climate funds managed by the MDBs.
8 The MDBs have an agreed common list of project activities, including various energy efficiency measures and renewable energy sources, considered to yield mitigation cobenefits. Adaptation involves a context- and location-specific assessment. To qualify as providing adaptation cobenefits a project, or project component, must set out the climate vulnerability, making an explicit statement of intent to address climate vulnerability, and articulate a clear and direct link between the climate vulnerability and the specific project (component) activities.
9 Infrastructure, energy, and built environment includes: construction, transport, coastal and riverine infrastructure (including built flood protection infrastructure), urban development, tourism (mainly hotels and transport facilities), waste management, energy generation (including renewables), and energy transmission and distribution.
10 This combines two regions shown in the reports; South Asia (8 countries) and East Asia and the Pacific (24 countries).
These reports are the basis for the MBD data included in the Landscape estimates in Table 1. When the managed resources and EU 13 countries are excluded, the climate finance provided to developing countries by MDBs is approximately $22 billion per year as shown in Table 1. The low estimate in Table 1 is the industrialized countries’ share of MDB ownership applied to that amount.

2.4.2 Multilateral Climate Funds

A number of climate funds have been established in recent years. This section focuses on multilateral climate funds; those funded by multiple industrialized countries that provide financial support to projects in multiple developing countries. Funds established by a single industrialized country are discussed in Section 2.4.3 while Section 3.3.4 reviews funds established by a single developing country.

Multilateral climate funds coordinate delivery of climate finance, often for specific project types and/or regions, from several industrialized countries to multiple developing countries. Unlike multilateral development banks, climate funds do not have any resources of their own and do not borrow to leverage the contributed funds. Table 3 lists the funds pledged to and committed by multilateral climate funds. The data are cumulative amounts since the establishment of the fund except in the case of the GEF Trust Fund where they relate to the fifth replenishment.

There are multiple funds for adaptation, REDD+ and other mitigation measures whose pledged funds represent 24%, 15% and 61% of the total respectively. Four of the funds, accounting for 64% of the total pledges, are part of the Climate Investment Funds (CIFs). The CIFs is a partnership of the African Development Bank, Asian Development Bank, European Bank for Reconstruction and Development Inter-American Development Bank, and the World Bank Group administered by the CIF Administrative Unit hosted by the World Bank Group. Three of the adaptation funds and one mitigation fund operate under the UNFCCC and are discussed in more detail in Section 2.5.2. They account for 26% of the pledged funds.

Seventy percent of the funds pledged for adaptation have been committed to projects but less than forty percent of the REDD+ pledges have been committed to projects. This may reflect the prevalence of performance based financing for REDD+ projects. Some of the funds not yet committed to projects may be allocated to specific countries or regions under a resource allocation formula.

Data on the regional distribution of approved projects is not readily available for all of the funds. For the CIFs, $2.7 billion has been allocated to 15 countries in the Asia and Pacific region representing 33% of the total portfolio; 36% for the Clean Technology Fund, 30% for the Pilot Program for Climate Resilience, 15% for the Forest Investment program, and 13% for the Scaling Up Renewable Energy Program for Low Income Countries.

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11 See Figure 1 and Climate Funds Update. http://www.climatefundsupdate.org/listing
12 While some funds are contributed by other sources, such as firms, the vast majority come from industrialized country governments.
### Table 3: Multilateral Climate Funds Focus Mainly on Mitigation ($ million)

<table>
<thead>
<tr>
<th>Name</th>
<th>Focus</th>
<th>Administrator</th>
<th>Year</th>
<th>Operational</th>
<th>Funds Pledged</th>
<th>Funds Deposited</th>
<th>Funds Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptation Fund*</td>
<td>Adaptation</td>
<td>Adaptation Fund Board</td>
<td>2009</td>
<td>416</td>
<td>395</td>
<td>226</td>
<td></td>
</tr>
<tr>
<td>Least Developed Countries Fund*</td>
<td>Adaptation</td>
<td>GEF</td>
<td>2002</td>
<td>907</td>
<td>832</td>
<td>726</td>
<td></td>
</tr>
<tr>
<td>Pilot Program for Climate Resilience**</td>
<td>Adaptation</td>
<td>CIF AU</td>
<td>2008</td>
<td>1,160</td>
<td>973</td>
<td>772</td>
<td></td>
</tr>
<tr>
<td>Special Climate Change Fund*</td>
<td>Adaptation</td>
<td>GEF</td>
<td>2002</td>
<td>344</td>
<td>299</td>
<td>242</td>
<td></td>
</tr>
<tr>
<td>Congo Basin Forest Fund</td>
<td>REDD+</td>
<td>AfDB</td>
<td>2008</td>
<td>186</td>
<td>165</td>
<td>95</td>
<td></td>
</tr>
<tr>
<td>Forest Carbon Partnership Facility</td>
<td>REDD+</td>
<td>World Bank</td>
<td>2008</td>
<td>743</td>
<td>539</td>
<td>114</td>
<td></td>
</tr>
<tr>
<td>Forest Investment Program**</td>
<td>REDD+</td>
<td>CIF AU</td>
<td>2009</td>
<td>599</td>
<td>530</td>
<td>279</td>
<td></td>
</tr>
<tr>
<td>UN REDD Programme</td>
<td>REDD+</td>
<td>UNDP</td>
<td>2008</td>
<td>249</td>
<td>215</td>
<td>193</td>
<td></td>
</tr>
<tr>
<td>Clean Technology Fund**</td>
<td>Mitigation</td>
<td>CIF AU</td>
<td>2008</td>
<td>5,242</td>
<td>4,599</td>
<td>3,549</td>
<td></td>
</tr>
<tr>
<td>GEF Trust Fund*</td>
<td>Mitigation</td>
<td>GEF</td>
<td>2010</td>
<td>1,350</td>
<td>777</td>
<td>721</td>
<td></td>
</tr>
<tr>
<td>Scaling Up Renewable Energy Program for Low Income Countries**</td>
<td>Mitigation</td>
<td>CIF AU</td>
<td>2009</td>
<td>521</td>
<td>506</td>
<td>136</td>
<td></td>
</tr>
<tr>
<td>Subtotal Adaptation</td>
<td></td>
<td></td>
<td></td>
<td>2,827</td>
<td>2,499</td>
<td>1,965</td>
<td></td>
</tr>
<tr>
<td>Subtotal REDD+</td>
<td></td>
<td></td>
<td></td>
<td>1,777</td>
<td>1,448</td>
<td>682</td>
<td></td>
</tr>
<tr>
<td>Subtotal Mitigation</td>
<td></td>
<td></td>
<td></td>
<td>7,113</td>
<td>5,882</td>
<td>4,405</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>11,718</strong></td>
<td><strong>9,828</strong></td>
<td><strong>7,053</strong></td>
<td></td>
</tr>
</tbody>
</table>

Notes: Funds Pledged = contributor pledges; Funds Deposited = funds received from contributors; Funds Approved = funds committed to approved projects; REDD+ = projects to reduce emissions from deforestation and forest degradation, foster conservation and sustainable management of forests, and enhance forest carbon stocks.

* denotes a fund under the UNFCCC.

** denotes a fund that is part of the Climate Investment Funds administered by the CIF Administrative Unit (CIF AU) subject to decisions by the MDB Committee which consists of representatives from the African Development Bank, Asian Development Bank, European Bank for Reconstruction and Development, Inter-American Development Bank, and World Bank Group.

a Data relate to the fifth replenishment of the GEF Trust Fund.


Virtually all of the funds pledged to multilateral climate funds come from industrialized country governments and their bilateral finance institutions. These pledges are included in the reports of climate finance submitted by industrialized country governments to the OECD Development Assistance Committee (DAC) and to the UNFCCC. Hence to avoid double counting, funds pledged to climate funds can be considered to be included in the DAC figures or they can be removed from the DAC figures and be tallied separately. The Landscape chooses the latter approach and estimates an annual commitment for 2011/2012 of $1.4 billion (Table 1) corresponding roughly to the cumulative commitment of $6.2 billion shown in Table 3.

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14 The two approaches are not fully equivalent. Funds pledged by a government to a multilateral climate funds would be reported to DAC for the year the pledge is made. The multilateral climate funds commit the funds to specific projects some time later, so the total climate finance for a given year could differ under the two approaches.
2.4.3 Bilateral Climate Finance Flows to Developing Countries

The OECD Development Assistance Committee (DAC) reports the amount of official development assistance (ODA) committed bilaterally for projects that have climate change mitigation or adaptation as a “principal” or “significant” objective by its 23 member countries and the EU institutions. ODA consists of flows to countries on the DAC list of ODA recipients and to multilateral institutions. ODA must be used to promote the economic development and welfare of developing countries and must be concessional in character; grants or concessional loans with a grant element of at least 25%.

When a project reported to DAC is “flagged” as contributing to climate change mitigation and/or adaptation, the total funding committed to the project is reported. Researchers have questioned the accuracy of the classification of projects as contributing to climate change mitigation or adaptation so the amounts reported by the OECD as climate finance may be overstated. Note that the DAC approach—reporting the total financial commitment for projects with climate change as a “principal” or “significant” objective—differs from the MDB approach of reporting the financial commitment for the project components with climate change cobenefits.

Table 4 shows the bilateral assistance reported by DAC members for climate change mitigation and adaptation projects for the period 2007 through 2012. Funding for projects with climate change mitigation as a “principal” objective increased from $2.2 billion in 2007 to $13.5 billion in 2010 before declining to $10.4 billion in 2012. In addition, funding for projects with climate change mitigation as a “significant” objective grew from $1.8 billion in 2007 to $5.1 billion in 2012. Data on adaptation is only available from 2010. Funding for projects with an adaptation objective grew from $8.5 billion that year to $10.1 billion in 2012. Adaptation is usually not the “principal” objective of a project; the value of projects with adaptation as a “significant” objective is much higher. Projects with a value of between $3.6 billion and $4.2 billion contribute to both mitigation and adaptation.

The DAC data indicate that the bilateral ODA funding committed to projects with a “principal” or “significant” mitigation or adaptation objective in recent years is of the same order of magnitude, $17 billion to $22 billion per year, as that provided by MDBs to developing countries using their own resources. There is some double counting however; 15% to 20% of the ODA is provided to multilateral agencies including MDBs and multilateral climate funds. Bilateral climate finance commitments, excluding contributions to MDBs, amount to roughly $17 billion to $20 billion per year.

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15 OECD 2013.
16 See Michaelowa and Michaelowa 2011; Junghans and Harmeling 2013. While the researchers note instances of both overstatement—projects not related to climate change but flagged as having a climate objective—and understatement—projects that contribute to mitigation or adaptation but not flagged as having a climate objective—the former dominate, so the amount of climate finance reported may be overstated.
17 There are other differences as well; some financial commitments reported by MDBs, for example, might have a grant element of less than 25%.
18 Prior to 2007, reporting financial commitments for climate change mitigation was voluntary, so earlier data are not comparable.
The Landscape estimates of climate finance provided to developing countries in 2012 (Table 1) use the DAC figures for the funds provided by government bodies with the low estimate ($4 billion) including only projects with adaptation or mitigation as a “principal” objective and the high estimate ($11 billion) also including projects with adaptation or mitigation as a “significant” objective. Those amounts are much lower than the 2012 figures in Table 4. This is because the Landscape estimates adjust the DAC totals to exclude the climate finance provided by industrialized countries’ bilateral finance institutions ($14 billion) and the contributions to multilateral climate funds ($1.4 billion). 19

Table 4: Bilateral Assistance Reported by OECD Development Assistance Committee Members for Climate Change Mitigation and Adaptation Projects, 2007 through 2012 ($ million)

<table>
<thead>
<tr>
<th>Year</th>
<th>Mitigation Principal</th>
<th>Mitigation Significant</th>
<th>Adaptation Principal</th>
<th>Adaptation Significant</th>
<th>Both</th>
<th>Total*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>2,212</td>
<td>1,781</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>3,994</td>
</tr>
<tr>
<td>2008</td>
<td>5,547</td>
<td>3,161</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>8,707</td>
</tr>
<tr>
<td>2009</td>
<td>6,972</td>
<td>3,287</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>10,259</td>
</tr>
<tr>
<td>2010</td>
<td>13,540</td>
<td>4,285</td>
<td>2,705</td>
<td>5,772</td>
<td>3,624</td>
<td>22,678</td>
</tr>
<tr>
<td>2011**</td>
<td>8,294</td>
<td>4,919</td>
<td>2,067</td>
<td>6,450</td>
<td>3,686</td>
<td>18,044</td>
</tr>
<tr>
<td>2012**</td>
<td>10,442</td>
<td>5,089</td>
<td>2,680</td>
<td>7,422</td>
<td>4,164</td>
<td>21,469</td>
</tr>
</tbody>
</table>

Notes: Adaptation projects were not tracked prior to 2010.
* Total nets out “both.”
** The United States is reviewing its data collection methodology and is likely to submit revised data for 2011 and 2012.
Source: OECD database on climate-related aid.

