

The World Bank and the carbon market

Rhetoric and Reality

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Introduction

The World Bank Group (hereafter referred to as the Bank)¹ has emerged as the dominant player in the carbon market created by the 1997 Kyoto Protocol. Not only are the Bank's carbon funds the biggest single buyer of carbon credits, but the Bank is one of the most influential shapers of the emerging rules and modalities that govern these new mechanisms. The Bank sees its role as a catalytic one, helping to develop the market and attract private sector investment in it; a role which is consistent with its broader agenda of promoting market solutions to environmental problems. In justifying this self-appointed role, and building support for the carbon market, the Bank has claimed that far from simply being a means by which industrialised countries can reduce the costs of complying with the Kyoto Protocol, a global carbon market is consistent with its mission to reduce poverty, will promote sustainable development, and finance renewable energy and sustainable forestry projects.

This paper shows that these claims are false and that:

- these goals and project types are not being advanced by the carbon market;
- that the ongoing Bank financing of fossil fuels and unsustainable forestry projects marginalises the Bank's carbon market activities and works directly against the Bank's stated objectives in developing a carbon market;
- that despite its rhetoric, the Bank in fact is seeking to use carbon finance to support unsustainable technologies and practises such as industrial plantations and large dams;
- that as part of this effort it is promoting non-additional projects, and methodologies that would facilitate the approval of non-additional projects, thus directly undermining the Kyoto Protocol;
- that the Bank's flagship fund – the PCF – is not based on renewable energy projects as the Bank said it would be, and the Bank's attempts to argue otherwise are blatantly misleading.

If the Bank is really concerned about poverty alleviation, sustainable development and climate change then it must finally accept the need to redirect its conventional funding away from fossil fuels and towards renewables, and to stop funding forest destruction. Developing a carbon market will not achieve these goals, and indeed will divert attention and resources from programs and policies that will.

¹ We include all members of the World Bank Group in our analysis: the International Finance Corporation (IFC), International Development Association, Multilateral Investment Guarantee Agency, and International Bank for Reconstruction and Development.

Background to the Bank's carbon market activities

The Bank has a long history of involvement with the carbon market and its precursors. Following the establishment of a pilot phase for Activities Implemented Jointly (AIJ) in 1995 by the Parties to the United Nations Framework Convention on Climate Change (UNFCCC), the Bank established an AIJ fund which developed pilot projects in conjunction with the Norwegian Government and International Finance Corporation (IFC). At the July 1997 Rio+5 conference, marking the 5th anniversary of the 1992 Rio Summit Bank President James Wolfensohn proposed a Carbon Investment Fund which would see the Bank invest money from industrialised countries into greenhouse gas reducing projects in exchange for credits, a precursor of the mutual funds that the Bank eventually established.

In 1997 the Kyoto Protocol to the UNFCCC was adopted. It included provisions for two so-called "flexible mechanisms": Joint Implementation (JI) and the Clean Development Mechanism (CDM). The two mechanisms allowed for projects to generate carbon credits that could be used by another country to meet its reduction commitments under the Protocol. The CDM was the focus of most interest as it allowed developing countries to host projects despite not having a reduction commitment themselves, and was the only part of the Kyoto Protocol that directly involved developing countries in emission reducing activities.

In response, the Bank Board of Directors approved the establishment of the Prototype Carbon Fund (PCF) in July 1999, a mutual fund that would develop projects through both JI and the CDM. The PCF was publicly launched in January 2000 with contributions from Finland, The Netherlands, Norway, Sweden and a number of Japanese utilities and trading houses². It was soon followed by a variety of other funds, which are detailed in the next section.

The Bank's carbon funds – an overview

The Bank's carbon funds make up a significant proportion of the existing CDM and JI market, both in terms of number of projects being developed and number of carbon credits being generated. The funds fall into two broad categories. The first are the open mutual funds like the Prototype Carbon Fund (PCF), BioCarbon Fund (BCF) and Community Development Carbon Fund (CDCF) which seek contributions from corporate and governmental investors. This capital is then invested in projects and the contributors get a pro rata amount of the carbon credits generated.

In addition, the Bank also manages funds for individual countries. Currently, the Bank is managing four funds for the Dutch Government and one each for the Italian, Danish and Spanish Governments. The Bank's success in attracting business has been such that private sector fund managers have complained about the Bank squeezing them out of the market. As of early 2005 the Bank announced it would no longer be developing individual country funds and instead was launching the Pan European Carbon Fund (PECF) to which European countries could subscribe³.

² World Bank launches first-of-its-kind market-based carbon fund, 18.1.00; www.carbonfinance.org.

³ <http://www.carbon-financeonline.com/issue/15/story/523.html>.

Carbon funds managed by the World Bank

Fund	Investors	Capitalisation \$m ⁴
Prototype Carbon Fund	Sweden, Norway, Canada, Japan, The Netherlands, Finland, BP, Chubu Electric, Chogoku Electric, Deutsche Bank, Electrabel, Fortum, Gaz de France, Kyushu Electric, Mitsubishi, Mitsui, Norsk Hydro, Rabobank, RWE, Shikoku Electric, Statoil, Tohoku Electric, TEPCO	180
BioCarbon Fund	Canada, Italy, Luxembourg, Spain, Agence Française de Développement, Eco-Carbone, Idemitsu Kosan, Okinawa Electric, Sumitomo Chemicals, Sumitomo Joint Electric Power, TEPCO	43.8 (target=100)
Community Development Carbon Fund	Italy, Okinawa Electric Power Co., Daiwa Securities SMBC Principal Investments, Idemitsu Kosan, Nippon Oil Corporation, BASF, Canada, The Netherlands, Endesa (Spain), Austria, Swiss Re, KfW, Statoil ASA, EdP, Hidroeléctrica del Cantábrico, Statkraft Carbon Invest AS, Luxembourg, Rautaruukki, Danish Carbon Fund, Belgium – Brussels Region, Spain, Belgium – Wallonia, Gas Natural, Göteborg Energi AB.	128
IFC-Netherlands Carbon Facility	The Netherlands	55
Netherlands European Carbon Facility (NECaF)	The Netherlands	30 ⁵
Netherlands Clean Development Fund	The Netherlands	174 ⁶
Italian Carbon Fund	Italian Govt and private entities	15 ⁷
Danish Carbon Fund	Danish Govt and private entities	30
Spanish Carbon Fund	Spain	210
Pan European Carbon Fund (PECF)		50 (target=100)
Total		1,022⁸

⁴ All amounts in this paper are US\$.

⁵ Source: <http://www.teriin.org/events/docs/pdfghg/3/robin3.pdf>.

⁶ The capitalisation is Euro136 million, this is a conversion based on the rate as of 15.4.05.

⁷ This is the amount of the initial endowment from the Italian Ministry for the Environment and Territory. The Fund will also be opened to Italian entities for a minimum contribution of \$1.5 million.

To market, to market

The primarily goal of the Bank's carbon market activities is to develop the market itself. By developing template projects and methodologies and helping bear the cost of "learning by doing" the Bank is hoping to catalyse the carbon market and private sector involvement in it. The Bank has said its role is:

*"to use its expanded pool of carbon finance to benchmark new methodologies for carbon asset creation....., and to bring new countries and market segments into the carbon market by developing first-of-a-kind transactions in each prospective country and sector of economic activity"*⁹.

The Bank's carbon funds are complemented by a range of developing country capacity building programs and associated promotional activities such as the annual Carbon Expo which it organises with the International Emissions Trading Association (IETA).

That the Bank has set itself the task of helping to operationalise the carbon market is consistent with its agenda of privatisation and liberalisation, particularly of developing country energy sectors. The Kyoto Protocol is the most ambitious and far-reaching piece of international environmental legislation ever agreed and one that will lead to ever deeper impacts on global energy production and use. While markets in pollution credits were not a new idea when Kyoto was negotiated, and have operated in the US since the mid-1990s, a global scheme such as that created by the Kyoto Protocol is unprecedented in size and scope. The PCF's first annual report in 2001 is explicit about the value of the example:

*"... the Kyoto Protocol is leading the way in addressing environmental problems of global scale and significance. Its pioneering of market-based mechanisms demonstrates how markets can begin to internalise global environmental externalities and work for sustainable development"*¹⁰.

