International Climate Change Financing: The Climate Investment Funds (CIF)

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Summary

The United States contributes funding to various international financial institutions to assist developing countries to address global climate change and other environmental concerns. Congress is responsible for several activities in this regard, including (1) authorizing periodic appropriations for U.S. financial contributions to the institutions, and (2) overseeing U.S. involvement in the programs. Issues of congressional interest include the overall development assistance strategy of the United States, U.S. leadership in global environmental and economic affairs, and U.S. commercial interests in trade and investment. This report provides an overview of two of the larger and more recently instituted international financial institutions for the environment—the Climate Investment Funds (CIF)—and analyzes their structure, funding, and objectives in light of the many challenges within the contemporary landscape of global environmental finance.

The CIF are investment programs administered by the World Bank Group that aim to help finance developing countries' transitions toward low-carbon and climate-resilient development. Formally approved by the World Bank's Board of Directors on July 1, 2008, the CIF are composed of two trust funds—the Clean Technology Fund (CTF) and the Strategic Climate Fund (SCF)—each with a specific scope, objective, and governance structure. The CTF provides financing for demonstrating, deploying, and diffusing low-carbon technologies that have the potential for long-term avoidance of greenhouse gas emissions. The SCF—a suite of three separate funds, including the Pilot Program for Climate Resilience (PPCR), the Forest Investment Program (FIP), and the Scaling Up Renewable Energy Program in Low Income Countries (SREP)—supports the least developed countries in their efforts to achieve low-carbon, climate-resilient development. Overall, donor countries have pledged $6.5 billion to the funds since September 2008 in support of programs in 45 developing countries. The U.S. pledge totals $2 billion. For FY2010, Congress approved $375 million for the CIF (the Consolidated Appropriations Act, 2010, H.R. 3288; P.L. 111-117); for FY2011, Congress approved $234.5 million (the Department of Defense and Full-Year Continuing Appropriations Act, 2011, H.R. 1473; P.L. 112-10); and for FY2012, Congress approved $234.5 million (the Consolidated Appropriations Act, 2012, H.R. 2055; P.L. 112-74). For FY2013, the Administration has requested $235 million for the fund.

The CIF are just one set of financial mechanisms in a larger network of international programs designed to address the global environment. Accordingly, their effectiveness depends on how the trust funds address programmatic issues, build upon national investment plans, react to recent developments in the financial landscape, and respond to emerging opportunities. Proponents of the CIF point to several factors in support of the funds, including an innovative programmatic design, a country-led investment process, and a balanced governance structure with enhanced stakeholder engagement. Proponents of the multilateral development banks' (MDBs') role in environmental assistance emphasize several advantages to financing climate programs through the World Bank Group, including its commitment to private sector development, its capacity to leverage large cofinancing arrangements, and its possession of fiduciary standards and institutional expertise. However, critics highlight several factors of concern with the CIF and their Trustee, including a lack of transparency, coordination, and "polluter pay" responsibilities; a potential for new conditionalities, additionalities, and increased debt burdens on developing countries; and a prior economic development policy at the World Bank that is considered a conflict of interest for environmental protection.

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Introduction

Many governments acknowledge that environmental degradation and climate change pose international and trans-boundary risks to human populations, economies, and ecosystems that could result in a worsening of poverty, social tensions, and political stability. To confront these global challenges, countries have negotiated various international agreements to protect the environment, reduce pollution, conserve natural resources, and promote sustainable growth. While some observers call upon developed countries to take the lead in addressing these issues, efforts are unlikely to be sufficient without similar measures being implemented in developing countries. Developing countries, however, focused on poverty reduction and economic growth, do not have the financial resources, technological know-how, and institutional capacity to deploy such measures. Therefore, increased international support in these areas has remained the principal method for governments to assist developing country action on global environmental problems.[1]

The United States and other industrialized countries have committed to financial assistance for environmental initiatives through several multilateral agreements (e.g., the Montreal Protocol (1987), the United Nations Framework Convention on Climate Change (1992), United Nations Convention to Combat Desertification (1994), and the Copenhagen Accord (2009)). International financial assistance takes many forms, from fiscal transfers to market transactions, and includes foreign direct investment (FDI), bilateral overseas development assistance (ODA), and contributions to multilateral development banks (MDB)[2] and other international financial institutions (IFI), as well as the offering of export credits, loan guarantees, insurance products, etc.

Table 1 outlines recent U.S. financial support for multilateral environmental initiatives.[3] Congress is responsible for several activities in this regard, including (1) authorizing periodic appropriations for U.S. financial contributions to the institutions, and (2) overseeing U.S. involvement in the programs. Issues of congressional interest include the overall development assistance strategy of the United States, U.S. leadership in global environmental and economic affairs, and U.S. commercial interests in trade and investment.[4] As Congress considers potential authorizations and/or appropriations for initiatives administered through the Department of State, the Department of the Treasury, and other agencies with international programs, it may have

[1] For a more detailed discussion on various sources and mechanisms of financial assistance for climate change activities, see CRS Report R41808, *International Climate Change Financing: Needs, Sources, and Delivery Methods*, by Richard K. Lattanzio and Jane A. Leggett.

[2] The group of multilateral development banks referred to in this report includes the International Bank for Reconstruction and Development (IBRD or World Bank), African Development Bank (AfDB), Asian Development Bank (ADB), European Bank for Reconstruction and Development (EBRD), Inter-American Development Bank Group (IDB), and the International Finance Corporation (IFC, the private sector wing of the IBRD).

[3] Some commentators believe the new and increased funding for environmental issues is the result of several factors, including (1) an increased political understanding by some policymakers of climate change, (2) the transformed role of multilateral development banks in global energy and environmental issues, (3) an expressed desire to achieve more immediate environmental and economic impacts through bilateral and private sector resources, and (4) a perceived lack of efficiency in current financial mechanisms. See Gareth Porter, Neil Bird, Nanki Kaur, and Leo Peskett, "New Finance for Climate Change and the Environment," WWF and the Heinrich Böll Foundation, 2008.