For 2012, most (54%) of the bilateral climate finance commitments were concessional loans and almost all of the rest (46%) were grants. Equity comprised less than 1% of the total. The OECD reports that Asia and Oceania received the largest share, just over 41%, of the climate assistance followed by Africa with 27% and America with almost 17%. Recipient government institutions received 40% of the assistance. Other public institutions (32%) and multilateral agencies and “other” (16%) account for most of the rest. The mix of recipients is similar for mitigation and adaptation projects.

Several industrialized countries have announced the establishment of climate funds to give their international climate finance more prominence (see Table 5). The funds are accounting mechanisms to track and publicize the country’s international climate finance contributions. Virtually all of their resources come from the national government; the funds have no resources of their own and do not borrow to leverage the contributed funds. The funds are disbursed by established institutions such as the country’s development agency.

The financial support reported by these bilateral funds is included in the reports of climate finance submitted by industrialized country governments to the OECD DAC and to the UNFCCC. To avoid double counting, disbursements by the bilateral climate funds are not counted separately when estimating international climate finance flows.

19 The Landscape low and high estimates would give totals of $19.4 billion (4+14+1.4) and $26.4 billion (11+14+1.4). The high estimate exceeds the DAC total. This is possible because the bilateral finance institutions, like the MDBs, have resources of their own so their climate finance commitments can exceed the contributions they receive.
Table 5: Bilateral Assistance Reported by Developed Country Bilateral Climate Funds
(cumulative since inception of each fund, $ million)

<table>
<thead>
<tr>
<th>Fund</th>
<th>Country</th>
<th>Pledged</th>
<th>Deposited</th>
<th>Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Forest Carbon Initiative</td>
<td>Australia</td>
<td>190</td>
<td>67</td>
<td>126</td>
</tr>
<tr>
<td>Global Climate Change Alliance</td>
<td>European Commission</td>
<td>385</td>
<td>385</td>
<td>383</td>
</tr>
<tr>
<td>International Climate Initiative</td>
<td>Germany</td>
<td>1,082</td>
<td>1,082</td>
<td>986</td>
</tr>
<tr>
<td>International Climate and Forest Initiative</td>
<td>Norway</td>
<td>1,608</td>
<td>1,608</td>
<td>305</td>
</tr>
<tr>
<td>International Climate Fund</td>
<td>United Kingdom</td>
<td>6,003</td>
<td>1,318</td>
<td>1,056</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>9,267</td>
<td>4,460</td>
<td>2,856</td>
</tr>
</tbody>
</table>

Notes: Amounts may not sum to the total due to rounding; Pledged = contributor pledges; Deposited = funds received from contributors; Approved = funds committed to approved projects.
Source: Climate Funds Update website, accessed 27 August 2014.

2.4.4 Fast Start Finance

At the UN Climate Change Conference in Copenhagen in 2009, developed countries committed to provide new and additional resources approaching $30 billion of “fast start finance” to support mitigation and adaptation action in developing countries during 2010–2012. The amount of fast-start finance reported by country for 2011 and 2012 is shown in Table 6. The sum of the announced commitments for the 2010 to 2012 period exceeds $33 billion.

Japan, the United States, the United Kingdom, Norway, and Germany, the five biggest donors, reported commitments amounting to $31.8 billion. For these five countries, Nakooda et al. (2013) finds that around 45% of the funds were provided as grants and about 47% were in the form of loans, guarantees and insurance. About 43% of the funds went to Asia and the Pacific followed by 18% for Sub-Saharan Africa. Approximately 61% of the funds had been committed for mitigation, 10% for REDD+ and 18% for adaptation. The funders reported commitments to recipient country governments via bilateral channels (33%), multilateral climate funds (20%), recipient country companies (12%) and multilateral institutions (9%).

The announced pledges triggered questions as to whether they were “new and additional” as promised. Some countries explain the basis on which they consider their pledge to be “new and additional” while others don’t. Criteria have been proposed that, when applied to the pledges, indicate that proportions ranging from virtually none to almost all are new and additional. For Germany, Japan, the United Kingdom, and the United States annual fast start finance contributions were significantly higher than the 2009 expenditure related to climate activities in developing countries.

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20 Although UNFCCC Conference of the Parties (COP) took note of the ‘fast start finance’ commitment in para. 95 of Decision 1/CP.16 (UNFCCC 2010) and the funds committed have been reported annually to the UNFCCC, the fast start finance is not formally climate finance under the UNFCCC.
21 UNFCCC 2009.
22 UNFCCC 2011b; 2012b; 2012c; 2013a.
23 Fallasch and De Marez 2010; BNEF 2011.
It is clear that at least some of the fast start finance commitments are included in amounts of climate finance reported by industrialized country governments and their bilateral finance institutions as bilateral climate finance or contributions to multilateral development funds and MDBs. No analysis is yet available of the extent of the duplication. It is assumed here that all of the fast start finance is also reported by one of the other channels discussed in the previous subsections.

2.5 Climate Finance under the UNFCCC

Climate finance under the UNFCCC also is not well defined. In the Convention, Annex II parties, the wealthier industrialized countries, committed to provide “new and additional” financial resources to developing countries to cover part of their mitigation, adaptation and other climate-related costs.26 Specifically, the Convention commits Annex II parties to cover the “agreed full incremental costs” of agreed mitigation measures implemented by developing countries (Article 4.3), 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) and to cover the “agreed full incremental costs” of implementing measures, including preparation of emissions inventories and national communications, covered by Article 4.1 (Article 4.3).27 Operational definitions of these terms have not yet been agreed.28

To implement these commitments, Article 11 of the Convention establishes a financial mechanism to provide financial resources to developing country Parties on a grant or concessional basis. Operation of the financial mechanism is to be entrusted to one or more existing international entities. The financial mechanism functions under the guidance of and is accountable to the Conference of the Parties (COP) which decides the policies, programme priorities and eligibility criteria. The Global Environment Facility (GEF) has been the only operating entity of the financial mechanism. The Green Climate Fund (GCF), established in 2010 but not yet capitalized, is also an operating entity of the financial mechanism.

Article 11 also states that developed country Parties may provide, and developing country Parties may avail themselves of, financial resources through bilateral, regional and other multilateral channels. Subsequently, the COP agreed that funds provided to developing country Parties may come from a wide variety of sources, public and private, bilateral and multilateral, including alternative sources.29

Thus climate finance under the UNFCCC may flow through bilateral and multilateral channels including multilateral channels managed by operating entities of the financial mechanism. Annex II parties are required to periodically report the climate finance they have provided. Those reports are summarized below, followed by an overview of the entities under the financial mechanism.

26 These commitments are reaffirmed by Article 11 of the Kyoto Protocol (UNFCCC 1998).
28 Machado-Filho 2011.
29 UNFCCC 2010, para. 99.
2.5.1 Financial Resources Provided by Annex II Parties

Although there is no agreed definition of climate finance under the UNFCCC, Annex II parties report the financial resources they provide to developing countries in their national communications and, more recently, in their biennial reports. In choosing what to report each Annex II party implicitly interprets climate finance under the Convention. Reporting practices differ so there is no consistent definition. Countries report a mix of commitments and disbursements. Many projects reported to the DAC are also reported to the UNFCCC, but some countries report only an estimate of the climate change share of the total cost to the UNFCCC. Financial support that does not qualify as ODA is also reported to the UNFCCC.

In their national communications Annex II parties report the “new and additional” financial resources provided to developing countries, the assistance provided to developing country parties that are particularly vulnerable to the adverse effects of climate change to assist them in meeting the costs of adaptation, the financial contributions made to the Global Environment Facility (GEF) as well as through other multilateral, regional and bilateral channels. National communications are submitted every 4 or 5 years.

In its summary of the financial information reported in the last national communications, the UNFCCC secretariat noted that many data gaps and inconsistencies in reporting approaches among Annex II parties and across periods persist. The summary reports that Annex II parties provided climate finance amounting to $58.4 billion for the period 2005 through 2010; an average of nearly $10 billion per year.

To improve the quality and timeliness of climate finance reporting, Annex II parties now include information on the climate finance provided in their biennial reports using standard reporting formats. The first biennial reports with this information were submitted early in 2014. Total climate specific finance provided to developing countries was just under $16.5 billion per year for 2011 and 2012 (see Table 6). Over 80% of the finance was provided bilaterally, with the balance provided through multilateral channels. Almost half of the finance was for mitigation. Adaptation received 10% to 15% of the funds and the balance was for “cross-cutting” and “other” purposes.

The biennial reports and DAC reports are separate reporting obligations for different institutions, the UNFCCC and the OECD respectively, with different reporting guidelines. DAC reports are submitted by members of the OECD’s Development Assistance Committee on the development assistance provided including projects that have mitigation or adaptation as a “principal” or “significant” objective. Biennial reports are submitted every 2 years by Annex II parties on climate finance provided to developing countries through bilateral or multilateral channels. All Annex II parties are members of the Development Assistance Committee, but the Committee also includes countries that are not

30 Annex I parties—developed countries—commit to implementing mitigation measures. Annex II parties—wealthier developed countries—also commit to provide financial resources to developing countries. Non-Annex I parties—developing countries—commit to implement mitigation and adaptation measures with international financial and technical support.

31 UNFCCC 2011a.

32 In addition, Annex II parties reported between $9 billion and $12 billion of “core general” support. This refers to “support to multilateral institutions that Parties cannot specify as climate-specific,” so it is excluded from the climate finance data in the table.

33 Several EU member countries that are not Annex II parties have provided climate finance to developing countries directly or via multilateral institutions and have submitted biennial reports. They are included in Table 6.
Annex II parties. Some of the climate finance reported in the biennial reports may not qualify as development assistance. There were no reporting guidelines for fast-start finance. Since it was a specific commitment for the 2010 to 2012 period, there will be no more fast-start finance reports.

The result of the different reporting processes, as shown in Table 6, is substantial differences in the amount of climate finance reported by a country under each system. Although a detailed comparison is not available, the amounts reported in the biennial reports, the fast-start finance reports and OECD DAC reports probably include many of the same projects. No attempt has yet been made to reconcile the reports and identify the unique elements of each.

2.5.2 Multilateral Climate Finance Entities of the Financial Mechanism

Historically, the only operating entity of the financial mechanism of the Convention has been the Global Environment Facility (GEF). The GEF also manages the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF). The Adaptation Fund, established under the Kyoto Protocol, is administered by its own board. These funds are described in turn. These funds were also included in Section 2.4.2 on multilateral climate funds.

The GEF Trust Fund finances the agreed incremental costs of approved projects. The Trust Fund is replenished on a 4-year cycle. From 1991 to 2010, $2.7 billion had been provided to the Trust Fund for climate change. Pledges for the fifth (2010 to 2014) replenishment included $1.35 billion for climate change. Over 97% of the pledged contributions are from members of the OECD Development Assistance Committee. Historically, almost all of the resources have been allocated to mitigation projects, including renewable energy (36%), energy efficiency (30%), and low-greenhouse gas emitting technologies (13%). The GEF uses a resource allocation system to allocate funds to each country.

The Least Developed Countries Fund (LDCF), established in 2001, supports projects that address the urgent and immediate adaptation needs of the least developed countries (LDCs). Contributions to the LDCF are voluntary. To date, $907 million has been pledged, of which $832 million has been received. Initially each of the eligible LDCs was given up to $200,000 to prepare a National Adaptation Programme of Action (NAPA). Of the 50 countries that have completed their NAPAs, 48 have accessed a total of $726 million for 138 projects that address urgent and immediate adaptation needs. The regional distribution of LDCF funding—69% to Africa and 28% to Asia—reflects the distribution of LDCs, 68% of which are located in Africa.

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34 Indeed, the Republic of Korea is an OECD DAC member that provides climate finance to developing countries and is also a non-Annex I party to the UNFCCC and, as such, eligible to receive climate finance under the Convention.

35 The concessional element may not meet the DAC threshold of 25% for example.

36 Anecdotal information indicates that different values may be reported for the same project. For DAC the full value of a project is reported. For its biennial report a country may report only its estimate of the climate component of the project.