Despite the problems that the Kyoto carbon market has faced in the past years, in particular the failure of the CDM¹¹, market mechanisms and emissions trading have been enshrined as the key policy response to climate change, even amongst previously sceptical constituencies such as European Governments and many mainstream NGOs. The EU in particular has shifted significantly on the value of market mechanisms. While at the Kyoto summit in 1997 it was deeply suspicious of trading and insisted on limiting their use in meeting emission reduction targets, it has now created the world's largest carbon market – the European Emissions Trading Scheme (ETS) – and is advocating unlimited use of trading in the Kyoto Protocol's second commitment period after 2012.

Yet while the ideological battle has largely been won, the last few years have also demonstrated the limitations of a carbon market as a driver of anything other than cheap carbon credits. In particular, the hype that accompanied the beginning of the

⁸ Assuming all target capitalisations reached.

⁹ "The Spanish and Danish carbon funds", www.carbonfinance.org.

¹⁰ www.carbonfinance.org.

¹¹ See "Market Failure"; www.cdmwatch.org.

CDM with the conclusion of its rules and modalities in the 2001 Marrakech Accords has given way to a much more sober appreciation of what carbon finance can deliver in developing countries, and what technologies and project types will benefit from it.

The predicted benefits cited by the Bank when justifying its self-appointed role as catalyst for this new market have failed to materialise. A comparison of the Bank's rhetoric versus the reality of the carbon market and its own funds not only calls into question the Bank's justifications for being involved in the carbon market and whether carbon market development fits with the Bank's mandate, but also whether a carbon market can achieve the things that the Bank claims it will. The most important are dealt with below.

Rhetoric and Reality

a. Do as I say, not as I do

The Bank claims that a carbon market is one of the most important tools in fighting climate change, which it calls "*one of the main challenges facing humanity*"¹². Yet the Bank's rhetoric about climate change and carbon markets stands in stark contrast to the Bank's continued role as a chief financier of fossil fuel projects in developing countries. This disconnect has been a feature of the Bank's response to climate change since the 1992 Rio Earth Summit which gave birth to the UNFCCC. The Sustainable Energy and Economy Network (SEEN) calculates that in the 10 years after Rio, the Bank invested over \$22 billion in 226 oil, gas and coal projects in developing countries, projects that will result in 40 billion tonnes of CO₂ emissions over their lifetimes. This is almost twice all anthropogenic emissions in the year 1999. In the same period, the Bank invested only \$1 billion in 36 renewable and efficiency projects, the technologies whose uptake is essential to drive the fundamental shifts in energy production and use that will combat climate change¹³.

A comparison of spending through the Bank's carbon funds with its ongoing financing of fossil fuels reveals a similarly skewed ratio. The combined capitalisation of all 10 Bank carbon funds will be about \$1 billion. This will be invested in projects in the seven year period from 1999 through to 2006; on average, therefore, about \$150 million a year. As a comparison, annual Bank spending on projects that extract fossil fuels is about \$500-600 million, while in 2003 alone the Bank provided \$2.5 billion in financing for fossil fuel projects such as power stations and coal mines¹⁴. The annual average over the previous ten years was about \$2.4 billion¹⁵. Thus, the entire amount that the Bank's carbon funds will place in greenhouse gas-reducing projects for the first commitment period of the Kyoto Protocol is equivalent to about two years of financing for extractive industries projects, and about 40% of 2003 financing for greenhouse gas producing fossil fuel projects¹⁶.

¹² www.carbonexpo.com.

¹³ www.seen.org.

¹⁴ http://www.seen.org/pages/reports/WB_brief_0903.shtml

¹⁵ http://www.seen.org/pages/reports/WB_brief_0903.shtml#approved.

¹⁶ The comparison is worse when one considers that some World Bank carbon finance projects are non-additional, that is they would have happened anyway, and thus do not actually reduce greenhouse gas emissions.

At times, the disconnect between the Bank’s carbon market activities and its conventional lending has been particularly acute. In July 2000, six months after the PCF’s public launch, the first sale of carbon credits from a PCF project was concluded, a solid waste management project in Latvia which is expected to reduce greenhouse gas emissions by 2 million tonnes of CO₂ equivalent over its 21 year lifetime. The previous month the Bank, through the IFC and IBRD/IDA, had approved over \$551 million¹⁷ in financing for the notorious Chad-Cameroon oil pipeline. The financing package for Chad-Cameroon is about 3 times the capitalisation of the PCF and its expected lifetime emissions of approximately 446 million tonnes of CO₂¹⁸ are roughly three times the 142 million tonnes that will allegedly be reduced by PCF projects in total¹⁹. In 2002 the IFC set up the IFC Netherlands Carbon Facility (INCaF), one of the two carbon funds it manages for the Dutch Government. Yet in the same year, its Director of oil, mining and gas, Rashad Kaldany, was clear about where most of IFC’s efforts would be concentrated: “*What we see looking forward is large investments in the oil sector*”²⁰.

SEEN has also shown that despite its rhetoric on climate change, many of the Bank’s top finance recipients in the years after the Rio Earth Summit were major fossil fuel companies, including many who were members of the openly anti-Kyoto Global Climate Coalition. The Bank’s carbon funds continue this trend. Many investors in the PCF – the Bank’s flagship carbon fund - are simultaneously receiving far greater amounts of Bank financing for fossil fuel projects. A comparison of how much these companies give the Bank for PCF projects that will *reduce* greenhouse gas emissions versus what the Bank has given them for projects that *produce* them is revealing.

Corporation	PCF contribution (\$US million) for CDM and JI projects 1999-2004 ²¹	Received from WB for fossil fuel projects 1992-2002 (\$ million) ²²
Mitsui (PCF and BCF)	16 ²³	1,807.5
BP	5	938.8
Mitsubishi	5	403.6
Deutsche Bank	5	165.6
Gaz de France	5	138.9
RWE	5	138.9
Statoil	5	242.3
Total	46	3,834,600

The involvement of BP and Statoil in the PCF is particularly notable given the ongoing financial support by the Bank’s IFC for their efforts to open up the massive Azerbaijan oil fields for consumption in Western Europe and the US. In October 2003, BP and Statoil were part of a group of corporations who received \$120 million from the IFC for development of the Azeri-Chirag-Guneshli oil fields in Azerbaijan. SEEN

¹⁷ <http://eireview.info/doc/EOanalysis0209FINAL.doc>

¹⁸ Environmental Media Services, “The World Bank’s investments in climate changing fossil fuels”, 16.10.03, www.ems.org.

¹⁹ Based on figures provided in the PCF’s 2004 annual report; www.prototypecarbonfund.org. We say “alleged” because some of the PCF’s projects are non-additional and thus do not represent real reductions.

²⁰ Quoted in “The World Bank and Fossil Fuels: a clear and present danger”, SEEN, September 2002; http://www.seen.org/PDFs/wb_brief_sept02.pdf.

²¹ This is the operational period of the PCF during which the funds are placed.

²² Figures taken from “Transnational corporate beneficiaries of World Bank Group fossil fuel projects, 1992 – August 2002”; www.seen.org.

²³ Mitsui invested an additional \$1 million in January 2003.

estimates that greenhouse gas emissions from the oil produced by this project will be over 2,000 million tonnes CO₂²⁴ over 20 years. The next month, November 2003, the IFC approved another \$125 million for the Baku-Ceyhan pipeline between Azerbaijan and Turkey. BP again leads a consortium of investors in this project. The estimated emissions resulting from the oil that will be transported by this pipeline is over 3,000 million tonnes of CO₂²⁵.

Even more striking is that in many cases PCF investors are receiving carbon credits from projects in a country where they are at the same time developing fossil fuel projects with the help of Bank financing; projects which will help lock those countries into a fossil fuelled energy path and lead to greenhouse gas emissions orders of magnitude greater than the PCF projects claim to be reducing. Notably, the PCF investors get a carbon *credit* for the PCF projects, but no *debit* for those involving fossil fuel extraction and use.

