

Occasional Paper: 7

CARBON OFFSETS & CLIMATE FINANCE IN INDIA:

**The Corporate-driven Climate
"Solutions" of the World Bank,
Asian Development Bank &
United Nations**

A Report for **Focus on the Global South**
by Konrad Fisher

OCCASIONAL PAPER 7

Carbon Offsets & Climate Finance in India

*The Corporate-driven Climate “Solutions”
of the World Bank, Asian Development Bank &
United Nations*

A Report for Focus on the Global South

by **Konrad Fisher**

August 2009



Printed March 2010

Focus on the Global South

4th Floor CUSRI
Wisit Prachuabmoh Building
Chulalongkorn University
Bangkok 10330
THAILAND

*Carbon Offsets & Climate Finance in India:
The Corporate-driven Climate “Solutions” of the World Bank,
Asian Development Bank & United Nations*
by Konrad Fisher

This work is licensed under Creative Commons Attribution

This publication or parts of it may be reproduced on the condition that proper acknowledgment and citation be given to the author and Focus on the Global South. Focus would appreciate receiving a copy of the text in which this report was mentioned or cited.

To publish figures not belonging to Focus on the Global South, please coordinate with the owners for permission.

THE OCCASIONAL PAPERS are published by Focus on the Global South. Although some of the authors are Focus staff or visiting researchers, we are open to proposals from individuals or organisations who would like to submit papers for publication. The aim of the series is to publish new research and policy analysis on key issues emerging from the processes of economic globalisation and militarisation and the countervailing force of resistance and alternatives. The views expressed in this series are those of the authors and do not necessarily represent the views of Focus on the Global South

FOCUS ON THE GLOBAL SOUTH is a non-profit policy analysis, research and campaigning organisation, working in national, regional and international coalitions and campaigns, and with social movements and grassroots organizations on key issues confronting the global south. Focus was founded in 1995 and is attached to the Chulalongkorn University Social Research Institute (CUSRI) in Bangkok, Thailand. It has country programmes in the Philippines and India.

For more information about Focus and other focus publications, please visit our website at <http://www.focusweb.org> or email us at info@focusweb.org

You may contact the author of this report at: konradfisher@gmail.com

Printed on recyclable acid-free paper.

ISSN: 1906-7437

TABLE OF CONTENTS

1. INTRODUCTION	1
2. CARBON MARKET	
Theory.....	3
Mechanisms	4
Practice	5
Indian Government Participation.....	6
Clean Development Mechanism Projects in India.....	7
3. WORLD BANK GROUP, ASIAN DEVELOPMENT BANK & CLIMATE CHANGE	
Carbon Emitters & Brokers.....	10
World Bank Group’s Climate-Related Finance	11
A. Carbon Funds & Facilities.....	11
B. Climate Investment Funds.....	12
C. IFC’s Carbon Delivery Guarantee & Emission Reduction	14
Asian Development Bank’s Climate-Related Finance	14
A. ADB’s Carbon Market Financing.....	14
B. ADB’s Private Sector Climate-Related Financing	15
C. ADB’s Concessional Climate Related Financing.....	15
World Bank & ADB in India.....	16
4. CONCLUSION.....	21
APENDIX 1: SELECTED CLIMATE-RELATED WORLD BANK GROUP PROJECTS IN INDIA.....	23
APENDIX 2: SELECTED CLIMATE-RELATED ASIAN DEVELOPMENT BANK PROJECTS IN INDIA.....	30
APENDIX 3: WORLD BANK CLIMATE FUNDS & FACILITIES.....	33

Climate change is arguably the greatest challenge humanity has ever faced. Eminent scientists from around the world warn that unless we drastically reduce global greenhouse gas emissions, the world will face ecological and economic collapse.

India is particularly vulnerable. Glaciers of the Himalaya which supply India's major river systems are receding at an unprecedented rate. Rising sea levels threaten low lying coastal areas of India along with large swaths of neighbouring Bangladesh. More extreme weather could decimate agricultural production and create an unprecedented famine. Mass migrations of refugees whose homes have faced drought or floods could result in resource conflicts between and within the nations of South Asia.

Faced with an unprecedented crisis, the majority of the world's nations joined an international treaty in 1992 – The United Nations Framework Convention on Climate Change (UNFCCC) – to advance international cooperation to reduce the emission of greenhouse gases (GHGs). The Kyoto Protocol, which set binding targets for GHG emission reductions, was adopted in December 1997 under the UNFCCC, but did not enter into force until February 2005.

Due in large part to pressure from the USA during the negotiation process, the Kyoto Protocol uses a market-based mechanism of buying and selling the right to emit GHGs.¹ These mechanisms form what is commonly referred to as a “carbon market,” because carbon is the principle GHG.²

Since the UN adopted the carbon market, global GHG emissions have increased. Meanwhile, this market has provided a significant new revenue source for corporations in India and other developing countries that can sell the right to pollute to developed countries. Conversely, it has allowed developed countries to escape emission reduction commitments by ostensibly paying other countries to reduce emissions on their behalf.

At the same time nations of the world were working to address climate change within the UN framework, the World Bank,

with its undemocratic governing structure, was working to influence and benefit from carbon trading. Shortly after its first of twelve “carbon funds” became operational in 2000,³ the World Bank entered into its first carbon transaction.⁴ The Bank's goal was to “pioneer” the market and influence the Kyoto Protocol's carbon trading mechanisms.

More recently, the World Bank broadened its efforts and is now working to establish a separate, parallel framework of climate change governance that threatens to divert funding from, and effectively undermine the UN process. Similarly, the Asian Development Bank (ADB) has followed suit by establishing its own carbon funds and pushing its own climate agenda through “technical assistance” and media campaigns.

As one of the largest World Bank and ADB clients, India has become a central focus in these institutions' overall climate agenda. While the Indian government supports the Kyoto Protocol, along with its flawed market mechanisms, the World Bank and ADB have exploited it as a means to fund and rationalize their most socially and environmentally destructive practices in India such as coal power plants, massive dams and mono-culture tree plantations.

Report Overview

The first section of this report will describe the theoretical basis which supports the carbon market, and the three carbon market mechanisms employed by the Kyoto Protocol. It will then describe the flaws inherent in the Clean Development Mechanism (CDM), the Kyoto Protocol mechanism which is most relevant to developing countries. This is followed with a description of the Indian government's support for this mechanism. Finally, the report will quantify India's role as the second largest carbon trader and then provide an overview of the ten projects in India which claim the largest quantities of emission reductions.

The second section of this report will focus on the roles of the World Bank and ADB in climate change. It will begin with an overview of the institutions' contribution to climate change through their overwhelming support for GHG producing projects. Next it will describe the various climate-related funds and facilities of the World Bank and ADB. Finally, the report describes selected World Bank and ADB climate-related projects in India.

CARBON MARKET

Theory

Conventional environmental economic theory holds that the way to reduce the largest amount of pollution is to implement the most efficient pollution abatement methods first (i.e. those which cost the least money per unit of pollution reduction). As the most efficient pollution abatement methods are exhausted, you can move on to incrementally less efficient methods. However, at any given time, you should implement the most efficient methods available.

To use the free market for this purpose, you must put a price on pollution by capping the overall level of pollution allowed, and then trading the right to pollute within that cap. This system is widely known as "cap and trade." In theory, the free market will automatically find the least costly way to achieve any given pollution limit.

The carbon market established through the Kyoto Protocol represents the most concerted international attempt to harness the purported benefits of free market pollution abatement.⁵ Because GHGs are dispersed throughout the atmosphere regardless of their point of origin, carbon markets operate on the basis that the location of pollution abatement is irrelevant to the goal of reducing overall atmospheric levels of GHGs. Because the cost of cutting a metric ton of carbon varies between countries, it is, in theory, most efficient to cut emissions where it is cheapest to do so. According to the World Bank, the cost of abating a ton of carbon dioxide is from \$25 to well over \$50 in developed countries, versus less than \$5 in developing countries.⁶

Mechanisms

The Kyoto Protocol requires a group of countries termed “Annex B” (used interchangeably with the term Annex 1) parties to collectively reduce their GHG emissions by an average of 5.2% below their 1990 levels between 2008 and 2012. Annex B countries include the industrialized countries and countries with economies in transition.⁷ In contrast, developing countries, or non-Annex B (used interchangeably with the term non-Annex 1) countries that ratified the Protocol, including India, are not required to meet specific emissions targets. They are however required to report their emission levels and develop national programs to mediate climate change. These differing roles are based on the principle of “common but differentiated responsibilities” which recognizes that developed countries are principally responsible for the current high levels of GHGs in the atmosphere resulting from 150 years of industrial activities, and they should bear the primary responsibility of reducing emissions.

During negotiations for the Kyoto Protocol, Brazil proposed a “Clean Development Fund,” which would have used fines collected from industrialized countries that failed to meet their GHG reduction commitments to support clean energy projects in developing countries. The USA opposed this concept and endorsed “flexible” market-based mechanisms including transactions between developing and industrialized countries. Despite reservations from developing countries, US demands were met.⁸ Ironically, the USA itself refused to ratify the Kyoto Protocol.

Under the Kyoto Protocol, Annex B countries commit to a specific limit, (also known as an allowance, cap, or target), to the level of GHG emissions

they can release. Countries can exceed their emissions limit by utilizing one or more of the Protocol’s three market-based mechanisms: Emissions Trading, the Clean Development Mechanism (CDM) and the Joint Implementation. Theoretically, if a country exceeds its emissions limit using one of these mechanisms, the excess emissions will be counteracted by a corresponding decrease in emissions in another country.

“Emissions Trading”⁹ can occur when one Annex B country emits less GHG than its Kyoto Protocol target. This surplus emission allowance can be sold so to another Annex B country which can then exceed its own target without violating the Protocol. Unlike CDM and Joint Implementation, such transactions do not have to be linked to emission reductions from specific projects.

Of the Protocol’s three market-based mechanisms, the CDM is that which directly impacts developing countries. Under the CDM, projects in developing countries can earn marketable credits known as “certified emission reductions” (CER) credits if they generate emissions reductions “that are additional to any that would occur in the absence of the certified project activity.”¹⁰ In other words, an emission reducing project can earn CERs if it occurred because of CER revenue, but not if it would have happened independently of CER revenue. Projects meeting this requirement are known as “additional.” Projects can include new installations (like a new power plant) or upgrades to existing operations (like new technology installed in a coal plant that increases its efficiency). By purchasing CERs from developing nations, corporations in developed nations can avoid emission reductions at home. These transactions are known as “offsets” because emissions in

developed nations are theoretically offset by emission reductions in developing nations. CERs can also be sold or traded in the international speculative market.

CERs are the currency of the CDM offset market. One CER is equivalent to the global warming impact of one metric ton of CO₂; however, CERs apply to all GHGs addressed by the Protocol.¹¹ These GHGs include Carbon dioxide (CO₂); Methane (CH₄); Nitrous oxide (N₂O); Hydrofluorocarbons (HFCs); Perfluorocarbons (PFCs); and Sulphur hexafluoride (SF₆).

In theory, offsets are beneficial for developing countries because the sale of CERs provides an additional revenue stream for projects that reduce emissions, thereby promoting clean technology and sustainable economic growth. For example, companies in India have earned CERs by installing wind power turbines.¹² These companies claim that the promise of revenue from the sale of CERs has driven more wind power investment than would have occurred without this revenue source.

Concurrently, the CDM allows developed countries to meet their emission reduction target by purchasing CERs on the international market rather than implementing more costly emission reduction measures at home. In theory, the demand for CERs from developed countries seeking to avoid emission reductions domestically will drive green, sustainable investment in developing countries.

Western European countries and Japan are among the largest national purchasers of CERs. Often however, CERs are sold first to carbon brokers which are private businesses that profit from buying and selling carbon credits and speculating about

price fluctuations. As we will see below, the World Bank and ADB also have become major brokers of CERs.

The Kyoto Protocol's third market-based mechanism, Joint Implementation, is similar to CDM but it applies to transactions between Annex B countries rather than between an Annex B and a developing country. Emission reducing activities in any Annex B country can generate credits that can be sold to another Annex B country to help it meet its own emission target under the Kyoto Protocol. As with CDM, emission reductions are eligible only if they are "additional" to reductions that would otherwise occur.