[4] For more substantive analysis of foreign aid and congressional roles, see CRS Report R40213, *Foreign Aid: An Introduction to U.S. Programs and Policy*, by Curt Tarnoff and Marian Leonardo Lawson; and CRS Report R41170, *Multilateral Development Banks: Overview and Issues for Congress*, by Rebecca M. Nelson.

questions concerning the direction, efficiency, and effectiveness of current bilateral and multilateral programs. This report provides an overview of two of the larger and more recently instituted multilateral mechanisms—the Climate Investment Funds (CIF)—and analyzes their structure, funding, and objectives in light of the many challenges within the contemporary landscape of global environmental finance.

Table 1. Recent U.S. Budget Authority for Multilateral Environmental Programs

In Nominal US$ Millions

Agency/Program	2010 Actual	2011 Enacted	2012 Enacted	2013 Request
Department of State				
Least Developed Country Fund	30.0	25.0	TBD[a]	TBD
Special Climate Change Fund	20.0	10.0	TBD	TBD
World Bank Forest Carbon Partnership	10.0	TBD	TBD	TBD
Department of the Treasury				
Tropical Forests Conservation Act	26.0	16.4	12.0	0.0
Global Environment Facility	86.5	89.8	89.8	129.4
Climate Investment Fund: Clean Technology Fund	300.0	184.6	184.6	185.0
Climate Investment Fund: Strategic Climate Fund—Pilot Program for Climate Resilience	55.0	10.0	12.5	12.5
Climate Investment Fund: Strategic Climate Fund—Forest Investment Program	20.0	30.0	25.0	25.0
Climate Investment Fund: Strategic Climate Fund—Scaling-Up Renewable Energy	0	10.0	12.5	12.5

Source: Office of Management and Budget, *Federal Climate Change Expenditures Report to Congress*, 2010; Office of Management and Budget, *The Budget of the United States Government*, 2011, 2012, and 2013.

a. TBD, "to be determined": Appropriated funds for these specific programs/activities are drawn from larger line item categories in agency budget authorities, occasionally with "shall"-language implementing spending ceilings. Based on provisions in the appropriations bills, allocations for these programs are left at the discretion of the agency and have yet to be determined or reported.

The Climate Investment Funds

Background

Projected climate change is considered a potential threat to economic development, with anticipated effects on the environment, human health, food security, and economic activity. Further, climate change disproportionately affects the urban and rural poor of developing countries, thus making it a central concern to those interested in poverty reduction and sustainable development.[5] Under this context, and at the request of the G8/G20, the multilateral development banks (MDBs) have recently sought to expand their support to low-carbon and climate-resilient investments in several ways, including (1) creating new and additional environmental funding resources, (2) repackaging their "core" financial products with specialized climate provisions, and (3) leveraging their suite of financial instruments for greater private sector environmental investment.[6]

In keeping with these aims, in February 2008, Japan, the United Kingdom, and the United States announced their intention to create a set of funds at the World Bank to help developing countries "bridge the gap between dirty and clean energy" and "boost the World Bank's ability to help developing countries tackle climate change."[7] The World Bank held the first design meeting for the proposed Climate Investment Funds (CIF) in March 2008 in Paris, France. Two subsequent meetings were held in Washington, DC, and Potsdam, Germany, and on May 23, 2008, representatives from 40 developing and industrialized countries reached agreement on the funds' design and duration (the CIF are programmed to sunset upon the commencement of a new climate fund in the UNFCCC). Formally approved by the World Bank's Board of Directors on July 1, 2008, the CIF have become an attempt to bridge the gap in climate financing between present obligations and a post-2012 global climate change agreement.[8]

The CIF are composed of two separate trust funds—the Clean Technology Fund (CTF) and the Strategic Climate Fund (SCF)—each with a specific scope, objective, and governance structure. Overall, donor countries have pledged $6.5 billion to the funds since September 2008 in support of programs in 45 developing countries.[9] The U.S. pledge totals $2 billion. For FY2010, Congress approved $375 million for the CIF (the Consolidated Appropriations Act, 2010, H.R. 3288; P.L. 111-117); for FY2011, Congress approved $234.5 million (the Department of Defense and Full-Year Continuing Appropriations Act, 2011, H.R. 1473; P.L. 112-10); and for FY2012, Congress approved $234.5 million (the Consolidated Appropriations Act, 2012, H.R. 2055; P.L. 112-74). For FY2013, the Administration has requested $235 million for the fund. See **Table 1**.

[5] As summarized by the International Institute for Sustainable Development, at http://www.iisd.ca/download/pdf/sd/ymbvol172num2e.pdf.

[6] See the World Bank website for additional information at http://siteresources.worldbank.org/NEWS/Resources/Climate_Change_Results_Brief_4-12-10.pdf.

[7] Henry Paulson, Alistair Darling, and Fukushiro Nukaga, "Financial bridge from dirty to clean," *Financial Times*, February 7, 2008.

[8] For a full description of purpose and programs, see CIF's website at http://www.climateinvestmentfunds.org/cif/.

[9] Exchange rates as of September 30, 2010, the last recorded Trustee Report for the CIF, at http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CTF%204%20Trustee%20Report%20nov2010.pdf.

All U.S. funding is subject to annual congressional approval. Authorizing legislation is managed by the House Financial Services Committee and Senate Foreign Relations Committee. The House and Senate Appropriations Subcommittees on State, Foreign Operations, and Related Programs have jurisdiction over appropriations.