As an illustration: the PCF has four projects in Brazil which will generate approximately 13 million carbon credits over 21 years, of which 6 million will be bought by the PCF. As a PCF investor, Mitsubishi will receive a pro rata amount of these credits. Yet at the same time, they are involved in the Barracuda-Caratinga oil field in Brazil which is being supported by \$15 million in MIGA risk insurance²⁶. The project is estimated to result in approximately 346 million tonnes of CO₂ being emitted over its lifetime, about 58 times the reductions that the PCF's Brazilian projects will allegedly achieve. Duetsche Bank, another PCF investor, has also received MIGA support for an oil and gas project in Brazil, this time \$60 million. What makes the comparison even worse is that the Plantar project, which accounts for about 10 million of the 13 million credits being generated in Brazil, is non-additional; that is, it would have happened anyway and as such the credits it generates and will sell on the carbon market – if approved – are fake. The emissions from the fossil fuel projects in Brazil that the Bank is supporting will be all too real.

The IFC's Brazilian CDM projects only reinforce the double standard. Through INCaF, the IFC is developing another plantation-based project in Minas Gerais, the V&M do project. It is similar to Plantar is that it claims carbon credits for not switching to coal from plantation-derived charcoal, but does not claim carbon credits for sequestering carbon in the plantations. When the provisional agreement for sale of the carbon credits from V&M was announced in February 2003 it was the biggest transaction in the CDM market to date and hailed by IFC Managing Director Peter Woicke as "*one of the most exciting and innovative projects that IFC has ever been involved with*"²⁷. Yet only two months later the IFC signed off on a much more climatically significant financial assistance package without the hoopla that attended V&M, providing \$40 million – nearly the entire capitalisation of INCaF - to Queiroz Galvão Perfurações S.A, a Brazilian oil and gas company to support the company's exploration and appraisal of the 11 oil and gas concessions in which it had a participating interest²⁸. The extraction and use of this oil and gas will lead to

²⁴ www.seen.org/db/Dispatch?action=ProjectWidget%3A29-detail=1.

²⁵ www.seen.org.

²⁶ <http://www.seen.org/db/Dispatch?action=History:-go=1&index=6>.

²⁷ "As prepared remarks of Peter Woicke, Executive Vice President, IFC, Signing of Conditional Commitment to Purchase of GHG Emission Reduction between V&M Brasil and IFC, Signing of MoU between the State of Minas Gerais and IFC, February 4, 2003.

²⁸ IFC Press Release No. 03/0105, 14.6.03.

emissions far greater than what is allegedly being reduced by V&M. What is worse, V&M, like Plantar, is non-additional.

The vast disparities highlighted here show how marginal the Bank's carbon market activities are compared to its conventional financing, and how the Bank itself is a major driver of the very problem it claims to be addressing by developing a carbon market. Ultimately, future efforts to combat climate change in developing countries, be they market driven or otherwise, will be made that much more difficult by the Bank's current support for fossil fuels.

b. poverty alleviation and sustainable development

The Bank's central mission is poverty alleviation, while the aim of a carbon market and CDM is to provide cheap emission reduction credits to industrialised country governments and corporations. As such, there is a real question as to whether developing a carbon market is consistent with the Bank's mission. The Bank's response has been to argue that it is and that in fact *"The World Bank's carbon finance initiatives go hand in hand with its mission to reduce poverty"*²⁹. Related to this, the Bank has also argued that the carbon market will promote sustainable development. These two themes run through most of the Bank's public materials. The Bank's BioCarbon Fund's slogan is *"bringing carbon finance to the world's poor"*, or alternatively *"harnessing the carbon market to sustain ecosystems and reduce poverty"*³⁰. The Bank's CDCF – which aims to develop small-scale carbon finance projects in developing countries – claims to offer *"development + carbon = carbon with a human face"*³¹.

The Bank argues that a carbon market helps alleviate poverty by addressing climate change to which the poor are most vulnerable. Yet it also goes beyond this to claim that the poor can benefit directly from the carbon market by tapping in to the private capital it will mobilise. A Bank-authored opinion piece on the BCF sketches a scenario in which *"the farmers in Chiapas can take a buy order for carbon from a Western company to a local credit organization to buy seedlings for improved crops"*³².

How do these claims stack up? Firstly, the Bank's claims that it is alleviating poverty by developing a carbon market to address climate change is again in stark contrast to the much more massive Bank financing that goes to climate-changing fossil fuel projects. Moreover, the fossil fuel extractive industries projects that the Bank finances and which help drive climate change, such as coal mining and oil exploration, are also a direct contributor to poverty in developing countries. As SEEN's Daphne Wysham notes, *"poor people are the most likely to be forced off their land and made homeless by oil, gas, and mining projects. They are most likely to live in polluted surroundings and the least empowered to demand fair compensation or a share in the revenue from oil, gas and mining projects"*³³. A recent internal report prepared for the Bank's IFC conceded: *"The notion that governments invest incremental rents/returns from*

²⁹ Quoted in "Carbon Finance at the World Bank", undated; www.carbonfinance.org.

³⁰ <http://carbonfinance.org/biocarbon/home.cfm>.

³¹ <http://carbonfinance.org/cdcf/home.cfm>.

³² Published in the International Herald Tribune, 29.11.02.

³³ Wysham, D., in "Marketing the Earth: the World Bank and Sustainable Development", August 2002; www.halifaxinitiative.org.

*extractive industries profitably and for the benefit of poor people is all too often more of an aspiration than a reality*³⁴. Oxfam America found that countries relying on oil and mineral exports seem to do worse with regard to health, education and income indicators³⁵.

An analysis of the current CDM portfolio also shows that despite the Bank's rhetoric the carbon market is bypassing the poorest countries and the poorest communities in developing countries. Investment is focused overwhelmingly on the richer developing countries, and within those countries is going not to projects that deliver sustainable development or alleviate poverty but to projects that involve reductions of gases from chemical facilities, coal mines and landfills. A recent OECD overview of the CDM summarised the emerging trend:

*'a large and rapidly growing portion of the CDM project portfolio has few direct environmental, economic or social effects other than GHG mitigation, and produces few outputs other than emissions credits. These project types generally involve an incremental investment to an already-existing system in order to reduce emissions of a waste stream of GHG (e.g. F-gases or CH₄) without increasing other outputs of the system.*³⁶

Notably, some of the biggest of these projects are being designed by foreign multinationals and their subsidiaries, such as UK company INEOS Fluor's HFC23 projects in South Korea and India, and UK company Rhodia's N₂O project, also in South Korea. These three projects alone account for one quarter of all carbon credits currently being generated by prospective CDM projects in total³⁷.

The Bank's flagship fund – the PCF – exhibits many of the characteristics of the broader CDM market. The five biggest contributors of carbon credits in the PCF portfolio accounting for nearly 43% of all CDM sourced carbon credits and 34% of the total portfolio are a Chinese coalmine methane project, the upgrading of a German-owned cement companies operations in Indonesia³⁸; a Nitrous Oxide project in India, and two landfill gas projects in South Africa and Vietnam.

Africa.....?

The failure of the carbon market to address poverty is further underscored by the fact that the CDM has almost completely bypassed Africa. There are currently only 7 projects in Africa, 5 of which are in South Africa³⁹. They are generating only about 19 million credits, about 5% of the total from all CDM projects. Of this total, nearly 18 million are from 2 landfill projects and an industrial efficiency project in South Africa. The only two projects that exist outside of South Africa - one in Uganda and one in

³⁴ *ibid.*

³⁵ *ibid.*

³⁶ Ellis, J., et al, "Taking stock of progress under the CDM", OECD, June 2004.

³⁷ We say prospective because while we have details of about X projects, they are at different points in the project approval process. Notably, these three seem certain to be formally approved in the near future whereas a number of smaller projects involved renewable energy will not.

³⁸ The exact amount of credits that is being purchased from this project is not given but we have calculated based on volumes of other projects that it is about 3,500,000 carbon credits.

³⁹ Our calculations are based on projects for which a Project Design Document (PDD) is publicly available.

Tanzania - are being developed by the Bank for political reasons and their replication by other investors in the carbon market is highly unlikely⁴⁰.

