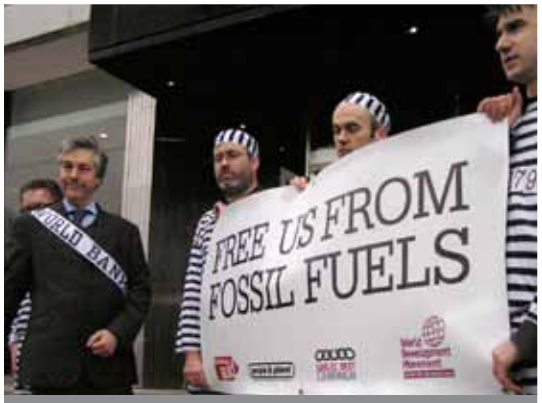
World Bank, Climate Change and Energy Financing:

Something Old. Something New?



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Campagna per la riforma della Banca Mondiale
CDM Watch Scrutinizing Carbon Offsets
Environmental Rights Action, Friends of the Earth Nigeria
groundWork
Friends of the Earth
INTERNATIONAL RIVERS people • water • life
LIFE

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Cover photos (from left to right): International Day of Action demanding that the World Bank end fossil fuel financing, March 1, 2011, London. Photo credit: Martyn Barson, World Development Movement. Pipeline in Nigeria. Photo credit: Friends of the Earth U.S.

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Campagna per la Riforma della Banca Mondiale (CRBM) is an Italian civil society campaign joined by 41 organisations that works for democratization and deep environmental and social reform of international financial institutions.

CDM Watch was set up in 2009 as an initiative of international NGOs to provide an independent perspective on Clean Development Mechanism (CDM) projects and the political decision-making process as well as on wider developments around carbon markets.

Environmental Rights Action/Friends of the Earth Nigeria is a Nigerian advocacy group dedicated to the defence of the human ecosystem in terms of human rights.

International Rivers' mission is to protect rivers and defend the rights of communities that depend on them. They oppose destructive dams and the development model they advance, and encourage better ways of meeting people's needs for water, energy and protection from damaging floods.

Legal Initiative for Forest and Environment (LIFE) is based in New Delhi, India and works nationally with local groups, individuals and communities through a unique combination of litigation, investigation, information dissemination, capacity building and supporting campaigns and movements.

World Bank, Climate Change and Energy Financing: Something Old, Something New?

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Far left: World Bank out of climate finance, Jakarta, Indonesia. Photo credit: Indonesian Climate Finance Network. Center and right: Demonstration against the World Bank at UN climate summit in Cancun, December 2010. Photo credit: Friends of the Earth International.

Introduction

2011 is a key year for the World Bank Group as it tries to solidly stake its claim in the areas of climate change and international climate finance.[1] But its surge in fossil fuel financing and continued strong support for large-scale energy infrastructure projects with questionable poverty alleviation outcomes cast doubt on the institution's self-professed leadership on climate change. As the World Bank re-vamps its Energy Sector Strategy for the first time in over a decade, the Bank will have to make critical decisions on whether to continue on its high greenhouse-gas-emitting-trajectory by making small cosmetic changes in its energy portfolio, or whether it can truly change direction towards serious investments in energy efficiency and decentralised renewable energy (like wind, solar, and micro-hydro) that may actually meet the needs of impoverished peoples.

The World Bank's carbon-intensive financing comes at a time when it is aggressively trying to secure a central role in international climate finance. At December 2010 United Nations climate negotiations in Cancun, the World Bank was named as the interim trustee of the newly established Green Climate Fund under the United Nations Framework Convention on Climate Change (UNFCCC). Now, the World Bank is trying to position itself to play a much greater role than interim trustee. Given its troubling record on social justice, the environment, human rights, climate impacts, truly sustainable development, and democratic governance, this is very concerning to civil society.

Through a series of seven case studies, *World Bank, Climate Change and Energy Financing: Something Old. Something New?* explains in plain terms what the World Bank Group is doing throughout the globe in the realms of climate and energy and challenges its rhetoric on sustainability and poverty alleviation. This report describes how the World Bank's financing is being delivered and the impacts of this funding on the ground. By examining these cases, a number of troubling trends emerge.

First, the institution's environmental and social safeguards are being applied to a decreasing proportion of projects. These long-fought-for safeguards, which are supposed to ensure a principled bottom-line to prevent the imposition of serious harm by World Bank projects to communities and the environment, cover such areas as involuntary resettlement, biodiversity conservation, and protections for Indigenous Peoples. However, as the institution shifts from project-based lending to a suite of other financing modalities, such as development policy loans and lending to financial intermediaries, the Bank is evading safeguards and accountability mechanisms.

Development policy loans, which support structural reforms in middle income countries, represented 52% of all funding in 2010 through the International Bank for Reconstruction and Development (IBRD), the Bank's middle-income lending branch.[2] Ultimately, these loans can end up financing environmentally and socially harm-

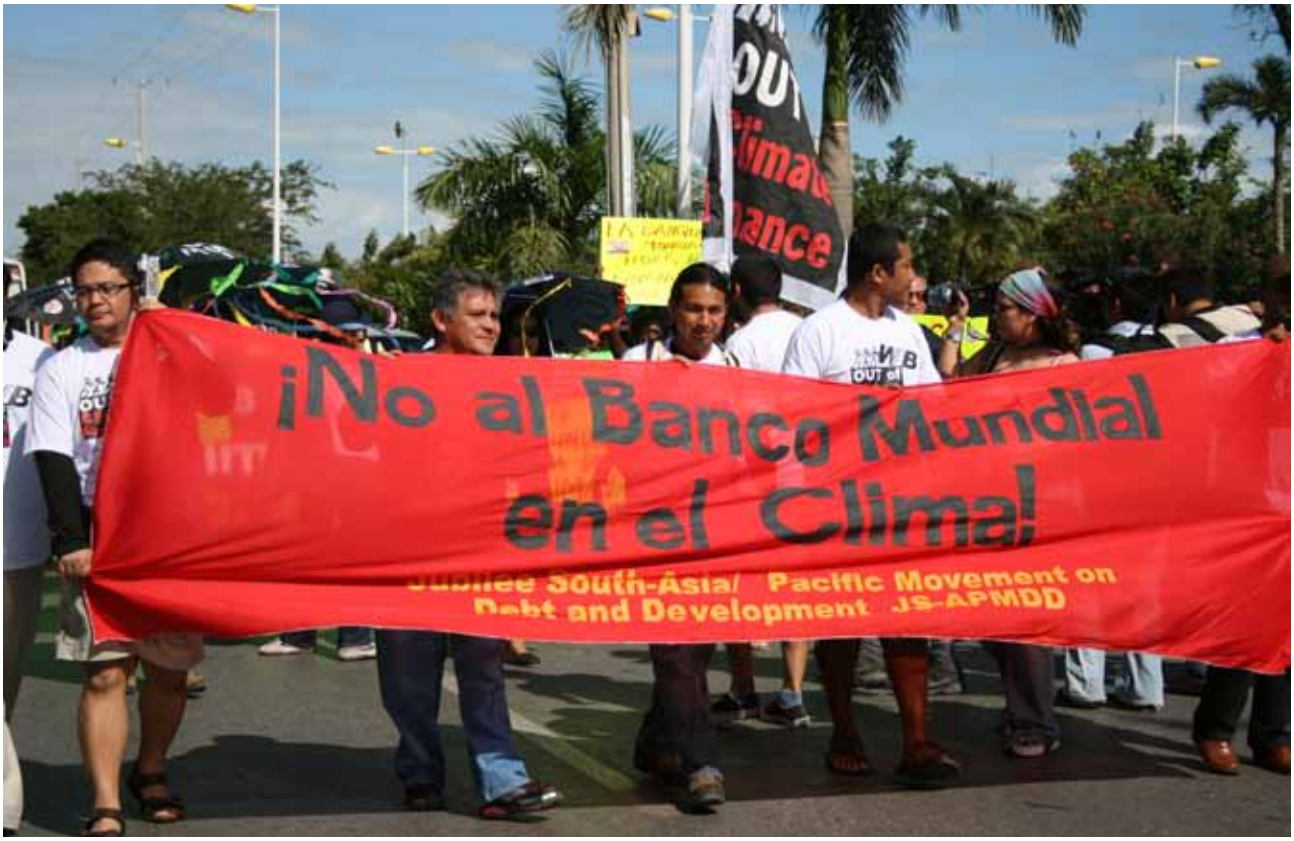
1 International climate finance is the transfer of funds from the North to the South to help enable developing countries adapt to the unavoidable impacts of climate change (i.e. adaptation), reduce greenhouse gas emissions (i.e. mitigation), and embark on clean energy development paths.

2 McElhinny, V. 2011. "The World Bank and DPLs: What Middle Income Countries Want." BICECA February 2011.

ful projects such as the Belo Monte Dam Complex in Brazil. Moreover, lending to financial intermediaries, such as commercial and investment banks and hedge funds, represented almost 40% of the disbursed investment portfolio and over half of all new project commitments of the International Finance Corporation (IFC), the Bank's private sector lending arm.[3] These intermediaries then finance projects which are not subject to conventional IFC safeguards.

Second, even for projects where safeguards do apply, the World Bank does not seem to have incorporated the lessons of past project failings. Several case studies examine such projects and the concrete impacts they are having years after World Bank approval, including the Nam Theun 2 Dam in Laos, the West African Gas Pipeline, and closely associated Bank-backed energy policies and projects in Nigeria. In the case of the West African Gas Pipeline, the World Bank's own independent grievance mechanism, the Inspection Panel, found that the Bank failed to comply with its social and environmental safeguards and faulted the bank for refusing to consider the impact of the pipeline on communities in the Niger Delta, where the gas was sourced. Today, the Inspection Panel is investigating alleged human rights, health, and other violations caused by another massive energy project, this time in South Africa. Another case study in this report examines the Plantar tree plantation in Brazil, a transaction supported by the Bank's Carbon Finance Unit, which facilitates international offsetting and carbon trading supposedly aimed at decreasing greenhouse gas emissions. Not only did World Bank safeguards fail to prevent harmful impacts, this project demonstrates how offset projects very

3 Ellmers Bodo, Molina Nuria and Tuominen Visa, Eurodad 2010, *Development diverted: How the International Finance Corporation fails to reach the poor.* http://www.eurodad.org/uploadedFiles/Whats_New/Reports/Development%20diverted.pdf.



World Bank protest, Cancun, December 2010. Photo credit: Jubilee South-Asia/Pacific Movement on Debt and Development.

often do little to mitigate greenhouse gas emissions or, worse, can actually lead to an increase of global emissions. Moreover, as the Bank's Carbon Finance Unit expands and disburses funds through third parties (called "delivery partners"), the application – let alone the implementation – of environmental and social safeguards seems doubtful.

Third, when it comes to effectiveness, deep questions remain about the World Bank's ability to meet its own sustainable development goals. Projects constructed in the name of alleviating energy poverty and/or transitioning to a lower-carbon economy very often don't achieve the desired outcomes, and all-too-often the opposite results. For example, in 2010 the Bank financed one of the world's largest coal plants in South Africa, despite the Bank's own 2008 Strategic Framework on Development and Climate Change, which states that the Bank is to help clients "maximize" national and local development outcomes, taking advantage of low-carbon growth opportunities wherever possible. Rather than increasing energy access, the controversial Medupi coal project will create very cheap electricity for mining companies, while making the poor pay rates that are four to seven times more than industry. Many of the mining companies have undisclosed "special pricing agreements," which were enacted during the apartheid era. In another case, rather than investing heavily in demand side management, energy efficiency, and in developing an effective strategy to address the energy needs of the 40% of Indians without access to electricity, the IFC financed another massive coal plant, the Tata Mundra project, which imports most of its coal from energy poor areas in Indonesia, adding to an already high climate burden.

Finally, the Bank's involvement in these two coal deals is not an aberration. Rather, it is part of an alarming trend. From 2006-2010, the World Bank increased its lending towards fossil fuel-based projects by 400%.[4] Moreover, most of the Bank's energy financing – whether direct or through financial intermediaries - is for domestic and/or export industry, not impoverished populations.

With its legacy of environmental and social harm, evasion of safeguards and accountability, and a questionable track record on reducing poverty – as demonstrated in the following case studies - the World Bank must make radical changes to the way it does business. Without a dramatic transformation, the World Bank will continue failing to live up to its motto of "Working for a world free of poverty", while undermining any attempts it makes to claim leadership in halting climate change and hastening the transition to low-carbon economies.

4 Heike Mainhardt-Gibbs, 2010 *"World Bank Group Energy Sector Financing Update,"* published by Bank Information Center.

Chapter Summaries

- **I. Shadow Funding – More than Meets the Eye: World Bank Support for Fossil Fuels through Infrastructure Lending and Financial Intermediaries**
  World Bank Group support for fossil fuel projects, which is already alarmingly high, is even greater than expected. A review of projects financed by the Bank between July 2008 and December 2009 revealed over US$1.5 billion linked to fossil fuel-related infrastructure and policy lending in excess of what the Bank has reported. Additionally, World Bank Group fossil fuel investments are taking place through financial institutions that act as intermediaries between investors and firms raising funds on capital markets. In 2009, lending to the financial sector was almost 40% of the disbursed investment portfolio and over half of all new project commitments of the International Finance Corporation (IFC). A review of World Bank Group project documents from January 2007 to December 2009 revealed that over US$4 billion in IFC investments took place through financial intermediaries with portfolios targeting energy development. Some financial intermediaries, such as private equity funds, invest up to half of their portfolio in the energy sector, including the development of oil and gas infrastructure. However, the Bank does not scrutinize projects financed via financial intermediaries for compliance with the social and environmental safeguards it applies to directly-financed projects. It is also failing to report on the development outcomes delivered by IFC sub-projects financed through financial intermediaries, including on energy access for the poor.