The Clean Technology Fund (CTF)

Overview

Faced with energy and environmental challenges, among others, many developing countries see value in clean technology to meet their energy security, poverty alleviation, and sustainable development goals while also reducing their growth in emissions. However, the costs to developing countries of switching to cleaner technologies without financial assistance may be prohibitive. The CTF seeks to provide financing—principally to larger emerging economies and to regional groups—for demonstrating, deploying, and diffusing low-carbon technologies with the potential for long-term avoidance of greenhouse gas emissions. The fund promotes renewable energy and energy efficient technologies in the power sector as well as energy efficiency strategies in the transportation, building, industry, and agricultural sectors. Currently, the CTF is designed to support 15-20 country and regional investment plans and/or cofinanced projects. As of September 2011, the CTF has endorsed 14 programs, including plans from Colombia, Egypt, Indonesia, Kazakhstan, Mexico, Morocco, Philippines, South Africa, Thailand, Turkey, Ukraine, and Vietnam, and one regional investment plan in the Middle East and North Africa (MENA) covering Algeria, Egypt, Jordan, Morocco, and Tunisia. An endorsed investment plan for Nigeria is contingent upon the availability of funds. Plans for Chile and India have been proposed. Projects include support for wind energy, urban public transportation systems, solar water heaters, smart-grid development, and concentrating solar thermal power programs, among others (see **Table 3** for more detailed descriptions of the national investment plans).[10]

Governance

The CTF is implemented by the World Bank Group and governed by representatives from the donor and recipient countries. The role of governance for the CTF is to approve investment plans, programming, and the allocation of financial resources; and to provide guidance, performance evaluation, and reporting. It is further tasked with ensuring that the strategic orientation of the CTF is guided by the principles of the United Nations Framework Convention on Climate Change (UNFCCC). The organizational structure of the CTF is equally balanced between donor and developing countries. All decisions are made by consensus. Other international organizations, the private sector, and civil society representatives are included as observers. All observer roles are "active," allowing them to take the floor to make interventions, propose agenda items, and recommend experts. Observers do not vote during consensus decisions. The governance structure includes:

[10] Description of CTF overview and governance from CIF, Annual Report 2009, on the CIF website at http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/cif_annual_report_final_021810.pdf; furthermore, for a more detailed background into the issues surrounding the implementation of the CTF, see CRS Report RS22989, *The World Bank's Clean Technology Fund (CTF)*, by Martin A. Weiss.

- The CTF Trust Fund Committee, which oversees and decides on the operations and activities of the CTF and includes (1) eight representatives from contributor countries; (2) eight representatives from eligible recipient countries; (3) a representative from the project recipient country (during deliberations on the investment plan, program, or project); (4) a representative of the World Bank; and (5) a representative for the other MDBs.
- The MDBs Committee, which facilitates collaboration, coordination, and the exchange of information, knowledge, and experience among MDBs partners.
- The Partnership Forum, which supports civil society engagement and includes representatives of donor and eligible recipient countries, MDBs, U.N. and U.N. agencies, Global Environment Facility (GEF), UNFCCC, Adaptation Fund, bilateral development agencies, NGOs, indigenous peoples, private sector entities, and technical experts.
- The Administrative Unit, which supports the work of the CIF, is housed in the World Bank Group's Washington, DC, offices.
- A Trustee (the World Bank), which holds in trust, as the legal owner and administrator, the funds, assets, and receipts that constitute the Trust Fund, pursuant to the terms entered into with the contributors.

Funding

Since September 2008, 14 donor countries have pledged over US$6.5 billion to finance the two CIF trust funds. The total amount pledged by the eight contributing countries to the CTF was US$4.543 billion as of September 30, 2011 (see **Table 2** for pledges and **Table 1** for U.S. Budget Authority). The funds are to be disbursed as grants, concessional loans, loan guarantees, and other risk management instruments.

Table 2. Total Pledges to the Clean Technology Fund

(In millions US$, historical value, as pledged and contributed since September 2008)

Donor	Contribution Type[a]	Amount Pledged	Amount Contributed[b]
Australia	Grant	$84	$84
France	Loan	$300	$300
Germany	Loan	$739	$739
Japan	Grant	$1,000	$664
Spain	Capital	$118	$75
Sweden	Grant	$92	$75
United Kingdom	Capital	$716	$716
United States[c]	Grant	$1,492	$485
Total		**$4,543**	**$3,138**

Source: The CIF website at http://www.climateinvestmentfunds.org/.

a. Donor contribution types include grants, loans, and equity, and describe in broad terms the general requirements stipulated by the donors on their contributed funds. The U.S. government has historically contributed grant financing for reasons that include ease, ODA accounting practices, and flexible capital reflow provisions.

b. As of September 30, 2011.

c. The total U.S. pledge to the CIF remains at $2 billion. Contributions across funds are extrapolated from current allocations.

Program Areas

The CTF is based on country and regional investment plans that aim to support climate-friendly technologies. Investment plans are undertaken jointly by the recipients, the MDBs, other development partners, private industry, and civil society to build upon existing national strategies and demonstrate how the CTF can be complementary to the country's overall developmental activities. The CTF supports investment plans that are cost-effective and implementation-ready, can be scaled up quickly to impact development, and have the potential for significant greenhouse gas emission reductions. To receive CTF funding, a country must be eligible for official development assistance (ODA) and have an active MDB program.

The majority of CTF funding supports programs that help shape demand side markets for technology diffusion. The fund's criteria for lending allow for all renewable and energy efficiency initiatives, as well as large-scale hydroelectric power plants, natural gas plants, some forms of biofuels, power plant refits, and ultra-supercritical coal plants.[11] Funds are commonly targeted to support a variety of investment activities, including (1) direct purchase of technological goods and services; (2) direct investment into government infrastructure for transport or transmission modernization; (3) seed funds for financial intermediaries to incentivize clean technology lending; and (4) investment support and risk mitigation strategies for private sector entry into the market. In short, the CTF attempts to address the additional costs contained in lower-carbon

[11] No coal-fired power plants have been proposed or approved at this time. Hydroelectric power generation is currently included in the Ukraine proposal.

energy investment such that it becomes a viable option to conventional fossil-fuel power generation. **Table 3** outlines the endorsed Investment plans as of September 30, 2011.