Ironically, the Bank's project in South Africa – a landfill gas project in Durban being developed through the PCF – is not only *not* benefiting the surrounding community but is opposed by many members of it. The Durban landfill gas project is one of the biggest in the PCF portfolio. The 3,800,000 carbon credits that the Bank will source from it makes the project the second largest source of carbon credits for the PCF from both CDM and JI projects. Yet the Durban landfill is a classic case of environmental racism, being sited in the midst of poor and Indian communities during the apartheid period. The poor standards and conditions under which it operated led to a range of negative health effects on the surrounding communities and a concerted campaign by them for its closure. Following the election of the ANC the community received a commitment from the local government in 1998 that the landfill would be closed. This, however, was reneged upon and it remains open to this day. Unavoidably, the new revenue stream that will be secured through the sale of credits make the chances of the closure commitment being honoured even more remote. Far from the carbon market helping this community, it is thwarting them.

The CDCF – carbon with a non-additional face

The Bank has itself frequently conceded that the carbon market is bypassing the poorest countries and communities, conceding that: *“Most developing countries can only deliver small CDM-eligible projects. The high transaction costs and high risks involved in delivering carbon from these projects means that most of the smaller and poorer of the Bank’s client countries will be unable to benefit from carbon finance as a catalyst for investment in clean technologies”*.⁴¹ Yet far from conceding that this is a fundamental structural problem, the Bank is seeking to obscure it using the CDCF. Established in 2002, the CDCF focuses on projects that allegedly will *“measurably benefit poor communities and their local environment”*⁴² and expects to generate about 11 million credits in total by 2012⁴³. To put this in perspective, the PCF's coal bed methane project in China will generate 10 million carbon credits in that timeframe⁴⁴.

How much of a measurable benefit will CDCF projects provide? Embarrassingly for the Bank the CDCF's first projects had their registration blocked by the CDM's Executive Board⁴⁵. The first to be delayed - the La Esperanza large hydro project in Guatemala - had its registration blocked in December 2004 in part because five Board members agreed with the International Rivers Network (IRN) that La Esperanza is non-additional; ie that it was going to happen anyway without the CDM.⁴⁶ [for more on La Esperanza see page 24]. Where, then, is the measurable benefit? Having La Esperanza registered as a CDM project will provide no additional benefit to the local environment or community because it was going to be built and operated anyway,

⁴⁰ The CDCF is developing a project in Uganda and one in Guyana but no project documentation is currently available.

⁴¹ http://www.esi-africa.com/archive/esi_4_2003/35_1.php.

⁴² CF booklet screen; www.carbonfinance.org.

⁴³ Information contained in a response from the World Bank Carbon Finance Helpdesk, 7.04.05.

⁴⁴ Information contained in a response from the World Bank Carbon Finance Helpdesk, 21.7.04.

⁴⁵ See the CDM Toolkit at www.cdmwatch.org for a description of the CDM approvals process; the Toolkit is available in English, French, Portuguese, Spanish, Indonesian, Thai and Hindi.

⁴⁶ The submission by International Rivers Network questioning the additionality of this project is at: <http://cdm.unfccc.int/Projects/Validation/view.html?ProjectId=383139767563127291&OE=DNV-CUK>.

regardless of the CDM. The only beneficiaries of the project are the CDCF's investors who can use the fake credits to meet their Kyoto targets instead of actually reducing emissions.

Furthermore, despite claiming to be a high quality project delivering developmental benefits, the documentation for La Esperanza does not even mention the principles and guidelines of the World Commission on Dams' (WCD) 2000 final report, widely accepted as the benchmark for sustainable hydro development. Even more striking in this case is that two CDCF participants - the Dutch and German Governments⁴⁷ - both require CDM projects from which they source carbon credits to demonstrate that they have complied with WCD guidelines⁴⁸. Thus, one of the first CDCF projects is not only non-additional and will generate fake credits if approved but actually uses sustainable development criteria that are inferior to the established criteria of two of its participants.

In conclusion, the claims by the Bank that carbon finance and the CDM will be a tool for poverty alleviation and sustainable development are directly contradicted by experience in the market so far, calling into question how developing a carbon market can be seen to be progressing the Bank's core mission. As to the claim that the Bank is protecting the poor from climate change by developing a carbon market, this claim is disingenuous given the much larger volumes of financing that the Bank provides for climate-changing fossil fuel projects, and for extractive industries projects which can exacerbate poverty.

c. sinks projects

The Bank's claims to be reducing poverty and promoting sustainable development through the carbon market are intimately related to another major focus of its carbon market activities, the promotion of sinks projects. The Bank has set itself the task of "selling" sinks in the face of widespread skepticism and mistrust. One of the first PCF projects had a sinks component – the Plantar project in Brazil - and in 2004 the Bank unveiled a dedicated sinks fund, the BioCarbon Fund (BCF). In making its case for sinks the Bank has been evangelical, claiming: "*carbon sequestration offers the greatest convergence between the carbon market and sustainable development, and between climate change, adaptation, and poverty reduction*"⁴⁹.

As with its energy sector activities, the Bank's rhetoric on sinks projects is totally inconsistent with the reality of the Bank's conventional forestry lending. A report released in April 2005 by a coalition of NGOs documented how programs funded by the Bank are causing destruction of the world's remaining forests and harming poor people dependent on forests for their survival. The report - entitled '*Broken Promises*' - shows that the Bank has failed to implement its own Forest "Safeguard" Policy, adopted in 2002, and that not one of the conditions the Bank promised to fulfill has been met. Releasing the report, Ricardo Carrera of the World Rainforest Movement (WRM) noted that "*In spite of all its past promises, the World Bank*

⁴⁷ The German government is represented by government owned development bank KfW.

⁴⁸ The Netherlands requires intermediaries developing CDM projects to "*apply those [WCD] criteria.*" Germany requires "*compliance with standards as they have been defined for the use of hydropower by the World Commission on Dams (WCD)*"

⁴⁹ Extending the Carbon Market to the World's Poor, Kenneth J. Newcombe, The World Bank, ABCDE, Paris, May 15, 2003

continues to be a major actor in the destruction of forests, and is pushing forest peoples into dispossession and poverty”⁵⁰.

Moreover, while the Bank is correct in noting the synergies between climate change, forest destruction and poverty alleviation, they have been proven wrong about the carbon market being able to develop projects that address them. Investors in the carbon market have avoided sinks projects and there is no evidence to suggest this will change in the near future. Notably, sinks projects were excluded from the world’s largest carbon market – the European Emissions Trading Scheme (ETS) – until 2007 and it seems highly likely that this exclusion will be extended to the end of the first Kyoto commitment period. The exclusion may prove to be academic; at the time of writing, only three sinks baseline methodologies have been proposed (of which two are from the Bank). In January 2005 the first two were rejected by the CDM Executive Board’s expert advisory panel⁵¹. The BCF has itself become emblematic of the lack of market interest in sinks. At the time of writing it had only raised \$US43.8 million of its target capitalisation of \$100 million⁵².

The Plantations agenda

The Bank’s sinks rhetoric is further undermined by evidence of a clear intent to use the carbon market as a new source of finance for plantations, and to change existing rules on sinks projects to the benefit of plantation-based industries. The first sinks project developed by a Bank carbon fund was the PCF’s Plantar project in Minas Gerais, Brazil. Plantar temporarily sequesters carbon in industrial tree plantations that will be converted to charcoal for use in pig iron production. It claims carbon credits for the carbon stored in the trees and for avoiding emissions that result from the use of coal. The Plantar company and Minas Gerais plantations industry are no strangers to Bank assistance. In 1987 the Bank provided half of the \$100 million dollars of financing for the Minas Gerais Forestry Development Project which aimed to increase industrial wood and charcoal production in the state. The MGFDF project was still operative as of 2002 and in 2000, while the PCF and Plantar were developing the Plantar CDM project, the MGFDF project provided a small loan to Plantar⁵³.

The Plantar project was always intended to be a precedent for other projects of its type. The 2002 Project Appraisal Document for Plantar states explicitly that *“The project is expected to prepare the ground for similar projects in the future”⁵⁴*. The CDM works on a case-law basis so methodologies and experience that are developed for Plantar can be used by other projects, greatly reducing transaction costs and risks. And, indeed, the baseline study that was developed for Plantar is used by an even larger plantation-based CDM project in Brazil, the V&M do project that is being developed by INCaF⁵⁵ [see page 24 for more on Plantar and V&M]. While the V&M project does not claim carbon credits for sequestering carbon, it does use carbon finance to support a plantation-based industry.

⁵⁰ www.wrm.org.

⁵¹ <http://cdm.unfccc.int/Projects/pac/Panels/ar>.