37 The GEF Trust Fund also serves other environmental agreements.

38 A total of $4.43 billion was pledged for the sixth replenishment (2014–2018) in April 2014. The amount to be devoted to climate change is expected to be approximately the same as for GEF-5.

39 The GEF Trust Fund has also dedicated $50 million to adaptation and $35 million to a technology transfer programme.

40 See Table 3.
### Table 6: The Amount of Climate Finance Reported by a Country Under Different Systems Differs Substantially ($ million)

<table>
<thead>
<tr>
<th>Country</th>
<th>DAC</th>
<th>BR</th>
<th>FSF</th>
<th>DAC</th>
<th>BR</th>
<th>FSF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>624.6</td>
<td>162.0</td>
<td>204.5</td>
<td>621.2</td>
<td>215.6</td>
<td>404.0</td>
</tr>
<tr>
<td>Austria</td>
<td>42.2</td>
<td>43.6</td>
<td>24.6</td>
<td>24.1</td>
<td>57.9</td>
<td>35.6</td>
</tr>
<tr>
<td>Belgium</td>
<td>248.7</td>
<td>43.3</td>
<td>17.5</td>
<td>116.2</td>
<td>34.6</td>
<td>20.4</td>
</tr>
<tr>
<td>Canada</td>
<td>584.2</td>
<td>451.9</td>
<td>395.6</td>
<td>568.6</td>
<td>435.6</td>
<td>390.1</td>
</tr>
<tr>
<td>Cyprus</td>
<td>0</td>
<td>0</td>
<td>0*</td>
<td>0</td>
<td>0.8</td>
<td>0.5*</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>0.3</td>
<td>7.1</td>
<td>3.6</td>
<td>5.6</td>
<td>5.9</td>
<td>3.6*</td>
</tr>
<tr>
<td>Denmark</td>
<td>283.7</td>
<td>109.1</td>
<td>36.5</td>
<td>362.6</td>
<td>136.8</td>
<td>51.4</td>
</tr>
<tr>
<td>EU Institutions</td>
<td>1,739.0</td>
<td>874.0</td>
<td>76.5</td>
<td>2,375.3</td>
<td>943.1</td>
<td>70.7*</td>
</tr>
<tr>
<td>EU</td>
<td>3,254.5</td>
<td></td>
<td></td>
<td>2,994.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>362.2</td>
<td>85.5</td>
<td>36.7</td>
<td>122.7</td>
<td>139.1</td>
<td>47.0</td>
</tr>
<tr>
<td>France</td>
<td>1,752.4</td>
<td>2,973.4</td>
<td>302.1</td>
<td>3,705.7</td>
<td>3,538.5</td>
<td>334.5*</td>
</tr>
<tr>
<td>Germany</td>
<td>4,599.1</td>
<td>1,596.7</td>
<td>358.2</td>
<td>3,491.7</td>
<td>1,534.0</td>
<td>336.9*</td>
</tr>
<tr>
<td>Greece</td>
<td>0</td>
<td>20.3</td>
<td>0*</td>
<td>0.4</td>
<td>0.6</td>
<td>0*</td>
</tr>
<tr>
<td>Hungary</td>
<td>0</td>
<td>1.3</td>
<td>1.4*</td>
<td>0</td>
<td>0.8</td>
<td>0.5*</td>
</tr>
<tr>
<td>Iceland</td>
<td>0</td>
<td>7.3</td>
<td>0.5</td>
<td>7.6</td>
<td>9.7</td>
<td>0.5</td>
</tr>
<tr>
<td>Ireland</td>
<td>65.4</td>
<td>61.4</td>
<td>30.9*</td>
<td>90.8</td>
<td>42.4</td>
<td>25.8*</td>
</tr>
<tr>
<td>Italy</td>
<td>96.2</td>
<td>70.8</td>
<td>86.6*</td>
<td>85.0</td>
<td>57.6</td>
<td>129.5*</td>
</tr>
<tr>
<td>Japan</td>
<td>4,699.8</td>
<td>4,141.2</td>
<td>6,300.0</td>
<td>6,576.2</td>
<td>4,088.9</td>
<td>9,600.0</td>
</tr>
<tr>
<td>Lithuania</td>
<td>0</td>
<td>115.6</td>
<td>0.1*</td>
<td>0</td>
<td>38.0</td>
<td>0*</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>22.0</td>
<td>38.7</td>
<td>2.2*</td>
<td>24.8</td>
<td>48.5</td>
<td>3.8*</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>231.0</td>
<td>286.0</td>
<td>84.9*</td>
<td>441.1</td>
<td>357.1</td>
<td>112.5*</td>
</tr>
<tr>
<td>New Zealand</td>
<td>35.3</td>
<td>18.0</td>
<td>19.8</td>
<td>19.2</td>
<td>26.7</td>
<td>42.5</td>
</tr>
<tr>
<td>Norway</td>
<td>796.6</td>
<td>428.9</td>
<td>710.0</td>
<td>864.6</td>
<td>851.0</td>
<td>954.0</td>
</tr>
<tr>
<td>Poland</td>
<td>0</td>
<td>13.0</td>
<td>1.4*</td>
<td>0</td>
<td>0</td>
<td>5.9*</td>
</tr>
<tr>
<td>Portugal</td>
<td>24.7</td>
<td>21.6</td>
<td>8.6*</td>
<td>19.3</td>
<td>18.6</td>
<td>1.0*</td>
</tr>
<tr>
<td>Slovakia</td>
<td>0</td>
<td>2.1</td>
<td>3.2*</td>
<td>0</td>
<td>4.3</td>
<td>3.0*</td>
</tr>
<tr>
<td>Slovenia</td>
<td>0</td>
<td>0</td>
<td>1.4*</td>
<td>0</td>
<td>0</td>
<td>1.3*</td>
</tr>
<tr>
<td>Spain</td>
<td>170.7</td>
<td>330.9</td>
<td>74.7*</td>
<td>210.7</td>
<td>261.8</td>
<td>110.5*</td>
</tr>
<tr>
<td>Sweden</td>
<td>433.4</td>
<td>461.0</td>
<td>241.7*</td>
<td>586.9</td>
<td>449.6</td>
<td>326.0*</td>
</tr>
<tr>
<td>Switzerland</td>
<td>413.8</td>
<td>166.4</td>
<td>182.6</td>
<td>403.8</td>
<td>175.3</td>
<td>149.3</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>387.8</td>
<td>574.9</td>
<td>334.2*</td>
<td>597.9</td>
<td>639.7</td>
<td>467.1*</td>
</tr>
<tr>
<td>United States</td>
<td>0**</td>
<td>3,193.6</td>
<td>2,000.0</td>
<td>2,284.5</td>
<td>3,100.0</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17,613.1</strong></td>
<td><strong>16,299.5</strong></td>
<td><strong>13,067.5</strong>*</td>
<td><strong>21,322.0</strong></td>
<td><strong>16,396.8</strong></td>
<td><strong>17,635.3</strong>*</td>
</tr>
</tbody>
</table>

Notes: Amounts reported to the OECD Development Assistance Committee (DAC), to the UNFCCC in the Biennial Review (BR) and in the Fast Start Finance (FSF) reports submitted to the UNFCCC.

* The European Union reported the amount of Fast Start Finance on behalf of member states and EU institutions.

** The United States is reviewing its data collection methodology and is likely to submit revised data for 2011 and 2012.

Sources: OECD database on climate-related aid for DAC, National Biennial Review submissions and UNFCCC, 2011b, 2012b; 2012c, 2013a for FSF.
The Special Climate Change Fund (SCCF), also established in 2001, has two active funding windows: adaptation and technology transfer. Contributions to the SCCF are voluntary. To date, $344 million has been pledged and $299 million has been received. Fifty adaptation projects with funding of $202 million have been approved together with eight technology transfer projects with funding of $40 million. The SCCF does not have sufficient resources to fund the adaptation projects submitted. The largest categories of adaptation projects are enhancing the resilience of water resources management and agriculture, each with 27% of the approved resources. The geographic distribution of SCCF funding is: Africa (29%), Asia (28%) and Latin America and the Caribbean (22%).

The Kyoto Protocol created the Adaptation Fund, which became operational in 2009, 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 Adaptation Fund is funded by a levy of 2% of the credits (CERs) issued for most CDM projects as well as voluntary contributions. From its inception to the end of 2013 the Fund realized $190 million from the sale of CERs and received donations of $205 million. 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. To date, 34 projects with funding of $226 million have been approved.

2.6 Private Climate Finance Flows to Developing Countries

Private climate finance flows to developing countries are not systematically tracked so their magnitude is highly uncertain. Estimates of private finance flows are reviewed first. Then the CDM and carbon funds are discussed.

2.6.1 Estimates of Total Private Finance Flows to Developing Countries

Clapp et al. (2012) distinguish public-private channels—export credits and primary purchases of CERs from CDM projects—as well as private investment and finance. They estimated total private finance flows from industrialized to developing countries at $39 billion to $75 billion per year based on 2009–2010 data. The total is dominated by private investment, which is estimated at $37 billion–$72 billion per year.

Stadelmann et al. (2013) estimate private climate finance flows to developing countries at between $27 billion and $123 billion based on 2008–2011 data from a variety of sources. They include foreign direct investment (FDI), portfolio investments, investment mobilized by the climate policies of industrialized countries, payments for CERs (voluntary and compliance purchases), and private donations. The principal components are investment mobilized by the climate policies of industrialized countries ($15 billion to $84 billion) and foreign direct investment ($10 billion to $37 billion).
The Landscape (see Table 1) reports a much lower range for private investment flows from industrialized countries to developing countries for 2012—$4 billion to $13 billion—but these amounts include only industrialized country investment in large-scale renewables in developing countries. The range is consistent with the estimated 2012 industrialized country investment in CDM projects discussed below. But renewable energy investments are only part of the climate-related private investment flows from industrialized to developing countries.

### 2.6.2 The Clean Development Mechanism

The Clean Development Mechanism (CDM) of the Kyoto Protocol creates an incentive to implement mitigation actions in developing countries. It does this by awarding credits (CERs) for the verified emission reductions achieved by a registered project to the project owners. The owners can sell the CERs to firms and governments in industrialized countries. The CERs can then be used by Annex I parties to meet their national emissions limitation commitments under the Kyoto Protocol. The first CDM project was registered in 2004. By the end of 2013 over 7,400 projects had been registered in 93 non-Annex I countries and over 1.4 billion CERs had been issued.

A project owner can sell CERs through an emission reduction purchase agreement (ERPA) or on the open market. An ERPA specifies, inter alia, the price and the quantity of CERs the buyer agrees to purchase over a specified period. Most ERPAs are confidential, so data on the agreed prices and quantities are not public. While the quantity of CERs issued for each CDM project is known and market prices for CERs are available, the revenues received by CDM projects from the sale of CERs are not known.

The most common project types are wind: 32% (23% of projected emission reductions), small hydro: 27% (27%), biomass energy: 8.5% (4.5%), and methane avoidance at wastewater treatment plants and manure operations: 8.5% (2.5%). The People’s Republic of China and India dominate with 50% and 20% of the projects.

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46 Four percent of CDM projects with a total investment of $194 billion in 2012 is about $8 billion. Renewables account for approximately 70% of the total investment in CDM projects (Kirkman et al. 2013), which would lower the figure to $6 billion for renewables. But not all renewables projects in developing countries are CDM projects, so the total would be higher.

47 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. Emission reductions must be independently verified before CERs can be issued.

48 Firms in many industrialized countries can use CERs, subject to quantitative and qualitative restrictions, to comply with emissions trading system obligations. When used for this purpose the CERs are transferred to the national government which can then use them to meet its commitment under the Kyoto Protocol.

49 Fenhann 2014.

50 An ERPA may also include provisions such as options to purchase additional CERs if available and penalties for failure to deliver the agreed quantity of CERs. Although the first CDM project was not registered until 2004, contracts to purchase the emission reductions achieved by CDM projects were signed as early as 1999.

51 Under an ERPA some or all of the CERs issued to a project might be sold at an agreed price that is above or below the market price at the time of issuance.

52 Fenhann 2014.
The main market for the credits is installations subject to the EU emissions trading system (ETS). Subject to specified limits, they can use CERs for compliance. During the latter half of 2012 it became evident that the supply of CERs could exceed the limit on their use by EU ETS installations. This led to a decline in the price of CERs from about €4 at the beginning of the year to less than €1 at the end of the year with further reductions since then. As a result few new projects are being developed and some existing projects have ceased monitoring their emission reductions.