Table 3. Clean Technology Fund Investment Plans

(In millions US$)

Date[a]	Country	Direct CTF Funding / Cofinancing[b]	Investment Plan
January 2009	Egypt	$300 / $1,600	Wind power; Urban transport (natural gas buses and a subway); Transmission upgrades.
January 2009	Mexico	$500 / $6,000	Energy efficiency (appliance & lighting); Urban transport (rapid bus); Wind power.
January 2009	Turkey	$250 / $1,900	Renewable energy and energy efficiency; Smartgrid technology.
October 2009	Morocco	$150 / $1,500-$1,800	Energy sector privatization; Energy conservation; Urban transport.
October 2009	South Africa	$500 / $1,900	Concentrated solar power; Wind power; Solar water heaters; Energy efficiency.
October 2009	M.E.N.A.[c]	$750 / $4,900	Concentrated solar power; Transmission and distribution infrastructure.
December 2009	Thailand	$300 / $4,000	Renewable energy and energy efficiency; Urban transport (bus system).
December 2009	Philippines	$250 / $2,500	Solar power; Transmission infrastructure; Demand side management; Sustainable transport strategy.
December 2009	Vietnam	$250 / $3,200	Renewable energy and industrial energy efficiency; Urban transport (rail system); Initial capitalization of funds; Transmission infrastructure.
March 2010	Colombia	$150 / $3,000	Sustainable transport program; Public/private sector energy efficiency program.
March 2010	Indonesia	$400 / $2,700	Large-scale geothermal power; Biomass and other renewable energy.
March 2010	Kazakhstan	$200 / $535	Hydro and wind power; Public sector transport fuel switch; District heating; Energy efficiency.
March 2010	Ukraine	$350 / $2,300	Wind, hydro, biomass; Residential and government energy efficiency; District heating; Smartgrid technology.
November 2010	Nigeria	$250 / $1,300	Transport sector structure; Clean and renewable energy development; Energy efficiency; Financial sector reform.

Source: CTF committee meeting documents and national Investment plans, available at the CTF website.

a. Date of official CTF endorsement of the investment plan.

b. Endorsed funding by the CTF / leveraged cofinancing from additional sources; in millions US$. It is estimated that 30% of the cofinancing comes from the private sector; the remainder comes from other multilateral financial institutions, the recipient governments, state-owned enterprises, and carbon finance.

c. The Middle East North Africa region, including Algeria, Egypt, Jordan, Morocco, and Tunisia.

The Strategic Climate Fund (SCF)

Overview

Some governments and civil society organizations are concerned that climate change may exacerbate poverty situations and reverse economic gains in the developing world through the possibility of temperature increases, rising sea levels, droughts, changes in rainfall patterns, heightened disease patterns, and the lack of drinkable water. They believe that resources may be necessary to help low-income countries manage a response. Responses to climate change are likely to entail both mitigation efforts (i.e., slowing, then reducing greenhouse gas emissions) and adaptation efforts (i.e., managing the effects of short- and long-term climate outcomes). The SCF aims to help developing countries prepare for climate change by promoting low-carbon, climate-resilient development. Three targeted programs provide grants and concessional loans to pilot new approaches aimed at specific challenges:[12]

- The Pilot Program for Climate Resilience (PPCR) supports ways to integrate climate risk and resilience into the development strategies of low-income countries. Funds can be used to provide technical assistance to help with capacity building, policy reform, and sector investment.
- The Forest Investment Program (FIP) provides financing to countries to help them prepare for and participate in programs that aim to reduce deforestation. Funds can be used for managing forests and for educating indigenous and local communities about forest policies.
- The Scaling Up Renewable Energy Program in Low Income Countries (SREP) helps low-income countries adopt renewable energy solutions to aid in the development of their power generation sector. Funds can be used to provide policy support, technical assistance, financial management, and sector investment.

Governance

The SCF is implemented by the World Bank Group and governed by representatives from the donor and recipient countries. The governance and decision-making structure is similar to the CTF, but specifically includes:

- The SCF Trust Fund Committee, which oversees and decides on the operations and activities of SCF and includes (1) eight representatives from contributor countries; (2) eight representatives from eligible recipient countries; (3) a representative of the World Bank; and (4) a representative for the other MDBs.
- An SCF subcommittee for each of the targeted programs, which includes up to six representatives from contributor countries to the SCF Program, a matching number of representatives from eligible recipient countries, and such other representatives designated by the SCF Trust Fund.

[12] Description of SCF overview and governance from CIF, Annual Report 2009, on the CIF website at http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/cif_annual_report_final_021810.pdf.

- The MDBs Committee, which facilitates collaboration, coordination, and the exchange of information, knowledge, and experience among the MDBs partners.
- The Partnership Forum, which supports civil society engagement and includes representatives of donor and eligible recipient countries, MDBs, U.N. and U.N. agencies, GEF, UNFCCC, Adaptation Fund, bilateral development agencies, NGOs, indigenous peoples, private sector entities, and technical experts.
- The Administrative Unit, which supports the work of the CIF, is housed in the World Bank Group's Washington, DC, offices.
- A Trustee (the World Bank), which holds in trust, as the legal owner and administrator, the funds, assets, and receipts that constitute the Trust Fund, pursuant to the terms entered into with the contributors.

Funding

Since September 2008, 14 donor countries have pledged over US$6.5 billion to finance the two CIF trust funds. The total amount pledged by 12 countries to the SCF was US$2.041 billion as of September 30, 2011 (see **Table 4** for pledges and **Table 1** for U.S. Budget Authority). The funds are to be disbursed as grants, concessional loans, loan guarantees, and other risk management instruments.