⁵² www.carbonfinance.org.

⁵³ “Project appraisal document on a proposed purchase of emissions reductions from the Prototype Carbon Fund in the amount of \$ 5.3 million to the Republic of Brazil for the PCF Minas Gerais Plantar Project, April 1, 2002” www.prototypecarbonfund.org.

⁵⁴ *ibid.*

⁵⁵ V&M does not claim credit for carbon sequestration, only avoiding a switch to coal.

Projects like Plantar are the real focus of the Bank's sinks agenda. The smaller community-oriented projects that are being developed by the BCF are largely greenwash, designed not only to help them sell sinks but to help them justify their development of the carbon market. Moreover, the BCF is being used by the Bank as a vehicle to help change existing sinks rules to the advantage of plantation projects by making "avoided deforestation" projects an eligible project type.

Avoided deforestation and the BCF

Avoided deforestation was excluded as an eligible project category from the CDM in Kyoto's first commitment period because of fears of gaming and fraud. Now, however, the Bank claims that these concerns have been addressed, and the BCF will "explore" projects of this type⁵⁶. As well as developing the necessary methodologies the BCF will provide politically attractive examples of what avoided deforestation projects could look like to help overcome opposition.

If avoided deforestation is reintroduced as an eligible project category for the CDM, the big winners will be the tree plantation industry and projects like Plantar. To understand why, a bit of history: the Plantar project was originally an avoided deforestation project. Without the prospect of carbon credits, Plantar argued it would not have been able to replace its plantations when they reached the end of their third cycle, and they would have been abandoned. The project thus avoided this "deforestation" and associated loss of carbon stored in the trees. However, when avoided deforestation was excluded from the 2001 Marrakech Accords, the Plantar project needed to be modified to use only lands that were cleared before 1990, consistent with the new CDM rules. Whilst Plantar was able to acquire such lands, most plantation developers who might want to use the CDM will not be able to, as it requires the acquisition of new land for planting that was cleared prior to 1990 and since remained idle, rather than reliance on lands already under plantation management. It thus greatly reduces the potential for plantations to generate carbon credits through the CDM. If avoided deforestation was reintroduced, then plantation companies worldwide could threaten that without carbon credits they would not replace their plantations, leading to the loss of the carbon stored in them.

The Bank's plantations agenda further undermines its claims to be focusing its carbon market activities on poverty reduction and sustainable development. Plantations and plantation-based industries have had severe social and environmental impacts in a number of developing countries, and continue to do so to this day. When a coalition of NGOs, unions, church groups and individuals wrote to the Bank in March 2003 opposing the Plantar project they wrote of the history of the impacts of plantation establishment in Brazil, a history that renders the Bank's sinks rhetoric utterly empty:

"Corporations like Plantar S.A. installed themselves in our states in the 1960s and 1970s during the military dictatorship, taking advantage of attractive tax incentives. Unfortunately, local communities who were directly impacted by the actions of the corporations were never consulted about whether they wanted this type of project for their region. The result was that Tupinikim and Guarani Indigenous peoples were expelled from their lands, as well as traditional afro-brazilian communities and tens of

⁵⁶ Presentation by PCF Fund Manager Ken Newcombe in Paris, 15.5.03.

thousands of peasants, increasing unemployment and, consequently, the despair of these populations who lost their lands and were left without their biodiversity and without their water, on which they were dependent”⁵⁷.

c. renewables

If the carbon market is going to contribute to efforts to address climate change and sustainable development then it must be a driver for fundamental shifts in the production and use of energy in developing countries. In particular, it must support the rapid uptake of renewable energy technologies. That the CDM, as the part of the carbon market that engages developing countries, has failed to do so undermines yet again a key justification for the Bank’s role in developing it. Related to this, the Bank continues to falsely claim that its flagship fund – the PCF – will source the majority of its credits from renewable energy projects. This is demonstrably false. Instead, the PCF is a microcosm of the market as a whole in which renewables are marginal and the majority of carbon credits come from projects with few if any developmental benefits.

The CDM and renewables – a promise unfulfilled

It is now generally accepted that the CDM is not an effective mechanism for the promotion of renewables projects in developing countries. The problem is not just one of price but is fundamental and stems from the CDM’s structure as a project-based market mechanism in which the search for least-cost carbon credits is the paramount consideration. This sidelines more expensive projects like renewables by not rewarding the multiple benefits they provide. While the CDM has a mandate to promote sustainable development, in practice this has been made all but impossible the fulfillment of the CDM’s first mandate to seek out low cost carbon credits for industrialised countries.

While the CDM is *rhetorically* mandated to assist in achieving sustainable development and this should benefit renewables, no part of the CDM’s architecture specifically monetises those benefits and as such they play a very limited role, if at all, in directing investment. For all the rhetoric about sustainable development, projects generate revenues through the CDM by reducing or storing a quantity of greenhouse gas emissions which are commodified as carbon credits and sold. The various co-benefits that these projects may create are not commodified and do not directly produce revenues through the CDM. Arguably, the CDM’s project-based structure makes it almost impossible for the broader sectoral or national benefits provided by a renewables project to be rewarded because they are so difficult to quantify on a project level. Judging how many tonnes of a specified greenhouse gas have been reduced or stored by an individual project in a delineated project boundary as compared to a theorised business as usual scenario is complex enough. Yet quantifying and commodifying the additional benefits that a renewables project provides outside that boundary would be extremely difficult and prohibitively expensive for each individual project⁵⁸.

⁵⁷ Available at www.cdmwatch.org.

⁵⁸ Some developers do of course assert broader benefits.

At the time of writing a large number of renewables⁵⁹ CDM projects were moving through the CDM approval process. Indeed they are the most common project type. Yet they are generating only about 11% of all carbon credits through the CDM, around 35 million in total. This is less than the credits resulting from the two HFC-23 projects – 40 million – and about one half the credits that will be generated by an N₂O project in South Korea– 70 million. It is these credit volumes which provide the most meaningful comparison of how successfully a technology is able to use the CDM, as the CDM involves industrialised countries buying carbon credits as a commodity; thus the percentage of credits indicates the proportion of total carbon investment flowing through the CDM to particular technologies. Moreover, the additionality of many renewables projects is highly questionable and many of the current ones are unlikely to be approved.

It is also clear that many of the renewables projects are intended merely to “green” portfolios that rely on less attractive technologies for the majority of their credits. The Bank itself recently noted of the CDM that the “*The current distribution of projects may not be representative of the mature CDM market*”⁶⁰. In future, the Bank suggests that participants may concentrate on “proven” project types that are cost-effective and have an approved methodology, citing as an example the concentration on landfill gas projects by Japanese corporations. The steady increase in such projects suggests this is correct, and at the time of writing landfill gas projects alone were claiming more carbon credits than all renewables projects combined up to 2012⁶¹.

The dominance of large non-CO₂ projects in the market- and project-based CDM is inevitable. They involve relatively inexpensive, quick and common-practise additions to existing facilities which in return generate huge volumes of carbon credits because of the global warming potential of the gases they capture. In contrast, renewables projects have a financial profile that is the exact opposite of that favoured by the CDM. They are greenfield developments which are capital intensive, providing low rates of return and generating relatively small volumes of carbon credits. Given the current low price for credits and the fact that renewables only displace carbon dioxide emissions the revenues from the sale of carbon credits are usually small and do not significantly improve the project’s Internal Rate of Return (IRR). Moreover, the prevalence of a commodity model for the purchase of the carbon credits – in which the credits are bought as they are delivered over the 10 or 21 year crediting period – does not directly address the major financial barrier for renewables projects which is their high upfront costs.

Ultimately, the primary focus of the CDM on producing a tradable commodity in a specific project boundary at the lowest cost frustrates environmentally superior outcomes by directing investors and buyers away from projects with the most overall benefits such as renewables. Buyers and investors favour projects that require the least investment, least technology transfer and that provide the least sustainable development co-benefits as these produce the cheapest credits. Renewables will always struggle to benefit from such a mechanism.

⁵⁹ Renewables only includes hydro projects below 10MW.

⁶⁰ Haites, E., for the World Bank Carbon Finance Business Unit, “Estimating the Market Potential for the CDM: review of models and lessons learned”, June 2004.

⁶¹ See “quick stats” at www.cdmwatch.org.