- **II. Burning Questions: The World Bank's Carbon Finance Unit and the CDM Plantar Project in Brazil**
  The Carbon Finance Unit of the World Bank facilitates international offsetting and carbon trading under the UN's Clean Development Mechanism (CDM), the world's largest offsets market. The Carbon Finance Unit sponsored Brazil's Plantar project, one of the first large reforestation projects, involving industrial eucalyptus monocultures, in the CDM. The Plantar project, one of the most controversial CDM projects to date, calls into question both the sustainable development and greenhouse gas reducing credentials of the World Bank and the CDM. It has led to serious social conflicts and environmentally disastrous outcomes. Over the past years, local communities affected by water-shortages and intimidation have shown tremendous resistance to the project. Numerous national and international NGOs took these concerns, and evidence that the project does not reduce emissions, to the UN climate body, yet Plantar was approved under the CDM in July 2010. This chapter demonstrates that the World Bank's involvement in the UN climate body's decision-making processes has resulted in outcomes that help industry first, not the poor.

- **III. Nigeria and the World Bank: Oil, Gas, Increased Pollution, Increased Poverty**
  The World Bank has exercised enormous control and influence in Nigeria's energy sector, particularly oil and gas. The Bank's financing and support for mainly large-scale, fossil fuel power projects, its technical assistance to revamp the energy sector, as well as its facilitation of multinational corporation involvement, have not helped expand electricity access to the tens of millions of Nigerians who lack it. The Bank is perhaps most notoriously connected to Nigeria through its financing of the West African Gas Pipeline. Though partly framed by the Bank as a means to alleviate poverty, years later the pipeline has proven to be nothing short of a disaster for the people of Nigeria and the environment. In a second example, the World Bank's Global Gas Flaring Reduction public-private partnership has created an enabling environment for oil and gas companies to access cheap carbon credits and evolve new profit streams through facilitating gas flaring reduction projects under the UN's Clean Development Mechanism. However, gas flaring in Nigeria is illegal, and through this partnership the Bank is encouraging Nigeria to not enforce its own environmental laws.

- **IV. Tata Mundra and the IFC: India's Energy Future – Black as Coal**
  In 2008, the International Finance Corporation provided a US$450 million loan for the Coastal Gujarat Power Limited's (CGPL) Tata Mundra project - a 4000 MW coal-based thermal power plant being built in the western state of Gujarat in India. This plant will emit an estimated 25.7 million tons of CO_2 annually for at least twenty five years and will be one of the largest point sources of CO_2 on the planet. These estimates do not take into account the emissions that take place up until the coal reaches the plant, including the importation of coal from an energy poor area of Indonesia. Little of the project's electricity is expected to reach India's poor. The health and livelihoods of thousands of people will be adversely affected by this plant, as will the unique ecology of the Mundra coast. The IFC's justification that its investment in this project was needed to reduce risk perception and to encourage public and private investments in super critical technology is entirely misplaced, as super critical technology is already receiving significant government and private backing in India anyway.

- **V. World Bank Loan to South Africa's Eskom: Carrying Coal to Newcastle**
  The World Bank's funding for coal power plants reached new heights in 2010 when it approved a US$3.75 billion loan for Eskom, the state-owned South African power utility, almost all of which will go to build the world's fourth-largest coal plant. The 4800 MW Medupi coal-fired plant will emit some twenty-five million metric tonnes of CO_2 per annum. Despite claims to the contrary by the World Bank, this loan will not alleviate energy poverty in South Africa; instead, it will aggravate poverty and worsen ongoing inequities in access to electricity. In part to help pay for Medupi and its World Bank loan, a 137% electricity rate hike for consumers will make electricity unaffordable for many and will double household bills. The World Bank loan's predominant beneficiaries are large multinational corporations like BHP Billiton; thirty-eight of South Africa's largest corporations consume 40% of the electricity grid. Because of undisclosed "special pricing agreements" concluded during the last days of the apartheid era, these corporations will continue to enjoy the world's cheapest electricity while sending much of their profits overseas. The Inspection Panel, the World Bank's own accountability mechanism, is currently investigating the Eskom loan for violations of operational policies and procedures. Most recently, in February 2011, residents living close to Medupi went to court to stop the destruction of an ancient river-bed for the building of the coal plant.

- **VI. A History of Harm: The World Bank, Large Hydropower and Nam Theun 2 in Laos**
  Large dams are not clean sources of electricity. They have serious social and environmental impacts, including climate impacts, and they do not provide an effective means by which to achieve universal energy access. Many of these problems can be seen in the Nam Theun 2 (NT2) Hydropower Project, the largest dam in Laos, financed by the World Bank to the tune of US$270 million. NT2 project developers have faced significant shortcomings in developing and implementing sustainable livelihood programs for the more than 6,300 villagers displaced by NT2 and resettled on the Nakai Plateau. In violation of the World Bank's safeguard policy on involuntary resettlement, compensation payments for the loss of paddy fields, fruit trees and riverbank gardens were not paid before villagers' lands were taken. Moreover, instead of ensuring the conservation of the Nakai-Nam Theun National Protected Area, the largest protected area in mainland Southeast Asia, and the restoration of forest cover in the watershed as promised, NT2 has exacerbated pressures by opening up access via the reservoir. Project developers have also failed to release monitoring reports, up-to-date project management plans, and critical data on fisheries, water quality and hydrology to the public. The project's shortcomings make it very unlikely that villagers' livelihoods, including the 110,000 people living downstream from the dam, will be restored by 2015, when a livelihood restoration program is scheduled to end – ultimately leaving them worse off than they were before Nam Theun 2.

- **VII. Moving Money, Avoiding Accountability: Development Policy Loans and Brazil's Belo Monte Dam**
  Development Policy Loans (DPLs) are an increasingly common way for the World Bank to move money to middle-income countries in light of strong competition from new financiers, such as the Brazilian National Development Bank (BNDES). Though DPLs are supposed to improve environmental integrity, it appears that the result may be the opposite. A 2009 Development Policy Loan sought to assist BNDES in establishing a new social and environmental safeguards framework, but the framework was not completed. Despite the failure of BNDES to comply with this as a condition for further DPL funding, new funds were still delivered. BNDES has committed to financing up to 80% of the world's third-largest dam in installed capacity, the Belo Monte Dam Complex. If built, it would flood a significant area of the Brazilian rainforest, displacing over 20,000 people and threatening the survival of 800 Indigenous Peoples, in addition to other potentially serious environmental, socioeconomic and climate impacts.

Abbreviations List

ACA	African Capital Alliance
ADB	Asian Development Bank
AFD	Agence Française de Développement
APF	Amazon Partnership Framework
BNDES	Brazilian National Development Bank
CAPE	Capital Alliance Private Equity Fund III Ltd
CCP	Conduit Capital Partners LLC
CCS	Carbon capture and storage
CDM	Clean Development Mechanism
CEIF	Clean Energy Investment Framework
CER	Certified emission reduction
CFU	Carbon Finance Unit of the World Bank
CGPL	Coastal Gujarat Power Limited
CO_2	Carbon dioxide
CPS	Country Partnership Strategy
DFID	Department for International Development of the UK
DPL	Development Policy Loan
EAIF	Emerging Africa Infrastructure Fund
EDF	Electricité de France International
EGCO	Thailand's Electricity Generating Company
EIA	Environmental Impact Assessment
EU ETS	European Union Emissions Trading System
FBE	Free Basic Electricity
FGD	Flue gas desulphurization
FHN	First Hydrocarbon Nigeria Limited
GDP	Gross domestic product
GHG	Greenhouse gas
GoB	Government of Brazil
GoL	Government of Laos
GWh	Gigawatt hour
HCFC-22	hydrofluorocarbon (HFC), refrigerant
HFC-23	hydrofluorocarbon (HFC), refrigerant
IBRD	International Bank for Reconstruction and Development of the World Bank
IDA	International Development Association of the World Bank
IDB	Inter-American Development Bank
IEG	Independent Evaluation Group
IEP	Integrated Energy Policy
IFC	International Finance Corporation of the World Bank Group
KP	Kyoto Protocol
MIGA	Multilateral Investment Guarantee Agency of the World Bank Group
MW	Megawatt
NERSA	National Energy Regulator, South Africa
NESA	Norte Energia, S.A.
NGO	Non-governmental organization
NOx	Nitrogen oxides
NPA	National Protected Area
NTPC	Nam Theun 2 Power Company
OP	Operational Policy
PCF	Prototype Carbon Fund
PIDG	Private Infrastructure Development Group
SEM	Sectoral Environmental Management
SFDCC	Strategic Framework on Development and Climate Change
SME	Small and medium enterprise
SOx	Sulphur oxides
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
WBG	World Bank Group

I. Shadow Funding - More than Meets the Eye:
World Bank Support for Fossil Fuels through Infrastructure Lending and Financial Intermediaries

Despite the very serious impacts of climate change on the world's poor, as previously mentioned, the World Bank increased fossil fuel lending 400% between 2006 and 2010.[5] A recent study by Bretton Woods Project, CRBM and Urgewald, "Fuelling Contradictions",[6] which reviews projects financed by the World Bank between July 2008 and December 2009, reveals over US$1.5 billion[7] linked to fossil fuel-related infrastructure and policy lending in excess of what the Bank has reported. Additionally, World Bank Group fossil fuel investments are taking place through financial institutions that act as intermediaries between investors and firms raising funds on capital markets. Financial intermediaries may include commercial and investment banks, insurance companies, investment dealers, pension funds, hedge funds and investment funds. In 2009, lending to the financial sector was almost 40% of the disbursed investment portfolio and over half of all new project commitments of the International Finance Corporation (IFC). IFC lending to the financial sector grew from US$1.7 billion in 2004 to US$12.3 billion in 2008.[8] This is particularly worrying in a context where total investments by the private sector in infrastructure projects in developing countries have been increasing exponentially, reaching an average of about US$100 billion per year[9].

Energy infrastructure for industry and exports, not for the poor

One form of World Bank "shadow" funding for fossil fuels is through financing for fossil fuel-related infrastructure. These projects are important components of large-scale coal plants and support the creation of energy trade networks, which often are directed towards the needs of large industrial consumers and not the energy needs of poor communities. For example, in 2009 the World Bank provided US$1 billion to India for the Fifth Power System Development Project through its middle income country lending arm, the International Bank for Reconstruction and Development (IBRD). This project's primary activity is to enhance an energy transmission network in order to handle large bulk power transfers from two newly commissioned mega thermal coal plants, Sasan and Tata Mundra.

Another example is the Bank's support for the first phase of the Mozambique Regional Transmission Development Program APL Series, an "export based generation power transmission project".[10] This project will produce energy for export by constructing five mega projects (large coal power and hydropower facilities) in Mozambique.[11] The electricity produced is appar-

5 Mainhardt-Gibbs, H., 2010, *"World Bank Group Energy Sector Financing Update"*. Published by Bank Information Center.

6 Bretton Woods Project, Urgewald, CRBM, 2010, *"Fuelling Contradictions. The World Bank Energy lending and climate change"*.

7 The figure specifically does not include projects with a stated aim to improve access for households, to support low-carbon projects, or small-scale energy infrastructure for the rural poor. Bretton Woods Project, Urgewald, CRBM, 2010, *"Fuelling Contradictions. The World Bank Energy lending and climate change"*.

8 Ellmers Bodo, Molina Nuria and Tuominen Visa, Eurodad 2010, *Development diverted: How the International Finance Corporation fails to reach the poor.* http://www.eurodad.org/uploadedFiles/Whats_New/Reports/Development%20diverted.pdf.

9 A listing of private equity funds and infrastructure funds active in developing countries is available as a work in progress from The Corner House. Contact: nick@fifehead.demon.co.uk.

10 World Bank, 2008, *"Project Information Document: Concept Stage. Mozambique Regional Transmission", Development Program APL Series, Phase 1.*

11 Ibid.

WORLD BANK LENDING TO FINANCIAL INTERMEDIARIES

There is little public information available about World Bank lending to financial intermediaries, which raises serious concerns about overall transparency in the Bank's lending portfolio and accountability to the Bank's overall development goals. According to the IFC website, the use of financial intermediaries allows it to reach small and medium enterprises (SMEs) that cannot be reached through its own channels due to high transaction costs. However, the IFC has not provided evidence of how this happens in practise. Looking at the reality of the banking sector in developing countries leads to different conclusions on IFC support for SMEs, particularly in Sub-Saharan Africa.

The World Bank and the International Monetary Fund over the past thirty years have enforced deregulation of the banking sector in the context of structural adjustment of developing countries' economies. As a consequence, most local banks and financial actors in poor countries are controlled by foreign banks and investors, which are systematically draining local resources into global financial markets to generate higher returns rather than re-investing them locally to foster economic and social development. In the best case, foreign controlled financial intermediaries do not necessarily know the local economic context and the needs of communities.[13]

In addition to banks, private equity funds and investment funds, such as index funds and country funds, are among the financial actors receiving IFC support. As pointed out by Eurodad, index funds target stock market indexes, where large companies are usually listed; it is hard to see how this helps small local businesses. Country funds target a particular country, which may be a least developed or 'frontier' country, but they do not necessarily guarantee a specific focus on small and medium enterprises.[14] Moreover, private equities and infrastructure funds look for high return investments, in the range of 25-30%,[15] rates that are hardly achievable by investing in small and medium enterprises active in production for local markets in developing countries.

ently supposed to decrease the "electricity deficit" experienced by large multinationals operating in the southern African region in the extractive sector, and other industries like aluminium smelters. However, distribution and generation of energy for domestic use is not a priority of the project, though 88% of that country's citizens lack access to energy.[12]

12 International Energy Agency (IEA), 2010, *"World Energy Outlook 2010: The Electricity Access Database".* Available at http://www.worldenergyoutlook.org/database_electricity10/electricity_database_web_2010.htm.