Practice

In essence, the Kyoto Protocol's CDM allows developed countries to purchase the right to pollute, rather than reduce emissions domestically. In theory, these transactions could finance enough emission reductions to decrease global GHG emissions. Unfortunately, it is nearly impossible to ensure that the CERs used as the currency of the carbon market represent actual reductions in emissions.

Perhaps the most widely recognized flaw is that it is difficult, if not impossible to establish that emissions reductions used in transactions are "additional" to what would have occurred in the absence of incentives provided by the Protocol. For example, Indian brick manufacturers claim to have adopted new technologies and production methods that reduce GHG emissions because they foresaw revenue from the sale of emission reduction credits. If this claim is true, then the activity is indeed additional to what would have otherwise occurred. However, if these brick manufacturers would have taken these actions regardless

of the emission reduction credits – perhaps because there are other financial incentives involved – then the project is not additional. Given the Protocol’s design, every emission reduction that is certified for use in a market transaction allows for a corresponding increase GHG emissions elsewhere. Therefore, non-additional transactions actually will increase net global GHG emissions.

Unfortunately, additionality is nearly impossible to verify and is subject to intense lobbying and manipulation by profit seeking market participants. The CDM executive board, which makes additionality determinations for CDM offset projects, is severely under-staffed and it relies on third-party verifiers to validate or reject the claims made by project proponents. Because these verifiers are paid by the project developers, they have a strong incentive to approve projects. Similarly, the CDM board is inclined to approve projects because it is under pressure from host country governments, and because it bases its decisions primarily on information submitted by project proponents.

A study of Indian CDM projects registered in 2006 found that most have questionable methods for determining additionality, and only 32% provide independent sources to substantiate their claims.¹³ A Guardian UK investigation found a high level of incompetence among third party verifiers and unwillingness on the part of CDM board to prosecute wrong-doing.¹⁴ A study commissioned by the World Wildlife Fund found that up to 20% of CERs were not additional, which would be “equivalent to the emissions of seven 600 MW coal-fired power plants.”¹⁵ According to carbon market researchers at The Program on Energy and Sustainable Development of Stafford University, it is impossible to “administer

an offsets system so that it rewards only bona fide [emissions] reductions.”¹⁶

Even if we assume that the emission reductions used for carbon trades were valid, the CDM provides a loophole. To function properly, carbon trading requires a cap on the overall level of pollution, and trading within and among countries that are party to that cap. However, CDM offsets involve trading between developed countries with a cap on their overall emissions and developing countries that do not have a cap on emissions. This loophole effectively undermines emission limits for capped countries.

Another problem is that the CDM can discourage developing nations from implementing regulations that would curb global warming. This occurs because emission reductions that are required by law cannot be used in CDM transaction. For example, if the government of India required energy companies to use more efficient technology, this technology would be exempt from CDM benefits. Consequently, developing governments are discouraged from adopting laws to reduce emissions because domestic corporations would lose revenue. While this requirement is necessary to ensure additionality of CDM projects, it provides an unfortunate disincentive for developing countries to take independent action to reduce emissions and transition to a more climate friendly economy.

Indian Government Participation

Although the Indian government has expressed strong reservations about World Bank involvement in the carbon market,¹⁷ it has embraced the CDM as an opportunity to attract a new revenue stream for India’s economic development. India’s National

CDM Authority,¹⁸ established in accordance with a UNFCCC agreement, has vowed that it “is committed to promoting India as a preferred destination for CDM projects.”¹⁹ In fact, the Ministry of Environment and Forests which houses India’s National CDM Authority hosted the “Carbon Bazaar 2009” in Delhi to offer “direct business to business meetings between buyers and sellers” of CERs.

As part of its engagement with the UNFCCC, India released its National Action Plan on Climate Change in June 2008. The core of the plan is its eight national missions – one each for solar, enhanced energy efficiency, sustainable habitat, water, sustaining the Himalayan ecosystem, “Green India,” sustainable agriculture, and strategic knowledge for climate change. The plan states that comprehensive mission documents must be submitted to the Prime Minister’s Council on Climate Change office by December 2008, and that, “Each Mission will report publicly on its annual performance.”²⁰ According to the civil society organization, South Asia Network on Dams Rivers and People, the government failed to consult with the public while creating the Action Plan, and it is unknown whether any missions other than the water mission has submitted its documents to the Prime Minister’s Council.²¹

In addition to lack of transparency, the plan reveals a basic shortcoming in the government’s climate change agenda – namely that the government is pursuing unfettered economic and energy sector growth without addressing the unequal distribution of income and electricity. The plan repeatedly espouses the need for “rapid economic growth” and it maintains that “It is obvious that India needs to substantially increase its per capita energy consumption

to provide a minimally acceptable level of well being to its people.”²²

In reality, the vast majority of India’s energy sector growth is consumed by corporations and affluent families, not small villages that require a modest amount of electricity for basic needs. Moreover, economic growth in India (as elsewhere) is not only unequal, but it remains positively correlated with GHG emissions. India should promote economic activity that benefits the neediest people in society and maintains GHG emissions well within ecologically sustainable limits.

Clean Development Mechanism in India

Due in part to government support, India has more registered CDM projects and CERs than any country in the world except China. As of March 2009, India was host to 408 registered CDM projects accounting for 26.93% of the world’s total.²³ These projects resulted in the issuance of 60,715,491 CERs accounting for 22.45% of the world’s total.²⁴

India’s ten largest CDM projects in terms of emissions reductions²⁵ include four which are designed to capture and destroy a gas known as HFC-23.²⁶ This gas is produced largely as a waste product during the manufacture of another gas, HCFC-22 which is used in refrigerators, air conditioners and in the production of certain plastics. Because HFC-23 is 11,700 times more potent as a GHG than CO₂,²⁷ projects designed to reduce HFC-23 emissions can generate considerably more CERs than projects designed to reduce CO₂ emissions. Consequently, India has only 8 HFC projects, but they account for more CERs than any other project category.²⁸ Globally, HFC-23 accounts for only 1% of the total

CDM projects, but they have captured 56% of all CERs issued.²⁹

HFC-23 projects have been widely criticized because it is much more expensive to use the CDM to destroy the gases than it would be to simply pay factories to install the necessary equipment to destroy the gas. According to an estimate by Michael Wara, a climate change expert at Stanford University, a \$100 million expenditure targeted directly at destroying HFC-23 would require \$6 billion in CDM credits to accomplish the same task.³⁰ Moreover, according to critics, carbon transactions became so lucrative for refrigerant manufacturers that they increased the level of HFC-23 production simply to profit from the sale of CERs.

Ultimately, the UNFCCC responded to these problems by excluding HFC-23 projects from the CDM. Nonetheless, HFC-23 provides a clear example of why it can often be better to reduce emissions directly through regulation and/or payment to industry than indirectly through a carbon market.

India's second largest CDM project is for the construction of a power plant by Torrent Power Limited that runs on natural gas, or liquefied natural gas. Torrent claimed that without the incentives of CDM, it would not have been economically feasible to build this plant, and that the power it can provide with gas would otherwise have been supplied with coal power.³¹ With this argument, Torrent can establish coal power as the "baseline" in terms of GHG production per kilowatt of power output. And because its gas power plant produces power more efficiently than the baseline scenario, Torrent is eligible for emission reduction credits.

This project exemplifies the precarious nature of "additionality" because there is no definitive way to know if this project would have occurred without CDM incentives. Moreover, it is noteworthy that energy-related CDM projects are worth more in countries like India that produce a large portion of their power with coal because it creates a GHG-intensive baseline for electricity production.

Another beneficiary of India's GHG-intensive electricity production baseline is JSW Energy (previously named Jindal Thermal Power Company Ltd.). JSW Energy installed systems and infrastructure to generate electricity using waste gases produced by JSW Steel (previously named Jindal Vijayanagar Steel Ltd) adjacent to the JSW Steel factory in Karnataka.³² JSW Energy is able to generate electricity with both coal and waste gas. Therefore, the company claims that this project reduces GHG emissions by allowing it to produce a larger portion of its energy from gas, which is less GHG-intensive than coal.³³ The company also claims that without the CDM, it would have no incentive to contain its waste gases.

Excluding HFC-23 and energy-related projects, cement projects produce more CERs than any other project category in India.³⁴ Large quantities of CO₂ are released during the production of "clinker," a primary ingredient of cement. Cement factories have been able to apply for carbon credits by using substitutes to clinker that are less CO₂-intensive. India's ten largest CDM projects include one such project involving Gujarat Ambuja Cements Limited (GACL). The company will substitute clinker with "fly ash," a waste produced by coal power factories.³⁵ The company argues that the CDM provides it with the necessary

resources to increase the percentage blend of fly-ash in its cement from 25% to 32%. Consequently, the GACL claims this will reduce clinker production and the associated CO₂ emissions per ton of cement produced.

Interestingly, GACL notes that the Indian Ministry of Environment and Forests requires coal plants to achieve full “utilization” of fly ash waste. Given this requirement, coal companies benefit when cement companies increase the fly ash content of their cement because it provides a place to dispose of their waste product. Given these overlapping incentives between the coal and cement industry, it is difficult to know if such cement projects are indeed “additional” or if they occur due to pressure from the coal sector. Again, it may be more appropriate to reduce GHG’s from cement production through regulation rather than carbon credits.

India’s ninth largest project, sponsored by The Tamil Nadu Spinning Mills Association (TSMA), involves the grouping of 704 wind turbines which are connected to the power grid. TSMA is comprised of individual wind turbine owners. The project utilizes the fact

that India’s power mix is coal intensive to establish a GHG intensive baseline for electricity production. Nonetheless, wind power is one of, if not the most viable options for large scale power production.

India’s tenth largest CDM project is a massive Allain Duhangan hydropower plant in Himachal Pradesh which was supported with funding from the World Bank. This project is described in the next section of the report and in Appendix 1.

India’s largest CDM projects clearly reveal the flaws inherent in the CDM. Most notable is the fact that additionality determinations are nearly impossible to make, and they are subject to manipulation by profit seeking corporations. Examination of these projects reveals how investigating additionality can be a cumbersome and expensive task, requiring in-depth knowledge about a variety of industries and scientific fields. Moreover, these projects demonstrate how the CDM rewards countries for choosing not to enact even the simplest and least costly regulations to curb GHG emissions.

WORLD BANK & ADB

While India's government and industry have clearly embraced the CDM on their own accord, the World Bank and ADB are using it to assert their own respective agendas in India, the Asia-Pacific Region and around the world.

Carbon Emitters & Brokers

The climate-related agendas of World Bank and ADB reveal a deep contradiction.

Report stated that the chief U.S. objective is, "Encouraging private investment in the oil and gas" in developing countries and that the Bank should "seek to complement and catalyze private investment in the oil and gas sector, not to displace it."³⁶ The report argued that the most significant impediment to private investment in developing countries is "host country policies and attitudes" which the Bank should overcome through loan conditionality and subsidies to energy corporations in the form of infrastructure projects.

Box 1: World Bank's Governing Structure

The World Bank is controlled by its 185 member governments based roughly on the size of their economy. The U.S. chooses the World Bank's president, is home to its headquarters, and is its largest single shareholder, with 16.38% percent of votes, followed by Japan (7.86%), Germany (4.49%), the United Kingdom (4.30%) and France (4.30%). The U.S. holds 23.62% of voting shares in the World Bank Group's private sector lending arm the International Finance Corporation.³⁷

On one hand, the two multilateral lending institutions claim to have become climate-friendly through their project-based investments and overall support for the carbon market. On the other hand, they have been among the leading financiers of carbon-emitting projects such as coal-fired power plants, and oil and gas development. Moreover, both banks openly plan to continue favoring large, long-term fossil fuel-based energy investments over renewable energy.