Lastly, while this section focuses on renewables, the CDM has also proved unsuccessful at promoting projects that address energy efficiency and transport, both of which are critical to achieving sustainable development in the South and combating climate change globally. The one transport project seeking approval recently had its baseline methodology rejected, leaving it in doubt. And while the Bank estimates that the potential for efficiency projects is significant, they note in a recent paper that: “*the limited number of projects to date suggests they face barriers not fully reflected in analyses of the achievable potential*”⁶².

The PCF and renewables

The Bank’s flagship fund is the PCF. From the time of its conception, the Bank assured NGOs that it would be focused on renewables. The press release announcing the launch of the PCF claimed “*The primary focus will be on renewable energy technologies — such as wind, small-hydro, and bio-mass energy technology....*”⁶³. This claim has been repeated in Bank promotional literature on its carbon market funds, and the PCF’s 2004 annual report makes a slightly modified claim, although one that still implies a prominent role for renewables: “*as intended, renewable energy and waste-to-energy technologies dominate the portfolio pipeline by representing 60% of total emission reductions purchased*”⁶⁴.

This statement also seems designed to imply a similarity between renewable and waste to energy projects, as if they are subcategories of the same project type. In reality they are quite different. For example, the huge Chinese coal mine methane project is considered a waste-to-energy project⁶⁵. While it is the case that using methane from coal mines is preferable to simply venting it – from a climate change and worker safety point of view – it is also unavoidably true that this project will provide the coal mine operator with a new revenue stream and thus enhance the profitability of their operations. This is a far cry from the wind, small hydro and biomass that the PCF promised. In passing, the acute irony of these project types must be noted: coal mine operators profiting from a mechanism set up to combat climate change. That the Bank should be developing the methodologies to make it possible speaks volumes.

The claim that renewables make up a significant portion of the PCF is also based on the misleading labelling of a number of PCF projects. Firstly, the Bank labels the 1.5 million credits being sourced from the Plantar avoided fuel switch and sinks project as “biomass”⁶⁶. Yet Plantar’s “biomass” is industrial eucalypt plantations, hardly a sustainable renewable resource.

More seriously, the Bank misleadingly labels all its hydro projects as “small hydro”, and thus renewable, when in fact most are well above the accepted cut-off of 10MW. 10MW is used, *inter alia*, by the European Small Hydropower Association, and both the International Energy Agency’s Small-Scale Hydro Task Force, and Renewable Energy Working Party. At the June 2004 Bonn renewables conference, Bank staff,

⁶² Haites, E., for the World Bank Carbon Finance Business Unit, “Estimating the Market Potential for the CDM: review of models and lessons learned”, June 2004.

⁶³ “World Bank launches first-of-its-kind market-based carbon fund”, 18.1.00; www.prototypecarbonfund.org.

⁶⁴ PCF annual report 2004, page A.5.

⁶⁵ Response from the Bank’s Carbon Finance Helpdesk, 20.4.05.

⁶⁶ Confirmed in response from the Bank’s Carbon Finance Helpdesk, 5.4.05.

including IFC Managing Director Peter Woicke, stressed to IRN that the Bank would in the future exclude large hydro greater than 10MW from project types included in their renewable target. At COP6 in 2000 the European Union attempted to restrict the CDM to a positive list of renewable technologies with 10MW being the limit for hydro projects.

Only 3 of the 10 PCF hydro projects are below the 10MW threshold (see table below). These three small projects contribute approximately 1.4 million carbon credits to the PCF portfolio⁶⁷. Small hydros therefore contribute only about 4% of the total as opposed to the 25% claimed by the PCF. As a result, the subsequent claim that 60% of the PCF's credits come from renewable and waste-to-energy projects is false.

Even more damning for the credibility of the PCF is the fact that the PCF's "small hydro" claims are inconsistent with their own stated "small hydro" threshold. In March 2004 we asked the PCF to clarify their use of the "small hydro" label. The Carbon Finance Helpdesk stated in an email that "*Small hydro would be 15 MW or less*" consistent with the "*Marrakech Accords definition of small-scale projects*"⁶⁸. Yet 5 of the 10 hydro projects that the PCF labels as "small" are in excess of 15MW (again, see table below). Moreover, these 5 projects account for nearly 7 million of the 9.5 million carbon credits that will be sourced by the PCF from hydro projects⁶⁹.

Thus, at least 70% of the carbon credits that the PCF claims are from "small hydro" projects in fact come from projects that do not even meet the PCF's own stated definition of "small hydro". More broadly, this means that approximately 17% of credits in the PCF's active pipeline are mislabeled according to the PCF's own definitions and, as a result, the broader claim that the PCF is dominated by renewables and waste-to-energy is demonstrably false. In August 2004 IRN and CDM Watch wrote to the Bank seeking further clarification on this point but at the time of writing have not received a response.

⁶⁷ Because the Bank refuses to provide a breakdown of how many carbon credits are coming from each of the INELEC hydro projects we do not know the exact number of carbon credits that will be sourced from the 8MW Trojes project. But given that the INELEC projects sources only 1,120,000 carbon credits from four hydro projects, three of which are above 10MW, we assume the amount sourced from Trojes will not be substantial and will not affect this estimate greatly.

⁶⁸ It must also be noted that this answer confuses two separate issues. The Marrakech Accords establishes a category of "small-scale" projects for which simplified modalities and procedures can be used when seeking registration. But this does not mean that a hydro project that meets this criterion is a "small hydro" project in the sense that the term is commonly used; only that it is a "small-scale" project under the Marrakech Accords.

⁶⁹ Because the Bank refuses to provide a breakdown of how many carbon credits are coming from each of the INELEC hydro projects we do not know the exact number of carbon credits that will be sourced from the 30MW El Gallo project. .

PCF hydro projects	Size (MW)	ERPA volume (from PCF 2004 annual report)	Percentage of total PCF active pipeline portfolio
Xiaogushan	98	2,170,000	
El Canadá	43	2,000,000	
Rio General	39	1,800,000	
Chacabuquito	26	1,000,000	
INELEC			
El Gallo			
Chilatan	30		
Benito Juarez	15		
Trojes	15		
	8	1,120,000	
West Nile	~6.6	1,300,000	
Cote	6.3	172,120	
TOTAL		9,562,120	23%
Projects above 10MW (commonly accepted “small hydro” threshold)	7 projects	~6,970,000 (doesn’t include carbon credits from Chilatan, Benito Juarez and El Gallo as exact breakdown of INELEC credits is unknown. Number likely to be slightly higher)	17% (doesn’t include carbon credits from Chilatan, Benito Juarez and El Gallo as exact breakdown of INELEC credits is unknown. Number likely to be slightly higher)
Projects under 10MW	3 projects	~1,472,120 (doesn’t include carbon credits from Trojes as exact breakdown of INELEC credits is unknown. Number likely to be slightly higher)	4% (doesn’t include carbon credits from Trojes as exact breakdown of INELEC credits is unknown. Number likely to be slightly higher)
Projects above 15MW (PCF “small hydro” threshold)	5 projects	~6,970,000 (doesn’t include carbon credits from El Gallo as exact breakdown of INELEC credits is unknown. Number likely to be slightly higher)	17% (doesn’t include carbon credits from El Gallo as exact breakdown of INELEC credits is unknown. Number likely to be slightly higher)

Large hydro

In the same way that the Bank’s sinks rhetoric obscures an agenda focused on industrial plantations, the Bank’s rhetoric on renewables and “small hydro” hides the Bank’s intent to use carbon finance as a new funding option for large dams. The mid-1990s saw the Bank reduce its support for large hydro projects in response to the controversy of the Sardar Sarovar project in India and mounting evidence of the social and environmental impacts of large dams. Yet in recent years the Bank has reversed this trend as part of its broader strategy of focussing on so-called “high risk-high reward” projects⁷⁰.

⁷⁰ “The World Bank at 60. A case of institutional amnesia?” Report by IRN; www.irn.org.