13 Counterbalance, 2010, *"Hit and Run Development. Some things the EIB would rather you didn't know about its lending practices in Africa, and some things that can no longer be covered up".*

14 Ellmers Bodo, Molina Nuria and Tuominen Visa, Eurodad 2010, *Development diverted: How the International Finance Corporation fails to reach the poor.* http://www.eurodad.org/uploadedFiles/Whats_New/Reports/Development%20diverted.pdf.

15 "According to the British Private Equity and Venture Capital Association (BVCA), private equity investments in the UK have returned an average of 38.8% net to investors each year for the past three years. This is the performance of 'independent' UK private equity funds - ie, funds raised from external investors for venture capital and private equity investment, but excluding quoted private equity investment trusts (Peits) and venture capital trusts (VCTs). The overall long-term net return to investors is 17.3% a year, according to the BVCA.", Hotbed, n.d., "Profit from private equity – Investors Chronicle", available at http://www.hotbed.uk.com/news/profit-private-equity-investors-chronicle.

Shady money transactions

Aside from general concerns related to the World Bank's lending to financial intermediaries (see box), specific concerns revolve around extractive sector projects and infrastructure support by the Bank through financial intermediaries. Extractive projects and related infrastructure are among the Bank's most controversial projects and, in many cases, involve human rights violations and other negative social, economic and environmental impacts. Such projects usually respond to an export-oriented logic driven by external needs rather than prioritising local communities' access to energy and other resources. However, the Bank does not scrutinise projects financed via financial intermediaries for compliance with the social and environmental safeguards applied to projects it finances directly. Indeed, even figuring out which projects are ultimately funded by the Bank via financial intermediaries is a big challenge. In many cases, there are no indications that projects are supported by the World Bank, nor information available about the length of the investment.[16] Public information is not available on IFC-supported individual investments by financial intermediaries, which are IFC-supported sub-projects.[17]

A review of World Bank Group project documents from January 2007 to December 2009 reveals that over US$4 billion in IFC investments took place through financial intermediaries with portfolios targeting energy development.[18] Some financial intermediaries, such as private equity funds, invest up to half of their portfolio in the energy sector, including the development of oil and gas infrastructure. Although it is not known how much of the US$4 billion involves fossil fuel development, it is clear that financial intermediaries represent a substantial pathway for fossil fuel investment that is not being accounted for by the Bank in its annual energy sector figures. Tracking these fossil fuel investments, however, is essential in assessing the climate and environmental footprint of the institution, and the accuracy of its energy investment accounting.[19]

IFC Incognito - Leaving fossil fuel imprints all over the globe

Though publicly embracing rhetoric about concern for climate change, the IFC is working hard behind the scenes to turn a handsome profit in fossil fuel energy sectors throughout the globe.

Africa -- In 2009, the IFC invested up to US$40 million in Capital Alliance Private Equity Fund III Ltd (CAPE III),[20] a fund managed by African Capital Alliance (ACA), a "leading private equity firm" active in Nigeria and West Africa but registered in the Cayman Islands, a well-known tax haven. According to the IFC, CAPE III is "expected to invest up to 40% of committed capital in the energy sector". ACA's portfolio of investments includes companies active in oil and gas in Nigeria – a country with a long history of human rights violations related to oil and gas extraction – such as DWC Drilling and Capsea Marine. CAPE III recently acquired a minority stake in First Hydrocarbon Nigeria Limited (FHN), "an upstream oil and gas company engaged in the acquisition and development of substantial oil and gas assets in Nigeria".[21] Regret-

16 Financial intermediaries report their portfolios to the IFC. It is, however, difficult to establish which part of the overall portfolio of a financial intermediary is financed with IFC money and avoid problems of fungibility. Eurodad, 2010, *"Development Diverted: How the International Finance Corporation fails to reach the poor"*.

17 *"Even for high-risk FI portfolios, there is no public information in the Summary of Proposed Investment on project types, on applicable Performance Standards (with the exception of Performance Standard 2, Labour and Working Conditions), or whether the FI has a social and environmental management system in place that meets IFC requirements".* Submission by Civil Society Organisations to the International Finance Corporation commenting on the Social and Environmental Sustainability Policy, Performance Standards and Disclosure Policy, 11 March 2010.

18 Bretton Woods Project, Urgewald, CRBM, 2010, *"Fuelling Contradictions. The World Bank Energy lending and climate change"* .

19 Ibid.

20 http://www.ifc.org/ifcext/spiwebsite1.nsf/f451ebbe34a9a8ca85256a550073ff10/b2a71d49c85de406852576ba000e2cc2?OpenDocument.

21 African Capital Alliance, n.d., *"Cape III Invests in First Hydrocarbon (FHN)".* Available at http://www.aca-web.com/index.php?option=com_content&view=article&id=144:cape-iii-invests-in-first-hydrocarbon-fhn&catid=2:latest-news.

tably, IFC does not report the detailed amount it invested in each of the subprojects supported by CAPE III, nor does it consider itself directly responsible for ensuring the compliance of financed projects to IFC performance standards (i.e. safeguards). IFC is limiting its action to overseeing the overall environmental and social risk management of the financial intermediaries that it finances, which is far too little according to many civil society groups.[22]

IFC is also among the initiators of the Private Infrastructure Development Group (PIDG), a coalition of donors "mobilising private sector investment to assist developing countries to provide infrastructures vital to boost their economic development and combat poverty".[23] Together with some PIDG members, the IFC provided initial equity of US$133.5 million to set up the Emerging Africa Infrastructure Fund (EAIF).[24] EAIF's portfolio of investments includes the restructuring and privatisation of Eleme Petrochemicals Ltd in Nigeria,[25] one of the two publicly owned processing plants that are a part of Nigeria's downstream petrochemical infrastructure. The IFC has also actively promoted its privatisation through a loan to the project sponsor, Indorama International Finance (IIF),[26] an investment ve-

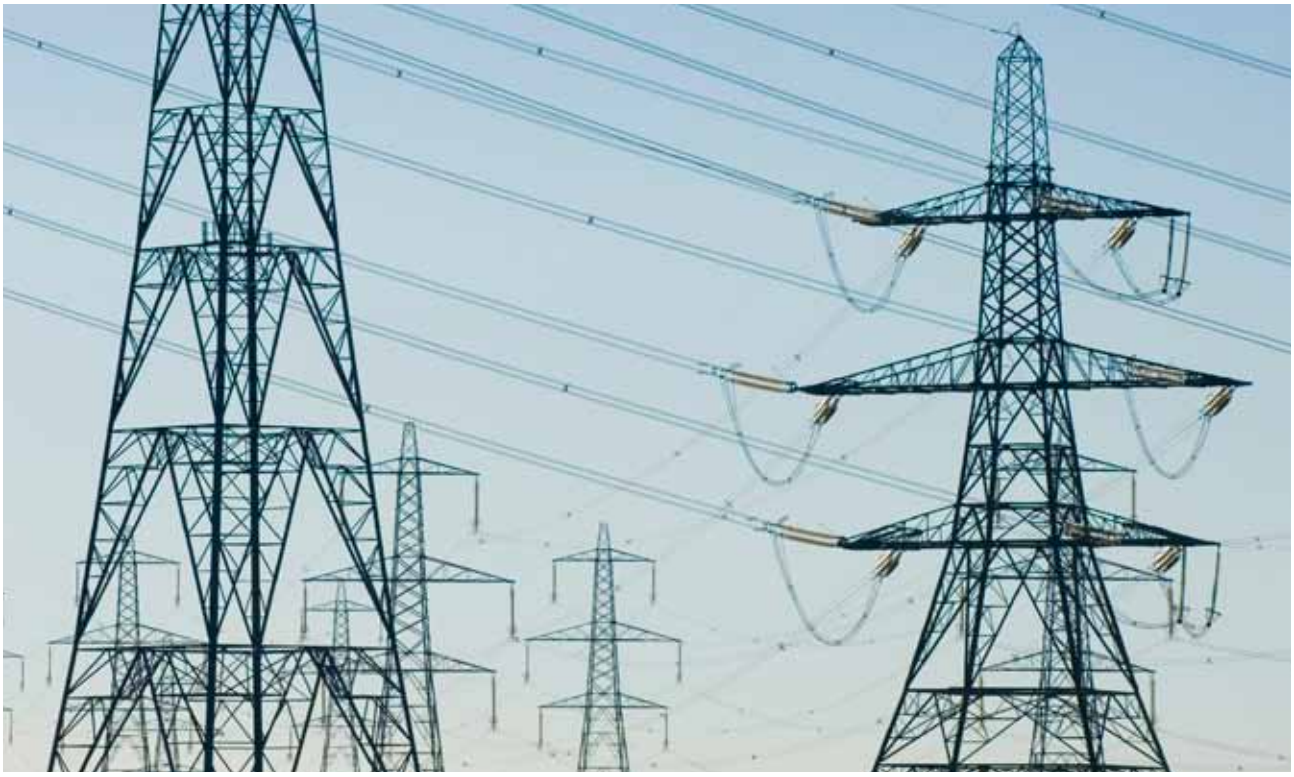
22 Submission by Civil Society Organisations to the International Finance Corporation commenting on the Social and Environmental Sustainability Policy, Performance Standards and Disclosure Policy, 11 March 2010.

23 Private Infrastructure Development Group, n.d., "*About PIDG*". Available at http://www.pidg.org/sitePages.asp?step=4&navID=2&contentID=10.

24 EAIF was initiated by the Private Infrastructure Development Group (PIDG), whose founding members are the UK Government's Department for International Development, Netherlands Ministry of Foreign Affairs, Swiss State Secretariat for Economic Affairs, Swedish International Development Cooperation Agency, International Finance Corporation/World Bank, Austrian Development Agency, and Irish Aid. These PIDG members provided equity totalling US$133.5 million to EAIF and US$73 million to GuarantCo through the PIDG Trust. Emerging Africa Infrastructure Fund, n.d., "Useful Links", available at http://www.emergingafricafund.com/useful-links.aspx.

25 Private Infrastructure Development Group, n.d., *"Document Library"*, available at http://www.pidg.org/document.asp?navID=5&clientID=6&documentSubTypeID=2.

26 The total project cost is estimated to be US$385 million, of which US$225 million is for the acquisition and US$160 million towards



Transmission lines to support centralized conventional grid.

hicle registered in the UK, owned by B.I.F. Holding Limited and registered in the British Virgin Islands, another well-known tax haven. According to the IFC, the privatisation of Eleme Petrochemicals is in itself delivering a development outcome for Nigeria, including through "adding value to Nigerian natural resources".[27] However, the IFC has not provided clear indicators that could help evaluate how this privatisation and restructuring project could, in fact, benefit local communities (about 70,000 people) to achieve energy access, nor how it would lead to reduced socio-economic and environmental impacts. Moreover, it is not clear how the local private sector may benefit from the privatisation process, given that IIF is not rated as a small or medium enterprise but rather as "the 12th largest polyester producer in the world",[28] targeting mainly the export market in Europe and other African countries.

Latin America -- The IFC has also invested in Conduit Capital Partners LLC, a private equity investment firm active in Latin America that "serves as a principal sponsor or developer of medium-sized power plants and pipelines in the region".[29] The IFC has been investing in two of the investment funds managed by Conduit, Latin Power I and II, both focusing on investment in the energy sector in Latin America. It is worth noting that the portfolio of investments of a third fund managed by Conduit, Latin Power III, includes Kuntor Transportadora de Gas, which owns a concession "for the development, construction and operation" of a 1085km natural gas pipeline in Peru,[30] for the transportation of natural gas from the Camisea field in the Peruvian Amazon across the highlands to the Ilo port in Moquegua. The Camisea project is one of the most controversial extractive projects on the continent, involving violations of the human rights of Indigenous Peoples living in the territory.

Asia -- In Asia, the IFC has invested up to US$150 million in Macquarie India Infrastructure Opportunities Fund, a fund that will make "equity and equity-like investments in infrastructure and infrastructure related assets in India and other countries in South Asia".[31] The Fund is designed to invest in a diversified range of greenfield and brownfield assets, including power generation, power transmission and distribution and other infrastructure-related sectors, which may include highly controversial large coal power plants now under construction.

IFC's financial intermediaries – unknown costs and benefits

The IFC is failing to report the real figures of its investments in the extractive sector and related infrastructure through financial intermediaries. It is also failing to account for the development impacts of transferring almost half of its support to the private sector through these intermediaries. The Development Outcome Tracking System, which the IFC is only partially implementing for its lending portfolio, does not include the portfolio of projects of financial intermediaries financed by the IFC.[32] Finally, in light of the IFC's Performance Standards Review, civil society is deeply concerned that IFC safeguards only apply to a very limited set of operations financed through financial intermediaries.[33]

the project. IFC's proposed investment would comprise a loan of up to US$75 million for IFC's own account and a syndicated B loan of up to US$80 million for the account of participating banks/financial institutions. IFC, n.d., "Eleme Petrochemicals Company Limited", available at http://www.ifc.org/ifcext/spiwebsite1.nsf/0/A9BE4A6DACD483FF852576BA000E28AA.

27 Ibid.

28 Ibid.

29 Conduit, n.d., "About Us", available at http://www.conduitcap.com/about.htm.

30 http://www.conduitcap.com/kuntur.htm.

31 IFC, n.d., *"Macquarie India Infrastructure Opportunities Fund"*, available at http://www.ifc.org/ifcext/spiwebsite1.nsf/1ca07340e47a35cd85256efb00700cee/511B0D34F8F7169C852576BA000E2AAD.

32 Ellmers Bodo, Molina Nuria and Tuominen Visa, Eurodad 2010, *Development diverted: How the International Finance Corporation fails to reach the poor.* http://www.eurodad.org/uploadedFiles/Whats_New/Reports/Development%20diverted.pdf.