Table 4. Total Pledges to the Strategic Climate Fund

(In millions US$, historical value, as pledged and contributed since September 2008)

Donor	Contribution Type[a]	Amount Pledged	Amount Contributed[b]
Australia	Grant	$72	$64
Canada	Grant	$97	$97
Denmark	Grant	$38	$38
Germany	Grant	$74	$45
Japan	Grant	$200	$124
Korea	Grant	$3	$3
Netherlands	Grant	$76	$76
Norway	Grant	$221	$73
Spain	Grant/Capital	$34	$34
Switzerland	Grant	$20	$20
United Kingdom	Capital	$698	$698
United States[c]	Grant	$508	$125
Total		**$2,041**	**$1,397**

Source: The CIF website at http://www.climateinvestmentfunds.org/.

a. Donor contribution types include grants, loans, and equity, and describe in broad terms the general requirements stipulated by the donors on their contributed funds. The U.S. government has historically contributed grant financing for reasons that include ease, ODA accounting practices, and flexible capital reflow provisions.

b. As of September 30, 2011.

c. The total U.S. pledge to the CIF remains at $2 billion. Contributions across funds are extrapolated from current allocations.

Program Areas

The programming of the SCF is less advanced than that of the CTF. Each of the three funds remains in early implementation stages with its trust fund committee, having launched no earlier than January 2009. As of the November 2011 meeting of the Joint CTF and SCF Trust Fund Committees, the status of each fund was reported as follows:[13]

- **The Pilot Program for Climate Resilience.** The PPCR became operational in January 2009; $972 million of the SCF pledge has been targeted to the PPCR. The program provides funding to the countries in two phases: (1) a technical assistance phase, which includes looking at how countries' development plans can be made more climate-resilient and deciding upon the types of investments countries could make; and (2) an implementation phase, which includes the dispersal of grants of up to $1.5 million with the option of additional loans to

[13] See SCP Committee document, "SCF/TFC.6/3, Progress Report on targeted programs under the SCF," at http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/SCF%203%20Progress%20Report%20on%20targeted%20programs%20nov2010.pdf.

implement programs. Zambia was the first country to begin preparations for phase one. Zambia's process was expected to raise discussion in the PPCR subcommittee regarding deliverables to guide other countries. Cambodia, Tajikistan, and Mozambique followed in November 2009 in presenting proposals for development. As of September 30, 2011, the PPCR subcommittee has endorsed two regional groupings—the Pacific and the Caribbean—and seven countries, including Bangladesh, Cambodia, Mozambique, Nepal, Niger, Tajikistan, and Zambia, for a total amount of proposed PPCR funding of $689 million.

- **The Forest Investment Program.** With a February 2010 pledge of $60 million from Japan, the FIP was operational with a total of $624 million targeted to the program. The FIP subcommittee then selected five pilot countries and three backup countries; finalized and approved operational guidelines, financing, and investment criteria; and designed a grant mechanism to support the participation of indigenous peoples and local communities. In March 2010, the FIP subcommittee approved pilot programs in Indonesia, Ghana, Laos, Peru, and Burkina Faso; with Brazil, Democratic Republic of Congo, and Mexico approved subsequently in June 2010. All eight pilot country governments have confirmed in writing their interest in being supported under the FIP. Work has been initiated in each. The Multilateral Development Banks (MDBs) have reached out informally to the government representatives in the pilot countries and are in the process of planning jointly with the governments in partnership with country stakeholder groups and other interested partner institutions. The first meeting of pilot countries for the FIP took place in November 2010. The objective of the meeting was to build a community of practice among the FIP pilot countries to exchange experiences, to document good practices from the design process of Investment Strategy, and to reach a shared understanding provided by the FIP. As of September 30, 2011, the FIP subcommittee has endorsed two investment plans, in Burkina Faso and the Republic of Congo, for a total amount of proposed FIP funding of $90 million.
- **The Scaling Up Renewable Energy Program in Low Income Countries.** The SREP become operational in December 2009, surpassing its target of $250 million with a pledge of $50 million from the United States at the Copenhagen Conference of Parties to the UNFCCC. With a February 2010 pledge of $40 million from Japan, and a June 2010 pledge of $12 million from Denmark, the fund now has a total of $361 million. The SREP subcommittee held meetings in early February 2010 to set criteria for selecting an advisory group as well as pilot countries. In June, Ethiopia, Honduras, Kenya, Maldives, Mali, and Nepal were selected. All six pilot country governments have confirmed in writing their interest in being supported under the SREP. The committee aimed to approve programming procedures, financing, and a measurement framework over the course of 2010. The first scoping and joint missions were organized in early 2011, and the MDBs have reached out informally to the government representatives in the pilot countries to begin preliminary discussions on SREP activities. As of September 30, 2011, the SREP subcommittee has endorsed one investment plan, in Kenya, for a total amount of proposed SREP funding of $50 million.

Current Issues

Each year, billions of dollars in environmental aid flow from developed country governments—including the United States—to developing ones.[14] While the efficiency and the effectiveness of these programs are of concern to donor country governments, a full analysis of the purposes, intents, results, and consequences behind these financial flows has yet to be conducted.[15] International relations, comparative politics, and developmental economics can often collide with global environmental agendas. Critics contend that the existing system has had limited impact in addressing major environmental concerns—specifically climate change and tropical deforestation—and has been unsuccessful in delivering global transformational change. A desire to achieve more immediate impacts has led to a restructuring of the MDBs' role in environmental finance and the introduction of many new bilateral and multilateral funding initiatives. The CIF grew out of these concerns.

The effectiveness of the CIF depends on how the trust funds address their programmatic issues, build upon their national investment plans, react to recent developments in the financial landscape, and respond to emerging opportunities. The following section investigates some of the current challenges facing the CIF and summarizes some of the responses initiated by the funds.