Total investment in registered CDM projects is estimated at over $400 billion of which $80.5 billion and $197.5 billion was for projects registered during 2011 and 2012 respectively. Data for over 4,800 CDM renewable energy projects indicate that about 5% of the projects accounting for over 12% of the total involve investment by both domestic and foreign investors. Of the projects with some foreign investment, approximately one-third of the investment (4%) each came entirely from Annex I countries, a combination of Annex I and non-Annex I countries, and other non-Annex I countries. Thus less than 8% of the total investment originated in industrialized countries.

### 2.6.3 Carbon Funds

Since 1999, almost 100 carbon funds with a capitalization of $14.2 billion have been established. Carbon funds differ from the climate funds discussed in sections 2.4.2 and 2.4.3 above. The sole purpose of a climate fund is to channel foreign (mainly public) financial resources to adaptation and mitigation projects in developing countries. A carbon fund is an investment vehicle whose objective is to earn a return for its investors. In pursuit of that objective a carbon fund may agree to purchase CERs from CDM projects or invest in mitigation projects in developing countries.

Carbon funds purchase carbon credits (52%) and/or invest in emission reduction projects (23%). A fund may have only private investors (48%) only public investors (29%) or a mix of both (23%). Investment may be restricted to a specific region or project type (e.g., REDD+). Financial data, especially for private funds, is often confidential so the amount of finance provided to developing countries via carbon funds is not available.

### 2.7 Current Climate Finance in the Context of Development Assistance

It is clear from this overview that comprehensive, accurate data on international climate finance are not available. Data on multilateral and bilateral flows are available, but they involve some double counting. Currently the multilateral and bilateral flows are each approximately $20 billion per year for an annual total of $40 billion. The few estimates available place the private flows at between $25 billion and $125 billion per year. That means private flows could represent over half of the international climate finance.

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53 The installations covered by an ETS must submit valid allowances or credits equal to their actual emissions at the end of each year. The number of allowances distributed is limited so the aggregate emissions of the installations are capped by the number of allowances plus the number of imported credits permitted. In the EU ETS most allowances (EUAs) have been distributed free. The imported credits that can be used are CERs and ERUs (credits for emission reductions in Annex I countries. The use of CERs and ERUs over the period 2008 through 2020 is limited to about 5% of the allowable emissions.

54 Fenhann 2014.

55 Kirkman et al. 2013.

56 Alberola and Stephan 2010.

57 Alberola and Stephan 2010.
To put international climate finance into context, the estimates are compared with data on development assistance and private flows from industrialized to developing countries in Table 7. Climate finance accounts for 10% to 15% of the development assistance provided by multilateral institutions and 20%–25% of the bilateral development assistance. The uncertainty in the private climate finance flows means that they represent between 10% and 40% of the total private flows. Although private grants for development assistance, at about $30 billion per year, are substantial, no data are available on private grants for climate purposes.

### Table 7: Comparison of Estimated International Climate Finance Flows to Developing Countries with Development Assistance and Private Flows for 2011 and 2012 ($ billion)

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amount</td>
<td>%</td>
</tr>
<tr>
<td><strong>Development Assistance and Private Flows</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multilateral flows</td>
<td>184.4</td>
<td>11%</td>
</tr>
<tr>
<td>Bilateral flows</td>
<td>94.4</td>
<td>19%</td>
</tr>
<tr>
<td>Private flows at market terms</td>
<td>326.6</td>
<td>12%–23%</td>
</tr>
<tr>
<td>Of which FDI</td>
<td>219.6</td>
<td>8%–38%</td>
</tr>
<tr>
<td>Net private grants</td>
<td>32.0</td>
<td>5%–17%</td>
</tr>
</tbody>
</table>

*a* Own resources for seven MDBs less EIB as a proxy for funding to European countries (Table 2).

*b* Landscape estimates for multilateral development banks and multilateral climate funds (Table 1).

*c* OECD DAC figures for projects that have climate change as a “principal” or “significant” objective.

*d* Landscape estimates for government bodies and bilateral financial institutions (Table 1).


*g* Commitments during the year as obtained from the annual reports of the MDBs.

Source: Development assistance and private flows from OECD Total Flows by Donor.

http://stats.oecd.org/Index.aspx?datasetcode=TABLE1

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**SECTION 2 HIGHLIGHTS**

It is difficult to assess the levels and trends of climate finance due to the lack of agreed definitions and absence of a comprehensive tracking system. Estimates must be assembled from a variety of disparate sources.

The term “climate finance” is applied both to financial resources devoted to addressing climate change globally and to flows from industrialized countries to assist developing countries in addressing climate change. The most comprehensive estimates of global climate finance are provided by the annual Global Landscape of Climate Finance reports. The estimates for recent years range from $343 billion to $385 billion per year but recent estimates of investment in energy efficiency suggest the total could be $100 billion to $270 billion per year higher; a total of $340 billion to $650 billion.

*continued next page*
SECTION 2 HIGHLIGHTS  Continued

The focus of this section is climate finance from industrialized countries to address climate change in developing countries consistent with the paper’s scope of possible alignment climate finance and development finance. The most comprehensive estimate of the climate finance provided to developing countries by industrialized countries in 2012 is $39 billion to $62 billion, but with a very low estimate of the private flows. A more comprehensive estimate of the private flows increases the annual flow from industrialized to developing countries to between $40 billion and $175 billion.

Public funds flow through multilateral and bilateral channels in roughly equal amounts of approximately $20 billion per year. Multilateral flows are dominated by the activities of the multilateral development banks. At present a relatively small amount flows through multilateral climate funds. Bilateral flows from industrialized countries are provided by government bodies and bilateral financial institutions.

Richer industrialized countries (Annex II parties) have commitments to provide climate finance to developing countries under the United Nations Framework Convention on Climate Change (UNFCCC). Finance is provided bilaterally and multilaterally including through multilateral funds that are part of the financial mechanism of the Convention. Only about 10% of the finance under the Convention flows through the Convention funds.

Developed countries report climate finance to both the UNFCCC and the Organisation for Economic Co-operation and Development. The countries, eligible financial flows and reporting frequency differ. Despite these differences, it is clear that the systems involve considerable overlap. No attempt has yet been made to reconcile the reports.

Despite the uncertainty inherent in the estimates, the data suggest that current international climate finance is primarily (about 60%) for mitigation plus another 10% for REDD+. Where geographic information is available it indicates that about 40% of the funds go to Asia and the Pacific.

3. INCREASING CLIMATE FINANCE

There is broad agreement that the amount of climate finance provided to developing countries needs to increase. More resources are needed to reduce emissions in developing countries and to help vulnerable countries adapt to the impacts of climate change. Developed countries have committed to a goal of mobilizing jointly $100 billion per year by 2020 to support climate change actions in developing countries.

Some developing countries consider climate finance to be a contractual obligation under the UNFCCC to reimburse them for costs incurred to implement adaptation and mitigation actions. Much of the climate finance provided by industrialized countries qualifies as development assistance. Many development projects have climate change benefits and many climate projects have development benefits. Thus industrialized countries tend to report eligible climate finance to the OECD as part of their development assistance.

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58 For most developing countries GHG emissions per capita or per unit of GDP are lower than for industrialized countries. Reducing developing country GHG emissions is desirable when this can be done at lower cost than in industrialized countries. Reducing developing country GHG emissions is essential if atmospheric concentrations are to be stabilized, the goal of the UNFCCC, since that requires global emissions to be reduced to virtually zero.
Developing countries are concerned that by reporting climate finance as part of their development assistance, industrialized countries can meet commitments to increase climate finance by reducing their development assistance. Negotiated commitments to increase climate finance therefore state that the resources be “new and additional.” Although an operational test of “new and additional” has not been agreed the intent is to ensure that increasing climate finance does not undermine development assistance.

One indication of whether past increases in climate finance have been “new and additional” is provided in Section 3.1 by examining trends in development assistance and climate finance. The developed country commitment to a goal of mobilizing jointly $100 billion per year by 2020 is discussed in Section 3.2. Recent institutional developments—creation of the Green Climate Fund and establishment of national climate funds by several developing countries—are documented in Section 3.3. Changes to UNFCCC processes relating to climate finance are considered in Section 3.4.

### 3.1 Increasing Climate Finance without Undermining ODA

When they report the climate finance provided to developing countries in their national communications and biennial reports, Annex II countries are asked to explain how they have determined that the resources are new and additional. Not all countries do so and those that do use different criteria.

In the context of fast-start finance (see Section 2.4.4) researchers proposed a variety of possible criteria, including:59

- Only funds mobilized from new sources, such as a domestic carbon tax;
- Only funds delivered through new UN channels, such as the GCF;
- Only funds in excess of 0.7% of GNI;
- Only funds in excess of current ODA;
- Only funds in excess of projected ODA calculated using a specified formula;
- Only a specified share of the increase in ODA;
- Only funds in excess of current climate finance; and
- Only climate finance that is not reported as ODA.

When applied to the fast-start finance pledges, proportions ranging from virtually none to almost all are new and additional depending upon the criterion used.

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59 Brown et al. 2010; Fallasch and De Marez 2010; Stadelmann et al. 2011.
In October 1970, the UN General Assembly adopted a Resolution including the goal that “[E]ach economically advanced country will progressively increase its official development assistance to the developing countries and will exert its best efforts to reach a minimum net amount of 0.7% of its gross national product at market prices by the middle of the Decade.” Only a few countries achieve this target. The weighted average of DAC members’ ODA has fluctuated between 0.2% and 0.4% of GNI.

The main concern is possible diversion of ODA to climate finance. ODA, including the climate finance component, has been growing in absolute terms but not as a percent of GNI. One test of possible diversion is whether both climate finance and ODA net of climate finance continue to grow in absolute terms over time. Figure 2 shows the total bilateral ODA provided by DAC members and the total net of bilateral ODA with climate finance as a principal objective in constant dollars.

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**Figure 2: While Climate Finance Has Increased, Bilateral ODA Net of Climate Finance Has Remained Roughly Constant**

Source: Data provided by OECD DAC Secretariat.

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60 “International Development Strategy for the Second United Nations Development Decade,” UN General Assembly Resolution 2626 (XXV), 24 October 1970, para. 43. The decade in question was the 1970s. When the revised System of National Accounts was promulgated in 1993, “gross national product” was replaced with “gross national income” (GNI), an equivalent concept.
The funding for projects with climate mitigation or adaptation as a “principal” objective is an approximation of the climate finance provided. Only part of the total funding goes to climate change mitigation or adaptation and the balance is development finance. On the other hand, the climate finance share of funding for projects with a “significant” mitigation or adaptation objective is excluded.

The figure shows that total bilateral ODA has continued to grow in real terms since 2007 when the climate data become available. Bilateral ODA with a climate as a “principal” or “significant” objective has also grown in real terms during this period. Total bilateral ODA net of ODA with climate as a “principal” objective has been roughly constant since 2006. By this test, then, the climate finance provided by industrialized countries probably has been new and additional.

3.2 Developed Country Commitment to Mobilize Jointly $100 billion per Year by 2020

As part of the Copenhagen Accord, developed countries committed to a goal of mobilizing jointly $100 billion per year of climate finance for developing countries by 2020. It led to studies of how the funds could be mobilized and pressure by developing countries to establish interim targets to monitor progress.

3.2.1 The Commitment: What does $100 billion per year by 2020 mean?

The Copenhagen Accord states “[I]n the context of meaningful mitigation actions and transparency on implementation, developed countries commit to a goal of mobilizing jointly $100 billion a year by 2020 to address 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.”61 The commitment was formally recognized by the next Conference of the Parties.62 This recognition does not change the commitments of Annex II Parties specified in Article 4 of the Convention to provide financial resources for climate-related costs incurred by developing countries.

The commitment is to a “goal of mobilizing” the resources as distinct from a promise to provide $100 billion in 2020. The commitment also is conditional on “meaningful mitigation actions and transparency on implementation” by developing countries. And it is not operationally defined; climate finance is not defined, the relevant private and alternative sources are not specified, and respective contributions of developed countries are not set out.63

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61 UNFCCC 2009, Copenhagen Accord, para. 8. Whether the $100 billion is to be “new and additional” is not clear. The first sentence of the paragraph states that scaled-up, new and additional funding will be provided. Then the paragraph sets out the fast-start finance commitment and specifies that those funds will be new and additional. Next the paragraph defines the 2020 goal, but does not mention that those resources will be new and additional. Lawyers and negotiators can debate whether the new and additional reference in the first sentence applies to the whole paragraph including the 2020 goal or only to the fast-start finance commitment.