33 Submission by Civil Society Organisations to the International Finance Corporation commenting on the Social and Environmental Sustainability Policy, Performance Standards and Disclosure Policy, 11 March 2010.

II. Burning Questions:
The World Bank's Carbon Finance Unit and the CDM Plantar Project in Brazil

The Carbon Finance Unit of the World Bank facilitates international offsetting and carbon trading through the buying and selling of carbon credits by governments (and companies within those countries) that are party to the Kyoto Protocol (KP) of the United Nations Framework Convention on Climate Change (UNFCCC). This is done through the two offsetting mechanisms of the Kyoto Protocol – the Clean Development Mechanism (CDM) for developing countries and Joint Implementation for economies in transition – which were designed to help industrialised countries achieve their Kyoto greenhouse gas (GHG) reduction targets in a cost-effective manner.

The World Bank made an early entry into the arena of carbon markets. In April 2000, its first carbon fund, the Prototype Carbon Fund, became operational. Its involvement in carbon financing at such an early stage of the Kyoto Protocol had the primary objective of catalysing a global carbon market[34] while ensuring investors' confidence in carbon offsetting. The Carbon Finance Unit now manages eleven carbon funds and facilities, and the Bank is working vigorously to ensure the vitality of carbon markets beyond 2012, when the first commitment period of GHG reductions by developed countries under the Kyoto Protocol ends. For example, in an effort to provide certainty to offset developers, in January 2011 the Bank launched a €68m fund to buy carbon credits scheduled for delivery after 2012. It's important to note that the World Bank also profits from its

WHAT IS INTERNATIONAL OFFSETTING?

International offsetting is a mechanism through which polluters in developed countries, rather than reducing their own pollution, pay for projects in developing countries or economies in transition that are supposed to lead to equivalent reductions in emissions. Each unit of carbon that is theoretically not emitted represents a credit that can then be traded on carbon markets. The Clean Development Mechanism (CDM) is the world's largest offsets market. Each CDM credit is known as a certified emission reduction (CER) and in theory represents one metric tonne of avoided carbon dioxide emissions, worth around €12 on the EU Emissions Trading System (as of March 2011). CDM eligibility, and the issuance of CERs for such projects, hinges on their "additionality", i.e. project developers must be able to demonstrate that the activity would not have occurred in the absence of the CDM. Additionality is the determining factor for the environmental integrity of the project and thus of the mechanism itself.

34 The World Bank, 2010, *"10 Years of experience in Carbon Finance".* Available from http://siteresources.worldbank.org/INTCARBONFINANCE/Resources/10_Years_of_Experience_in_CF_August_2010.pdf.

involvement in the CDM by earning 5% to 10% in commissions on the credits it purchases for the funds that it manages[35].

The World Bank views itself as an "honest broker"[36] for carbon finance and a pioneer of carbon markets. But offsets very often fail to deliver the promised results and can actually lead to increased emissions, making climate change worse.[37] Dr. David Victor of Stanford University estimates that up to two-thirds of projects under the CDM "do not represent actual emissions cuts"[38] because the projects would have happened anyway. For example, one World Bank Prototype Carbon Fund project, the Xiaogushan dam in China, began applying for CDM credits in 2005. The project claimed that, "Without CDM support, it would have not been able to reach financial closure, mitigate the high project risk, and commence the project constructions." However, project construction had already started two years earlier, and a 2003 Asian Development Bank analysis on the project found that the dam was in fact the cheapest generation option for the province.[39]

In addition to emissions reductions, an equal objective of the CDM is supposed to be sustainable development. As a development institution, the World Bank would presumably hone in on this objective. However, very few CDM projects actually address poverty and local environmental benefits, and some actually have harmful impacts.[40] A 2007 analysis of a sample of CDM projects found that only 1.6% of credits went to projects that benefited sustainable development.[41] Furthermore, the CDM is strongly biased towards large-scale projects that produce large numbers of credits; smaller-scale projects, which would be more likely to have sustainable development benefits, would not generate offsets as cheaply. As of the end of July 2009, more than 70% of credits went to industrial gas capture projects,[42] while the most common type of project was large hydropower.

World Bank: Profiting from and defending perverse incentives at the climate's expense

HFC-23 and N_2O are unwanted by-products from the production of HCFC-22 (a refrigerant gas) and N_2O adipic acid (for nylon production). These industrial gases have been found to create perverse incentives[43] and carbon leakage[44] when destroyed through the CDM. Overwhelming evidence exists that manufacturers have been gaming the CDM system by producing more potent GHGs just so they can get paid to destroy them[45]. Analysis of monitoring data from all

35 Vlachou, A. & Konstantinidis, C., 2010, "*Climate Change: The Political Economy of Kyoto Flexible Mechanisms*", Review of Radical Political Economics 42(I), 32-49.

36 World Bank Group, Carbon Finance Unit, "Frequently Asked Questions," Available at http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/ENVIRONMENT/EXTCARBONFINANCE/0,,contentMDK:21848927-menuPK:4125939-pagePK:64168445-piPK:64168309-theSitePK:4125853,00.html.

37 Friends of the Earth U.S., 2009, '*A Dangerous Distraction, Why Offsets Are a Mistake the U.S. Cannot Afford to Make*'.. Available at www.foe.org/sites/default/files/A_Dangerous_Distraction_US.pdf.

38 Vidal, J., 2008, *'Billions Wasted on UN Climate Programme: Energy Firms Routinely Abusing Carbon Offset Fund, US Studies Claim'*, The Guardian, 26 May. Available at www.guardian.co.uk/environment/2008/may/26/climatechange.greenpolitics.

39 International Rivers, 2005, *"Comments on World Bank PCF Xiaogushan Large Hydro Project (China)"*, August 21. Available at http://www.internationalrivers.org/node/1340.

40 McCully, P., 2008, '*Bad Deal for the Planet, Why Carbon Offsets Aren't Working and How to Create a Fair Global Climate Accord*', International Rivers. Available at http://www.internationalrivers.org/node/2826.

41 Sutter, C. & Parreno, J.C., 2007, *'Does the current clean development mechanism (CDM) deliver its sustainable development claim? An analysis of officially registered CDM projects'*, Climate Change, July. Available at http://www.cleanairnet.org/caiasia/1412/articles-72508_resource_1.pdf.

42 Wara, M., 2009, '*Written Testimony to the U.S. Senate Committee on Energy and Natural Resources Concerning Methods of Cost Containment in a Greenhouse Emissions Trading Program*'. Available at http://energy.senate.gov/public/index.cfm?FuseAction=Hearings.Testimony&Hearing_ID=9f3597e7-a135-e397-f850-b22b300d4b24&Witness_ID=7b5629a9-8eff-4281-b3e2-2dde0e64e2de.

43 CDM Watch, n.d., *'UN Under Pressure to Halt Gaming and Abuse of CDM*, press release. Available at http://www.cdm-watch.org/wordpress/wp-content/uploads/2010/06/hfc-23_press-release_gaming-and-abuse-of-cdm1.pdf.

44 CDM Watch, 2010, *'Industrial Gas Projects Caused Millions Of Phantom Emission Reductions, New Study Shows'*, press release, 18 October. Available at http://www.cdm-watch.org/wordpress/wp-content/uploads/2010/10/Phantom-Emission-Reductions_EN1.pdf.

45 CDM Executive Board, 2006, *"Clean Development Mechanism Project Design Document Form (CDM-PDD) Version 03 - in effect*

registered HFC-23 destruction projects revealed that CDM HCFC-22 plants are intentionally operated in a manner to maximise the production of offset credits. Because of the extra CDM revenue, more HCFC-22 is produced and far more HFC-23 generated than would occur without the CDM. HFC-23 is a "super greenhouse gas"; the destruction of 1 tonne of HFC-23 under the CDM yields 11,700 CERs, i.e. more than €140,000 at an average market price of €12 in the EU Emission Trading Scheme (ETS) – the biggest carbon market in the world. Since HFC-23 destruction is relatively cheap, the profits made from their credits are enormous – as much as five times greater than the profits made from selling HCFC-22. HFC-23 destruction projects represent less than 1% of all registered CDM projects, yet their credits account for 69% of about 465 million offsets issued so far.

The case of HFC-23 is particularly controversial, not least because of the Wold Bank's involvement through its Carbon Finance Unit[46]. In an attempt to protect its investments in the face of evidence of these projects' lack of environmental integrity, the World Bank[47] started a campaign that defended the inclusion of HFC-23 in the CDM. Nonetheless, the non-additionality of such projects forced the CDM Executive Board (EB) to put the methodology for these types of projects on hold. In January 2011 the EU announced a complete ban of both HFC-23 and N_2O adipic acid credits in the EU ETS from May 2013. However, EU member states, which are also purchasers of industrial gas credits, have yet to announce a similar ban in the so-called "effort sharing" (or non-traded) sectors, which represent around half of the EU's total GHG emissions.[48]

Aerial view of Plantar. Photo credit: Synara Thomas.

Plantar and the World Bank's Prototype Carbon Fund

The CDM Plantar project in Brazil provides a useful lens through which to concretely examine the World Bank's facilitation of international offsetting and its outcomes. Plantar S.A. is the developer of three projects in Brazil, two[49] of which were registered with the CDM in 2007 and 2010. The projects were set to generate CERs by reducing GHG emissions through additional reforestation of industrial eucalyptus monocultures for charcoal production, so-called sustainable use of biomass and methane reduction during the carbonisation process of charcoal for pig iron manufacturing in the state of Minas Gerais. The registered projects together are anticipated to generate about 3.3 million CERs[50] during their

as of: 28 July 2006", UNFCCC, 28 July. Available at https://cdm.unfccc.int/methodologies/PAmethodologies/revisions/58215.

46 World Bank, Carbon Finance Unit, 2011, *"Umbrella Carbon Facility T1".* Available at http://wbcarbonfinance.org/Router.cfm?Page=UCF&ItemID=9715&FID=9715.

47 CDM Watch, 2010, *"World Bank Attempting to Sabotage Reform of CDM HFC-23 Projects",* press release, August 26. Available at http://www.cdm-watch.org/wordpress/wp-content/uploads/2010/08/Ethically-Bankrupt-Press-release-from-EIA-CDM-Watch-Noe-21-26-Aug-2010.pdf.

48 For more information go to the CDM Watch page *"HFC-23 and N20 Projects",* available at http://www.cdm-watch.org/?page_id=451).

49 UNFCC, n.d., *"Project 1051 : Mitigation of Methane Emissions in the Charcoal Production of Plantar, Brazil".* Documents available at http://cdm.unfccc.int/Projects/DB/DNV-CUK1175235824.92/view UNFCC, n.d., *"Project 2569 : Reforestation as Renewable Source of Wood Supplies for Industrial Use in Brazil".* Documents available at http://cdm.unfccc.int/Projects/DB/TUEV-SUED1242052712.92/view.

50 Credit buyers as follows:

Project 1051: Gaz de France (France), Shikoku Electric, Mitsubishi, Kyushu Electric, MIT Carbon Fund, Chubu Electric, Tohoku Electric, JBIC (Japan), VROM, Electrabel (Netherlands), Norsk Hydro, Norwegian Ministry of Finance, Government of Sweden , BP, Deutsche Bank-

crediting periods[51], equalling about €40 million at current CER prices[52].

Plantar was one of the first CDM projects to be sponsored by the World Bank's Prototype Carbon Fund (PCF). The World Bank signed a Letter of Intent on the 25th of April 2001[53] to invest and purchase CERs generated by Plantar's replacement of coke with charcoal in the production of iron. The letter confirmed the PCF's interest in obtaining CERs provided the project met the quality standards of the PCF and complied with the World Bank's environmental and social safeguards. To the surprise of many, the World Bank endorsed industrial eucalyptus plantations grown with the exclusive objective of burning them for iron production as model projects expected to promote sustainable development, with various social and environmental benefits[54].

Plantar S.A. originally submitted a single project proposal entitled "sustainable fuelwood & charcoal production for the pig iron industry" in 2002. It claimed that its eucalyptus plantations – 23,000 hectares presented as "forests" – would be burnt and would not be replanted once cut down unless carbon finance was forthcoming[55].

The proposal was accepted by the PCF. However, following a decision at the UNFCCC to exclude "avoided deforestation" from the CDM, and despite attempts to change the rules towards a successful registration of Plantar, the CDM EB rejected the project. But Plantar S.A. did not give up, and the project was repackaged as three separate projects. The stated aim of the first project activity[56] was to reduce methane emissions during the burning process, while the second one[57] sought to prevent switching from eucalyptus charcoal to carbon-intensive coal or coke for its pig iron production. After a long struggle between civil society organisations and other institutions interested in the realisation of Plantar, both projects were finally registered, one in 2007 and the other in 2010.

A wide range of civil society actors have raised serious concerns about the Plantar project since its inception. The excessively positive picture presented by a large number of powerful investors contrasts immensely with realities on the ground. Concerns relate, in particular, to harmful environmental and social impacts and the deliberate exclusion of civil society in the CDM decision-making process.

Bad for the climate

The main argument for the World Bank's financial involvement in Plantar is that it was necessary to reverse a trend towards decreasing funding for forestry plantations in Minas Gerais (though some would question whether funding for forestry plantations constitutes sustainable development in the first place). However, in reality, World Bank support for this type of plantation predated the PCF and the Plantar proj-

London Branch (UK), International Bank for Reconstruction and Development (as Trustee of Prototype Carbon Fund);

Project 2569: DNA of Netherlands - Ministry of Housing, Spatial Planning and the Environment (VROM), Electrabel S.A. (Belgium), World Bank Prototype Carbon Fund (PCF), Plantar Carbon Ambiental Ltda., Deutsche Bank AG, London Branch, Swedish CDM and JI Programme (Swedish Energy Agency), Statoil ASA (former Statoil Hydro, Norsk Hydro), Ministry of Foreign Affairs Norway, BP Alternative Energy International Ltd, International Bank for Reconstruction and Development (as Trustee of Prototype Carbon Fund).