Innovations by the CIF

Since their inception, the CIF have attempted to provide innovative approaches to global environmental issues and have introduced several processes to address the limitations of previous environmental finance.[16] These innovations include, but are not limited to, the following:

- **Programmatic Design.** While the CIF still aim to scale up existing practices and fund activities at the project level, they also were created to serve as laboratories for new financing schemes and vehicles for developing sustainable strategies. Funding strives to target the potential for large-scale transformation and to attain global environmental benefits. Stakeholders seek to share knowledge gained and inspire the use of best practice. As such, multinational or regional investment plans that support global development goals, energy security, industrial growth,

[14] The Organisation for Economic Co-operation and Development (OECD) maintains information on Member countries' Official Development Assistance. Current data (accessed April 15, 2011) reflect that all OECD DAC Member countries contributed, on average, a total of $2,283 million per annum over the period 2005-2009 to multi-sectoral environmental protection assistance (in 2010 US$), and that the United States contributed, on average, $285 million per annum over the same period to multi-sectoral environmental protection assistance (in 2010 US$). See OECD StatExtracts database at http://stats.oecd.org/Index.aspx?DataSetCode=ODA_DONOR#.

[15] This report does not aim to unpack the full range of discussions on environmental and developmental assistance. For a discussion on international development assistance in general, see CRS Report R40213, *Foreign Aid: An Introduction to U.S. Programs and Policy*, by Curt Tarnoff and Marian Leonardo Lawson. An overview and analysis of the history of environmental financing can be found in a number of source materials including recent book length studies by Inge Kaul and Pedro Conceição, *The New Public Finance: Responding to Global Challenges,* New York: Oxford University Press, 2006; and Robert L. Hicks, Bradley C. Parks, J. Timmons Roberts, and Michael J. Tierney, *Greening Aid?: Understanding the Environmental Impact of Development Assistance,* New York: Oxford University Press, 2008.

[16] For further discussion regarding the limitations of past mechanisms for global environmental finance, see the section on institutional challenges in CRS Report R41165, *International Environmental Financing: The Global Environment Facility (GEF)*, by Richard K. Lattanzio.

diversification, and regional integration (e.g., the M.E.N.A. plan) best exemplify the CIF's programmatic approach.

- **Country-led Process.** Beyond a simple project-by-project approach, the purpose of the CIF is to bolster the efforts of countries' official adaptation plans and their actions toward low-carbon, climate-resilient development. The country-led approach aims to integrate funding into the country-owned development strategies consistent with the Paris Declaration.[17]
- **Innovative Governance and Stakeholder Engagement.** In an effort to attain transparency and accountability, the governing structure of the CIF is equally balanced between donor and developing countries. All decisions are taken by consensus, with no provision for voting. If a consensus is not possible, the proposal is postponed or withdrawn. Representatives from other international organizations, the private sector, and civil society are included as observers. All observer roles are "active," allowing them to take the floor to make interventions, propose agenda items, and recommend experts.

Issues in Support of the Multilateral Development Banks (MDBs) and Multilateral Assistance

The choice of financial mechanism and its administration is an important element to environmental finance. The differences among multilateral or bilateral assistance, grant or lending institutions, regional or global organizations, etc., all play a role in the structure of assistance. The decision to employ the MDBs as trustees for the CIF has both advantages and disadvantages. Historically, the MDBs have provided financial assistance to developing countries, typically in the form of loans and grants, for investment projects and organizational capacity.[18] Donor country support for the MDBs—including U.S. support—has assisted efforts to promote institutions, strengthen financial systems, undertake large infrastructure and social welfare projects, and develop property rights and rules of law. Through increased global integration, the aim of the MDBs has been to bolster economic growth, poverty alleviation, and resource allocation (including greater access to electricity) in developing countries while simultaneously building new markets for developed countries' exports and jobs. In 2008, at the urging of some donor countries,[19] a strategy to address climate change was added to the MDBs' development agenda. The "Strategic Framework on Development and Climate Change"[20] analyzed the risks of climate change to economic development and served as a basis for integrating mitigation and adaptation planning into national development plans. Donor countries see several advantages to financing climate programs through the institutional structure of the MDBs. These advantages include, but are not limited to, the following:

[17] The 2005 Paris Declaration, endorsed by over 100 countries, aims to increase harmonization, alignment, and management of aid for results with a set of actions and indicators that can be monitored. See http://www.oecd.org/dataoecd/11/41/34428351.pdf.

[18] For a fuller discussion on the structure and the role of the MDB system, refer to CRS Report R41170, *Multilateral Development Banks: Overview and Issues for Congress*, by Rebecca M. Nelson.

[19] Including the United States. See the negotiations at the 2005 G8 Gleneagles Summit at http://www.g7.utoronto.ca/summit/2005gleneagles/.

[20] See http://siteresources.worldbank.org/EXTCC/Resources/407863-1219339233881/DCCSFTechnicalReport.pdf.