62 UNFCCC 2010, para. 98.

63 UNFCCC 2013b.
3.2.2 How Can the Commitment be Met?

Options for mobilizing $100 billion per year by 2020 were studied by the High-level Advisory Group on Climate Change Financing and the World Bank and other institutions at the request of G20 finance ministers. The studies focus primarily on options that mobilize public funds and yield mitigation benefits. The AGF concluded that it is challenging but feasible to reach the goal of mobilizing $100 billion annually for climate actions in developing countries. Both reports conclude that a mix of sources is likely to be required to reach the goal.

Both reports estimate the revenue that could be mobilized in 2020 by various options to finance climate action in developing countries in the context of a carbon price of $25 per ton of CO₂ in Annex II countries. The feasibility of the options was not assessed. For some options, only a fraction of the revenue was assumed to be used for international climate finance. Their estimates of the international climate finance that could be generated by each option are summarized in Table 8.

<table>
<thead>
<tr>
<th>Potential Source of Public Funds</th>
<th>Projected Amount Generated in 2020 (2010 $ billion/year)</th>
<th>Share Assumed to be Dedicated to International Climate Finance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AGF Estimate</td>
<td>World Bank Group et al. AGF Estimate</td>
</tr>
<tr>
<td>Domestic auctioned allowances/AAUs</td>
<td>250–500</td>
<td>250</td>
</tr>
<tr>
<td>Domestic carbon tax</td>
<td>250</td>
<td>4%</td>
</tr>
<tr>
<td>Phase out of fossil fuel subsidies</td>
<td>8</td>
<td>40–60</td>
</tr>
<tr>
<td>Higher fossil fuel royalties</td>
<td>10</td>
<td>100%</td>
</tr>
<tr>
<td>Wires charge on electricity generation</td>
<td>5</td>
<td>100%</td>
</tr>
<tr>
<td>Extension of the “share of proceeds”</td>
<td>38–50</td>
<td>2%–10%</td>
</tr>
<tr>
<td>Carbon pricing for international aviationb</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>Carbon pricing for international shippingb</td>
<td>16–19</td>
<td>26</td>
</tr>
</tbody>
</table>

a The AGF estimates revenue of $10 billion per $1 tax per tonne of CO₂, that is equivalent to potential revenue of $250 billion and a 4% share for international climate finance as reported here.

b The AGF and World Bank Group et al. estimates for international aviation and international shipping assume that a substantial fraction (30%–50%) of the global revenue is allocated to developing countries and that the specified share of the remaining revenue is used for climate finance.

Sources: AGF 2010; World Bank Group et al. 2011.

Both reports note that a combination of sources will be needed to mobilize $100 billion for international climate finance annually by 2020. Some of the options analyzed by the AGF are substitutes, so the amounts cannot be summed. Both reports identify the following combination:

- Multiple sources from the options listed in Table 8 (AGF; various possible combinations of sources; World Bank Group et al.: $43 billion to $77 billion per year)

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64 AGF 2010 and World Bank Group et al. 2011, respectively.

65 Any taxes could be increased to generate the revenue needed to meet the commitment. Focusing on policies that raise revenue and yield mitigation benefits is more effective and more challenging.
• Expanded activity by multilateral development banks (AGF: $30 billion to $40 billion per year; World Bank Group et al.: $35 billion per year)

• International carbon markets (AGF: $30 billion to $50 billion per year; World Bank Group et al.: $20 billion to $100 billion per year)

• Private capital flows leveraged by public policies and instruments (AGF: $100 billion to $200 billion per year; World Bank Group et al.: $150 billion per year).

Since only a fraction of the revenue from each option is assumed to be used for international climate finance, industrialized country government revenues would increase after making the higher climate finance contributions. The World Bank Group et al. report, for example, estimates industrialized country fossil fuel subsidies at $40 billion to $60 billion annually but assumes only $10 billion to $15 billion of this is used for international climate finance. Under the assumptions used the revenues to industrialized country governments would increase by much more than $100 billion per year after meeting the international commitment. The extra domestic revenue could be used to reduce existing taxes or reduce debt.

Developing countries have advocated interim targets, such as minimum of $70 billion per year by 2016, as a means of tracking progress toward achievement of the 2020 goal. During 2013, the UNFCCC work programme on long-term finance considered the question of pathways for mobilizing scaled-up climate finance to $100 billion per year by 2020. Numerous issues related to the formulation of pathways were discussed but agreement on interim targets could not be reached. The fundamental reason is that industrialized countries are not prepared to agree to interim targets.

3.3 Recent Institutional Developments to Boost International Climate Finance

The Green Climate Fund established in 2010 is expected to receive its initial capital in 2014. That may trigger the sunset clause for the Climate Investment Funds. COP 19 established a process for dealing with international climate finance from 2014 to 2020. These changes could facilitate increased levels of international climate finance between 2014 and 2020. If negotiations for a new climate change agreement are successful, climate finance under the Convention could involve more funders and/or fewer recipients, as well as new sources of funding, post-2020. Some developing countries are also implementing mechanisms to better coordinate and leverage the international climate finance they receive. These developments are discussed in the following subsections.

3.3.1 The Green Climate Fund

In 2010 the Conference of the Parties (COP 16) decided to establish the Green Climate Fund (GCF) as an operating entity of the financial mechanism of the Convention. It also created a Transitional Committee to design the Fund. A year later the COP approved the governing instrument for the GCF

67 UNFCCC 2013b.
68 UNFCCC 2010, para. 102.
drafted by the Transitional Committee and requested the board of the GCF to operationalize the fund in an expedited manner. The GCF is required to provide “direct access” to national implementing entities, to have a private sector facility and to balance the allocation of resources between adaptation and mitigation.

In its report to COP 19 in 2013 the GCF outlined a plan for its initial resource mobilization process. A list of requirements that are essential for the Fund to receive, manage, program, and disburse financial resources has been agreed by the GCF board. At its May 2014 meeting the GCF board decided that the essential requirements have been met and to launch the initial resource mobilization process. Thus, the GCF could be in a position to receive funds by the end of 2014.

The likely size of the GCF is not yet clear. A reasonable guess is that the initial capitalization might be sufficient to support disbursements of $2 billion to $5 billion per year, comparable to the activities of a regional development bank or the Climate Investment Funds. Further growth likely would depend on good performance and access to dedicated sources of international funding, such as revenue from the regulation of international aviation and shipping emissions. How the GCF engages and leverages the private sector also could determine the scale of its operations.

The fate of the Climate Investment Funds (CIFs) is linked to the GCF. The CIFs comprise the Clean Technology Fund (CTF) and the Strategic Climate Fund (SCF) which in turn has three programs: the Pilot Program for Climate Resilience (PPCR), the Forest Investment Program (FIP), and the Scaling up Renewable Energy Program (SREP). As evidenced by their sunset clauses, the CIFs were intended to be an interim arrangement pending the development of a permanent new mechanism; the GCF. The sunset clause for the CIFs indicates that each fund will conclude its operations once a new financial architecture is effective.

The GCF’s initial resource mobilization process, presumably, should trigger the sunset clause. The CIFs’ Trust Fund Committee agreed in November 2012 that CIFs are to: (i) continue to provide climate finance to recipient countries at least until such time as the GCF can take over; and (ii) monitor the progress of putting GCF structures in place, and decide at an appropriate later stage on whether or not the sunset clause should be revisited and revised or invoked as it stands.

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70 UNFCCC 2011c.

71 At its February 2014 meeting the Board decided to allocate 50% of its resources each to adaptation and mitigation with a sub-allocation of 20% from each category for the private sector facility and a target of 20% of the adaptation funds of particularly vulnerable countries. In addition it adopted a ceiling of 5% of total resources for any one country (Green Climate Fund 2014a).

72 Green Climate Fund 2014b.

73 Capitalization of the GCF might also trigger changes to the existing adaptation funds under the financial mechanism—the Least Developed Countries Fund and Special Climate Change Fund—and the Adaptation Fund. The GCF will become the fourth entity under the Convention to provide finance for adaptation in developing countries. The Standing Committee on Finance could recommend rationalization of these entities given its mandate to recommend improvements to the coherence, effectiveness and efficiency of the operating entities of the financial mechanism.

74 Climate Investment Funds, 2011. The Governance Framework contains the following sunset clause. “Recognizing that the establishment of the CTF is not to prejudice the ongoing UNFCCC deliberations regarding the future of the climate change regime, including its financial architecture, the CTF will take necessary steps to conclude its operations once a new financial architecture is effective. The Trustee will not enter into any new agreement with contributors for contributions to the CTF once the agreement providing for the new financial architecture is effective. The CTF Trust Fund Committee will decide the date on which it will cease making allocations from the outstanding balance of the CTF.”
Capitalization of the GCF will have several effects. Since it is an operating entity of the financial
mechanism of the Convention, more of the international climate finance will be subject to the
guidance of the COP, especially if the CIFs, which are outside the Convention, are wound up.
The GCF’s private sector facility could increase the scale of private climate finance. To the extent that
the GCF is able to leverage its funds by borrowing or through the private sector facility it could increase
the amount of international climate finance available. Direct access will mean that international
implementing entities, such as UN agencies and multilateral development banks, including ADB, will
face competition from national implementing entities when attempting to access GCF funds.

3.3.2 Biennial Climate Finance Reviews from 2014 to 2020

The Warsaw (COP 19) decision on long-term climate finance put in place a process for biennial
climate finance reviews from 2014 through 2020.

Parties previously had agreed to include climate finance in countries’ biennial reports using a specified
tabular format. The new format was used for the biennial reports by industrialized countries
submitted at the beginning of 2014. The first reports by developing countries are due in 2015. If parties
adhere to the reporting templates, these reports should provide more comprehensive and more timely
information on climate finance under the UNFCCC.

The mandate of the Standing Committee on Finance includes the preparation of biennial assessments
of climate finance. The assessments cover all climate finance, not just climate finance under the
UNFCCC. Preparation of the first biennial assessment is currently underway for submission to COP 20
in December 2014.

In Warsaw the COP requested developed country parties to prepare biennial submissions on their
updated strategies and approaches for scaling up climate finance, including information on:

- the expected levels of climate finance mobilized from different sources;
- their policies, programmes and priorities;
- their actions and plans to mobilize additional finance; and
- how they are ensuring the balance between adaptation and mitigation.

The first reports are to be submitted in 2014 in time for consideration by COP 20.

A high level ministerial dialogue on climate finance is to be convened during the COP every 2 years
between 2014 and 2020 to consider the biennial assessment prepared by the SCF, the submissions
by developed countries on their plans to scale up climate finance and other relevant information. The
ministerial dialogues should provide the basis for COP decisions on climate finance under the
Convention. For example, if a need for additional climate finance is demonstrated the COP could
request Annex II countries to increase the funding they plan to provide. Other recommendations,
such as shifts in the adaptation/mitigation balance or the regional distribution, are also possible.
This process is still in the early stages of its first cycle, so how well it will work remains to be seen.

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75 Decision 19/CP.18.
76 Decision 2/CP.17.
77 Decision 3/CP.19.
3.3.3 International Climate Finance Post-2020

At Durban in 2011, the Conference of the Parties (COP 17) agreed to establish a process known as the ADP (Ad Hoc Working Group on the Durban Platform for Enhanced Action). The ADP is mandated to develop, by 2015, a protocol, another legal instrument or an agreed outcome with legal force under the Convention applicable to all parties to come into effect and be implemented from 2020.

If an agreement can be reached, it is expected that all parties will have commitments of equal legal force to implement measures to address climate change. More countries could have commitments to implement mitigation or adaptation measures domestically at their own cost thus reducing the number of countries eligible to receive international financial support. In addition, more countries could have commitments to contribute to international climate finance.

If all countries have national emissions limitation commitments under a new agreement, emissions from international aviation and shipping might be the only unregulated sources. The International Civil Aviation Organization (ICAO) has agreed to develop a market-based measure to regulate international civil aviation emissions to be implemented from 2020. The International Maritime Organization (IMO) has studied market-based measures and likely would regulate international shipping emissions by 2020 as well. As shown in Table 8, these measures could generate revenue that might be channeled to international climate finance.

After 2020, then, international climate finance under the Convention could involve more funders and/or fewer recipients together with potential revenue from regulation of international aviation and shipping emissions.

3.3.4 Developing Country Efforts to Coordinate International Climate Finance

Many developing countries, other than the larger ones, are trying to cope with the multiplicity of sources, agents and channels offering climate finance. These efforts take two forms.

One form is coordination of national efforts to address climate change by relevant government institutions. Climate finance decisions typically involve multiple ministries and agencies often coordinated by the ministry of the environment. Involvement of ministries of foreign affairs and finance is becoming more common due to their engagement in international negotiations and the increasing scale of international climate finance.