The Water Resources Sector Strategy adopted in February 2003 commits the Bank to “re-engage with high risk/high reward hydraulic infrastructure” – large hydro projects - and identifies carbon finance, specifically the CDM, as one of the ways in which such projects can be funded. This policy is now being operationalised through the Bank’s carbon funds. In addition to the current batch of hydro projects being developed by the PCF, more are being developed through other Bank carbon funds. The Bank’s Carbon Finance Unit is developing the 15MW Sibimbe project in Ecuador and 15.4MW Poechos project in Peru. One of the funds that the Bank manages for the Dutch government – the Netherlands Clean Development Facility (NCDMF) - is developing the 78MW Rio Amoyá large hydro project in Colombia and the 55MW Hornitos large hydro in Chile⁷¹.

As with the Bank’s plantations agenda, the Bank’s determination to use carbon finance to help them re-engage in large hydro projects directly calls into question their rhetoric about using the carbon market to promote sustainable development and reduce poverty. As the WCD notes, while the benefits of large dams “have been considerable”: “in too many cases an unacceptable and often unnecessary price has been paid to secure these benefits, especially in social and environmental terms, by people displaced, by communities downstream, by taxpayers and by the natural environment”⁷². Notably, the first dam approved for financing under the Bank’s new strategy - Nam Theun II in Laos - will result in tens of thousands of poor Laotian farmers losing land, fisheries and other resources as a result of the project⁷³.

Renewables in the PCF portfolio

After taking into account the Bank’s mislabelling of its large hydro projects and Plantar, a different picture of the PCF emerges in which renewables such as small hydro, wind and biomass are a relatively small contributor to the overall portfolio; in fact, they make up about 15% of all carbon credits that the PCF will buy from CDM projects and 17% of the total portfolio. The PCF’s portfolio of 34 projects is dominated by five large projects: two that capture methane from landfills in South Africa and Vietnam, one that captures methane from a coal mine in China, the removal of Nitrous Oxide from a Nitric Acid plant in India, and a project which improves the efficiency of a German-owned cement company in Indonesia. These five projects account for 40% of all carbon credits from the PCF’s 27 CDM projects, and 36% of the overall portfolio of 34 CDM and JI projects⁷⁴. The next largest project category is large hydro projects; the 7 large hydro projects contribute at least 7 million carbon credits, about 20% of credits sourced from CDM projects – more than renewables - and at least 17% of the total portfolio⁷⁵. In conclusion: 60% of the carbon credits that the PCF will buy from CDM projects and 53% of the total portfolio will come from five large industrial and landfill gas capture and efficiency

⁷¹ Information provided by World Bank carbon finance helpdesk.

⁷² Extracted from the International Rivers Network’s “Citizens’ Guide to the WCD”: www.irmn.org.

⁷³ www.irmn.org.

⁷⁴ We count the individual projects in the Mexican INELEC umbrella hydro project separately, but do not count the Chorotega wind farm in Costa Rica as the PCF’s 2004 annual report states: “this agreement terminated on June 30, 2004 as the financial closure conditions precedent to effectiveness were not satisfied”. While the PCF may conclude another agreement at the time of writing this hadn’t happened.

⁷⁵ Because the Bank refuses to provide a breakdown of how many carbon credits are coming from each of the 4 INELEC hydro projects we do not know the exact number of carbon credits that will be sourced from the 8MW Trojes project. But given that the INELEC projects sources only 1,120,000 carbon credits from four hydro projects, three of which are above 10MW, we assume the amount sourced from Trojes will not be substantial and will not affect this estimate greatly.

projects⁷⁶, and large hydro projects. Renewables will make up 15% and 17% respectively.

Selected PCF projects	Purchased carbon credits
China coal mine methane project	4,000,000
Durban landfill project, South Africa	3,800,000
Cement efficiency and fuel switching project, Indonesia	3,500,000 ⁷⁷
Indian NOX project	3,000,000
Vietnam landfill project	2,500,000
Total	16,800,000
7 large hydro projects	6,970,000 ⁷⁸
10 CDM renewables projects	5,217,780 ⁷⁹
3 JI renewables projects	1,883,000
Total renewables	7,100,780
Total credits purchased from 34 PCF projects	41,342,984

Moreover, these calculations are based on how many carbon credits the PCF itself will buy from each of these projects, but does not measure how many credits the projects will generate overall and which will be available on the carbon market. Based on the PCF's own estimates for the total credits that will be generated by each project, the five large projects mentioned above will generate 86 million credits, about 61% of all credits being generated by the PCF portfolio, with the Chinese coal mine methane project alone generating 49 million credits, about 34%. The 13 renewables projects will generate a total of about 13 million credits, about 9% of the total.

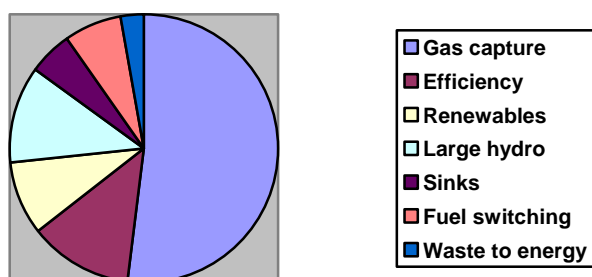


Figure 1: Total carbon credits from PCF projects; based on PCF annual report 2004⁸⁰.

d. additionality and fake credits

Additionality is the most important measure of whether CDM and JI projects, and by extension the carbon market, actually reduces greenhouse gas emissions below what would have happened without them. A non-additional CDM project is one that would

⁷⁶ The South African landfill gas projects and Chinese coal mine methane project will use the methane to generate electricity and are thus likely to be categorised as waste-to-energy.

⁷⁷ See footnote 36.

⁷⁸ See footnote 76.

⁷⁹ See footnote 75.

⁸⁰ We don't know how to split the efficiency and fuel switching components of the Indonesian cement project so include them all in efficiency. The South African landfill project and Chinese coal mine methane project may be included by the Bank in the waste-to-energy category, but it does not alter the calculation relating to renewables which is the main point of the table.

have happened anyway, meaning the credits it generates are fake. They can be used by an industrialised country to meet its Kyoto target instead of making real reductions and as such undermines the Kyoto Protocol's already inadequate targets.

The Bank itself says it “*views additionality as the key requirement that lends integrity to emission reductions from CDM and JI projects*”⁸¹ and certainly it has shown more respect for the principle than players such as the Dutch Government. Yet overall the Bank has played a negative role in the development and application of additionality testing. It has sought to reinterpret additionality testing so that business-as-usual projects can be approved, tried to gain approval for non-additional projects and for baseline methodologies that would facilitate the approval of non-additional projects. In most cases those projects are large dams and plantations, suggesting that the Bank sees promoting these project types through the carbon market as more important than addressing climate change.

Environmental additionality and the Bank

The debate over additionality testing heated up around 2002 as the CDM Executive Board was drafting the Project Design Document (PDD) for CDM projects which includes an additionality test. It revolved around what seemed to many outsiders to be an esoteric dispute over whether “environmental” or “financial” additionality was to be used. But the difference was critical. As an EU program elaborating baselines and additionality testing noted: “*It is generally recognised that credits for GHG emissions reduction should only be granted for projects that are additional; that is, for projects which would not have taken place in the absence of the crediting procedure or trading scheme*”⁸².

When the CDM Executive Board issued its first draft of the CDM Project Design Document (PDD) in July 2002, it included an additionality test that reflected this commonsense requirement. Developers were asked to:

*“Provide affirmation that the project activity does not occur in the absence of the CDM”*⁸³.

An explanatory paragraph elaborated: “*...the project itself would not occur in the absence of the CDM or the ability to register the proposed project activity as a CDM project activity*”⁸⁴.

Yet the Board's formulation was strongly rejected by industrialised countries and corporations as a “financial” or “investment” additionality test. Instead, they argued for an “environmental” additionality test which did not require a developer to show that the project would not have happened without the CDM, opening the door for projects that were going to happen anyway to generate fake credits. Prominent CDM project validator SGS was clear on this point: “*In our opinion, the environmental additionality test does not screen out business as usual projects.....*”⁸⁵

⁸¹ Host country concerns in Carbon Finance deals; questions and answers; DRAFT; 27.8.03.

⁸² PROBASE briefing note on additionality, undated.

⁸³ CDM PDD Version 1, 3.7.02. available from cdmwatch@indosat.net.id

⁸⁴ *ibid.*

⁸⁵ Email from SGS to IRN, 25.10.02.