- **Commitment to Private Sector Development.** Many donor countries—including the United States—believe that climate-friendly economic growth can be led by the private sector through such efforts as improving access to financial markets, building the capacity of entrepreneurs, and providing training to civilian society. One aim of the MDBs is to help foster private sector development by leveraging donor funds into highly effective cofinancing arrangements. Historically, the U.S. Administration has supported these efforts. In a March 25, 2010, hearing before the House Appropriations Subcommittee on State, Foreign Operations, and Related Programs, the Treasury Department went on record as stating that the United States invests in the MDBs because "they help generate new engines of growth that benefit the U.S. economy and the global economy as a whole."
- **Economies of Scale, Coordination, and Cofinancing.** Proponents of the MDBs argue that multilateral assistance can solve problems of scale and efficiency by providing specialized expertise while lowering administration and coordination costs. Similarly, more competitive procurement rules, attractive cost-sharing opportunities, and the ability to leverage cofinancing from other public and private organizations allow the MDBs to play a catalytic role in mobilizing financial aid.[21] At the March 25, 2010, hearing noted above, the Treasury Department stated that the MDBs "provide strong, effective and highly leveraged means to advance global prosperity.... For every dollar the United States contributes to paid-in capital for the World Bank, six dollars of additional capital is generated by other donors. And, for every dollar we invest in the World Bank, $26 worth of aid is delivered."[22]
- **Responsiveness to Donors.** The Treasury Department has similarly stated that the United States invests in the MDBs because they "promot[e] core American interests and values." This arrangement is due primarily to the structure and organization of the banks. MDBs' governance is weighted on the basis of the cumulative financial contributions and commitments by the donor countries, and thus, while a single trust fund, like the CIF, may be designed to balance equally the roles of developed and developing countries, the MDBs are designed to give greater weight to the major donors. The United States retains the most influence on World Bank matters, with a 16.4% voting share and the ability to veto major policy decisions. It is followed by Japan in second place, Germany in fourth, and France and the United Kingdom tied for fifth. The only developing or emerging country with as much voting interest is China, at third, with 4.4%.[23] With a governing structure that requires one representative from the World Bank, as trustee, and one representative from the group of remaining MDBs, as well as eight representatives from participating donor countries, the overall governance structure of the CIF has remained responsive to donor interests.

[21] Sources of additional funds most often include other MDBs and multilateral financial institutions, the recipient governments, state-owned enterprises, and carbon finance, as well as the private sector.

[22] See testimony at http://appropriations.house.gov/images/stories/pdf/sfo/Secretary_Geithner.3.25.10.pdf.

[23] As reported by Reuters, at http://www.reuters.com/article/idUSTRE63O1RQ20100425, after the World Bank Development Committee spring meetings on April 25, 2010. See World Bank press release at http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:22556192~pagePK:34370~piPK:34424~theSitePK:4607,00.html.

- **Possession of Fiduciary Standards.** Both current and past Administrations have argued that the World Bank has the proper internal safeguards to oversee large amounts of financing. As reported by the Department of Treasury, "the World Bank is an attractive trustee [for environmental funds] precisely because of its strong fiduciary standards and its extensive capacity to uphold them."[24]
- **Possession of Institutional Expertise, Information, and Credibility Provisions.** Proponents of the MDBs claim that multilateral agencies offer larger and better trained staffs with greater technical expertise. They state that large infrastructure investment, particularly in innovative technologies and methods, requires professionals who are experienced in identifying and facilitating access to technology, sharing risks associated with commercialization, and improving institutional capacity. Beyond institutional knowledge, multilaterals also collect, interpret, and disseminate costly information on a global scale and provide credibility controls for both recipient and donor governments.

Issues of Concern for Developing Countries and Civil Society

While advantages exist to financing climate programs through the institutional structure of the MDBs, concerns also persist. A variety of recipient countries, nongovernmental organizations, and civil society groups[25] have highlighted a number of issues, including, but not limited to, the following:

- **Donor Centrism.** While efforts have been made to include developing countries in the governance of the CIF, some commentators still point to the fact that the initiative was led by Japan, the United States, and the United Kingdom, and that it existed outside international climate change regulatory frameworks and without the initial participation of developing countries and other stakeholders. Moreover, they claim that the design of the CIF remains premised on an aid framework that is based on a donor-donee relationship that runs contrary to the international climate change principles of developed country obligations and "common but differentiated responsibilities."[26]
- **Lack of Transparency.** While efforts have been made at transparency and accountability, some sessions of the CIF committee meetings remain closed to observers. Similarly, technology investment plans are not publicly disclosed due to claims about sensitive sovereign information and national priorities. Observers from GEF and UNFCCC are also excluded from investment plan discussions, making it difficult to ensure complementarity.[27]

[24] As reported in Climatewire, "Eskom fallout spurs new opposition to World Bank's role in climate funding," May 24, 2010.

[25] There are many published critiques on the environmental agenda of the MDBs. Of specific relevance for CIF, see, for example, Celine Tan, "No Additionality, New Conditionality: A Critique of the World Bank's Proposed Climate Investment Funds," TWN, 2008, at http://www.twnside.org.sg/bangkok.briefings.htm; Smita Nakhooda, "Catalyzing Low-carbon Development?" WRI, 2009, at http://pdf.wri.org/working_papers/development_clean_technology_fund.pdf; and Heike Mainhardt-Gibbs, et al., "Fuelling Contradictions: The World Bank's Energy Lending and Climate Change," Bretton Woods Project, CRBM & URGEWALD, 2010, at http://www.brettonwoodsproject.org/art-566198.

[26] See UNFCCC, Art. 3.1, at http://unfccc.int/essential_background/convention/background/items/1355.php.

[27] It should be noted that the United States, as well as the United Kingdom and France, have expressed a desire for (continued...)