As early as 1981, the US Treasury, which holds the largest number of votes that control the World Bank, asserted that the Bank's role is to support the efforts of private oil companies in developing countries. A U.S. Treasury Department

With a firm mandate from its single largest shareholder, the World Bank has prioritized private fossil-fuel based energy development, and has become a leading financier of GHG producing projects. On average, the World Bank's fossil fuel financing is five times that of renewable energy financing.³⁸ During its most recent fiscal year, the World Bank, along with its private lending arm the International Finance Corporation (IFC), increased funding for fossil fuels by 102% while it increased its funding for renewable energy by only 11%.³⁹ According to one of the most comprehensive studies on the Bank's emissions, from 1997-2007 the Bank financed 26 gigatons of CO₂ emissions – an amount equal to approximately 45 times the annual emissions of the United

Kingdom (UK).⁴⁰ Over the lifetime of the Bank's 2008 projects alone, they will have released approximately 7% of the world's annual CO₂ emissions from the energy sector.⁴¹

Despite the World Bank's overwhelming contribution to climate change, it has aggressively inserted itself in the UN climate process. Consequently, at the 1992 earth summit, the Global Environmental Facility (GEF) was designated as the financial mechanism of the UNFCCC with the World Bank as its trustee. In 1999, the Bank established the Prototype Carbon Fund which was designed to shape what would become the CDM. Since that time, the Bank has established 11 additional carbon funds through which it manages CDM projects and transactions. And now, through its Climate Investment Funds, the Bank is creating climate change governance parallel to the UNFCCC.

While the ADB has not shared the World Bank's prominent role in the evolution and management of global carbon trading, it is actively promoting the carbon market through its own Carbon Market Initiative as well as blatant media and public relation campaigns designed to mold public opinion in favor of the ADB's climate agenda. And similar to the World Bank, the ADB prefers to invest in GHG-intensive projects over genuine climate-friendly projects. From 1988 to 2006, renewable energy received only 2.2% of ADB's public sector energy lending in India.⁴²

World Bank Climate-Related Finance

In recent years, the World Bank has reinvented itself in order to capitalize on the growing international concern with climate change. In many cases, this has

meant a change in rhetoric – such as repackaging business-as-usual projects as climate friendly. More notable however, through its climate-related financing schemes, the Bank has captured available climate-related funding and is building a parallel international climate-change framework outside the UNFCCC process. Rather than work with developing countries to actually reduce emissions, the bank is exploiting the CDM model to advance its own “development” agenda which favors unsustainable energy development and wealth consolidation.

Carbon Funds & Facilities

The World Bank has adopted the role as manager of several carbon “funds” and “facilities” through which it has become a major player in the international carbon market. With the World Bank as trustee and manager, these funds and facilities use contributions from developed country governments and corporations to support CDM projects in developing countries.

The Prototype Carbon Fund (PCF), the first at the World Bank, was established in 1999. It used \$180 million from five governments and 18 companies to support projects that reduce GHG emissions. The resulting emissions reductions are to be distributed to the PCF's funders in proportion to their financial contribution.

By its own admission, the World Bank designed the PCF to “pioneer” the global carbon market before it became operational under the UN framework. With an aggressive strategy to essentially sidestep the UNFCCC process, the PCF designed projects and began purchasing emission reductions years before the Kyoto Protocol came into force.⁴³

Today, the World Bank manages a total of 12 carbon funds or facilities. While they each have different missions, they all work on roughly the same premise: the World Bank acts as the trustee and administrator for money contributed from governments of, or corporations from, countries that have commitments under the Kyoto Protocol. The funds then support CDM projects in developing countries to help the funders meet their emission reduction commitments.

According to World Bank databases and staff, there are 14 carbon finance projects in India that are either under development or have resulted in signed emission reduction purchase agreements.⁴⁴ Five of the Bank's carbon funds account for these projects. They include the Community Development Carbon Fund with 7 projects, Spanish Carbon Fund with 3, BioCarbon Fund with 2⁴⁵, Danish Carbon Fund with 1, and Italian Carbon Fund with 1 project. (See Appendix 1 for a description of selected projects and Appendix 3 for an overview of the 12 carbon funds.)

Climate Investment Funds

The World Bank's latest attempt to capitalize on climate change is the establishment of new portfolio of Climate Investment Funds (CIF). According to the World Bank, the CIF is designed as an "interim measure" to increase funding to developing countries to address climate change challenges at a time when the UNFCCC's "future financial architecture" is being deliberated.⁴⁶ Civil society organizations and developing country representatives have criticized the CIF for usurping funding and a mission that should be allocated and executed by the UNFCCC. The CIF will offer various forms of financing including loans, grants and investment guarantees and will support

both the public and private sector. Its funds will also be available to support projects of various multilateral development banks including the ADB.

The CIF was approved by the Bank's board of directors in July of 2008, and in September 2008, ten industrialized countries⁴⁷ pledged to support the CIF with over \$6.1 billion. Under the Bush administration, the U.S. refused to ratify the Kyoto Protocol but pledged \$2 billion to the CIF – the single largest commitment. This contradiction demonstrates clearly that the Bush administration felt that its interests would be served with funds managed by the World Bank but not the UNFCCC. The UK and Japan made the next largest pledges of \$1.5 billion and \$1.2 billion respectively.⁴⁸ Not coincidentally, these three nations were instrumental in formulating the concept and design of the CIF.⁴⁹

The CIF consists of the Clean Technology Fund (CTF) and the Strategic Climate Fund (SCF). According to the World Bank, the CTF "will invest in projects and programs that contribute to demonstration, deployment and transfer of low carbon technologies with a significant potential for long term greenhouse gas emissions savings."⁵⁰ The CTF will provide grants, loans and loan guarantees to lower and middle-income countries. The proposed investment sectors include power, transportation and energy efficiency. The World Bank asserts that all operations that use both Bank and CIF funding "will follow the Bank's operational policies and procedures for investment lending."⁵¹

Technologies cited as examples in CTF planning documents include highly efficient gas plants and "best available coal technologies."⁵² One potential project described in the planning document is

a loan guarantee for a private large-scale geothermal power project supported jointly between the CTF and a multilateral development bank such as the ADB or World Bank. Another potential project is a \$200 million CTF loan to support two “commercial-scale demonstration [coal] plants of the high efficiency technology.”⁵³

In contrast to the CTF, the SCF will “provide financing to pilot new development approaches or scaled-up activities aimed at a specific climate change challenge or sectoral response.”⁵⁴ The SCF is clearly designed to influence the UNFCCC process. It aims to establish its programs “as soon as possible and before an agreement on the future of the climate change regime.”⁵⁵ It includes a Pilot Program for Climate Resilience (PPCR) which is explicitly designed to adopt the role of and influence the management of the Adaptation Fund of the UNFCCC. The Adaptation Fund was established under the Kyoto Protocol to finance climate change adaptation in developing countries using 2% of the proceeds from the sale of CERs. SCF planning documents state that the PPCR will “provide lessons” that may be taken up by the “future climate change regime, including the Adaptation Fund.” This stated agenda of the PPCR violates agreements reached at the UN climate negotiations in Bali in 2007 which state that the Adaptation Fund should be managed by developing countries.

The SCF also includes a proposed Forest Investment Program (FIP) which is designed to “support,” or more accurately, adopt the role of, the UNFCCC’s Reducing Emissions from Deforestation and Degradation in Developing Countries (REDD) program. According to planning documents, “the main purpose of the FIP is to support

developing countries’ REDD-efforts” by offering “bridge financing” identified through the REDD strategy.⁵⁶ Further, it will help finance the investments for the implementation of policies that emerge from the REDD planning process. This is another clear example of the World Bank overstepping its mandate by duplicating the efforts of, and potentially diverting funds from, the UNFCCC process.

The World Bank has made some token attempts to respond to criticism that it is using CIF to usurp the role of the UNFCCC. For example, the CIF planning documents now have a sunset clause stating that the CIF “will take necessary steps to conclude its operations once a new financial architecture is effective.”⁵⁷ However, there is no specific date for cessation of the CIFs, and planning documents state that “if the outcome of the UNFCCC negotiations so indicates” the committee which manages the CIF “may take necessary steps to continue the operations” of the CIFs. This language leaves ample room for discretion about what constitutes a “new financial architecture” that is adequate to trigger the sunset of the CIF.

Moreover, CIF planning documents cite article 11 of the UNFCCC which stipulates that developed countries may provide resources to developing countries “related to the implementation of the Convention through bilateral, regional and other multilateral channels.”⁵⁸ However, this language does not justify the World Bank creating separate entities that replicate activities of the UN. Through the UN process, developing countries have called for direct access to funds established for meeting UNFCCC obligations, not access via a secondary gatekeeper such as multilateral development banks.

Finally, the World Bank boasts that the CIF will be managed by a Trust Fund Committee comprised of equal numbers of donor and recipient country representatives. This is little consolation however, given the fact that the World Bank will serve as the trustee, legal owner and administrator of the CIF funds, will hold permanent seat as co-chair of the Trust Fund Committee and act as the CIF's "overall coordinator."⁵⁹ Furthermore, each multilateral bank will use CIF funds "in accordance with its own fiduciary framework, policies, guidelines, and procedures."⁶⁰ This provides broad authority for the World Bank, ADB and other multilateral banks to use CIF funds in accordance with their own priorities, not those of the UNFCCC.

Despite rhetoric to the contrary, the World Bank is using the CIF to usurp the role of UNFCCC bodies, control funding that would otherwise be controlled by the UNFCCC, and to maintain a market-based approach to climate change mitigation after the current phase of the Kyoto Protocol expires.

IFC's Carbon Delivery Guarantee & Emission Reduction Purchase Facilities

The World Bank's private lending arm, the IFC, is involved in private sector carbon market projects through its Carbon Delivery Guarantee and Emission Reduction Purchase Facilities. Its carbon delivery guarantee is a "credit enhancement product" which guarantees delivery of carbon credits for projects in developing countries to buyers in developed countries.⁶¹ This is intended to eliminate the risk of non-delivery of carbon credits for developed country buyers. (See Appendix 1, Project # 26609).

The IFC also has two Emission Reduction Purchase Facilities worth \$135 million

which it manages for the benefit of the Government of the Netherlands. Similar to the World Bank's carbon funds, this fund purchases carbon credits that will be used to help the government that supported the fund to meet its emission reduction commitments under the Kyoto Protocol. (See Appendix, Project # 520722 & 531872)

ADB's Climate-Related Finance

The ADB's climate-related funds and facilities mirror those of the World Bank in many respects. The ADB divides its climate-related financing into three categories: Carbon Market, Private Sector and Concessional.

ADB's Carbon Market Financing

In 2006, the ADB established the Carbon Market Initiative (CMI) to "tap" carbon markets and "convert this added cash flow into resources for project co-financing."⁶² The CMI currently consists of two funds and two facilities. The ADB's \$150 million Asia Pacific Carbon Fund provides direct co-financing for CDM projects. It works by obtaining a portion of expected future CERs in exchange for upfront project financing.

The Future Carbon Fund is designed specifically to extend the ADB's Carbon Marketing Initiative beyond 2012 when the current Kyoto Protocol expires.⁶³ This fund has already received financing commitments of over \$100 million and it aims to provide up to \$200 million to finance energy-related and other GHG mitigation projects.⁶⁴ This fund will make upfront payments for projects in exchange for expected carbon credits generated after 2012. The ADB maintains that this will help eliminate the "cloud of uncertainty" and stimulate investments based on projections about the carbon market after the current phase of

the Kyoto Protocol which expires in 2012.⁶⁵ This fund rests on the assumption that the post-2012 climate framework will continue to use market-based carbon trading.

The CMI's two facilities help CDM project developers obtain and sell CERs. The Technical Support Facility offers a range of assistance including advice on technical, financial and legal aspects of CDM projects, project and carbon credit valuation, and documentation preparation. The Credit Marketing Facility helps project developers market credits they have generated that were not sold upfront to the Asian Pacific Carbon Fund. For this purpose, the ADB has retained two private brokers to help project sponsors sell their CERs: CM Capital Markets Holding and Tradition Financial Services Limited.