51 UNEP Risoe Centre, 2011, *'Welcome to the UNEP Risoe CDM/JI Pipeline Analysis and Database'.* Available at http://cdmpipeline.org/.

52 CER = €11.85 in the EU ETS as of March 2011 according to www.pointcarbon.com.

53 de Moura, G.A. & de Moura, E.S., 2007, *"Request for review: Mitigation of Methane Emissions in the Charcoal Production of Plantar, Brazil (Ref. no. 1051)"*, CDM Executive Board, 3 July. Available at http://cdm.unfccc.int/Projects/DB/DNV-CUK1175235824.92/ReviewInitialComments/FQXI2HK6ZOU6PNIBFCANZYBANLL9HF.

54 The World Bank, Carbon Finance Unit, 2011, *"Brazil: Plantar Sequestration and Biomass Use".* Available at http://wbcarbonfinance.org/Router.cfm?Page=PCF&FID=9707&ItemID=9707&ft=Projects&ProjID=9600.

55 Prototype Carbon Fund, 2002, *"Brazil: Sustainable Fuelwood and Charcoal Production for the Pig Iron Industry in Minas Gerais"*, 14 March. Available at http://cd4cdm.org/Asia/Philippines/Training%20Workshop/day2/plantar_pdd.doc.

56 UNFCC, n.d., *"Project 1051 : Mitigation of Methane Emissions in the Charcoal Production of Plantar, Brazil".* Documents available at http://cdm.unfccc.int/Projects/DB/DNV-CUK1175235824.92/view.

57 UNFCC, n.d., *"Project 2569 : Reforestation as Renewable Source o. Wood Supplies for Industrial Use in Brazil".* Documents available at http://cdm.unfccc.int/Projects/DB/TUEV-SUED1242052712.92/view.

ect. Between 1987 and 1996, it provided about 50% of the funds to the Minas Gerais Forestry Development Programme for charcoal production[58]. The fund is still operational and, in as late as 2000, provided a small loan to Plantar. This raises very serious doubts about the additionality of the Plantar project, as it appears that the project did not actually require CDM revenues to go ahead. Furthermore, in November 2010, Plantar S.A. requested the issuance of more than 4.8 million CERs for a ten-year period[59] (2001-2010). In other words, it was claiming carbon credits retroactively from 2000 despite the fact that it only gained registration in July 2010. Although it is not unusual for CDM projects to be granted CERs on a retroactive basis, the fact that the activities described in the project had already been underway for ten years provided further evidence that their realisation was not dependent on CDM financing. All emission reductions generated by the project would therefore have happened anyway. Given that CDM credits are used to meet emission reduction obligations in developed nations, the Plantar project has actually led to an increase in global GHG emissions.

Repression and damaged livelihoods

The World Bank states[60] that all Carbon Finance Unit projects must, at minimum, complete an environmental assessment report. Other plans, such as an Indigenous Peoples Plan or a Resettlement Plan, may also be required. However, despite the supposed application of such social and environmental safeguard policies by the World Bank, the Plantar project has caused serious social and environmental harm. It has encouraged land speculation, which has, in turn, paralysed agrarian reform and the demarcation of Indigenous Peoples territories and Afro-Brazilian community lands. The expansion of eucalyptus monocultures has further created a concentration of land ownership in the hands of a powerful few, contributing to broader power imbalances and dislocation and directly impacting the local population's livelihood activities. Those who have stayed are subject to psychological pressure, as they now depend on Plantar for the provision of water and employment. The company has effectively made use of its economic power in the region by becoming the main provider of both. This is no surprise, given that the production of massive eucalyptus plantations requires immense quantities of water, leading to water scarcity for drinking and agricultural purposes in surrounding areas.

Though Plantar touted the creation and improvement of good quality employment opportunities in rural areas, it has, in reality, exacerbated unemployment. Eucalyptus monoculture plantations in the area are expected to generate 100 times fewer jobs per hectare compared to small-scale agriculture[61]. The lack of employment alternatives under the project activity has pushed many locals to the margins; many have been forced to accept to work with Plantar S.A on purely economic grounds. Plantar employees are poorly paid and work under unhealthy conditions, as they are involved in the application of hazardous agrotoxins.

The World Bank is supposed to review all projects entering the Carbon Finance Unit portfolio to support informed decision-making, build consensus on development alternatives, minimise or prevent disputes, and build public confidence. This was hardly the case for Plantar. High levels of local resistance to the Plantar project have long attracted national and international attention, not least because of the company's intimidation of local populations speaking against the project. Despite continuous efforts by NGOs and

58 UNFCC, n.d., *"Project 2569 : Reforestation as Renewable Source of Wood Supplies for Industrial Use in Brazil"*. Documents available at http://cdm.unfccc.int/Projects/DB/TUEV-SUED1242052712.92/view.

59 http://cdm.unfccc.int/Projects/DB/TUEV-SUED1242052712.92/view.

60 The World Bank, 2010, *"10 Years of experience in Carbon Finance"*. Available from http://siteresources.worldbank.org/INTCARBONFINANCE/Resources/10_Years_of_Experience_in_CF_August_2010.pdf.

61 Lang, C., 2007, *"Banks, Pulp and People"*, Urgewald. Available at http://www.greenpressinitiative.org/documents/BPP_A_FIN_2.pdf.

affected stakeholders to highlight the legitimate arguments behind such resistance, comments submitted through the few options available for public input in the CDM process have not been adequately addressed. In 2010, the CDM EB requested TÜV SÜD[62] to re-open the 45-day Global Stakeholder Consultation Period[63] after

Local communities depend on water delivery by truck, largely as a result of the Plantar project. Photo credit: Synara Thomas.

recognising that it had failed to comply with the rules and that no comments had been submitted in the previous comment period in 2009, despite high public opposition to the project. In the end, the project was registered despite the comments that were submitted during the new consultation period. While this says nothing about the environmental integrity of Plantar, it puts under question the UNFCCC's ability to take independent decisions when powerful players, such as the World Bank, are involved and undermines the credibility of the UNFCCC's public participation process[64]. Today, few dare to criticise Plantar.

62 The Designated Operational Entity that validated the project prior to its registration.

63 For background information on CDM rules, see CDM Watch, 2010, *"The Clean Development Mechanism (CDM) Toolkit,"* available at http://www.cdm-watch.org/wordpress/wp-content/uploads/2010/04/CDM_Toolkit.pdf.

64 CDM Watch, 2010, Newsletter #5, September . Available at http://www.cdm-watch.org/wordpress/wp-content/uploads/2010/09/CDM-Watch-Newsletter-5-September-20101.pdf.

Harming the environment

Though the Plantar project claims it will reduce pressure on endangered native cerrado forests, currently being decimated for charcoal used in the Brazilian pig iron industry, in reality it does not plant native species in sustainable forests[65]. Reforesting land for the sole purpose of burning trees and releasing CO_2 and other pollutants is far from sustainable. Further, eucalyptus is notoriously unfriendly to other flora.

Industrial non-native eucalyptus plantations require huge amounts of water. Plantar has already caused damage to streams and water provision for local communities[66]. Project documents deliberately neglect mention of impacts on water supplies and deny the negative effects on soil fertility. Instead, the project developer claims that eucalyptus plantations benefit the soil by depositing a "large amount of woody material"[67]. Eucalyptus wood is slow to decompose and the trees' leaves contain substances noxious to many native species, problems that are not present in other alternative scenarios to CDM-based forests, such as natural pastures[68].

Plantar – satisfying industry and hurting Brazil's poor

The World Bank's involvement in the Plantar project has been a complete failure in terms of promoting environmental integrity and sustainability. Furthermore planting massive extensions of industrial eucalyptus monocultures to later be burnt for iron production does not increase en-

65 CDM Watch et al., 2010, *"Declaracao de ONGs, Movimentos sociais, ativistas e cidadaos sobre o Mecanismo de Desenvolvimento Limpo,"* 28 October.. Available at http://www.cdm-watch.org/wordpress/wp-content/uploads/2010/10/declaracao_oficina_brasilia.pdf.

66 Carbon Trade Watch, 2009, *"Carbon Trading – How it Works and why it fails,"* Critical Currents no.7, November. Available at http://www.carbontradewatch.org/publications/carbon-trading-how-it-works-and-why-it-fails.html.

67 See section F from PDD: http://cdm.unfccc.int/Projects/DB/TUEV-SUED1242052712.92/view.

68 See comments to UNFCC, 2010, *"Reforestation as Renewable Source of Wood Supplies for Industrial Use in Brazil,"* available at http://cdm.unfccc.int/Projects/Validation/DB/DWXT-GTQLAORUROS9KPVZJUSGI8UK70/view.html.

ergy access for the poor of Brazil. Rather, evidence of abuse of power, destruction of the local environment, disruption of the local population's livelihoods, social conflicts, exclusion of the poor and intimidation of those who dare to speak out against the project reveal how the World Bank has once again failed to accomplish its develop-

The Plantar project exhausts local water supplies, like this former pond. Photo credit: Synara Thomas.

ment mandate. Clearly, the World Bank should withdraw its involvement from the project.

The process that led to the successful registration of both Plantar projects is yet more proof of how a CDM project, its rules and the policies attached to it can be pulled and pushed to accommodate investors' interests. The Plantar case is a damning indictment of the World Bank's Carbon Finance Unit, facilitated in part by the CDM EB and the UNFCCC. Nonetheless, the World Bank looks set to continue playing a major role in shaping the rules and modalities of the CDM and any future international carbon trading mechanism.

III. Nigeria and the World Bank:
Oil, Gas, Increased Pollution, Increased Poverty

The World Bank has long been intimately involved with Nigeria's power sector, particularly oil and gas. Within the last decade, the Bank is perhaps most notoriously connected to Nigeria through its financing of the West African Gas Pipeline. More recently, the Bank has had a heavy hand in the restructuring of Nigeria's power sector and, to the benefit of developed countries trying to avoid domestic greenhouse gas emission reductions, the facilitation of carbon credits for gas flaring reduction.

World Bank and gas financing -- West African Gas Pipeline

In November 2004, the World Bank Group approved financing for the West African Gas Pipeline, one of Africa's largest fossil fuel projects, sponsored by a consortium, led by ChevronTexaco and including Royal Dutch Shell. The pipeline transports Niger Delta gas to Benin, Togo, and Ghana. The Niger Delta, home to very large reserves of crude oil and natural gas, is also home to deep poverty and rampant human rights violations. World Bank financial backing provided the backbone for the West African Gas Pipeline, allowing it to go forward despite very substantial political risk. The World Bank's International Development Association (IDA) provided a guarantee covering US$50 million for twenty-two years. The Bank's Multilateral Investment Guarantee Agency (MIGA) provided political risk insurance of US$75 million for up to twenty years.

Though partly framed by the World Bank as a means to alleviate poverty, the West African Gas Pipeline has been nothing short of a disaster for the people and the environment of Nigeria. In releasing its 2009 report, "Petroleum, Pollution and Poverty in the Niger Delta",[69] Amnesty International said that "pollution has created [a] human rights tragedy in the Niger Delta".[70] The report states, "decades of pollution and environmental damage, caused by the oil industry, have resulted in violations of the right to an adequate standard of living, including food and water, violations of the right to gain a living through work and violations of the right to health". This report was released some five years after World Bank financing for the West African Gas Pipeline was approved.

In 2006, twelve community groups in Nigeria filed a complaint with the World Bank's own accountability mechanism, the Inspection Panel. According to World Bank Inspection Panel documents, the communities claimed that the project would "cause irreparable damage to their land and destroy the livelihoods of their communities… that the Bank did not comply with a number of its policies and procedures, [including]… Involuntary Resettlement, … Environmental Assessment,…Economic Evaluation of Investment Operations and … Project Supervision… the Bank failed to follow its policies and procedures in the preparation of the Environmental Impact Assessment ('EIA'). They state that the overwhelming majority of their people were not consulted during the preparation of the

69 Amnesty International, 2009, *"Nigeria: Petroleum, Pollution and Poverty in the Niger Delta".* Available at http://www.amnesty.org/en/library/asset/AFR44/017/2009/en/e2415061-da5c-44f8-a73c-a7a4766ee21d/afr440172009en.pdf.

70 Amnesty International, 2009, *"Nigeria: Amnesty International Says Pollution Has Created Human Rights Tragedy in the Niger Delta"*, June 30. Available at http://www.amnesty.org/en/for-media/press-releases/nigeria-amnesty-international-says-pollution-has-created-human-rights-tr.