- **Lack of Coordination.** Observers point out that the CIF may create a parallel structure for financing climate change adaptation and mitigation efforts outside the ongoing multilateral framework for climate change negotiations. They are concerned that without harmonization between the CIF and the other sources of environmental finance (e.g., funds managed by the U.N., the Global Environment Facility, and bilateral sources), overlaps, redundancies, competing views, and lack of synergy may affect climate priorities, funding processes, and qualifying criteria.
- **Potential to Prejudice U.N. Climate Provisions.** Some commentators and several governments have expressed concerns that the establishment of the CIF as trust funds to the MDBs may prejudice the outcomes of the international negotiations on climate finance within the framework of the United Nations. Many developing countries have expressly stated that they do not consider funds contributed to the CIF as meeting U.N. Annex I obligations. Furthermore, the design of the CIF includes a "sunset clause" stating that the CIF "will take necessary steps to conclude its operations once a new [UNFCCC] financial architecture is effective." The nature of these steps has yet to be determined.
- **Potential for New Conditionalities.** Under the CIF, individual loans or grants under country programs follow the investment lending policies and procedures of the MDBs, including their fiduciary standards and environmental and social safeguards. Some observers believe this burdens developing countries with the World Bank's traditional criteria for financing, including tight fiscal discipline and the implementation of economic and other structural and policy reforms. They fear that the CIF may create onerous obligations on developing countries to comply with emission reduction targets and other rules from which they have been previously exempt.
- **Lack of Polluter Responsibility.** Some commentators claim that the provision of loans—in addition to grants—as a financial instrument to eligible developing countries contradicts the internationally agreed principle of "polluter pays" as stated in the Rio Declaration. Some argue that the repayment of a loan, notwithstanding the degree of concessionality, burdens a developing country with self-paying for a problem (climate change) that was caused by others (i.e., developed countries).
- **Increased Debt Burden.** While the loans under the CIF are provided on a concessional[28] basis, they are co-invested in other projects and programs and will have to be repaid. Some commentators believe that the CIF's loans may add to their debt burden in the long run and affect their ability to generate resources for growth.
- **Potential for Additionality.** The UNFCCC provides that developed country signatories to the Convention "provide new and additional financial resources to

(...continued)

some advance disclosure of investment plans and for observer participation in these sessions.

[28] "Concessional" or "soft" loans are loans extended on terms substantially more generous than market loans. The concessionality is achieved either through interest rates below those available on the market or by extended grace periods, or a combination of these.

meet the agreed full costs incurred by developing country Parties" in their efforts at mitigation and adaptation.[29] Some observers fear that the design of the CIF establishes a parallel process for climate financing that does not result in new and additional resources. They are concerned that significant portions of the aid budgets of donors may be diverted into the CIF and counted as part of their annual ODA commitments.

- **Commercial Influence.** While advantages exist in prioritizing market-based solutions to dealing with the problems of climate, some groups express concern that the private sector may be unduly driven by commercial interests at the expense of social or environmental safeguards.[30] Concern also exists that a dependence on market mechanisms as a source of climate financing may be inadequate and inconsistent for meeting the financial needs of developing countries charged with the responsibility of both implementing climate change commitments and mediating the social, economic, and environmental dislocations brought on by climate change.
- **Energy Policy at the Banks.** Many observers claim that the history of the World Bank's energy and infrastructure lending undermines its credibility as an institution committed to combating the impacts of climate change. Civil society groups have often highlighted the inconsistencies between the Bank's rhetoric on climate change and its operational policies and practices. They emphasize that while the Bank has increased financing for renewable energy and energy efficiency in recent years, its fossil fuel lending still accounts for 54% of the energy sector share for fiscal years 2006 to 2008 (compared to 10% for renewable energy, 15% for energy efficiency, and 21% for large hydropower). Furthermore, the trend has reportedly increased, as FY2008 has seen the World Bank and IFC scale up funding for fossil fuels by 102%, compared with only 11% for new renewable energy.[31] The controversy is compounded by the Bank's inability to reach a consensus on the definition of "clean energy technology," retaining provisions for ultra-supercritical coal-fired power generation in its environmental strategies.[32] Recent guidance from the U.S. Administration regarding the World Bank's engagement with coal-fired power generation in developing countries similarly leaves the definition open, stating that projects "could include more carbon efficient fossil fuel generation" in their portfolio.[33] While observers generally agree that funding from the CIF is unlikely to be used in coal-fired power generation projects, most agree that continued investment by the World Bank in fossil fuel energy and infrastructure may have several

[29] See UNFCCC, Article 4:3, at http://unfccc.int/essential_background/convention/background/items/1362.php.

[30] This concern has been levied against the Bank's brokering of carbon purchases through its Prototype Carbon Fund. See Bank Information Center, et al., "How the World Bank's Energy Framework Sells the Climate and Poor People Short," 2006, at http://www.bicusa.org/en/Article.2954.aspx.

[31] See Bank Information Center report at http://www.bicusa.org/en/Article.11033.aspx.

[32] Ultra-supercritical coal-fired power generation is defined as "new pulverised coal combustion systems ... [that] operate at increasingly higher temperatures and pressures and therefore achieve higher efficiencies than conventional PCC units and significant CO2 reductions. Supercritical steam cycle technology has been used for decades and is becoming the system of choice for new commercial coal-fired plants in many countries." See World Coal Institute website at http://www.worldcoal.org/coal-the-environment/coal-use-the-environment/improving-efficiencies/.

[33] See U.S. Treasury memorandum at http://www.ustreas.gov/offices/international-affairs/multilateral_banks/statements/COAL%20GUIDELINES%202009%2012%2014%20FINAL%20%282%29.pdf.

unintended effects, including, inter alia, (1) counteracting any gains made with the Bank's renewable portfolio, (2) directing resources toward large-scale power generation for industrial use rather than energy access and poverty reduction in poor urban and rural communities, and (3) drawing the Bank's professional and technical staff away from a concentration on energy efficiency and renewable energy activities to remain involved with fossil fuel generation.[34]

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[34] For discussion of further debate on this issue, see CRS Report RS22989, *The World Bank's Clean Technology Fund (CTF)*, by Martin A. Weiss; as well as the World Bank's issue brief on "Energy," available at http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:21513875~menuPK:34480~pagePK:64257043~piPK:437376~theSitePK:4607,00.html; and, as one example, Heike Mainhardt-Gibbs, et al., "Fuelling Contradictions: The World Bank's Energy Lending and Climate Change," the Bretton Woods Project, CRBM & URGEWALD, 2010, at http://www.brettonwoodsproject.org/art-566198.