ADB's Private Sector Climate-Related Financing

In addition to the CMI, the ADB also provides private sector climate-related financing. This includes \$100 million for the establishment of five "clean energy-focused" private equity firms.⁶⁶ These firms are charged with investing in renewable energy, energy efficiency, GHG abatement and other technology. The ADB also supports private equity fund managers through its Seed Capital Assistance Facility. This facility was funded by a \$4.2 million grant from the GEF and supports the development of clean energy funds and financing for early stages of clean energy projects.⁶⁷

ADB's Concessional Climate Related Financing

The ADB's concessional financing includes funds for both mitigation and adaptation. The \$90 million Clean Energy Financing Partnership Facility (CEFPF)

was established in 2007 to improve energy security and curb climate change through investments in new, more efficient, energy technologies. In India, this facility supported a project to increase the energy efficiency of the municipal water system in Nagpur and another to fund preparatory work for a solar thermal power plant in Rajasthan.⁶⁸

The ADB has three funds that address mitigation. Small Grants for Promoting Adaptation offers grants to ADB regional departments, NGOs, private firms and academic organizations. It provided a \$200,000 grant to study the impacts of glacial melt in India and Afghanistan and thereby align ADB's loan operations with adaptation requirements for the water and hydro-energy sectors.⁶⁹ The ADB also manages a \$68 million Water Financing Partnership Facility which is focused on the provision of water services but includes adaptation elements including flood control. Finally, the ADB manages the \$3.6 million Poverty and Environment Fund which focus on poverty and environment linkages and includes elements of climate adaptation such as reducing vulnerability to natural hazards and disaster prevention.⁷⁰

In 1998, the ADB also established a \$40 million "cross cutting" fund designed to increase investment that "address the causes and consequences of global warming" by providing grants "for technical assistance, investment projects, research and other activities."⁷¹ This fund will also support "social vulnerability issues" "such as livelihood, resettlement and health."⁷²

Finally, it is important to remember that the ADB also has direct access to the World Bank managed CIF.

While the ADB has been creative at reframing itself as a climate friendly bank,

it continues to support GHG-intensive, socially irresponsible projects. (See next section and Appendix 2)

World Bank & ADB in India

India is a leading recipient of World Bank and ADB funds and has played a central role in their overall climate change agendas. The IFC, the World Bank's private lending arm, now has more active investments in India than in any other country with a portfolio of \$2.9 billion, or 9% of its total.⁷³ During fiscal year 2008, India was the world's largest borrower from the International Development Association (IDA) – the World Bank arm which “focuses on the poorest countries in the world” – with \$1.3 billion in new investments. That same year, India was the second largest borrower from the International Bank for Reconstruction and Development (IBRD) – the World Bank's arm which “focuses on middle income and creditworthy poor countries” – with \$1.4 billion in investments.⁷⁴ The ADB's investments in India also are significant with a total of \$16.2 billion in public sector investments from 1986 to 2006.⁷⁵

According to the Bank and ADB, increasing portions of their loans and investments are being allocated to address the climate crisis. For the period 2005 - 2008, IBRD & IDA funded 43 total projects in India worth \$10.9 billion, of which 4% was spent on “environment and climate change.” In contrast, the Bank's plan for the 2009 - 2012 period is to fund 94 projects in India worth \$20 billion, with 12% spend on climate change and the environment.⁷⁶ Accepting the Bank's definition of climate change and environment spending, this would represent a spending increase from \$436 million to \$2.4 billion for the two consecutive three year periods.

The unfortunate reality, however, is that both the Bank and the ADB have a very broad definition of climate spending which includes large dam projects that contribute to GHGs and displace large numbers of people, and projects that burn large quantities of fossil fuels and create deforestation. An examination of their projects reveals that these institutions are merely repackaging business-as-usual projects as “climate-friendly,” and using carbon credits as an additional funding source.

Perhaps the most egregious example of this is occurring in the coal energy sector. In April 2008, the IFC and the ADB's private sector arm each approved \$450 million loans to Tata Power Company to build a massive coal fired power plant in Mundra in the state of Gujarat.⁷⁷ The IFC also may purchase a \$50 million stake in this project through an equity investment. When complete, this project will rank among the 50 largest GHG emitters on the planet.⁷⁸

The IFC maintains that because this project uses “supercritical technology,” and will produce marginally more electricity per unit of coal than India's national average, it should be eligible to receive funding through the CDM. In 2007, the CDM executive board actually approved the eligibility of supercritical coal plants to receive emission reduction credits.⁷⁹ Consequently, one of the world's largest GHG emitting projects is eligible for funding through the CDM.

This additional revenue will benefit a company that certainly does not need to be subsidized. During the fiscal year ending in March 2007, Tata Power Company Ltd, part of the Tata Group, had total revenues of \$1.6 billion and an asset base of \$2.8 billion.⁸⁰

With the road paved for construction of “climate-friendly” coal plants, Tata is not the only corporation queuing up to receive CDM funding. The ADB is also funding a giant coal project in the state of Haryana by CLP Power India Private Limited which is a subsidiary of Hong Kong-based CPL Holdings Limited.⁸¹ Project documents claim that because supercritical technology is more expensive, it is only economically viable to use “if Clean Development Mechanism (CDM) under the Kyoto Protocol carbon credits are granted for the reduction in CO2 emissions that will result.”⁸² This is doubtful given that plans to build plants with this technology were developed independently of CDM considerations.⁸³

and ADB as climate-friendly despite the fact that they produce large quantities of methane, a leading GHG. For the World Bank and ADB, the CDM is a welcome turn of events because it provides an additional revenue stream for a segment of projects already high on their priority list.

One prominent example is the 192MW Allain Duhangan hydropower plant in Himachal Pradesh, supported with loans from the World Bank managed Italian Carbon Fund and equity investments from the IFC. An emission reductions purchase agreement has been signed for 2,820,251 tonnes of CO2 equivalent.⁸⁹ Interestingly, the World Bank’s Carbon Finance Unit says that the price for CERs that “the Italian

Box 2: Conflicting Opinions About Coal:

According to a leading NASA scientist, “coal is the single greatest threat to civilization and all life on our planet.”⁸⁶ On the other hand, the ADB believes that India has an “under developed coal market,”⁸⁷ while the IFC maintains that India has no choice but to, “continue to be dependent on coal to fulfill its power requirements.”⁸⁸

Other companies that are counting on CDM funding for coal projects include NTPC and the Indian Farmers Fertilizer Coop which plans to build a 1,320MW plant in Chhattisgarh for which it expects 750,000 carbon credits annually.⁸⁴ Reliance Energy also is eyeing the CDM funding stream. Reliance Energy VP said, “We have a 4,000MW ultra mega project at Sasan and another 1,200MW project in Uttar Pradesh, and we will apply for carbon credits for all of them.”⁸⁵

While coal is the most GHG-intensive kind of CDM project, hydropower plants also are being promoted by the World Bank

Carbon Fund is paying is not available for public dissemination.”⁹⁰

Like many hydropower projects, this one probably should have failed the Kyoto Protocol’s “additionality test.” According to project documents submitted to the UNFCCC, this project faced various “barriers for implementation” and without “CDM benefits it would have not been possible to implement the project.”⁹¹

However, project documents submitted long before the UNFCCC even considered CDM projects indicate that this project was well underway with or without CDM benefits.⁹²

The Rampur hydropower Project is another massive project supported by both the World Bank, through a \$400 million loan, and the World Bank managed Spanish Carbon Fund through an agreement to purchase emissions reductions.⁹³ The World Bank claims this project “will provide renewable, low carbon energy to India’s over-stretched Northern Electricity Grid.” However, as with most dam construction the local people must bear much of the cost. According to the Bank’s “Resettlement Action Plan” this project will affect 4 villages, require the acquisition of public and private land and displace numerous families.

Also in the name of clean energy and climate mitigation, the ADB is laying the groundwork for huge hydropower investments through its Jammu and Kashmir Clean Power Development Investment project. In this “technical assistance” phase, the ADB examines the feasibility of selected hydropower development options in Jammu and Kashmir and makes recommendations for project financing and overall capacity development for the hydropower sector. Its technical assistance projects allow the ADB to influence government officials and industry to determine when, where and how energy development takes place.

In addition to financing physical projects, the ADB and World Bank are heavily involved in promoting the overall carbon market and facilitating transactions. For example, India was one of the first countries host a project under the IFC’s newly formed Carbon Delivery Guarantee. Through this guarantee, the IFC intends to “help projects get a much higher value for their credits” and to eliminate “the risk of [buyers] not receiving the promised carbon credits.” The IFC does this by guaranteeing the delivery of carbon credits for projects in developing

countries to buyers in developed countries.⁹⁴ The IFC will provide carbon credits to the buyer from another source even if the particular project fails to earn carbon credits.

In India, the IFC provided a guarantee for 850,000 carbon credits from Rain Calcining Limited which produces Calcined Petroleum Coke, a raw material in the manufacture of aluminum. The company generated CERs by using its waste heat to produce electricity for its own operations. The IFC plans to broaden this program and hopes it will “boost the carbon market” in the region.⁹⁵

For its part, the ADB is managing a project entitled Capacity Building for the Clean Development Mechanism in India. This project is designed to provide comprehensive assistance to the Indian government and Indian industry to play an “active role” in the global carbon market. Specially, this project will build capacity within the Indian Government’s National CDM Authority and assist the Indian private sector, financial institutions and stakeholders in accessing CDM opportunities. It provides staff for India’s National CDM Authority, other relevant government stakeholders, and selected institutions from the financial and insurance sectors who are trained in risk management, appraisal and structuring of CDM projects. It also will provide written methodologies and various toolkits and handbooks to help project sponsors identify projects and manage risk.

The ADB is also embarking on a full-scale media and public relations campaign to promote the carbon market and its overall climate agenda. With resources from its Climate Change Fund, the ADB will collaborate with the Asia Pacific Broadcasting Union (ABU) to “raise the profile” of climate change risks and

Box 3: ADB Gives Low Priority to Renewable Energy

Of the \$4.6 billion the ADB invested in public sector energy projects in India between 1988 and 2006, only \$100 million, or 2.2% was lent for renewable energy projects. The majority was spent on fossil fuel energy projects or large dams which also contribute to GHGs.

responses in Asia and the Pacific. ABU will organize workshops and invite journalists to “familiarize participants with various aspects of climate change” and explain ADB programs to support mitigation and adaptation. The workshops will help broadcasters “identify stories they can work on, and the key messages that the ADB wants to convey.”

These workshops will generate production of short video news features, which workshop participants must agree to broadcast as a condition of their participation. During the production process, ADB’s Department of External relations will oversee broadcasters “to ensure quality control.” The ABU has agreed to market the news videos to its member broadcasters, the best of which it will promote to international television networks. ABU also will undertake the Climate Change Radio Initiative, inviting radio members to a workshop in New Delhi. ABU will appoint executive producers from the participants to develop a “story template” to be shared with ABU radio members. ABU also will provide various awards, grants for radio and television as well as a prize for climate change reporting.

This project is a blatant example of the ADB misappropriating funds for self promotion. The ADB hopes that this project will provide it with “enhanced brand credibility through stories that demonstrate

ADB’s commitment to fighting climate change.”⁹⁷

In their alleged efforts to combat climate change, the World Bank and ADB support a wide variety of projects. While some, such as wind power, may be considered genuinely climate friendly, these projects receive a fraction of the funding that is allocated toward GHG intensive and socially harmful projects. Other projects, such as those related to water delivery, most likely would have happened anyway, but are being repackaged as climate friendly. An overview of selected projects follows. The project number for each is included so they can be located in the Appendix and/or in the database of the respective funding institution.