The second form is the establishment of specialized national funds to mainstream climate change activities in overall development strategies. These institutions blend international climate finance with domestic public funds and private sector resources. Examples include:

- Amazon Fund, Brazil (2010)

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78 Market-based measures are similar to emissions trading systems. Each participant must acquire sufficient allowances to cover its actual emissions.

79 Auctioning some or all of the allowances, for example, would raise revenue. The revenue might be collected internationally and be directed to entities such as the Green Climate Fund.

80 Glemarec 2011.

81 Flynn 2011.
- Bangladesh Climate Change Resilience Fund (2010)
- People’s Republic of China CDM Fund (2007)
- Indonesia Climate Change Trust Fund (2010)
- Guyana REDD Investment Fund (2010)
- Ethiopia Climate Resilient Green Economy Facility (2012)
- Mexico Climate Change Fund (2012)
- Philippines People’s Survival Trust (2012)
- Rwanda National Climate and Environment Fund (2012).

A common feature is the desire to allocate resources for activities that are fully aligned with the national needs and priorities. To do this they seek to tap the numerous international sources of climate finance and supplement them with domestic resources. Some of them may also develop the governance and capacity requirements for “direct access” to funds from the Adaptation Fund and the GCF.

Most of the national climate funds are too new to be able to assess their performance. But as with any mechanism performance in some countries will be better than in others.

### 3.4 Scaling Up Private Climate Finance

Private finance is a major component of current climate finance. It is expected to remain a significant share of the total especially for mitigation measures. Scaling up private climate finance will be a challenge due to a dramatic decline in activity under the Clean Development Mechanism.

The CDM created an incentive to invest in mitigation measures in developing countries. The incentive was credits (CERs) for emission reductions achieved that could be sold to companies in and governments of industrialized countries. Companies used them for compliance with domestic emissions trading obligations. Governments used them to meet their Kyoto Protocol commitments.

The CDM was so successful—over 7,400 projects in 93 developing countries with emission reductions of over 1.4 billion tons of CO₂ equivalent in less than a decade—that the supply exceeded the demand and the market price for CERs has fallen to less than 1 euro. At the current price virtually no new projects are being implemented. Thus new mechanisms are needed just to sustain the past level of private finance triggered by the CDM—in excess of $400 billion over a decade.

The only new mechanism aimed at scaling up private climate finance is the private sector facility of the GCF. The funding it will have and how it will work are not yet known.

Since the $100 billion goal by 2020 includes private finance, some industrialized countries may implement measures to stimulate private climate finance. An international research collaborative coordinated by the OECD is undertaking research is to contribute to the development of more

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82 Direct access means that an accredited institution in the recipient country may receive funds directly to implement a project. Currently, most international funding institutions insist that projects be implemented by a multilateral development bank or UN agency.
comprehensive methodologies and systems for measuring private climate finance flows and for determining those private flows mobilized by developed countries’ public interventions. The research is scheduled to be completed by the end of 2014.

SECTION 3 HIGHLIGHTS

Negotiated commitments to increase climate finance state that the resources be “new and additional” to address developing country concerns that official development assistance (ODA) not be diverted to climate finance. Total bilateral ODA net of ODA with climate as a “principal” objective has been roughly constant since 2006. By this test, then, the climate finance provided by industrialized countries probably has been new and additional.

There is broad agreement that the amount of climate finance provided to developing countries needs to increase. Developed countries have committed to a goal of mobilizing jointly $100 billion a year by 2020 from a wide variety of sources. Developing countries have advocated, but industrialized countries are not prepared to agree to, interim targets. Studies have identified several potential sources that would increase the revenues to industrialized country governments by more than $100 billion per year.

The Green Climate Fund (GCF) established in 2010 is expected to receive its initial capital in 2014. That may trigger the sunset clause for the Climate Investment Funds. Capitalization would place more of the international climate finance under the guidance of the Conference of the Parties to the UNFCCC (COP). To the extent that the GCF is able to leverage its capital and private funds through its private sector facility, it could increase the amount of international climate finance available. Direct access will mean that UN agencies and multilateral development banks will face more competition when attempting to access funds from the GCF.

A process, still in its infancy, for biennial assessment of all climate finance and decisions by the COP has been established to deal with international climate finance from 2014 to 2020. If a new climate agreement comes into force in 2020, international climate finance under the Convention could involve fewer recipients and/or more funders together with potential revenue from regulation of international aviation and shipping emissions.

Private finance is likely to remain a significant component of climate finance, especially for mitigation measures. Scaling up private climate finance will be a challenge due to a dramatic decline in activity under the Clean Development Mechanism. The only new mechanism aimed at scaling up private climate finance is the private sector facility of the GCF. The funding it will have and how it will work are not yet known. Research is underway on more comprehensive methodologies and systems for measuring private climate finance flows and on determining the private flows mobilized by developed countries’ public interventions.

4. ASIA AND THE PACIFIC’S EXPERIENCE WITH INTERNATIONAL CLIMATE FINANCE

The developing countries in Asia and the Pacific are incredibly diverse. They include the world’s largest emitter of GHGs together with several countries with negligible emissions. They include small, low-lying island states as well as land-locked, mountainous countries. As a result, virtually every potential adverse impact of climate change is expected to occur in at least a few of the countries. Adaptation is a priority for every country; fewer countries have significant mitigation potential.
Almost every national government in the region has a climate change plan. Many have institutional arrangements, typically a committee of representatives of relevant government ministries and entities, to coordinate climate change actions. Some countries also have mechanisms to fund adaptation and mitigation measures.

This section begins with a review of the Asia and Pacific region’s experience with international climate finance in Section 4.1. Then it turns to a review of ADB’s climate finance activities in Section 4.2. ADB has mobilized climate funds it could use to enhance development projects. ADB has also been the implementing entity for projects in the region funded by the CIFs and the GEF.

### 4.1 International Climate Finance in the Asia and Pacific Region

A comprehensive assessment of international climate finance for the Asia and Pacific region is not available. Some information on the distribution of international climate finance across all developing countries is available. This should be broadly applicable to countries in Asia and the Pacific since they receive about 40% of the international climate finance from the channels where geographic information is available (see Section 2). Information is also available for specific countries, but given the diversity of the countries in the region it is not possible to draw general conclusions based on the experiences of a limited number of countries.

#### 4.1.1 Distribution of International Climate Finance

International climate finance is directed toward mitigation and adaptation. Are mitigation funds directed to countries with high CO2 emissions intensity and, in the case of REDD+ funds, to countries with larger carbon sinks? Are adaptation funds directed to more vulnerable countries? Researchers have attempted to answer these questions.

The mitigation analysis uses DAC data for bilateral support provided to 180 developing countries for the period 1998–2010.\(^{83}\) The results must be interpreted with caution because designation of a project as having climate change mitigation as a “principal” or “significant” objective was voluntary until 2007; coverage became progressively more comprehensive from 1998 through 2007. The relationship between mitigation finance and national CO2 emissions is presented in the top panel of Figure 3 (Mitigation). If mitigation finance were directed to the countries with the highest emissions, the line would slope upward at an angle of 45°.

Statistical analysis finds that developing countries with higher CO2 intensity, larger carbon sinks, lower per capita GDP and good governance tend to be selected as recipients of climate mitigation finance and receive more of it. This suggests that bilateral mitigation finance tends to go to countries with larger mitigation potential—higher CO2 emissions intensity and larger carbon sinks—and lower capacity—lower capita GDP—and good governance. But there is substantial unexplained variation around this pattern.

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\(^{83}\) Halimanjaya 2014.
Figure 3: Bilateral Mitigation and Adaptation Finance is Partly, but not Completely, Focused on Countries with the Greatest Need

The adaptation analysis uses data on fast-start finance funding for adaptation and different indices of recipient country vulnerability. The bottom panel in Figure 3 (Adaptation) shows the relationship between FSF adaptation finance and country vulnerability as measured by the GAIN index. The results, not shown, using the DARA vulnerability index are similar. Although more vulnerable countries tend to receive more adaptation funding, vulnerability alone does not explain the allocation of adaptation funds (the slope is less than 45°). Further analysis is required, preferably with a larger data set.

4.1.2 National Approaches to Accessing International Climate Finance

Given the diversity of countries in the Asia and Pacific region in terms of their adaptation needs, mitigation potential and wealth, it is to be expected that their approaches to accessing international climate finance differ. Almost every national government has a climate change plan. Many have institutional arrangements to coordinate climate change actions.

Almost every developing country has at least one climate change plan, some developed as a domestic initiative and others developed in response to multilateral climate finance initiatives. Some countries, such as Bangladesh, prepared a climate change strategy as a domestic initiative (see Box 1). Virtually every LDC has a National Adaptation Plan of Action (NAPA) because the Least Developed Country Fund (LDCF) funded their preparation and made a NAPA a precondition for funding adaptation projects. The Climate Investment Funds (CIFs) likewise required interested countries to prepare an investment plan to identify priority projects as a precondition for project funding; a strategic program for climate resilience (SPCR) for funding from the Pilot Program for Climate Resilience (PPCR) for example.

<table>
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<th>Box 1: Climate Risk Management in Bangladesh</th>
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The Bangladesh Climate Change Strategy and Action Plan (BCCSAP) completed in 2009 identified six pillars under which climate change mitigation and adaptation will take place: (i) food security, social protection and health; (ii) comprehensive disaster management; (iii) infrastructure; (iv) research and knowledge management; (v) mitigation and low carbon development; and, (vi) capacity building and institutional strengthening. Institutional arrangements for managing climate change related issues were established within the Ministry of Environment and Forests. These arrangements include management and technical committees for the Bangladesh Climate Change Trust Fund (domestic resources; 77%) and Bangladesh Climate Change Resilience Fund (foreign resources; 23%).

The Asian Development Bank (ADB) has been actively engaged in administering the implementation of the strategic program for climate resilience (SPCR) for Bangladesh and in supporting the Government of Bangladesh in its development programs. ADB’s Independent Evaluation concluded that the Government of Bangladesh’s policies and development plans do consider climate change adaptation, but effectiveness is reduced by a lack of clarity of institutional mandates and budget allocation processes across line ministries, frequent staff turnover in the ministries, and by limited capacity.

Source: ADB 2014b, Linked document 3.

Institutional arrangements, typically a committee of representatives of relevant government ministries and entities, to coordinate climate change actions exist in virtually every country. The Climate Change Council in Nepal is an example (see Box 2). The composition of the committee naturally differs from country to country due to differences in the structure of the government. The effectiveness varies by country for reasons such as limited capacity, staff turnover, and lack of clarity of institutional mandates.

**Box 2: Climate Risk Management in Nepal**

Nepal approved its national adaptation plan of action (NAPA) in 2010 together with a Local Adaptation Plan of Action (LAPA) as a means of implementing the NAPA in the most vulnerable local communities. The NAPA identified 43 adaptation projects that have been clustered and prioritized under nine profiles. In 2011, Nepal approved a climate change policy.

The Climate Change Council, chaired by the Prime Minister, provides high-level policy and strategic oversight and coordinates financial and technical support to climate change-related programs and projects. The Ministry of Science, Technology and Environment has the remit to coordinate all climate change-related projects implemented across government, multilateral development banks, bilateral donors, and other agencies. Line ministries are expected to incorporate climate change-related activities in their annual plans and programs for the 3-year plan, but currently lack the capacity to do this.

The Asian Development Bank (ADB) has been actively engaged in framing and implementing the strategic plan for climate resilience (SPCR). ADB’s Country Partnership Strategy 2013–2017 underscores that ADB assistance will focus on disaster and climate change risk management by building institutional capacity, ensuring resilience of infrastructure against the risks, and applying risk-screening tools in designing projects.

Source: ADB. 2014b, Linked document 3.

Some countries devote significant domestic resources to climate change activities. Others rely almost exclusively on bilateral and multilateral climate finance. Bangladesh raises 77% of its climate finance domestically while Cambodia relies on international sources for 86% of its climate change funding and the Pacific island countries are heavily dependent on international sources for their climate finance (see Box 3). As mentioned in Section 3.3.4, some developing countries, notably Bangladesh, Indonesia and the Philippines in the Asia and Pacific region, have established national funds to blend international climate finance with domestic public funds and private sector resources.