EIA. The Requesters claim that though the West African Gas Pipeline Company holds periodic meetings with the landowners on the issue on compensation, many of the affected people in their communities are excluded because they are not considered landowners".[71]

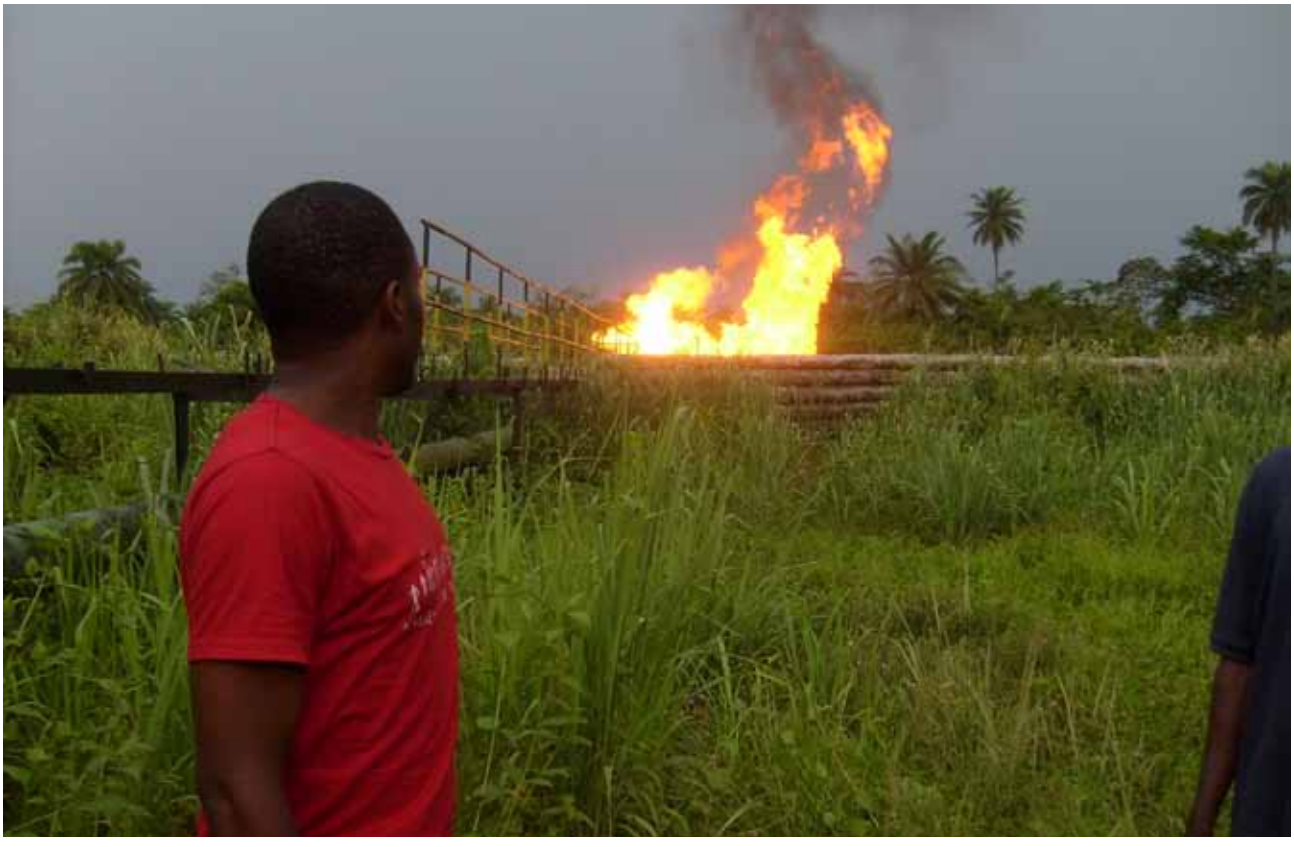
The Inspection Panel's report validated many of the grievances of community members, including failures to comply with social and environmental safeguards. Among other findings, the Panel noted that those dispossessed of land were compensated at only 10% of the land's value and faulted the Bank for refusing to consider the impact of the pipeline on communities in the Niger Delta, where the gas was sourced. Moreover, one of the supposed selling points of the pipeline was that it would lead to significant reductions in gas flaring, which, as seen below, has most certainly not been the case.

71 International Bank for Reconstruction and Development, 2006, *"Notice of Registration: Re: Request for Inspection. GHANA: West African Gas Pipeline Project"*, 2 May. Available at http://siteresources.worldbank.org/EXTINSPECTIONPANEL/Resources/Ghana_NoRMay1-FINAL.pdf.

Facilitating gas flaring reduction or just gas flaring?

When extracting crude oil in Nigeria, companies like Shell Petroleum Development Company, ExxonMobil and Chevron usually burn off the gas associated with it, a process known as gas flaring. However, routine gas flaring has been illegal since 1984. A federal high court in a 2005 ruling against Shell said that gas flaring is a "gross violation" of the constitutionally-guaranteed rights to life and dignity, which include the right to a "clean, poison-free, pollution-free healthy environment".[72] Yet throughout the Niger Delta, gas flares burn several stories high, twenty-four

72 Gbemre v. Shell, [2205], Federal High Court of Nigeria, FHC/B/CS/5305, Judgment of 5 November 2005.



Gas flaring in Niger Delta. Photo credit: Murphy Akiri of ERA.

hours a day, some having done so continuously for more than forty years. This often occurs within a few hundred yards of villages which, in a bitter irony, may lack access to electricity. Gas flares, numbering at least 100 in the Delta, have severe health and environmental impacts. Communities are hit hard by toxic cocktails, and acid rain showers the area. In addition to greenhouse gases, the noxious substances resulting from gas flaring include sulphur dioxide, nitrogen dioxide and carcinogenic substances such as benz[a]pyrene, dioxin, benzene and toluene. Nearby communities may suffer from serious health impacts, including respiratory illnesses, asthma, blood disorders, cancer, painful breathing and chronic bronchitis. The average life expectancy in the Niger Delta area is only 43 years, and 12% of babies die before they reach their first birthday.[73]

Moreover, Nigeria's gas flares are one of the top sources of climate pollution in Sub-Saharan Africa. Some 400 million tons of carbon dioxide equivalent are being emitted yearly. The amount of flared gas is equivalent to 25% of US gas consumption and 30% of EU gas consumption.[74]

Despite the fact that gas flaring is illegal, the World Bank's Global Gas Flaring Reduction public-private partnership has created an enabling environment for oil and gas companies to access cheap carbon credits and evolve new profit streams through facilitating gas flaring reduction projects under the UN's Clean Development Mechanism, while communities in the Niger Delta continue to suffer. As part of its technical assistance for gas to power projects, the World Bank provided funds and direction in a 2006 study that resulted in the production of a guide book, Nigeria: Carbon Credit Development for Flare Reduction Projects. Even though flaring is actually not supposed to be occurring in the first place, the guide book aims to assist Nigeria and oil and gas companies in obtaining carbon credits under the CDM and to develop stakeholder capacity to prepare pilot gas flare reduction CDM projects in the oil and gas sector. This study has laid the groundwork for a slew of CDM projects by oil multinationals that have either been registered under the CDM or are in the registration pipeline.[75]

The Bank's promotion of gas flaring offsets is actually encouraging Nigeria not to enforce existing environmental laws. In August 2009, the Nigerian national oil company urged the National Assembly to withdraw a bill which would have prohibited gas flaring, since "any act or law introduced to stop gas flaring will erode the additionality criterion of getting any project registered with the CDM executive board".[76] In effect, the World Bank is propping up a perverse incentive for oil companies to continue flaring in order to earn profits; rather than being punished, these companies are being paid! Moreover, by using CDM carbon credits, developed countries are allowed to pay for already-legally-mandated reductions in gas flaring in Nigeria instead of reducing climate pollution at home.

World Bank fuels Nigeria's energy poverty

In a 2005 World Bank document, the Bank prided itself as "the only large international development institution active in the [Nigerian energy] sector".[77] With seemingly little positive impact for the majority of the people of Nige-

73 Howden, D., 2010, *"Visible from space, deadly on Earth: the gas flares of Nigeria"* The Independent, 27 April 2010. Available at http://www.independent.co.uk/news/world/africa/visible-from-space-deadly-on-earth-the-gas-flares-of-nigeria-1955108.html.

74 Environmental Rights Action, 2008, *"Fact sheet: Harmful gas flaring in Nigeria"*, November. Available at http://www.foe.org/pdf/GasFlaringNigeria_FS.pdf.

75 There are four registered gas-to-power CDM projects in Nigeria - 480 MW Okpai gas-to-power project owned by the Italian company Agip, the Italian oil company; Pan Ocean's Ovade-Ogharefe gas processing plant CDM project, reputed to be the biggest CDM project in Africa with capacity to utilise 200mscf/d of gas at peak production; Shell's Afam CDM project; and Platform Petroleum's Asuokpu CDM project, which also captures associated gas for delivery to Agip'sKwale Okpai project.

76 Ekott, I., 2009, *"Barkindo seeks extension to gas flaring deadline,"* 234Next. Available at http://234next.com/csp/cms/sites/Next/News/National/5451134-147/story.csp.

77 World Bank, 2005, *"Project Appraisal Document on a Proposed Credit in the Amount of SDR113.8 Million (US$172.0 Million Equivalent) to the Federal Republic of Nigeria for a National Energy Development Project"*, May 25.

ria, the World Bank has invested some US$172 million between 2005 and 2010 to support the reform and privatisation of Nigeria's energy sector, including the National Energy Development Project.[78] One component of this project provides for technical assistance for gas-to-power projects, gas pipelines and reforms and private participation in the energy sector. Bank assistance helped lead to the passage of the Electric Power Sector Reform Act of 2005, which heralded the full scale restructuring of Nigeria's energy sector.

While the World Bank has been the public face of the reform process in the gas sector, multinational corporations have been very active behind the scenes in formulating the Bank's strategy on the reform. The World Bank financed and supervised two major studies in 2004 – the Nigerian Strategic Gas Plan and the Nigerian LP Gas Sector Improvement Study. The former is touted as the "first comprehensive analysis and integration of corporate proposals to develop gas resources prepared by the seven largest international oil companies operating in Nigeria along with the Nigeria National Petroleum Corporation".[79] Many question the World Bank's facilitation of the involvement of large multinationals, which have troubling human rights records, in the design of a country's energy plan. The proposals put together by these seven oil companies and a process chaperoned by the World Bank are what today form the backbone of the Nigerian gas master plan. This master plan and other reforms in the energy sector have so far failed to achieve their main objectives, one of which was to eliminate all gas flaring by 2008.

The other significant objective of the master plan – to make electricity affordable for Nigerians – has failed miserably. The electricity crisis in Nigeria is, in fact, presently much worse than it was in 2001, when the World Bank commenced the administration of its reform medicine in Nigeria. While the Bank has profited handsomely from fossil fuel utilisation in Nigeria, its financing and support for mainly large-scale, fossil fuel power projects and technical assistance on revamping

Pipeline in Nigeria. Photo credit: Friends of the Earth U.S.

the energy sector have not helped expand electricity access to the tens of millions of Nigerians who lack it. With the Bank's support, the government has invested over US$20 billion[80] in the last ten years in gas-to-power electricity generation, transmission facility upgrades, and an enhanced distribution network, though only 4.6 million customers[81] are connected in a country of 150 million. Had Nigeria instead invested a fraction of that amount in modular renewable energy power plants that preclude the need to connect to the grid, Nigeria would not have had to spend huge amounts on grid upgrades and extensions.

Additionally, while on the one hand acknowledging the importance of ensuring that electricity is affordable, the World Bank also insists that in order to achieve full cost recovery with adequate profit margin, the reasonable average

78 See World Bank, 2010, *"Restructuring Paper on a Proposed Project Restructuring of Nigeria National Development Project Credit, July 1, 2005, to the Federal Republic of Nigeria"* June 8. Available at http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2010/06/17/000333037_20100617014301/Rendered/PDF/549120PJPR0P09101Official0Use0Only1.pdf.

79 UNDP/World Bank, 2004. *"Strategic Gas Plan for Nigeria"* under Joint UNDP/World Bank Energy Sector Management Assistance Programme. http://vle.worldbank.org/bnpp/files/TF027963ESMANigeriaGasPlan.pdf.

80 BBC News May 19, 2009 *"Nigeria MP panel in fraud charge"* http://news.bbc.co.uk/2/hi/8051602.stm.

81 World Bank. 2007. Nigeria: A Fiscal Agenda for Change. PEMFAR.

tariff should be about 30% higher than the one currently in operation.[82] The small minority of the Nigerian population currently connected to the epileptic power supply network would thus overwhelmingly find themselves priced out of access to electricity. The remaining 130 million households which do not presently have access to electricity would have to imagine, perhaps for the remainder of their lives, whether they could have had the opportunity to pull themselves from the clutches of poverty if they had access to electricity or could afford to pay the higher tariffs to have their homes and businesses connected to the grid.

On the other hand, renewable energy for electricity presents Nigeria with unique opportunities to scale up access, especially as the world confronts a climate crisis. The potential for small, decentralised hydro projects in Nigeria is vast, with unrivalled capacity to service tens of millions of Nigerians without access to the national grid. A study carried out by the Federal Ministry of Power and Steel in conjunction with the International Centre for Energy, Environment and Development in 2006 identified over 277 sites where small, decentralised hydro plants could be built in twelve states of the country.[83] It concluded that together these plants could generate close to 1000 MW of electricity. The study also pointed to the huge potential that constant electricity supply from renewable energy has in stimulating growth in the rural economy – ensuring massive job creation, enhancing community control of energy needs and helping millions of people to escape the poverty trap.

The path forward

Although the World Bank denies that its hands are in every pie in Nigeria's energy sector, it can be safely concluded that the World Bank indeed exercises enormous control and influence in Nigeria's energy sector, setting priorities and boundaries for the government. That Nigeria's energy policy decisions and pathways are not "country-owned" but rather World Bank-driven can be explicitly seen in "The World Bank in Nigeria 1998-2007, Nigeria Country Assistance Evaluation": "The Bank has prepared a considerable number of informal notes and just-in-time pieces for the government, including policy notes for incoming governments. In 2003 the Bank was asked to keep these notes confidential because of concerns that it might be damaging to the government if the Bank were seen as the source of policy proposals. The policy notes, prepared with DFID and USAID for the 2007 change of government have also been closely held".

The World Bank's energy policies and projects in Nigeria haven't worked. In the face of increasing climate impacts, the interest of Nigerians right now is to put in place a framework for a low carbon development pathway that provides access to clean, renewable energy for all the people of Nigeria. To achieve this, the World Bank would be far more of a hindrance than a help.

82 IDA/IMF, 2007. *"Joint Staff Advisory Note on the Progress Report for the National Economic Empowerment and Development Strategy (NEEDS) for Nigeria."* http://siteresources.worldbank.org/INTPRS1/Resources/Nigeria_APR2-JSAN(June13-2007).pdf.