The Bank, however, was a leading proponent of “environmental additionality” and sought to re-write the Marrakech Accords to fit its interpretation. In the documentation for projects such as the non-additional El Canadá hydroelectric facility and Durban landfill it falsely claimed that the Marrakesh Accords – the 2001 agreements that set out the basic rulebook for the CDM - “clarify that additionality is to be determined as environmental additionality”⁸⁶. This is simply incorrect: the term “environmental additionality” does not even appear in the Marrakech Accords.

When the baseline methodology for El Canadá was rejected by the Executive Board’s expert panel, doubts about the project’s additionality was one of the reasons given and the misrepresentation of the Marrakech Accords was specifically noted. Following this, NGOs wrote to the PCF in June 2003 insisting that they stop. In response the Bank conceded and in a statement on their website said “PCF recognizes and accepts that this term is not found in official documents of the UNFCCC and no longer intends to use the term in its submissions to the CDM Executive Board”⁸⁷.

The Bank’s non-additional projects

Despite dropping the phrase “environmental additionality” the Bank has not given up promoting non-additional projects and methodologies that would allow for their approval. Interestingly, when the Executive Board first proposed an additionality test that required developers to show that the project does not occur in the absence of the CDM, the International Emissions Trading Association (IETA), a close collaborator of the Bank’s, warned: “most of the projects in the portfolio of the Wordbank... would not meet this additionality criterion”⁸⁸. In contrast, *all* of the Bank’s fossil fuel projects are additional; the Bank’s lending mandate restricts it to projects that would not have happened without its intervention.

Large hydro: The PCF’s El Canadá large hydro project in Guatemala submitted its baseline and monitoring methodology for approval in 2003. It was one of the first large hydro projects to do so. At the time the project was well under way, indeed construction had begun 14 months previously, and its completion was clearly not dependent on carbon credits. It has since begun commercial operation. Regardless, the Bank attempted to demonstrate additionality by asking if the project was currently the most economically attractive (ie least cost) system expansion option in Guatemala at that time. If it was not, the Bank’s argued, then the project was additional as it did not represent the expected business as usual outcome. Sure enough, the Bank’s analysis showed that “...the Project would not be part of the Guatemalan National Interconnected System (NIS), because its generation cost is higher than the generation cost of the least-cost thermal alternative expected to be developed by private investors”⁸⁹.

This is sophistry on a grand scale. The fact that the Bank’s investment calculus showed that it made more economic sense in the Guatemalan electricity market to invest in a coal plant instead of El Canadá is frankly irrelevant because the decision to build El Canadá has already been taken by the time it sought carbon credits. The

⁸⁶ See the Project Design Document for El Canadá at www.prototypecarbonfund.org.

⁸⁷ www.prototypecarbonfund.org.

⁸⁸ Submission by IETA, 11.7.02; available from cdmwatch@ozemail.com.au.

⁸⁹ Project Design Document for El Canadá; www.prototypecarbonfund.org.

Bank's additionality justification involved hypothesising a scenario in which a nearly completed plant was *not* built and its capacity replaced by a thermal plant then asking if the emissions would be higher under this scenario. This is designed not to test additionality but to get around the fact that El Canada is not additional. The Methodology Panel agreed, rejecting the methodology. At the time writing, nearly two years after this rejection, no new methodology had been submitted.

El Canadá is not an isolated example. The International Rivers Network has been monitoring the Bank's CDM hydro projects and has consistently questioned their additionality. As mentioned before, the La Esperanza project in Guatemala had its registration blocked by five members of the Executive Board in December 2004 in part because of their concerns that it was non-additional. And it clearly is, despite being validated by Det Norske Veritas (DNV). The Project Design Document (PDD) for La Esperanza claims that "*lack of available knowledge and confidence in the technology involved in small, privately built hydroelectric projects makes this type of development non-existent and difficult to establish*" [emphasis added], and that "*Privately financed, built and operated small hydro plants are not common practice in Honduras*"⁹⁰. Yet as IRN notes, seven small hydro plants have recently been completed or entered construction in Honduras, as have the two mini-hydros that make up Phase 1 of La Esperanza⁹¹.

Almost comically, DNV's validation report claims that additionality is demonstrated by a regulatory barrier which is "*.....the assembly of various required permits, which costs a lot of time*"⁹². Yet how can the notoriously labyrinth and slow process of gaining CDM approval be said to overcome this barrier? In fact, by seeking CDM registration the developer now has to gain a whole new set of permits which will make this problem even worse.

Other Bank large hydro projects in the pipeline are similarly questionable. The Bank's largest CDM hydro project is the 98MW Xiaogushan project in Gansu province, China. A November 2003 report from the ADB Director to the ADB Board recommending a loan to the project noted that it is "*the least-cost alternative for generation expansion in Gansu Province*"⁹³, and that pre-construction work began in mid-2003. Given that, and the fact that the ADB loan covers \$35 million of the \$87 million project cost, it is difficult to see how carbon credits are needed, and how this project could be justified as additional.

Plantations: The two plantation-based avoided fuel switch projects being developed by the Bank in Brazil – Plantar and V&M - are clearly non-additional projects. Both claim that without the incentive of carbon credits they would not have replaced their plantations and thus switched from using charcoal in their industrial activities to using coal. Both projects use the same baseline study and it was clear that the baseline methodology submitted by V&M in 2003 would also have been used by Plantar if approved.

⁹⁰ Project Design Document for La Esperanza available at: http://cdm.unfccc.int/Projects/under_review.html.

⁹¹ The full submission is available at www.cdmwatch.org.

⁹² Available at http://cdm.unfccc.int/Projects/under_review.html.

⁹³ Report and recommendation of the President to the Board of Directors on a proposed loan to the PRC for the Gansu clean energy development project, November 2003; RRP: PRC 34476.

However, the Methodology Panel rejected the first baseline methodology put forward, in part because it did not credibly demonstrate additionality. One of the expert reviewers of the methodology noted that another developer was about to construct a new charcoal-based pig iron plant representing about 15% of total Brazilian charcoal-based iron production *without* carbon credits. In September 2003, V&M resubmitted a modified baseline methodology for approval. Two months later the Methodologies Panel sought the guidance of the Board about this revised methodology, and more broadly avoided fuel switch projects such as V&M and Plantar. In the report from their 8th meeting they wrote:

"The meth panel seeks the guidance of the Board on the project type of avoided fuel switch and expresses concern, based on the consideration of NM0029 [ie V&M do Brasil], related to immaterial nature of the project activity and the moral hazard⁹⁴ that is related to the fact that the project activity consists of continuing current practice" [emphasis added]⁹⁵.

Essentially, the Panel was recommending that avoided fuel switch projects be excluded as a project category, with one of the main concerns being the difficulty of credibly assessing the additionality of projects that merely involved continuing to do what was already being done. The issue of whether to exclude avoided fuel switch projects *per se* is still being considered by the CDM Executive Board, but in December 2004 the Board accepted the recommendation of the Meth Panel to again reject V&M's modified baseline methodology and it is hard to see how it, and Plantar, will now go ahead.

Ultimately, the Bank's efforts to have non-additional plantation and large hydro projects approved shows that using carbon finance to promote these projects types is a greater priority for it than reducing greenhouse gas emissions. This in turn further undermines its claims that it is developing a carbon market to help address climate change.

Conclusion

If the aim of the Bank is to drive sustainable development and climate protection while alleviating poverty then the development of a carbon market should not be its focus. A carbon market whose primary aim is to deliver cheap carbon credits to industrialised country buyers will never be an effective tool for addressing these issues. NGOs have long advocated a host of ways in which the Bank can improve its environmental and social performance. Central to them is the need for the Bank to re-focus its conventional lending away from fossil fuels and towards renewables. The recent Bank-initiated Extractive Industries Review (EIR) made a recommendation that mirrors those of the NGO community, that the Bank phase-out financing of extractive industries and utilise its lending to "*aggressively promot[e] the transition to renewable energy*". It is policies like this, consistently rejected by the Bank, which are the key to capturing the synergies between climate change, sustainable development and poverty alleviation.

⁹⁴ This is one of the many available definitions: "*The risk that a party to a transaction has not entered into a contract in good faith, has provided misleading information about its assets, liabilities, or credit capacity*".

⁹⁵ http://cdm.unfccc.int/Panels/meth/Meth08rep_ext.pdf.