Accessing international funds can be difficult and complex, especially for small countries. There are a large number of potential bilateral and multilateral sources each with its own priorities and approval processes. The LDCF is limited to high priority adaptation measures in LDCs. The GEF has a formula for allocating resources to eligible countries. The CIFs require that a country have an approved investment plan. The GEF and CIFs use only approved international implementing entities. Bilateral donors often have priority recipient countries and preferred adaptation or mitigation activities. Some of the bilateral funds may be tied to donor country purchases. Finding a source interested in funding a developing country’s priority projects can be a challenge.
4.2 ADB’s Climate Finance Experience

ADB’s support for climate change mitigation and adaptation interventions is funded through:

- ADB’s Climate Change Fund funded by ADB’s internal resources;
- trust funds managed by ADB that received contributions from the governments of Australia, Canada, Japan, Norway, Spain, Sweden, and the United Kingdom, and the Global Carbon Capture and Storage Institute; and
- externally managed climate funds ADB can access.

**Box 3: Climate Risk Management in Pacific Island Countries**

Asian Development Bank (ADB) operations in the Pacific cover 14 developing member countries. ADB’s analysis of progress towards achievement of millennium development goals groups Pacific countries as:

(i) those with some capacity for sustained growth (Cook Islands, Fiji, Samoa, Tonga, and Vanuatu);
(ii) those with predominantly resource-based growth (Papua New Guinea, Solomon Islands, and Timor-Leste); and,
(iii) those which have difficulty creating/sustaining growth (Federated States of Micronesia, Kiribati, Palau, Nauru, Marshall Islands, and Tuvalu).

There is a well-developed regional institutional framework with the Pacific Islands Forum (PIF) as the preeminent grouping of political leaders of the region. The PIF established the Council of Regional Organisations of the Pacific (CROP) in 1988 to improve cooperation, coordination, and collaboration among the 10 intergovernmental agencies that work toward achieving sustainable development in the region, including addressing adaptation and disaster risk reduction.

At the national level, efforts to integrate climate risks into development planning are at various stages. The three Strategic Plan for Climate Resilience pilot countries—Papua New Guinea, Samoa, and Tonga—each have a national development plan referencing climate change and its impacts, as well as overall climate change or sector specific plans which consider development in the face of climate change.

Most of the climate funds available for the Pacific are from international sources. Accessing international funds can be difficult and complex due to the large number of potential sources each with its own priorities and approval processes. Country systems for allocating and disbursing climate funds may be a way to reduce these access difficulties.

ADB’s approach to its Pacific operations is to provide increased financial and technical support for measures that will ensure continued economic growth in the face of climate change, and to facilitate access to financing for building climate resiliency and promoting clean energy development. Most adaptation projects in these countries for 2009–2012 involve climate proofing of infrastructure such as roads, water supply and agricultural drainage, health and other transport infrastructure. The mitigation projects involve mainly renewable energy, transmission of renewable power and support for power system upgrades.

Source: ADB 2014b, Linked document 3.
By the end of 2013, ADB had set up, managed and accessed externally managed climate funds of about $1.5 billion.85

The first two categories—the internal resources of the Climate Change Fund and the trust funds—are available exclusively to ADB for project use. Trust fund contributions may be subject to conditions imposed by the donor. In the case of externally managed climate funds, ADB is an implementing entity.

4.2.1 **ADB’s Experience with Climate Finance from Internal Resources and Trust Funds**

Since its establishment in 2008, ADB has allocated $59 million to its Climate Change Fund (CCF); $30 million for mitigation, $18 million for adaptation and $6 million for carbon sequestration (REDD+). ADB’s Real-time Evaluation of ADB’s Capacity to Support Access to Climate Finance concludes that CCF funds were easy to access and were used to support projects in the pipeline.86 The funds were used to enhance adaptation or mitigation aspects of development projects rather than to support climate projects.

The Clean Energy Financing Partnership Facility (CEFPF), established in 2007, serves as a partnership platform between ADB and its financing partners. By the end of 2012, CEFPF funds had a combined commitment of $133.2 million, of which the cumulative investments were $72.3 million. The fund has helped achieve ADB’s annual target of $2 billion clean energy investments by 2013.

ADB’s nonsovereign operations (including private sector operations) have thus far limited their climate change interventions largely to clean energy, primarily renewable energy and cleaner fuels. The nonsovereign clean energy portfolio has grown significantly since 2003, and appears to have stabilized at the level of 35%–45% of total approved clean energy investments. Energy efficiency interventions have been limited to the buildings, transport and water sectors.

Mainstreaming of adaptation and mitigation interventions has been dominated by clean energy projects. The ADB target of clean energy approvals of $1 billion for 2008 was gradually ramped up to $2 billion by 2013. The clean energy targets for the period 2008–2013 were comfortably met. ADB’s nonclean energy climate mitigation interventions are estimated to be $287 million for 2011 and $137 million for 2012. Adaptation interventions were estimated at $585 million and $821 million for 2011 and 2012 respectively.87 Most of the climate change adaptation projects involve climate proofing of infrastructure such as roads, water supply and agricultural drainage, health, and other transport infrastructure in Pacific island countries.

4.2.2 **ADB Experiences as a Climate Finance Intermediary**

ADB has accessed financing for mitigation and adaptation projects from the Climate Investment Funds (CIFs) and the Least Developed Country Fund (LDCF) and the Special Climate Change Fund (SCCF) managed by the Global Environment Facility (GEF). From 1998 through 2013, GEF allocated

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85 If portions of externally managed funds that are earmarked for (but not yet accessed by) ADB are also included, the total exceeds $2.5 billion.
86 ADB 2014b.
87 The evaluation noted problems with the classification of both mitigation and adaptation projects and hence with the estimates of climate finance. It concluded that there is a need for a revision of its estimates of adaptation finance reported since 2011.
grants of more than $122 million to ADB for climate projects. ADB will administer 61% of the $1.6 billion allocated to Asia and the Pacific by the CIFs. Although qualified as an international implementing entity, ADB has not accessed the Adaptation Fund due to concerns about liability for project management.

ADB’s Independent Evaluation unit has conducted a real-time evaluation of ADB’s capacity to support access to climate finance. The evaluation notes that the documentation needed to obtain funding from external sources, CIFs and GEF, is much more extensive than that required to access internally managed funds. Approval times also are much longer for external funds. Although competition is regulated to some extent, ADB must compete with other agencies to access external funds. Finally, ADB’s internal systems do not provide incentives to operations departments to access external climate funds.

The evaluation concludes that ADB has limited experience leveraging climate finance from external financing sources, external climate funds or the private sector. To scale up and mainstream adaptation and mitigation (beyond clean energy) it will be necessary to secure more funding from external sources. Internal systems will need to be changed to provide operations departments an incentive to seek climate finance from such sources.

SECTION 4 HIGHLIGHTS

Virtually every potential adverse impact of climate change is expected to occur in at least a few countries of the Asia and Pacific region. A few countries are among the world’s largest emitters of greenhouse gases while others have negligible emissions and are vulnerable to the impacts of climate change. In response to the needs of vulnerable countries, a rising share of climate finance is being allocated for adaptation and resilience. That trend will continue if the Green Climate Fund (GCF) achieves its medium-term target of allocating 50% of its funds for adaptation. More funding for adaptation and climate resilience will better align climate finance with the concerns faced by small countries, especially the Pacific islands.

Almost every national government has a climate change plan and many have institutional arrangements to coordinate climate change actions. Some countries also have mechanisms to fund climate change actions. Some countries rely almost exclusively on bilateral and multilateral climate finance. The large number of funds and institutions, each with their own priorities and procedures, makes it difficult and complex, especially for small countries, to access international climate finance. This situation is unlikely to be simplified and may become more complex as the GCF begins operation and some existing funds wind down or change their strategies.

continued next page

88 ADB 2014a.
89 ADB 2014b.
90 ADB 2014b.
SECTION 4 HIGHLIGHTS  Continued

A comprehensive assessment of international climate finance for the Asia and Pacific region is not available. Bilateral support for mitigation to 180 developing countries during 1998–2010 went to countries with higher CO₂ intensity, larger carbon sinks, lower per capita GDP and good governance tend to be selected as recipients of climate mitigation finance, and receive more of it. Fast-start finance (2010–2012) for adaptation was not highly correlated with recipient countries’ vulnerability as measured by the GAIN and DARA indices.

The Asian Development Bank’s (ADB) support for climate change mitigation and adaptation interventions is funded through:

- ADB’s Climate Change Fund (CCF) funded by ADB’s internal resources;
- trust funds managed by ADB through the Clean Energy Financing Partnership Facility (CEFPF); and
- externally managed climate funds ADB can access.

By the end of 2013, ADB had set up, managed, and accessed externally managed climate funds of about $1.5 billion.

Since 2008, ADB has allocated $59 million to the CCF. There is no evidence the projects would not have gone ahead in the absence of CCF support. By the end of 2012, CEFPF funds had a combined commitment of $133.2 million which helped achieve ADB’s annual target of $2 billion clean energy investments. ADB has accessed financing for mitigation and adaptation projects from the Climate Investment Funds (CIFs), the Least Developed Country Fund (LDCF), and the Special Climate Change Fund (SCCF).

ADB has limited experience leveraging climate finance from external financing sources, external climate funds or the private sector. To scale up and mainstream adaptation and mitigation (beyond clean energy) it will be necessary to secure more funding from external sources. Internal systems will need to be changed to provide operations departments an incentive to seek climate finance from such sources.

5. ALIGNING CLIMATE FINANCE AND DEVELOPMENT FINANCE: PROSPECTS AND WAY FORWARD

More aid is needed to help developing countries reduce poverty. A 2002 World Bank research paper estimates that, if countries improve their policies and institutions, the additional foreign aid required to reach the Millennium Development Goals by 2015 is between $40 billion and $70 billion per year.91

Developing countries also need more financial resources for climate change mitigation and adaptation. Comprehensive estimates of the amount of climate finance needed are not available, but developed countries have committed to a goal of mobilizing jointly $100 billion a year by 2020 from a wide variety of sources.92

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91 Devarajan et al. (2002) summarized in The Costs of Attaining the Millennium Development Goals; available at www.worldbank.org/html/extdr/mdgassessment.pdf. Note the range in the original report is $40 billion to $70 billion but $40 billion to $60 billion in the summary.

92 Estimating the climate finance needed is difficult because there is no agreed definition of climate finance and poor data on current climate finance.
OECD aid data indicate that the bilateral climate finance provided to developing countries has grown since 2006. The same data show that total bilateral development assistance has grown more or less steadily since the turn of the century. Total bilateral development assistance net of bilateral development assistance with climate as a “principal” objective has been roughly constant since 2006.

The virtual stagnation in the amount of bilateral development assistance net of climate finance and the need for more resources for both climate and development raise two questions: How can more resources be mobilized? Can the limited resources be deployed to yield both development and climate benefits?

This section argues that development and addressing climate change are not the same. Conceptually development and climate change projects can, in some cases, be difficult to distinguish. In practice, climate change projects can be identified based on the funding source and/or approvals process. Climate projects receive funding from a climate fund and/or are identified by a national climate change plan and/or require approval of a national climate change coordinating body.

Climate finance entities will continue to exist. That implies two different roles for ADB: seeking climate finance to which it has exclusive access to enhance the climate benefits of its development projects and serving as an implementing entity for climate projects in the region. ADB already has experience with both roles.

5.1 The Post-2015 Context

A proposed set of sustainable development goals (SDGs) has been developed for consideration by the United Nations General Assembly at its 68th session. The target for achieving the goals is likely to be 2030 probably with interim milestones. Strengthening the means of implementation and revitalizing the global partnership for sustainable development is another. This recognizes that developing countries will need additional financial and other resources to achieve the goals. Financing the SDGs is being discussed by the Intergovernmental Committee of Experts on Sustainable Development Financing and will be the subject of the third the International Conference on Financing for Development.

A new climate change agreement is being negotiated with a target for completion in December 2015 and entry into force by 2020. In 2011 the parties to the UNFCCC established the Ad Hoc Working Group on the Durban Platform for Enhanced Action to negotiate a legal agreement applicable to all Parties. If the negotiations are successful, the new agreement is expected to shift from the current structure of Annex I and non-Annex I countries to one with differentiated commitments with equal legal status for all parties.

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93 There was a peak in 2010.
94 Taking urgent action to combat climate change and its impacts is one of the proposed goals.
Regardless of the new agreement, international climate finance is evolving. Initial capitalization of the Green Climate Fund is underway, which may trigger the sunset clauses of the CIFs. A new process for COP review of climate finance on a biennial cycle from 2014 through 2020 is being implemented. And numerous initiatives to ensure the developed country commitment to jointly mobilize $100 billion per year by 2020 is met are underway. Assuming a new climate change agreement enters into force, it is likely that more countries will contribute and fewer countries will receive climate finance post 2020.

Mobilizing significantly more resources for development and to address climate change will be a challenge. Although there are economically attractive options for generating more government revenue, a rising share of both development finance and climate finance is likely to come from nongovernment sources.