83 International Center for Energy, Environment, and Development, and Federal Ministry of Power and Steel, 2006, *"Renewable electricity policy guidelines".*

LESSONS NOT LEARNED: IFC NATURAL GAS FINANCING IN AMAZON BASIN

The Peru Liquefied Natural Gas Project (Peru LNG), also known as Camisea II, is the biggest foreign direct investment ever in Peru and Latin America's first LNG export project.[84] Camisea II is an expansion of the controversial Camisea Natural Gas Project ("Camisea I").[85] Camisea I has been repeatedly criticised – including by the Peruvian Human Rights Ombudsman – for the devastating environmental and social harm it has caused, especially to Indigenous Peoples, in ecologically sensitive areas in the Amazon Basin. Though Camisea I is seen by many as one of the most damaging projects in the Amazon Basin, the IFC approved a US$300 million loan for Camisea II in June 2008.[86]

The IFC categorised Camisea II as a Category A project, which means it could have significant adverse social or environmental risks and/or impacts that are diverse, irreversible or unprecedented.[87] Even though Camisea II is using many of Camisea I's existing resources and infrastructure, the IFC said its environmental and social lending standards apply only to those components of the project it specifically funded, and not to the gas fields that would supply the energy resource.[88]

An oil spill flows down Chuuntsa Creek in the Northern Peruvian Amazon. Photo credit: Amazon Watch.

Camisea II is also among the top greenhouse gas emitters in Latin America. As the project is fully geared for delivery of LNG to the export market, it was never conceived as a means of delivering energy access to people in Peru, where around 20% of the population has no access to modern energy.

84 Independent Advisory Panel on Development Issues in South-Central Peru, 2010, *"2010 Report".* Available at http://www.southperupanel.org/pdf/AnnualReportPeruSouthPanel2010.pdf.

85 USAID, 2006, *"Multilateral Development Bank Assistance Proposals"* – likely to have adverse impacts on the environment, natural resources, public health and indigenous peoples (October 2004-September 2006) USAID, Washington DC at page 12.

86 IFC, n.d., *"Peru LNG Project".* Available at http://www.ifc.org/ifcext/plng.nsf/content/Home.

87 Amazon Watch, 2006, *"Substandard Peruvian Gas Pipeline Blamed for Spills",* Press release, March. Available at Osinbergmin, 2007, *"Informe sobre falla ocurrida en el ducto de Líquidos de Gas Natural del Sistema de Transportes de Camisea".* Available at http://www.osinerg.gob.pe/osinerg/camisea/informes/informe-CamiseaDucto_sexta.pdf.

88 Oxfam International, n.d., *"Review of IFC Performance Standards and Sustainability Policy".* Availaable at http://www.oxfam.org.au/resources/filestore/originals/OAus-OIPSReviewStatement-0410.pdf.

IV. Tata Mundra and the IFC:
India's Energy Future – Black as Coal

In 2008, the International Finance Corporation provided a US$450 million loan for the Coastal Gujarat Power Limited's (CGPL) Tata Mundra project, being built in the western state of Gujarat in India. This 4000 MW coal plant will emit an estimated 25.7 million tons of CO_2 annually for at least twenty-five years. Most of the coal for this project will be imported from Indonesia, and little of its electricity is likely to reach India's poor.

The Mundra region, which forms the southern-most part of the Kutch District of Gujarat, has a 72km-long coast line across ten coastal settlements. Its unique ecological features – a vast intertidal zone comprised of a network of creeks, estuaries and mudflats – provide an environment conducive to traditional occupations like fishing and salt-making and also support land-based occupations such as agriculture, horticulture and animal husbandry. The region also supports mangroves, coral reefs, mudflats, seaweed, commercial fishing and several rare marine species. The mangroves of Kutch are the second largest after the Sunderbans in the mainland of India.[89] In recent years, the area has witnessed massive infrastructure development. Besides the 4000 MW coal project, the Mundra Port and Special Economic Zone are underway and three new thermal power plants with a total capacity of 20,000 MW are in the pipeline.

Tata Mundra project and benefits, from the vantage point of the IFC

The 4000 MW Tata Mundra project is one of India's first coal-based thermal power plants using super critical coal technology. It is being developed by CGPL on a build-own-operate basis. As a wholly-owned subsidiary of Tata Power, CGPL is responsible for constructing, operating and maintaining the Mundra Ultra Mega Power Project.[90] The total project cost is estimated to be around US$4.2 billion. The project is funded on a 75:25 debt-to-equity ratio by a consortium of banks, including State Bank of India, IFC, Asian Development Bank (ADB), Korea Export Insurance Corporation and The Export Import Bank of Korea.[91] The debt from the IFC and ADB is around US$450 million each. The IFC loan is for twenty years and the repayment starts only after six years. It is the longest tenure loan for the IFC.[92]

The Tata Mundra project consists of five units, each with a capacity of 800 MW. The first unit is likely to be commissioned in September 2011. The electricity generated will be sold to state-owned utilities in five states of India – Gujarat,

89 Machimar Adhikar Sangharsh Sangathan, 2011, *'Waves of Violations in Mundra Coast By the International Finance Corporation funded Tata Ultra Mega Power Plant'* - A complaint to the Compliance Advisor Ombudsman, February.

90 Asian Development Bank, 2008, *"Report and Recommendation of the President to the Board of Directors, Project Number: 41946, March 2008, Proposed Loan - India: Mundra Ultra Mega Power Project".* Available at http://www.adb.org/Documents/RRPs/IND/41946-IND-RRP.pdf [Accessed: 12 March 2011].

91 2010, *'Tata Power may commission first unit of Mundra project by Sept'*, Business Standard, 18 December. Available at http://www.business-standard.com/power/news/tata-power-may-commission-first-unitmundra-project-by-sept/418764/ [Accessed: 12 March 2011].

92 2008,. *'Tata wraps up finance pacts for Mundra UMPP'*, Business Standard, 26 April. Available at http://www.business-standard.com/india/news/tata-wrapsfinance-pacts-for-mundra-umpp/321166/ [Accessed: 13 March 2011].

Pagadiya, a local fishing practice on the coast of Mundra. Photo credit: Machimar Adhikar Sangharsh Sangathan.

Maharashtra, Haryana, Punjab and Rajasthan. The coal for this project is being imported mainly from Indonesia through the Mundra port, and the equipment is from Korea and Japan. Coal mining areas in Indonesia are among the poorest in the country. Despite hosting three large mines that require substantial amounts of energy for coal exploitation, the area in Indonesia from which the coal is sourced is facing an energy crisis and has the lowest rate of access to energy in Indonesia.[93]

The IFC has ascribed numerous benefits to the Tata Mundra project, the merits of many of which can be challenged. According to the plant's proponents, it will supply a competitive source of electricity and help meet India's growing demand for electricity. Cheap and reliable electricity would help in improving the competitiveness of Indian manufacturing and services industries. The IFC claims the project will improve access to electricity in rural and urban areas and reduce the burden of subsidies which the government has to bear. The project is also supposed to create 5000 jobs during construction and 700 jobs during operation. Furthermore, the IFC has claimed that its involvement with the project would improve the environmental and social performance of the project and reduce the impact of the project on local communities. According to the IFC, the performance standards it follows are stronger than those followed by the Government of India. The IFC also claims that its involvement will result in lower emissions of air pollutants (sulphur dioxide, particulate matter) from the plant than if it were not involved.[94]

93 Both Ends, 2011, *"A Burning Issue – a Global Footprint of coal-fired energy in Netherlands",* briefing paper, March. Available at http://www.bothends.org/uploaded_files/Both_ENDS_Briefing_Paper_A_Burning_Issue.pdf [Accessed: 26 March 2011].

94 Ibid.

A more grounded view of reality from India

India's energy needs and energy access

The Integrated Energy Policy 2006 (IEP) prepared by the Planning Commission of India made certain energy demand projections. According to the policy, if India has to sustain an economic growth rate of 8-10%, its power generation capacity by 2031-32 has to increase to around 800,000 MW from the then estimated capacity of 160,000 MW (including captive capacity).[95] The Government of India has been actively pursuing a policy of encouraging ultra mega power plants, which typically adopt supercritical technology. It has launched an initiative for the development of nine coal-based ultra mega power plants. Currently, 53% of the total installed capacity in India is coal-based,[96] and according to the IEP, this dominance of coal in the Indian energy mix is unlikely to change.[97]

But the IEP has been criticised by experts for various reasons, including for these energy demand projections. The target of increasing power generation capacity to 800,000 MW by 2031-32 has been found to be not only infeasible and impractical but also socially unacceptable due to the potential adverse implications.[98] In an insightful critique of the IEP, Shankar Sharma, a power policy analyst, makes the following observation –

> *"Whereas the assumption that a high GDP growth rate of 8-9% through 2031-32 will alleviate poverty in the country early due to trickle down effect is itself seriously questioned, it should be noted that the huge growth in the installed power capacity during sixty-two years has not been able to provide even the life line electricity to 44% of the households. … Installed electricity generating capacity in the country has grown phenomenally from about 1400 MW in 1948 to about 157,000 MW in Feb 2010; an increase of 110 times. … Despite such phenomenal increases in generation capacity since independence, about 44% of rural households are still deprived of electricity connection, and various forms of electricity crises are continuing even after six decades of self rule. So, massive addition to generating capacity cannot be seen as the panacea for our energy problems".*[99]

Lack of access to electricity (which is dependent on availability and price) has significant adverse impacts on health, natural resources and the environment. Women, children and other vulnerable groups often have to bear the burden of these impacts. While the IFC claims that the project will provide electricity to five states and will help India to meet its energy demands, it does not specify the segment of consumers who will be given access to the electricity. Approximately 40% of the population do not have electricity access in India and are not connected to the grid and hence will not be served in any way by the Tata Mundra project.[100] In another report published in 2007, the following finding was made:

> *"When it comes to CO_2 emissions, a relatively small wealthy class of 1% of the population in the country is hiding behind a huge proportion of 823 million poor people. It is the country's poor, with an income of less than 5000 rupees a month, who keep the average CO_2 emissions really low."*[101]

95 Government of India, Planning Commission, Integrated Energy Policy, Report of the Expert Committee, xiii (2006).

96 Government of India, n.d., *"Power Sector at a Glance".* Available at http://www.powermin.nic.in/JSP_SERVLETS/internal.jsp [Accessed: 21 March 2011].

97 Supra n. 103 at xiv.

98 Sharma, S., 2010, *"Shadow Integrated Energy Policy (IEP)",* 4. Available at http://www.d-sector.org/pdfs/Shadow-IEP-Final-Draft.pdf [Accessed: 10 March 2011].

99 Ibid at 9.

100 Greenpeace, 2009, *"Still Waiting – A report on Energy Injustice",* 5. Available at http://www.greenpeace.org/india/en/publications/stillwaiting/ [Accessed: 25 March 2011],

Moneycontrol.com, 2011, *"India Nuclear Plants on track despite Japan Crisis"*, 15 March. Available at http://www.moneycontrol.com/news/business/india-nuclear-planstrack-despite-japan-crisis_529774.html [Accessed: 27 March 2011].

101 Ananthapadmanabhan, G., Srinivas, K., Gopal, V., 2007, "*Hiding behind the Poor",* Greenpeace, 8. Available at http://www.greenpeace.org/india/en/publications/hiding-behind-the-poor/ [Accessed: 26 March 2011].

Climate and other environmental impacts

According to the IFC, funding for the Tata Mundra project supports its climate strategy, as the relatively more efficient super critical technology has less GHG emissions. But a coal plant is still a coal plant and, even according to the IFC's own admission, GHG emissions from this project are high. It has been estimated that the Tata Mundra project would add 643 million tons to the atmospheric carbon load[102] and be the third largest emitter in the country.[103] But emissions are likely considerably higher still. It appears that the IFC's calculations are only based on the amount of coal used. This serious oversight omits consideration of significant emissions on the supply end, at the source during mining, transport to the port from Indonesia, and port-to-port transport. Furthermore, transmission losses must be taken into account in calculating the efficiency of the project, particularly since this project, situated on the western coast, is going to supply power throughout the country. The IFC has also claimed that solar is not an economically viable option. However, calculations show that coal-based power generation may no longer enjoy a cost advantage due to the price of coal and construction costs of a plant. Even the UN's Clean Development Mechanism denied Tata Power's application for international offset credits, which had been based on the logic that the super critical technology was more efficient and therefore would burn less coal.[104]

The project is situated in an area with immense ecological value. Despite this, when the project proponent applied for an Environmental Clearance from the Ministry of Environment and Forests, it only undertook a Rapid Environmental Impact Assessment (EIA) using data from only one season, March to May 2006. For a project of this nature and size in an eco-sensitive zone, the project appraisal should not have been based on just a 3-month EIA study. The project is also likely to increase the salinity levels and temperature of the water in the Gulf of Kutch, thereby having a drastic impact on the marine ecology. Water discharged from the project will have high contents of chlorine, washed coal, oil and other pollutants, which would enter the sea and lead to fish mortality.

Banders near Mundra

Lack of accountability, and social and health impacts

Before the project was granted Environmental Clearance, the public did not have access to complete information about the project. The entire public consultation process was essentially a cosmetic affair. The Baseline Social Impact Assessment was completed between October and November 2007, including key impacts on project-affected persons, in particular the most vulnerable among them. Like the important EIA documents, this study was conducted only after the public hearing was over and the Environmental Clearance was granted.

102 Wheeler, D., 2008, *"Tata Ultra Mega Mistake: The IFC Should Not Get Burned by Coal",* Centre for Global Development, 12 March. Available at http://blogs.cgdev.org/globaldevelopment/2008/03/tata-ultra-mega-mistake-the-if.php [Accessed: 10 March 2011].