Selected Projects

- An IFC-funded private water purification and delivery project with water distribution centers throughout the states of Maharashtra, Rajasthan and Madhya Pradesh. This project expects to be eligible for carbon credits via the CDM because the water purification systems displace carbon that otherwise would be released by burning firewood to boil and purify water.(27215)
- A 2.9 billion dollar IFC-supported oil exploration, processing and pipeline project in Rajasthan. The company

- building the facilities has taken steps to reduce GHGs such as installing more efficient flares and “improving plant operations to minimize volumes of gas flared during plant upsets.” The company has initiated a study to determine if these and similar measures could render carbon credits under the CDM.(26763)
- A sugar producing plant in Uttar Pradesh which produces power by burning its own waste is supported by the IFC-Netherlands Carbon Facility. (520722)
 - A massive private sector IFC supported wind power project in Gujarat and Karnataka which is being developed as a CDM project. (26321)
 - A 3,5000 hectare tree plantation in the states of Orissa and Andhra Pradesh that will supply wood to JK Paper Mills Limited. With support from the World Bank managed Prototype Carbon Fund, this project is eligible for CDM credits because it purportedly sequesters carbon from the atmosphere. (P095901)
 - Two brick manufacturing projects supported by the World Bank managed Community Development Carbon fund. One uses a more efficient kiln reducing GHG emissions. The other avoids the use of a kiln and the associated GHG emissions through a chemical process that uses a waste byproduct from coal power plants.(P090163 & P091453)
 - An ADB supported project entitled Preparing the Sustainable Coastal Protection and Management (formerly Integrated Coastal Zone Management and Sustainable Coastal Protection) is part of a large-scale comprehensive economic development strategy for much of India’s coast. Because it contains an element of erosion control to prevent property loss to the sea, the ADB classifies this as a climate adaptation project.(40156)
 - The World Bank’s Community Development Carbon Fund is supporting solid waste and composting units throughout the state of Gujarat that will reduce GHG emissions from rotting organic garbage.
 - The World Bank’s Community Development Carbon Fund is supporting a municipal water energy efficiency project in Karnataka. (P100352)

CONCLUSION

The global community must take drastic and politically difficult steps to address climate change in ways that will actually reduce GHG emissions. Failure to do so will bring consequences far greater than any famine, drought, flood or economic downturn we have ever known.

The level of international cooperation that was reached to form the UNFCCC and the Kyoto Protocol offered a remarkable sign of hope. Nonetheless, we must recognize that the current market-based approach is fundamentally flawed, and that a viable solution will not arise if multilateral banks, and the world's most powerful nations that control them, are allowed to continue undermining a genuine multilateral decision making process.

The theory which supports carbon trading is based on the fundamental assumption that emission reductions, the currency of carbon trading, are based on actual definitive emission reductions. Unfortunately, this is not the case in large part because the World Bank, ADB and powerful corporations are able to exploit the fact that it is difficult, and often impossible to prove additionality. Emission reductions are further undermined by the fact that by purchasing pollution credits from countries without emission limits, developed countries effectively eliminate their own emissions limit. Overall, the availability of illegitimate emission reduction credits allows the largest GHG emitters to continue emitting. Clearly, the beneficiaries of this system are large corporations and developed countries, not the environment.

The World Bank and ADB have clearly taken advantage of the increased attention to climate change to advance their own

agendas and capture new funding sources. They have used the climate crisis to legitimize projects that create displacement, debt, deforestation, environmental destruction, and increase GHG emissions. Moreover, they have successfully positioned themselves as gatekeepers to funding that should be governed by the UNFCCC, and used it to extract concessions from developing countries. Finally, the World Bank is going a step further and developing its own framework parallel to that of the UNFCCC. Clearly the World Bank and ADB have overstepped their bounds and must be excluded from future climate negotiations.

For developing countries, the carbon trading system has had a perverse impact. It rewards corporations whose governments lack emission reductions laws because CDM benefits are available only for emission reductions that are not legally mandated. This reduces incentives for governments to enact emission reducing regulations and leaves governments open to lobbying pressure from corporations opposed to regulations that would forfeit their CDM revenues. Concurrently, it provides new funding for GHG-producing projects as long as they are deemed marginally less polluting than the national average. As we have seen in India, the World Bank and ADB have used carbon trading to rationalize and fund projects that are harmful to local communities and lock India into a GHG-intensive growth model.

It is clear that carbon trading is politically viable because it allows corporations in developed countries to avoid emissions reductions and it provides a new funding stream to corporations from developing countries. India has clearly embraced carbon trading under Prime Minister Manmohan Singh, and the Obama administration

has supported it as a preferred option for ultimate U.S. participation in future multilateral climate treaties.

Despite the relative political viability of free-market emission reductions, there is some hope for environmentally viable alternatives. For example, widespread support remains for the same proposals which were opposed by the U.S. during the Kyoto Negotiations – namely a framework based on fining or taxing emitters in developed countries to fund mitigation and adaptation in developing countries. And remarkably, with the notable exception of

the U.S., developed countries accepted the Kyoto Protocol’s fundamental principle of “common but differentiated responsibilities” which can and should remain a guiding principle of any post-2012 climate framework. Finally, despite its shortcomings, the UNFCCC happens to be the most functional, science-based, legally binding multilateral governing structure available for future climate negotiations. While it is not a perfect democracy, the UNFCCC is certainly more democratic than the climate governing structure preferred and promoted by the World Bank and the ADB.

APENDIX 1: SELECTED CLIMATE-RELATED WORLD BANK GROUP PROJECTS IN INDIA

INTERNATIONAL FINANCE
CORPORATION

Project Name / Location/ Number:

Tata Ultra Mega / Mundra, Gujarat/25797

Project Type / Sector:

Coal / Utilities

Total project cost:

Approximately \$4.14. billion

IFC Financing Amount:

An A loan of up to \$450 million, potential \$50 million in equity investment, potential \$300 million in B loans.

Project Description:

Coastal Gujarat Power Limited (CGPL), which is owned by Tata Power Co Ltd, will build, own and operate a 4,000MW (5 units of 800 MW each) power plant using coal imported from mines in Indonesia and other countries. Tata Power Company Limited will sell its power to the utilities of five states in western and northern India. The project will use port facilities operated by the Adani Group of Gujarat and equipment supplied by Doosan and Toshiba.

The IFC boasts that this is India's first private sector project based on "energy efficient supercritical technology" and IFC's first anywhere in the world. The IFC argues that, "while the total GHG emissions may be high," the GHG emission per unit of electricity produced are lower than for other coal plants "in India, across the globe

and OECD." Using this argument, the IFC gained approval for this as a CDM project.

The IFC believes that India has no choice but to, "continue to be dependent on coal to fulfill its power requirements due to limited availability and high pricing of gas, hydro and other renewable sources."

The Asian Development Bank also is contributing \$450 million for this project. (see Appendix III)

Project Name / Location/ Number:

INCaF BCML Bagasse Cogen / Haidergarh & Balrampur, Uttar Pradesh / 520722

Project Type / Sector:

Power via Cogeneration / Other

Total project cost:

EUR 7-8 M

Financing Amount:

EUR 7-8 M expected through 2012. Paid in installments upon annual delivery of CERs pursuant to contract or emission reduction purchase agreement with INCaF.

Project Description:

Balrampur Chini Mills Limited (BCML) is one of the largest sugar producers in India, accounting to 2.5% of India's annual sugar production. One family (Saraogi) holds 47% of its equity capital. BCML has developed 2 cogeneration projects since 2003 (total 39.5 MW capacity) to provide steam and electricity for its sugar mills and

to export surplus electricity. The plants are fueled with bagasse, a waste by-product of sugar production, and according to the IFC were developed with the expectation that they would sell CER's on the global carbon market. INCaF agreed to purchase approximately 90% of the CERs generated by BCML from 2003 to 2012. IFC's goal for this project is to "encourage emerging market private sector participation in the carbon market" because it is "well positioned to assist project sponsors with participation in the rapidly growing market for 'carbon credits'."

Project Name / Location/ Number:
INCaF IHDC Small Hydros / Himachal Pradesh (Sechi, Melan and Panwi), Maharashtra and Madhya Pradesh (Birsingphur) / 531872

Project Type / Sector:
Small Hydro / other

Total project cost:
\$45 million (estimated)

Financing Amount:
INCaF CER purchase: \$4.2 - \$5 million.
IFC A Loan: up to \$16 million.

Project Description:
INCaF will contract Dodson-Lindblom HydroPower Private Limited (DLHPPL) and Ascent Hydro Projects Limited (Ascent) to purchase CERs generated by the companies' small hydro projects in India from 2001 to 2012. Both companies are 100% owned subsidiaries of Dodson-Linblom Intl, which is a wholly-owned subsidiary of DLZ Corporation of Columbus, Ohio, USA. A Mr. Vikram Rajadhyaksha currently owns 67% of DLZ, while the remaining

shareholders are: employees (25%), Mr. P.V. Rajadhyaksha, brother of Vikram (7%), and Janet, wife of Vikram, and Dr. Kasturi Rajadhyaksha, mother of Vikram (1%).

In addition to INCaF's commitment to purchase \$4.2 to \$5 million in CER's, IFC is also providing direct lending for the actual construction of the hydroelectric plants.⁹⁸

Project Name / Location/ Number:
GPEC wind power/ Samana, Gujarat and Saundatti, Karnataka / 26321

Project Type / Sector:
wind power / utilities

Total project cost:
US\$232 million

IFC Financing Amount:
\$40 million requested from IFC

Project Description & Beneficiaries:
Gujarat Paguthan Energy Corporation (GPEC) has requested two \$20 million loans from IFC to finance two separate wind farms. GPEC is a 100% Indian subsidiary of CLP Holdings Ltd. of Hong Kong, held 99.99% by CLP Power (GPEC) Ltd., Mauritius and 0.01% by CLP Power India Pvt. Ltd, India (both 100% subsidiaries of CLP Holdings). CPL Holdings Ltd is listed on the Hong Kong Stock Exchange. GPEC is currently taking steps to develop both wind farms as CDM projects to earn carbon credits.

Project Name / Location/ Number:
WaterHealth India Private Limited/ Villages throughout the states of Maharashtra, Rajasthan and Madhya Pradesh / 27215

Project Type / Sector:
Decentralized water purification
systems / Utilities

Total project cost:
\$32 million estimated

IFC Financing Amount:
\$15 million requested

Project Description:
WaterHealth Pvt Ltd (WIPL), a wholly owned subsidiary of WaterHealth Intl. Inc (WHI) has proprietary water purification centers in approximately 175 villages in Andhra Pradesh which provide distributed water services. Through this project, WHI plans to install approximately 800 additional systems in villages across the states of Maharashtra, Rajasthan and Madhya Pradesh. These systems are dependent upon user fees from the sale of treated water. IFC project documents ignore the problem of water access for people who are unable to pay.

The IFC expects this project to be eligible for carbon credits via the CDM because the purification systems displace carbon that otherwise would be created by boiling water with firewood for purification.

Project Name / Location/ Number:
Rain CDG / Vishakhapatnam in
Andhra Pradesh / 26609

Project Type / Sector:
Carbon Delivery Guarantee

Total project cost:
N/A

IFC Financing Amount:
No investment or project financing involved in this transaction. In the proposed

transaction, IFC would purchase and on-sell CERs. There is

Project Description:
This project, along with another in South Africa, represents IFC's first carbon delivery guarantee which will guarantee the delivery of carbon credits to buyers in developing countries. Rain Calcining Limited produces Calcined Petroleum Coke which is a raw material in the manufacture of aluminum. By using waste heat from a kiln, Rain asserts it will reduce its dependence on fossil fuel for power generation leading to CERs. In 2007, this project was registered with the CDM with an annual CER generation estimate of 164,770. The IFC claims that by providing this guarantee, it will enhance the credit of Rain's CER sales, thereby facilitating the company's access to "the best global CER markets and customers, leading to better prices."

One Mr. Jagan Mohan Reddy, along with his family hold about 46.9% of Rain's equity. The balance is held by financial institutions, general public and other corporations. IFC has a 5% shareholding in Rain and has had it as a client since the company's inception in 1993-94.

Project Name / Location/ Number:
Cairn India II / Northwest Rajasthan near
Barmer / 26763

Project Type / Sector:
Oil exploration, processing & Pipeline / Oil,
Gas and Mining

Total project cost:
\$2.9 billion, of which approximately \$2.0 billion is Cairn's portion of the project's cost with the remaining 30% to be paid by Cairn's partner in the Rajasthan Block, the mainly state-owned Oil and Natural Gas Corporation (ONGC).

IFC Financing Amount:

Up to \$250 million

Project Description:

Cairn India Ltd was formed by Cairn Energy PLC, an oil and natural gas exploration and production company traded on the London Stock Exchange. This proposed project would contribute to the development of Cairn's crude oil discoveries in Rajasthan, the largest onshore discovery in India since 1985. It also would construct a processing facility and develop an approximate 600km crude oil pipeline to transport oil from Rajasthan to Gujarat's western coast.⁹⁹

Cairn has adopted a strategy to set targets for methane and greenhouse gasses and has taken steps to reduce GHGs such as installing more efficient flairs and "improving plant operations to minimize volumes of gas flared during plant upsets." Cairn UK has initiated a study to determine if these and similar measures could render carbon credits under the CDM.