The reports discussed in Section 3.2.2 find that sources such as a carbon tax (or auctioned emissions trading system units) and reductions in fossil fuel subsidies yield mitigation benefits and raise significant revenues that can be used to reduce existing taxes in industrialized countries as well as to increase financial support to developing countries. Regulation of emissions by international aviation and shipping also could raise significant revenues. At the moment only a few countries are implementing these options.

Economic development, rather than ODA, has been the main driver of poverty reduction. With economic growth domestic tax revenues in developing countries have increased, allowing more development to be funded domestically. While ODA (including climate finance) has grown substantially since 2000, other sources of development finance—foreign direct investment inflows, workers’ remittances and philanthropic funding—have grown even more thus reducing the relative importance of ODA. These trends are very uneven across countries, with private flows heavily concentrated in middle income countries and low-income countries much more dependent on ODA.

5.2 Addressing Climate Change and Development Are Not the Same

Development projects can be adapted to the future climate; climate-proofed. Agricultural extension services concerned about the possibility of increased drought would advise farmers to select crop varieties better suited to dry conditions. A more robust adaptation strategy would seek to improve food security through a set of coordinated measures that include crop diversification, integrated pest management, and rainwater harvesting.

Development may lead to higher greenhouse gas emissions. Expansion of some industries, such as cement production, inevitably increases emissions. In other cases, such as electricity generation, new capacity can use fossil fuels or, often at some additional cost, renewable sources. Higher incomes tend to lead to greater use of private passenger vehicles and hence more greenhouse gas emissions.

Clearly, development and addressing climate change (mitigation and/or adaptation) are not the same. Development projects may, or may be modified so that they, contribute to mitigation and/or adaptation. Mitigation and adaptation projects likewise may have development benefits. The diversity of development projects means that the overlap ranges from negligible, treatment of HIV/AIDS for example, to almost complete, as in the case of renewable energy supply.

96 Greenhill and Prizzon 2012. See also Doucouliagos and Paldam 2014; Galiani et al. 2014.
97 Klein 2010.
Conceptually it can be difficult to classify a project as being development or as combatting climate change. Provision of seeds for drought resistant crops, for example, could be a development project or an adaptation project. In practice the distinction is easier since development and climate change projects are managed separately. They have their own funding sources and, often, different national approval processes.

Although it is tautological, climate projects are projects funded by a climate finance institution and/or are identified by a national climate change plan and/or require the approval of a national climate change coordinating body.

### 5.3 Proliferation of Funding Entities

Development and climate change have both experienced a proliferation of funding entities often with a specific focus, such as HIV/AIDS or REDD+. Several factors are responsible for this trend.

First, donors have specific interests and want to see their funds directed toward those goals. A specialized entity achieves this.

Second, it is a way to demonstrate the ‘additionality’ of the funding. The new funds are in specialized entities, so their funding is visible. The level of funding for other purposes in established funding entities also becomes clearer. Developing countries have expressed the concern that ODA budgets will be redirected to climate change. Separate funding entities enables better tracking of climate finance and development finance to ensure that the climate finance is additional.

Third, climate finance is a legal obligation of Annex II parties under the UNFCCC. These countries are required to report the climate finance they provide to developing countries. Separate climate finance entities help ensure that the funds are used for climate change purposes and facilitate reporting.

The drawbacks of this proliferation of funding entities are that finding the most suitable source becomes more complex, the different administrative requirements impose additional reporting burdens on recipient countries, and coordination across funding entities is needed.

Although the CIFs may be wound up once the GCF is capitalized, the number of climate change funds could increase over time. Additional thematic or regional funds could be established in response to donor preferences. The Standing Committee on Finance’s biennial assessment of climate finance and annual forum of bodies and entities dealing with finance provide possible mechanisms for coordination if needed.

### 5.4 Aligning Climate Finance and Development Finance

The argument for aligning climate finance and development finance is that it results in a more efficient use of financial and human resources than if climate change and development projects are designed and implemented separately. This objective should be pursued—all projects should, to the extent possible, contribute both to development and to climate change mitigation and/or adaptation.

The question is how best to fund projects so that they contribute to both goals. Climate and development have and will continue to have separate funding entities. Alignment then requires that development projects access climate funding and that climate projects access development funding.
That implies two different roles for ADB: seeking climate finance where appropriate to increase the climate change benefits of its development projects and enhancing the development benefits of climate projects for which it serves as an implementing entity.

5.4.1 Seeking Climate Finance for ADB Development Projects

ADB’s mandate is to alleviate poverty in its developing member countries. Climate change does not change that mandate. But the overlap and interaction of development and climate change suggests that ADB attempt to enhance the climate benefits of its development projects.

ADB already has experience with mobilizing finance to enhance the climate benefits of its development projects. ADB has used its CCF and CEFPF funds to cover the climate costs of development projects. The CCF is funded from the bank’s own resources while the CEFPF is funded by donors. The process for accessing these funds is simple and does not delay or complicate the projects. ADB has deployed these funds quite quickly.

In contrast, seeking funds from climate finance entities requires more extensive documentation and additional approvals that can delay the project schedule. Climate finance entities also may have preconditions, such as an approved climate change strategy, or country allocations that limit access for ADB development projects. As well the internal incentives to seek funds from such sources are missing.98

This strategy therefore is best implemented using climate change funds managed by ADB. Options for raising the necessary funds include:

- Seeking trust fund contributions from bilateral donors. Recent trust fund contributions include the Urban Climate Change Resilience Trust Fund, the Canadian Climate Change Fund for the Private Sector in Asia and the Climate Public–Private Partnership Fund. Bilateral donors could be requested to provide additional funds on the grounds that they are deployed cost-effectively since they cover only the incremental climate change costs and that they are deployed in countries where the donor does not have a presence. However, ADB will be competing with other climate finance entities, including the GCF, for contributions from these donors.

- Adopting a policy that allocates a share, say 10%, of ADB’s funding to enhance the climate benefits of its development projects. This could be a more systematic approach to replenishing the Bank’s Climate Change Fund. Or it could be implemented on a project basis; up to 10% extra for climate benefits for each development project.

- Merging ADB’s ordinary capital resources and the Asian Development Fund (ADF) to increase the resources the Bank can deploy. Some of these additional resources can be dedicated to enhancing the climate change benefits of development projects through replenishment of the Bank’s Climate Change Fund. The CCF is a well-established mechanism for funding additional climate change benefits for Bank projects.

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98 ADB 2014b.
• Seeking an increase in the Bank’s paid-in capital on the condition that part of the increase is used for climate change purposes. ADB could leverage the additional capital and have more resources for development and to address climate change in its projects. The additional climate change resources could be used to replenish the Bank’s Climate Change Fund. Since this would require the approval of all shareholders, it is likely to be the most difficult option to implement.

5.4.2 ADB as an Implementing Entity for Climate Projects

ADB also could serve as an implementing entity for climate projects for various climate finance entities. ADB has experience in this role for mitigation and adaptation projects from the Climate Investment Funds (CIFs) and the Least Developed Country Fund (LDCF) and the Special Climate Change Fund (SCCF) managed by the Global Environment Facility (GEF). The largest funder has been the CIFs.

As an implementing entity ADB will face several challenges. First, ADB’s largest source of implementing entity funding, the CIFs, are likely to be wound up once the GCF has been capitalized. Second, when seeking implementation funding from the GCF, ADB will be competing with other international and national entities. The GCF also could adopt a standard agreement similar to that of the Adaptation Fund that has raised fiduciary concerns sufficient to deter ADB from acting as an implementing entity for that Fund.

However, ADB also has several strengths it could use to increase the scale of its implementing entity activity, including:

• Limited competition in many of the countries in Asia and the Pacific where ADB operates. Most of the smaller countries are unlikely to seek accreditation for a national implementing entity to access funds directly from the GCF. Few international entities have a local presence comparable to that of ADB in many countries in the Asia and Pacific region.

• Ability to implement large projects. The GCF will be expected to implement projects at a scale equal to, or greater than, that of the CIFs. Only the MDBs, including ADB, have the proven capacity to implement climate projects on such a scale. The GCF’s need to use ADB and other MDBs as implementing entities increases the likelihood that a mutually acceptable standard agreement can be negotiated.

• Offering to ensure that climate projects for which it is an implementing entity also yield development benefits where possible. ADB could use its knowledge of the country’s development plans and priorities to assess whether they are affected by the proposed climate project. A renewable energy project might, for example, have implications for the electricity grid. ADB could provide finance for those development benefits if needed.

5.5 Recommendations

Consistent with its mandate to alleviate poverty in its developing member countries, it is recommended that ADB continue to align development finance and climate finance in the implementation of its development projects and when implementing climate projects on behalf of

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99 ADB 2014b.
climate finance entities. Alignment implies two different roles for ADB: seeking climate finance for its development projects and serving as an implementing entity for climate projects in countries in Asia and the Pacific and enhancing their development benefits.

Enhancing the climate change benefits of ADB development projects is best implemented using climate change funds from bilateral donors or from ADB’s own resources. Bilateral donors could be requested to provide additional funds for climate change purposes. ADB could continue to allocate a share of its resources to enhancing the climate benefits through its Climate Change Fund or other mechanisms. To increase its own resources, ADB could merge its ordinary capital resources and the Asian Development Fund and/or request its shareholders to increase the paid-in capital on the condition that part of the increase is used for climate change purposes.

The shifting institutional structure for climate finance creates challenges for ADB as an implementing entity. However, there will be relatively few competitors in many of the smaller countries in Asia and the Pacific where ADB operates. ADB also has the proven capacity to implement climate projects on a large scale. ADB could further differentiate itself by offering to ensure that climate projects also yield development benefits and to provide finance for those development benefits if needed.

The effectiveness of this strategy is likely to be enhanced if ADB adopts complementary policies that aim to ensure all of its projects contribute, to the extent possible, to both development and climate change adaptation and/or mitigation.
SECTION 5 HIGHLIGHTS AND RECOMMENDATIONS

The sustainable development goals (SDGs) are still being negotiated. More resources will be needed, but how they will be mobilized is not known. A new climate change agreement is being negotiated with a target for adoption in December 2015 and entry into force by 2020. Climate finance is currently in transition with the capitalization of the Green Climate Fund, possible winding-up of the CIFs, the new biennial process agreed by the COP in 2013 and a developed country commitment to mobilize $100 billion by 2020. A new agreement it is likely to change climate finance further post 2020.

Development projects may contribute to mitigation and/or adaptation. Mitigation and adaptation projects likewise may have development benefits. Conceptually projects can be difficulty to categorize. In practice a project funded by a climate finance institution and/or identified by a national climate change plan and/or requiring the approval of a national climate change coordinating body is a climate project.

All projects should, to the extent possible, contribute both to development and to climate change mitigation and/or adaptation. The question is how best to fund projects so that they contribute to both goals. Alignment requires that development projects access climate funding and that climate projects access development funding.

RECOMMENDATIONS

Alignment implies two different roles for the Asian Development Bank (ADB): seeking climate finance for its development projects and serving as an implementing entity for climate projects in countries in Asia and the Pacific and enhancing their development benefits.

The first role is best implemented using climate change funds from bilateral donors or from ADB’s own resources. Bilateral donors could be requested to provide additional funds for climate change purposes. ADB could continue to allocate a share of its resources to enhancing the climate benefits through its Climate Change Fund or other mechanisms. To increase its own resources, ADB could merge its ordinary capital resources and the Asian Development Fund and/or request its shareholders to increase the paid-in capital on the condition that part of the increase is used for climate change purposes.

The shifting institutional structure for climate finance creates challenges for ADB as an implementing entity. However, there will be relatively few competitors in many of the smaller countries in the Asia and Pacific region where ADB operates. ADB also has the proven capacity to implement climate projects on a large scale. ADB could further differentiate itself by offering to ensure that climate projects also yield development benefits and to provide finance for those development benefits if needed.

The effectiveness of this strategy is likely to be enhanced if ADB adopts complementary policies that aim to ensure all of its projects contribute, to the extent possible, to both development and climate change adaptation and/or mitigation.
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Aligning Climate Finance and Development Finance for Asia and the Pacific: Potential and Prospects

Aid projects should contribute both to poverty alleviation and to addressing climate change. Since funding sources differ, development projects need to access climate funding and climate projects need to access development funding.

About the Asian Development Bank

ADB’s vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people. Despite the region’s many successes, it remains home to approximately two-thirds of the world’s poor: 1.6 billion people who live on less than $2 a day, with 733 million struggling on less than $1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.