Project Name / Location/ Number:

AllainDuhanganII / Kullu District of Himachal Pradesh / 26500

Project Type / Sector:

Utilities / Hydropower

Total project cost:

Approximately \$408.98 million

IFC Financing Amount:

In 2004, IFC's board approved a \$46.00 million loan for this project and \$7 million in equity (project 11632). IFC is expected to invest an additional \$32.75 (estimate) in the form of an A loan and an additional \$9.25 million in equity.

Companies Involved:

AD Hydro Power Limited (ADHPL) is currently approximately 90% owned by Malana Power Company Limited (MPCL) and 10% by IFC. MPCL is owned 51% by Bhilwara Energy Limited ("BEL") and 49% by Stratkraft Norfund Power Limited (SNP) of Norway.

BEL is part of the LNJ Bhilwara Group (LNJB), a diversified industrial group with interests in textiles, graphite electrodes, power generation and information technology. Other members of the LNJ Bhilwara Group include HEG Limited (HEG), and Rajasthan Spinning and Weaving Mills Limited (RSWM). BEL is the holding company through which LNJB intends to increase its exposure in the Indian power sector. LNJB has successfully undertaken two other hydro-electric power projects to date: the 86MW Malana HPP in Himachal Pradesh and the 13MW Tawa HPP in Madhya Pradesh.

The sponsors of the project are HEG, RSWM, MPCL, and SNP.

Project Description:

This project provides additional financing to support the completion of a 192MW hydroelectric plant. Construction began in 2005 and the project faced cost overruns. It is now 60% complete. According to the project design document submitted to the UNFCCC, in the absence of this hydro facility, an equivalent amount of power would have been generated using fossil fuels given that the current power grid is dominated by power from coal. The document also states that this project faced various "barriers for implementation" and that "Without CDM benefits it would have not been possible to implement the project."¹⁰⁰ This project is also receiving

support from the Italian Carbon Fund managed by the World Bank.

Project Name / Location/ Number:

Carbon Financing for Improved Rural Livelihoods Project / Orissa and Andhra Pradesh / P095901

Project Type / Sector:

Agriculture, fishing, and forestry

Total project cost:

\$6.76 Million

Financing Amount & Source:

\$1 million from the World Bank administered Prototype Carbon Fund

Project Description:

This project will develop 3,500 hectares of tree plantations in the states of Orissa and Andhra Pradesh to supply a paper company, JK Paper Mills Ltd. The plantations will consist of around 50% non-native Eucalyptus and are expected to sequester carbon from the atmosphere and generate carbon credits. This project will organize farmers into cooperatives to supply the mill. The mill will provide credit to the farmers and provide subsidized planting materials and purchase commitments.

Project Name / Location/ Number:

FaL-G Brick and Blocks Project / Andhra Pradesh – various locations / P090163

Project Type / Sector:

Brick manufacturing / Industry and Trade

Total project cost:

\$4.94 million

Financing Amount & Source:

The World Bank's Community Development Carbon Fund will purchase the emissions

reductions generated. Payment amount unavailable.

Project Description:

This project will promote the use of fly ash, a waste material from coal based power plants, in the construction of building bricks. By mixing fly ash with lime and gypsum, bricks harden chemically rather than having to be fired in a kiln. According to the World Bank, traditional brick manufacturing requires burning 200 tons of coal to produce one million bricks. This project bundles 14 FaL-G plants that have been established in various locations in the state of Andhra Pradesh since January 2003. One member of the CDM executive review raised concerns that this project will consume cement/lime and other products that cause GHG emission during their production.¹⁰¹ The World Bank replied that emissions from inputs do not need to be considered.¹⁰²

Project Name / Location/ Number:

Vertical Shaft Brick Kiln Cluster Project/ Chattisgarh, Rajasthan, Jharkhand, Madhya Pradesh, and Orissa / P091453

Project Type / Sector:

Brick manufacturing / Industry and trade

Total project cost:

\$2.4 million

Financing Amount & Source:

The World Bank's Community Development Carbon Fund will purchase the emissions reductions generated. Payment amount unavailable.

Project Description:

This project involves the use of a vertical shaft brick kiln (VSBK), a more efficient kiln for clay brick makers. The promotional

web page of the World Bank's Carbon Finance Unit states that this brick kiln method offers "energy savings of more than 50 percent." A more detailed World Bank project information documents says it will "reduce fuel consumption by about 30-50%."

This project is being implemented by the Technology and Action for Rural Advancement (TARA) the social enterprise arm of the Development Alternatives Group. TARA provides VSBK technology in India and intends to set up a total of 126 VSBK units under this project. TARA act as the bundling entity or a "single service window" on behalf of individual entrepreneurs. TARA will enter legal agreements with individual brick making entrepreneurs which give it rights to the emissions reductions generated by the project. Project documents state that TARA is tasked with ensuring that the "monetary value of the emission reductions purchased by the Community Development Carbon Fund of the World Bank will be transferred to local entrepreneurs in accordance with the emission reduction purchase agreement."

Project Name / Location/ Number:
Rampur Hydropower Project / Himachal Pradesh, Satluj River / P095114

Project Type / Sector:
Hydropower / Energy and mining

Total project cost:
\$670 million

Financing Amount & Source: \$400 million loan from IBRD and an emission reduction purchase agreement under development with the World Bank managed Spanish Carbon Fund.¹⁰³

Project Description:

The World Bank supported this 412 MegaWatt run-of-river hydropower plant with a loan to the public sector company, Satluj Jal Vidyut Nigam Limited. The World Bank claims this project "will provide renewable, low carbon energy to India's over-stretched Northern Electricity Grid." This project appears in the World Bank's project database under the theme "climate change." However, it does not appear in the World Bank's Carbon Finance Unit's database as a project of the Spanish Carbon Fund (SCF) despite the fact that there is emission reduction purchase agreement under development with the SCF.¹⁰⁴

According to the Bank's "Resettlement Action Plan" this project will affect 4 villages whose families have an average land holding of .7 hectare. The total estimated land acquisition includes 48.96 hectares of government forestland and 29.29 hectares of private land. Private land acquisition was estimated to affect 144 families of which 29 would be displaced by the project.

Project Name / Location/ Number:
Gujarat Solid Waste and Composting / 161 Municipalities in Gujarat / P105184

Project Type / Sector:
Solid waste management / Water, sanitation and flood protection

Total project cost:
Total estimated project cost \$93 million

Financing Amount & Source:
Estimated contribution of the World Bank's Community Development Carbon Fund: \$10 million

Project Description:

This is a carbon offset project that includes the establishment of composting units in 161 municipalities throughout Gujarat. Its goal is to “manage and mitigate the uncontrolled dumping of solid waste” in Gujarat. One aspect of this project is that it will reduce GHG emissions that are released as organic materials rot. The World Bank envisions “alternative institutional mechanisms” such as different forms of “public-private partnerships” to “enhance sustainability.” The World Bank will help the government of Gujarat access carbon finance to enhance operational viability. This typically implies a combination of funds from the World Bank’s Carbon Finance Unit and from other emission reduction buyers in the market.

Project Name / Location/ Number:

BBMB Hydro Power Rehab Project / Punjab / P105152

Project Type / Sector:

Rehabilitation of Hydropower facilities / Energy and mining

Total project cost:

\$123 million

Financing Amount & Source:

\$3.2 million estimated contribution from World Bank managed Spanish Carbon Fund¹⁰⁵

Project Description:

This project supports the renovation and upgrading of hydropower facilities of

Bhakra Beas Management Board’s (BBMB) which is under administrative control of the Indian Ministry of Power. By making these facilities more efficient, reliable and productive this project theoretically displaces coal power units. Project documents claim an approximate annual emission reduction of 301,420 tons of Carbon dioxide (CO₂) equivalent.

Project Name / Location/ Number:

India Energy Efficiency at Steel Forging Cluster / Punjab / P104961

Project Type / Sector:

Steel forging energy efficiency / Industry and trade

Total project cost:

\$16.9 million

Financing Amount & Source:

Proposed up front financing of \$100,000 from the Community Development Carbon Fund

Project Description:

This project is designed to improve the efficiency of 310 small steel forging operations, thereby reducing the need to burn coal and fuel oil and consume electricity. The operations will be “clustered” under the management of Ludhiana Hand Tools & Forging Envirocare Private Limited, a Special Purpose Vehicle (SPV) formed for this transaction. This SPV will act as a point of contact for the World Bank and other parties and sign agreements on behalf of individual forging operations.

APENDIX 2: SELECTED CLIMATE-RELATED ASIAN DEVELOPMENT BANK PROJECTS IN INDIA

Project Name / Location/ Number:

Jhajjar Thermal Power Project / Matanhel, Jhajjar, Haryana, India / 42933-01

Project Type / Sector:

Coal Power / Energy, Conventional En

ADB Financing Amount:

Private Sector Loan US\$75.00 million
B-loan US\$175.00 million

Project Description:

CLP Power India Private Limited (CPIPL), an Indian subsidiary of CLP Holdings Limited, Hong Kong (the parent company of the CLP Group) was the successful bidder for a a 1,320 MW coal based power plant. The Project was conceived by Haryana Power Generation Corporation Limited, the state-owned power generation utility and is currently owned by Jhajjar Power Limited (JPL), a Special Purpose Vehicle created for implementing the Project. Coal will be supplied by a public sector supplier owned by the government of India.

Similar to the Tata Mundra project, this coal plant will use supercritical technology. According to JPL project documents, this technology is more expensive than other available technology and is economically viable only “if Clean Development Mechanism (CDM) under the Kyoto Protocol carbon credits are granted for the reduction in CO2 emissions that will result.”¹⁰⁶ Further, they argue that the conservation of coal allowed by this technology will allow them to pass savings on to electricity customers. JPL sponsors

are preparing the necessary documentation to gain approval as a CDM project “to offset the additional capital cost.”¹⁰⁷

Project Name / Location/ Number:

Preparing the Sustainable Coastal Protection and Management (formerly Integrated Coastal Zone Management and Sustainable Coastal Protection) / Goa, Karnataka, and Maharashtra /40156

Project Type / Sector:

Erosion Control / Agriculture & Natural Resources/Environment & Biodiversity
Agriculture & Natural Resources/Water Resources Management

ADB Financing Amount:

\$1 million approved for technical assistance and up to \$320 million additional for approval in 2010

Project Description:

The \$1 million technical assistance will support the states of Goa, Karnataka and Maharashtra to prepare a “Sustainable Coastal Protection and Management Project,” formerly known as Integrated Coastal Zone Management. This technical assistance will include land use planning, institutional development, investment planning and site-specific. A portion of this project will be to design methods to reduce the loss of coastal property. The ADB considers this climate change adaptation due to erosion resulting from rising sea levels. Overall however, this project is designed to support much larger future investments and a broad based plan to essentially restructure the coastal economies and promote large

scale development. For this reason, this initial project will “ascertain the precise extent of resettlement implications” and will respond with plans for “subprojects involving involuntary resettling.”

Project Name / Location/ Number:

Capacity Building for the Clean Development Mechanism in India / throughout India / 38496- 01

Project Type / Sector:

Capacity Building / Technical Assistance

Financing Sources & Amount:

Of the total project cost of \$900,000, \$700,000 is from the Government of Canada’s Canadian Cooperation Fund for Climate Change and \$200,000 from the Government of India.¹⁰⁸

Project Description:

This project is designed to provide comprehensive assistance to the Indian government and Indian industry to “effectively plays an active role in the global carbon market.” Specially, this project will build capacity within the Government of India’s National CDM Authority and assist the Indian private sector, financial institutions and stakeholders in accessing CDM opportunities. It provides staff to the National CDM Authority, other relevant government stakeholders, and selected institutions from the financial and insurance sectors who are trained in risk management, appraisal and structuring of CDM projects. It also will provide written methodologies and various toolkits and handbooks to help project sponsors identify projects and manage risk.

Project Name / Location/ Number:

Climate Impacts and Responses:
A Multimedia Campaign Project / Regional / 43057- 01

Project Type / Sector:

Multimedia Campaign / Technical Assistance

Financing (Source, TPC, Brkdn):

US\$450,000 from the Climate Change Fund managed by ADB

Project Description:

The ADB will collaborate with the Asia Pacific Broadcasting Union (ABU) to “raise the profile” of climate change risks and responses in Asia and the Pacific. ABU will organize workshops and invite journalists to “familiarize participants with various aspects of climate change” and explain ADB programs to support mitigation and adaptation. The workshops will help broadcasters “identify stories they can work on, and the key messages that the ADB wants to convey.” The workshops will generate production short video news features, which workshop participants must agree to broadcast as a condition of their participation. During the production process, ADB’s Department of External relations will oversee broadcasters “to ensure quality control.” The ABU has agreed to market the news videos to its member broadcasters, the best of which it will promote to international television networks. ABU also will undertake the Climate Change Radio Initiative, inviting radio members to a workshop in New Delhi. ABU will appoint executive producers from the participants to develop a “story template” to be shared with ABU radio members. ABU also will provide various awards, grants for radio and television as well as a prize for climate change reporting. The ADB hopes that this project will provide it with “enhanced brand credibility through stories that demonstrate ADB’s commitment to fighting climate change.” 109

Project Name / Location/ Number:

Implementing the Technical Support Facility under the Carbon Market Initiative / Regional / 41138

Project Type / Sector:

Technical Assistance / Energy & Energy Sector Development & Multisector

Financing:

Government of Luxembourg US\$725,000; Government of Austria US\$1.0 million; ATF-Government of Swiss Confederation US\$300,000; ATF Spanish TA Grant US\$1.0 million; Finland (w/ LoA) US\$1.015 million

Project Description:

This project aims to operationalize the

Technical Support Facility of the ADB's Carbon Market Initiative (See Appendix ____). Through this project the ADB will hire consultants to advance CDM initiatives in the region, offer training, workshops and seminars, and support CDM validation. It also will assist in the screening of potential CDM, conduct "due diligence in tandem with loan preparation," support project developers in drafting the documents necessary to comply with the CDM, and help project developers obtain approval from their host country. Finally it will offer direct support during project implementation to ensure proper implementation and construction of the portion of given projects that will make them eligible to become a CDM project.

APPENDIX 3: WORLD BANK CLIMATE FUNDS & FACILITIES

Prototype Carbon Fund

The World Bank's first carbon fund, established in 1999 with \$180 million from five governments and 18 companies. The fund purchased emissions reductions and distributed them to the funds contributors. The World Bank used this fund to purchase emission reductions before the Kyoto Protocol became operational.

Netherlands CDM Facility

The World Bank and the government of the Netherlands agreed in 2002 establish this facility to purchase emissions reductions from projects in renewable energy, biomass, energy efficiency improvements and fossil fuel switch and methane recovery and carbon sequestration.

Community Development Carbon Fund

This fund became operational in 2003 but is now closed to further subscriptions. It was capitalized with \$128.6 million with nine governments and 16 corporations / organizations as participants. This fund claims to support projects with community development benefits as well as emission reductions in the poorest countries of the world. Its goal is to create "development plus carbon."

BioCarbon Fund

This fund was established in 2004 with public and private money to foster projects that sequester or conserve greenhouse gasses. This fund is intended to demonstrate

how forestry and land use activities can generate emissions reductions as well as livelihood benefits.

Italian Carbon Fund

In 2003, the World Bank entered an agreement with Italy to establish a fund to purchase emissions reductions in developing countries to help Italy meet its obligations under the Kyoto protocol. The fund has a total capital of \$155.6 million.

Netherlands European Carbon Facility

Created in 2004 through an agreement between The Netherlands, World Bank and IFC, this facility is designed to purchase emissions reductions from Joint Implementation projects for the benefit of the Netherlands.

Danish Carbon Fund

This fund was established in 2005 with the participation of two Danish government ministry's and one private sector participant. In 2005, three other private sector participants joined. The fund's present value is \$68.5 million. A portion of this fund (\$5.125 million) was committed to the Community Development Carbon Fund.

Spanish Carbon Fund

Established in 2005, this fund designed to purchase a minimum of 34 million tons of emission reductions from renewable energy, energy efficiency and other projects in developing and transition countries.

Umbrella Carbon Fund

This \$719 million fund was developed in 2005 to pool funds from existing World Bank-managed carbon funds and other sources to purchase emissions reductions for large projects. This fund is designed to purchase reductions that are too large for any single World Bank carbon fund, or even too large for all carbon funds combined. This fund will have multiple tranches. The first is dedicated to the purchase of CERs from HFC-23 projects in China.

Forest Carbon Partnership Facility

This new facility is designed to reduce emissions from deforestation and land degradation by advancing a market for emissions reductions based on standing forests.

Carbon Partnership Facility

This facility is designed to enhance the demand for emission reductions after the end of the Kyoto Protocol's regulatory period in 2012. Specifically, it aims to support large-scale long-term investments.

Carbon Fund for Europe

This fund was established in 2007 to help European countries meet their emission reduction commitments under the Kyoto Protocol. It is a trust fund established in cooperation with the European Investment Bank to complement private sector.

REFERENCES

- 1 The UNFCCC's Kyoto Protocol utilizes three market-based mechanisms which it calls Emissions Trading, Clean Development Mechanism, and Joint Implementation. Although the UNFCCC uses the term "Emissions Trading" to describe one of its three mechanism (See: http://unfccc.int/kyoto_protocol/mechanisms/items/1673.php), this term is commonly used to broadly describe trade in emissions of all kinds (GHG and non-GHGs), and trade under systems within and outside of the UNFCCC.
- 2 Buying and selling the right to pollute in general may be referred to as "emissions trading," however, the "Emission Trading" mechanism of the UNFCCC's Clean Development Mechanism is one of three mechanisms that addresses trade in greenhouse gases. The terms "carbon market" or "carbon trading" refer specifically to trading related greenhouse gases, but encompasses more greenhouse gasses than carbon dioxide. These terms may be used to encompass all greenhouse gasses, or just those which are part of the UN greenhouse gas emissions trading mechanisms. The UNFCCC states that, "Since carbon dioxide is the principal greenhouse gas, people speak simply of trading in carbon. Carbon is now tracked and traded like any other commodity. This is known as the "carbon market."" See: http://unfccc.int/kyoto_protocol/mechanisms/emissions_trading/items/2731.php
- 3 The Executive Directors of the World Bank approved the establishment of the Prototype Carbon Fund In July of 1999. It became operational in 2000.
- 4 http://wbcarbonfinance.org/docs/Banks_experience_in_contracting_emission_reductions.pdf
- 5 The international agreement established under the United Nations to reduce global concentrations of GHGs. See introduction and next section of report entitled "Mechanisms" beginning on Page 4.
- 6 http://wbcarbonfinance.org/docs/Role_of_the_WorkBank.pdf Page 1
- 7 http://unfccc.int/parties_and_observers/items/2704.php
- 8 "World Bank: Climate Profiteer," by Janet Redman, Institute for Policy Studies, April 2008. Available at: http://www.ips-dc.org/reports/world_bank_climate_profiteer
- 9 In other contexts, the term "emissions trading" is applied more broadly to include all three of the Koto Protocol's market-based mechanisms and/or emissions trading that occurs outside the Kyoto Protocol's framework.
- 10 Kyoto Protocol, Article 12, #5, c. Available at: http://unfccc.int/essential_background/kyoto_protocol/items/1678.php
- 11 http://unfccc.int/kyoto_protocol/items/3145.php
- 12 See Appendix I
- 13 "Additionality determination of Indian CDM projects: Can Indian CDM project developers outwit the CDM Executive Board?" By Axel Michaelowa and Pallav Purohit. University of Zurich, Institute for Political Science, Mühlegasse 21, 8001 Zürich, Switzerland. Page 6
- 14 "Abuse and Incompetence in Fight Against Global Warming," by Nick Davies, The Guardian, June 2, 2007. <http://www.guardian.co.uk/environment/2007/jun/02/energy.business>
- 15 "Is the CDM fulfilling its environmental objectives? An evaluation of the CDM and options for improvement," prepared for World Wildlife Fund by the Öko-Institut November 2007. Page 2.
- 16 "A Realistic Policy on International Carbon Offsets" by Michael W. Wara and David G. Victor Working Paper #74 April 2008, Page 8. Available at: <http://www.ucei.berkeley.edu/PDF/seminar20090213.pdf>
- 17 See: <http://www.brettonwoodsproject.org/art-563032> and http://timesofindia.indiatimes.com/Earth/Global_Warming/India_refuses_World_Bank_aid_to_fight_climate_change/articleshow/3578549.cms
- 18 www.cdmindia.com or <http://cdmindia.nic.in/>

- 19 “World’s Leading CDM Destination - India.” Government of India brochure. Page 2.
- 20 Government of India: National Action Plan on Climate Change, Page 6.
- 21 http://www.sandrp.in/CRTITUQE_ON_INDIAs_CLIMATE_PLAN-There_is_Little_Hope_Here_Feb_2009.pdf
- 22 Government of India: National Action Plan on Climate Change. Page 12 “Per capita” means average per person by dividing the quantity of electricity by the total number of people. This measure says nothing about equal distribution. An increase in per capita energy consumption does not necessarily mean that more people have access to electricity for basic needs.
- 23 Numbers accurate as of March 18, 2009. UNFCCC website updated regularly: <http://cdm.unfccc.int/Statistics/Registration/NumOfRegisteredProjByHostPartiesPieChart.html>
- 24 Numbers accurate as of March 18, 2009. UNFCCC website updated regularly: <http://cdm.unfccc.int/Statistics/Issuance/CERsIssuedByHostPartyPieChart.html>
- 25 Project size is based on the UNFCCC’s emission reduction number provided in their project database. It applies to “estimated emission reductions in metric tonnes of CO₂ equivalent per annum (as stated by the project participants).” The ten largest projects can be found by searching UNFCCC’s CDM database available at: <http://cdm.unfccc.int/Projects/projsearch.html> Select registered projects in India, and sort by amount of reductions.
- 26 The four companies involved in order of project size with accompanying link to project information follow:
SRF Limited: <http://cdm.unfccc.int/Projects/DB/DNV-CUK1129901204.48/view>,
Gujarat Fluorochemicals Limited: <http://cdm.unfccc.int/Projects/DB/SGS-UKL1092749325.58/view>,
Navin Fluorine International Limited: <http://cdm.unfccc.int/Projects/DB/DNV-CUK1167824240.14/view>,
Chemplast Sanmar Limited: <http://cdm.unfccc.int/Projects/DB/DNV-CUK1152277768.87/view>
- 27 See: <http://www.ucei.berkeley.edu/PDF/seminar20090213.pdf> Page 11
- 28 UNEP Risoe Center CDM Pipeline Spreadsheet, Tab: “Analysis2,” row 32, column R, and row 119. Available at: <http://www.cdmpipeline.org/>
- 29 Numbers accurate as of 1st July 2009. For up to date numbers, see: <http://www.cdmpipeline.org/cdm-projects-type.htm>.
- 30 <http://www.newscientist.com/article/dn11155-kyoto-protocol-loophole-has-cost-6-billion.html>
- 31 See project design document at: <http://cdm.unfccc.int/UserManagement/FileStorage/K8IYVBSAON1X5OFDGFNGPLHDTN4O1>
- 32 <http://cdm.unfccc.int/UserManagement/FileStorage/O6HI50NA08HODQCPAINASPCYVXJK8E>
- 33 <http://cdm.unfccc.int/Projects/DB/SGS-UKL1143807645.33/view> and <http://cdm.unfccc.int/Projects/DB/SGS-UKL1142515628.74/view>
- 34 UNEP Risoe Center CDM Pipeline Spreadsheet, Tab: “Analysis2,” available at: <http://www.cdmpipeline.org/>
- 35 <http://cdm.unfccc.int/UserManagement/FileStorage/3JSY06TSIYAJG51Z00KM7WZGAV7X7Z>
- 36 “U.S. Treasury Blasts World Bank Plan to Finance Third World Energy Development: Urges Bank and U.S. to Promote Private Investment At All Costs...” by Matthew Rothschild, *Multinational Monitor*, September 1981, Vol. 2, Number 9.
- 37 World Bank Group Voting Power, see: <http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/ORGANIZATION/BODEXT/EXTEDS01/0,,contentMDK:20174599~menuPK:380477~pagePK:64099144~piPK:64099061~theSitePK:380445,00.html>
And voting shares by country in the IBRD: <http://siteresources.worldbank.org/BODINT/Resources/278027-1215524804501/IBRDCountryVotingTable.pdf>

- 38 “World Bank Energy Sector Lending: Encouraging the World’s Addiction to Fossil Fuels,” by Heike Mainhardt-Gibbs, Bank Information Center, February 2009.
- 39 Ibid.
- 40 “The World Bank and its Carbon Footprint,” World Wildlife Fund, 2008, Page 5. Available at: http://assets.wwf.org.uk/downloads/world_bank_report.pdf
- 41 “World Bank Energy Sector Lending: Encouraging the World’s Addiction to Fossil Fuels,” by Heike Mainhardt-Gibbs, Bank Information Center, February 2009.
- 42 <http://www.adb.org/documents/reports/sape/ind/sap-ind-2007-17.pdf>, Page 14, Table 5. Renewable lending of \$100M / Total lending of \$4,693M from 1988 – 2006.
- 43 “World Bank experiences in contracting for emission reductions” by Rosebuj Carr: [2007] 2 Env. Liability Page 116. Available at: http://wbcarbonfinance.org/docs/Banks_experience_in_contracting_emission_reductions.pdf
- 44 Neither the World Bank’s primary database or the World Bank’s Carbon Finance Unit database provide comprehensive documentation about Carbon Finance projects. The CFU database is particularly out of date. Upon request of the author, staff at the World Bank’s Delhi office compiled a purported complete list of Indian Carbon Finance projects in March 2009.
- 45 Includes tranches one and two.
- 46 <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/ENVIRONMENT/EXTCC/0,,contentMDK:21713769~menuPK:4860081~pagePK:210058~piPK:210062~theSitePK:407864,00.html>
- 47 Australia, France, Germany, Japan, The Netherlands, Norway, Sweden, Switzerland, the United Kingdom, and the United States
- 48 <http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:21916602~pagePK:34370~piPK:34424~theSitePK:4607,00.html>
- 49 http://www.foe.org/pdf/CIF_TWNanalysis.pdf Page 2
- 50 http://siteresources.worldbank.org/INTCC/Resources/Clean_Technology_Fund_paper_June_9_final.pdf
- 51 http://siteresources.worldbank.org/INTCC/Resources/Clean_Technology_Fund_paper_June_9_final.pdf Page 34
- 52 Ibid.. page 17
- 53 Ibid. page 27
- 54 http://siteresources.worldbank.org/INTCC/Resources/Strategic_Climate_Fund_final.pdf#Strategic_Climate_Fund Page 10
- 55 Ibid. Page 10
- 56 Forest Investment Program Design Document. February 24, 2009. Page 5. Available at: http://siteresources.worldbank.org/INTCC/Resources/FIP_Design_Document_rev.pdf
- 57 http://siteresources.worldbank.org/INTCC/Resources/Strategic_Climate_Fund_final.pdf#Strategic_Climate_Fund Page 20
- 58 http://siteresources.worldbank.org/INTCC/Resources/Strategic_Climate_Fund_final.pdf#Strategic_Climate_Fund Page 3 and http://siteresources.worldbank.org/INTCC/Resources/Clean_Technology_Fund_paper_June_9_final.pdf Page 2
- 59 http://siteresources.worldbank.org/INTCC/Resources/Strategic_Climate_Fund_final.pdf#Strategic_Climate_Fund Page 12

- 60 http://siteresources.worldbank.org/INTCC/Resources/Strategic_Climate_Fund_final.pdf#Strategic_Climate_Fund
Page 18
- 61 http://www.ifc.org/ifcext/sustainability.nsf/Content/CarbonFinance_WhatWeDo
- 62 <http://www.adb.org/Climate-Change/cc-mitigation-carbon-market.asp>
- 63 <http://www.adb.org/Media/Articles/2008/12752-asian-carbon-funds/>
- 64 <http://www.adb.org/Media/Articles/2008/12752-asian-carbon-funds/>
- 65 <http://www.adb.org/Media/Articles/2008/12752-asian-carbon-funds/>
- 66 These include: the South Asian Clean Energy Fund, China Clean Energy Capital, China Environment Fund III, MAP Clean Energy Fund and the Asia Clean Energy Fund with each receiving \$20 million. The establishment of all five firms is listed under ADB project # 41922-01 at <http://www.adb.org/projects/project.asp?id=41922> and <http://pid.adb.org:8040/pid/PsView.htm?projNo=41922&seqNo=01&typeCd=4>. A longer description of all five projects available at: <http://www.adb.org/Documents/RRPs/REG/41922-REG-RRP.pdf>
- 67 <http://www.adb.org/Climate-Change/private-sector-investments.asp>
- 68 <http://www.adb.org/Documents/reports/CEFPF-AR/CEFPF-AR2008.pdf>
- 69 <http://www.adb.org/Water/WFPF/default.asp?afg-ind-downstream.asp>
- 70 <http://www.adb.org/Projects/PEP/>
- 71 <http://www.adb.org/Climate-Change/mitigation-funds.asp>
- 72 <http://www.adb.org/media/Articles/2008/12474-asian-climates-changes>
- 73 IFC Annual Report 2008. Pages 25 & 56
- 74 <http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/0,,pagePK:50004410~piPK:36602~theSitePK:29708,00.html>
- 75 <http://www.adb.org/Documents/Reports/SAPE/IND/SAP-IND-2007-17.pdf> Page 14
- 76 IBRD, IDA, IFC Country Strategy for the Republic of India FY 2009 – 2012. Available at: http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2008/11/20/000334955_20081120022910/Rendered/PDF/465090CAS0P1111USE0ONLY10R200810242.pdf
- 77 IFC and ADB project information available at: <http://www.ifc.org/ifcext/spiwebsite1.nsf/2bc34f011b50ff6e85256a550073ff1c/1584ea74da3979ab852573a0006847bb?opendocument> and <http://pid.adb.org/pid/PsView.htm?projNo=41946&seqNo=01&typeCd=4>
- 78 “Zoellick Fossil-Fuel Campaign Belied by World Bank’s Tata Loan” by Christopher Swann, Bloomberg News, August 10, 2008 citing Center for Global Development which ranks the world’s top GHG emitters. Available at: <http://www.bloomberg.com/apps/news?pid=20601109&sid=ap2zaLeAmcdQ&refer=exclusive>
- 79 <http://www.ifc.org/ifcext/spiwebsite1.nsf/2bc34f011b50ff6e85256a550073ff1c/4bc5d452c744bd97852574a20068885f?opendocument>
- 80 <http://www.ifc.org/ifcext/spiwebsite1.nsf/2bc34f011b50ff6e85256a550073ff1c/1584ea74da3979ab852573a0006847bb?opendocument>
- 81 <http://pid.adb.org:8040/pid/PsView.htm?projNo=42933&seqNo=01&typeCd=4>
- 82 <http://www.adb.org/Documents/Environment/IND/42933/42933-IND-SEIA.pdf>
- 83 Government of India - National Action Plan on Climate Change, Page 36.

- 84 CDM Changes to Benefit Efficient Coal Power Units (India), Live Mint. Available at: <http://asiaclean.tech.wordpress.com/2007/09/17/cdm-changes-to-benefit-coal-power-units-india/>
- 85 Ibid.
- 86 <http://www.commondreams.org/view/2009/02/15-1>
- 87 <http://www.adb.org/Documents/Reports/SAPE/IND/SAP-IND-2007-17.pdf> Page 12.
- 88 <http://www.ifc.org/ifcext/spiwebsite1.nsf/2bc34f011b50ff6e85256a550073ff1c/1584ea74da3979ab852573a0006847bb?opendocument>
- 89 <http://wbcarbonfinance.org/Router.cfm?Page=ProjPort&ItemID=24702>
- 90 Personal communication with World Bank Carbon Finance Unit help desk, March 18, 2009.
- 91 <http://cdm.unfccc.int/UserManagement/FileStorage/LYZSN7J5RUYN08DZTC236SF3POYNWK> Page 5
- 92 http://www.sandrp.in/hydropower/Allain_Duhangan.pdf
- 93 The proposed emission reduction purchase agreement with the Spanish Carbon Fund is not described on the World Bank's Carbon Finance Unit website. Information was provided by the Environment and Water Resources Team Leader at the World Bank's Delhi office.
- 94 http://www.ifc.org/ifcext/sustainability.nsf/Content/CarbonFinance_WhatWeDo
- 95 IFC press release: <http://www.ifc.org/ifcext/media.nsf/content/SelectedPressRelease?OpenDocument&UNID=E98BE5B64B0B132F8525740F005ECE10> and India PR wire: <http://www.indiaprwire.com/pressrelease/financial-services/200803178119.htm>
- 96 <http://www.adb.org/Documents/Reports/SAPE/IND/SAP-IND-2007-17.pdf> Page 14
- 97 <http://www.adb.org/Documents/TARs/REG/43057-REG-TAR.pdf> Page 3
- 98 First listed as project #23833 but now incorporated into #531872 available at: <http://www.ifc.org/ifcext/spiwebsite1.nsf/2bc34f011b50ff6e85256a550073ff1c/c6db7dfa8f8c6e588525702200796c5c?opendocument>
- 99 <http://www.cairnindia.com/Display.aspx?MasterId=3e068622-33e2-49b1-bd00-75960c3484ed&NavigationId=639>
- 100 <http://cdm.unfccc.int/UserManagement/FileStorage/LYZSN7J5RUYN08DZTC236SF3POYNWK> Page 5
- 101 http://www.ips-dc.org/reports/world_bank_climate_profiteer Page 23.
- 102 Ibid.
- 103 The proposed emission reduction purchase agreement with the Spanish Carbon Fund is not divulged on the World Bank's Carbon Finance Unit website. Information provided by the Environment and Water Resources Team Leader at the World Bank's Delhi office.
- 104 Ibid.
- 105 The proposed agreement with the Spanish Carbon Fund is not mentioned on the World Bank's Carbon Finance Unit website. Information provided by the Environment and Water Resources Team Leader at the World Bank's Delhi office.
- 106 <http://www.adb.org/Documents/Environment/IND/42933/42933-IND-SEIA.pdf>
- 107 Ibid.
- 108 <http://www.adb.org/Documents/TARs/IND/tar-ind-38496.pdf> Page 4
- 109 <http://www.adb.org/Documents/TARs/REG/43057-REG-TAR.pdf> Page 3

India is particularly vulnerable to the impacts of climate change, yet it has played a central role in a counterproductive global climate agenda pushed by the World Bank, the Asian Development Bank, and large corporations. India now hosts more registered greenhouse gas emission reduction projects – via the United Nations Clean Development Mechanism (CDM) – than any nation except China. In theory, these CDM “offset” projects – a form of “carbon trading” – reduce global emissions when developed nations avoid emission reductions at home by funding less expensive emissions reductions in developing nations. In reality, offset projects produce large quantities of greenhouse gases, pollute the local environment, and displace villages.

The World Bank and Asian Development Bank have become leading proponents of offset projects in India by committing their own resources, and by controlling international funding sources that would otherwise be managed within the more democratic, albeit flawed, United Nations climate framework. Moreover, these two multilateral banks have repackaged their existing corporate-friendly agenda as a solution to the climate crisis, while creating new climate governance programs intended to replace those of the United Nations.

Although it must overcome corporate influence and eliminate existing carbon trading programs, the United Nations – not multilateral banks – remains the most viable multilateral body available to manage climate-related finance and international agreements.



Regional office:

Focus on the Global South

c/o CUSRI, Chulalongkorn University, Wisit Prachuabmoh Building,
Bangkok-10330 THAILAND

Tel: +66(2)218.7363-65; Fax: +66(2)255.9976

Delhi office:

196/SFS, 2nd Floor, DDA,
Haus Khas Apts., Sri Aurobindo Marg,
New Delhi - 110 016, INDIA

Telefax +91-11-26513499