103 Bank Information Centre, 2010, *"Tata Mundra",* 1 July . Available at http://www.bicusa.org/en/Article.11942.aspx [Accessed: 12 March 2011].

104 Guay, J., 2010, *"The World Bank, Coal and Energy Poverty",* Celsias, 21 September. Available at http://www.celsias.com/article/world-bank-coal-and-energy-poverty/ [Accessed: 12 March 2011].

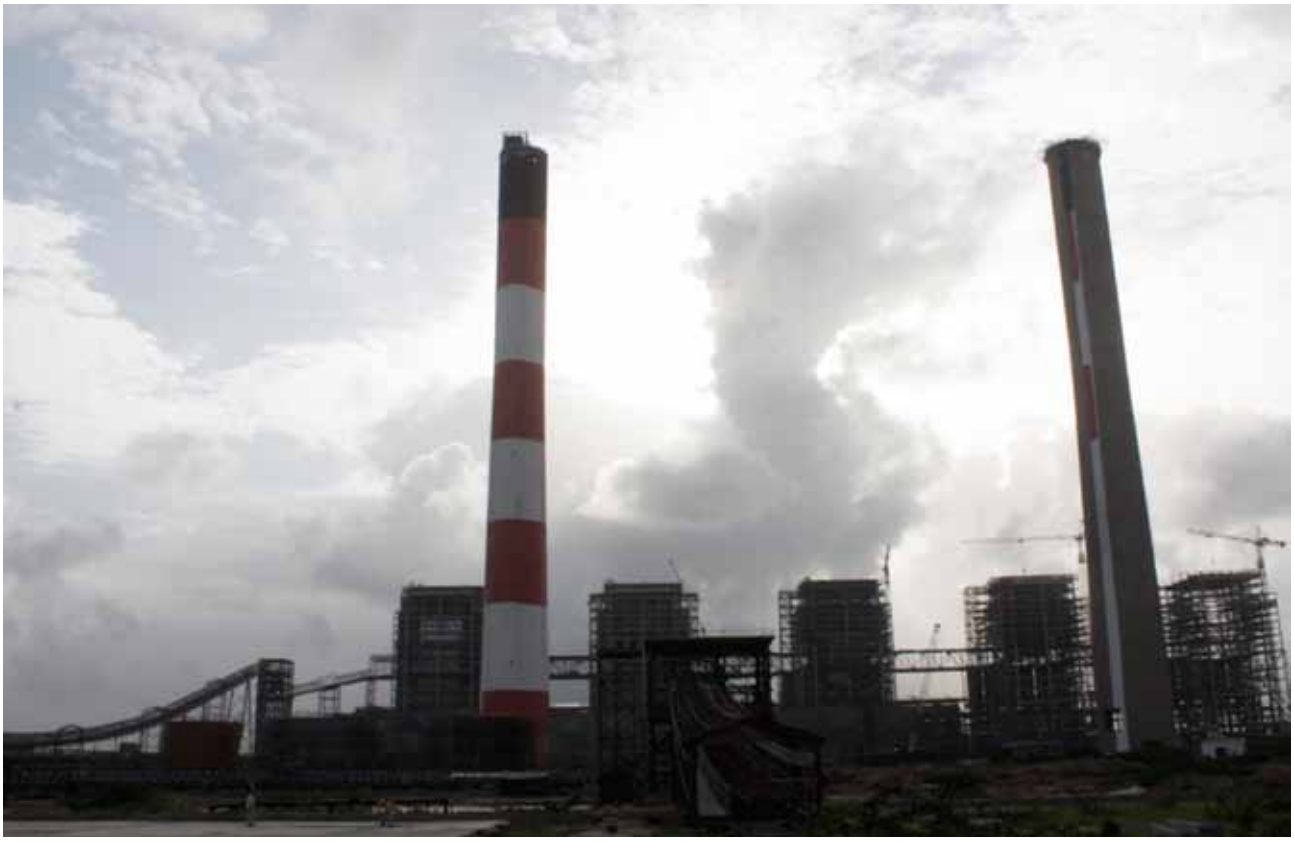
According to the IFC, no physical displacement/resettlement is expected as a result of the project. Regrettably, this statement ignores the transient population of fisherfolk who live on the Mundra coast for nine months of the year. More than 1000 families are dependent on fishing for their livelihoods in the Mundra region. Many practise a traditional form of fishing called *pagadiya*. However, the impact on their livelihood has not been considered. Furthermore, the impact of fly ash from the project on the dry fish industry has not been considered. Fly ash falling on dry fish makes it unsafe for consumption.[105]

According to a study by the National Environmental Engineering Research Institute, 6.5% of the population living within a 2km radius of a thermal power plant suffer from respiratory ailments.[106] The coal dust/fly ash from the power plant contains heavy metals such as mercury, nickel and hexavalent chromium, which are carcinogenic in nature. If mixed with the air, they pose a serious health hazard for the population in the surrounding areas. Moreover, the IFC's claim that its involvement will lead to lower SOx and NOx pollution does not hold water. There are no plans or provisions to install flue gas desulphurization (FGD) at the Tata Mundra plant. If FGD technology had been installed and activated, the plant's attributable mortality burden would drop from 250 to 100 annual deaths.[107]

105 Supra n. 97.

106 National Environmental Engineering Research Institute, 2006, *'Post-Clearance Environmental Impacts and Cost-benefit Analysis of Power Generation in India',* Summary Report, February. Available at http://mospi.nic.in/research_studies_post_clearance.htm [Accessed: 10 March 2011].

107 Sarah Penny et al, 2009, *"Estimating the Health Impacts of Coal-Fired Power Plants Receiving International Financing",* Environmental Defense Fund. Available at http://www.edf.org/documents/9553_coal-plants-health-impacts.pdf [Accessed: 25 March 2011].



Mundra coal power plant under construction. Photo credit: Joe Athialy, BIC South Asia.

Wise use of scarce development funds?

The 4000 MW project is the IFC's largest coal-fired project and its largest single loan for a coal plant to date. The investment has supported what will be one of the largest point sources of CO_2 on the planet.[108] The IFC did not have a role in the technology choice, as the Indian government pre-selected the supercritical technology. The World Bank's own Independent Evaluation Group's 2010 report contends that the IFC exaggerated the emission reductions in the project's Environmental and Social Review.[109] It also notes that India has overall transmission and distribution system losses of 27%, thus room for efficiency improvements in India is large and under-utilised.

Coal will likely remain the major source of power for India for years to come, and both public and private companies are going to invest in it. It is the renewable energy sector and energy efficiency which require support from large international financial institutions, both for financing and reduction in risk perception. Yet the IFC chose to invest limited international public resources in an already mature technology that also happens to be the dirtiest of all fossil fuels.

Sources

Coastal Gujarat Pvt. Ltd, Summary Environmental Impact Assessment, Project Number: 41946, India: Mundra Ultra Mega Power Project, prepared for the ADB, November 2007 available at http://www.adb.org/Documents/Environment/IND/41946-IND-SEIA.pdf (accessed on 09 March 2011).

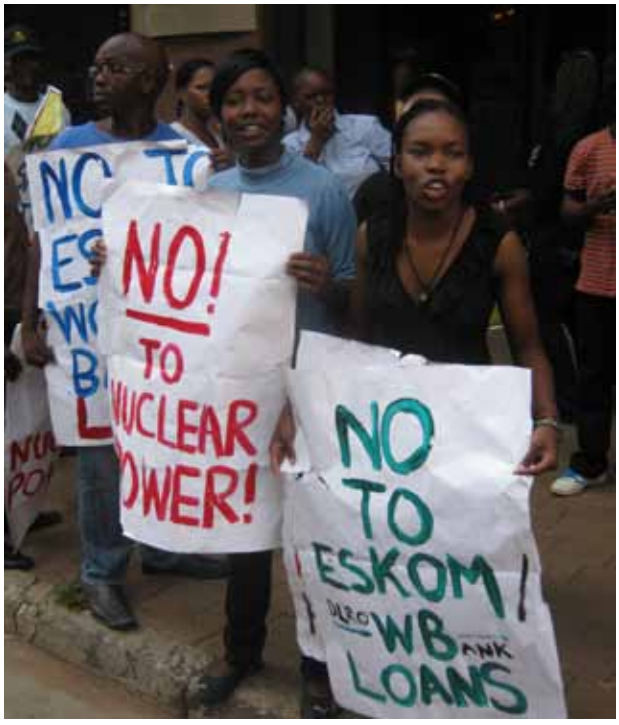
IFC, The Tata Mundra Project, power point presentation available at www.ifc.org/ifcext/.../TATA_Mundra.../Tata+Mundra+Project+04-04.ppt (accessed on 09 March 2011).

108 Independent Energy Group (IEG), 2010, *"The World Bank, Phase II: The Challenge of Low-Carbon Development, Climate Change and the World Bank Group"*, Study Series. Available at http://siteresources.worldbank.org/EXTCCPHASEII/Resources/cc2_full_eval.pdf.

109 Ibid.

V. World Bank Loan to South Africa's Eskom:
Carrying Coal to Newcastle

On the 7th of April 2010, the World Bank Group approved a US$3.75 billion loan for Eskom, the state-owned South African power utility, almost all of which will go to build the world's fourth-largest coal plant. The 4800 MW Medupi coal-fired plant will emit some twenty-five million metric tons of CO_2 per annum.[110] It will also result in increased local environmental degradation and burden poor South Africans with significant price increases. The World Bank is deeply involved in United Nations climate change negotiations, and its proclaimed mission is to finance sustainable development. Yet, this loan to Eskom is a disastrous step that takes the World Bank further away from meeting its own climate change goals. The World Bank's rationale behind supporting the loan is that South Africa will face economic losses and hardships for the poor if it does not increase its energy supply.[111] However, Medupi is designed mainly to supply big industrial users, not the poor people who suffer the most from power disruptions[112].



Protesters demonstrate against a World Bank loan to the South African utility Eskom to help build one of the world's largest coal plants. Photo credit: Makoma Lekalakala, Earthlife Africa.

No energy access for the poor

The current consumption level of the poor in South Africa is less than 5% of the electricity grid, in contrast to the thirty-eight largest corporations which consume 40%.[113] South Africa provides the cheapest electricity supply in the world to its biggest industrial consumers.[114] In fact, the poor are paying far more for their electricity than are export-oriented metals and mining industries, and these industries export the vast bulk of their profits outside of South Africa. Some of the big mining companies, like BHP Billiton, are the

110 Davidson, O., Hirst, N. & Moomaw, W., 2010 *"Recommendations to the World Bank Group on Lending to South Africa for Eskom Investment Support Project that includes a Large Coal Burning Power Station at Medupi: A Report Prepared by Expert panel".*

111 World Bank, 2010, *"Project Appraisal document on a proposed loan in the amount of US$3,750 million to Eskom Holdings Limited",* 19 March. Available at http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2010/04/12/000112742_20100412110336/Rendered/PDF/534250R201010005914.pdf.

112 groundWork, 2009, *"Re: Proposed 3.75 billion USD loan by World Bank to South African power utility Eskom"*, Letter to the World Bank, 1 March. Available at http://www.groundwork.org.za/Publications/EskomFinalDocs/lettertoWB%20ED.pdf.

113 groundWork, 2011, *"Response to World Bank-Eskom Panel Report and Fact Sheet".* Available at http://www.groundwork.org.za/Publications/EskomFinalDocs/ResponsetotheWorldBankpanelreportandFactSheet.pdf [Accessed: 16 February 2011].

114 Eskom, 2010, *"Eskom Abridged Annual Report 2009",* 2 March. Available at http://www.eskom.co.za/annreport09/ar_2009/downloads/eskom_abridged_ar2009.pdf.

beneficiaries of the still-secret "Special Pricing Agreements" concluded in a non-transparent manner during the last days of apartheid in the early 1990s. The details of these deals have never been shared with the public.

The World Bank claims that this loan will alleviate energy poverty in South Africa, because Eskom reportedly supplies free basic electricity (FBE) of 50kWh to poor households. A review of this policy by Earthlife Africa Johannesburg found that this amount is insufficient for the needs of poor households. According to Earthlife's analysis,[115] a light bulb used for four hours a day for a month will consume 20kWh, an electric stove used for one hour a day uses 42kWh, and boiling a kettle for thirty minutes a day for a month uses 21 kWh. Furthermore, after using this amount, the poor will pay more per unit of electricity than residents of rich areas and four times more than industry. The bottom 60% of South African households earn less than 15% of the average household income, yet most do not qualify for FBE. The National Energy Regulator, South Africa (NERSA) approved Eskom's request for a price increase of approximately 137% over the next three years, in part to help pay for Medupi and its World Bank loan. This is unaffordable to most South Africans and will double household bills. By any calculation, the World Bank's loan will not alleviate energy poverty in South Africa, but will instead aggravate poverty and worsen ongoing inequities in access to electricity.

115 Adam Ferrial, 2010, *"Free Basic Electricity: A better life for all?"* Published by Earthlife Africa. http://www.earthlife.org.za/wordpress/wp-content/uploads/2010/03/Free-Basic-Electricity-Final-Low-res.pdf.

Destruction of land in the Vaal Triangle adjacent to the Eskom Lethabo plant. Photo credit: groundWork/Friends of the Earth South Africa, courtesy of the Bateleurs.

Compromising health

Not only will low-income, predominantly black South Africans pay through their pocketbooks, they will also have compromised health, as well as degraded land, air and water quality, because of this plant. People in the vicinity of power plants are routinely exposed to mercury residues in the air, water and land caused by coal-fired electricity generation. Mercury can cause severe nervous system problems in humans and wildlife. Especially vulnerable are developing foetuses, babies and children.[116] This raises very important questions about the real costs and benefits'of this project. The Bank overemphasises benefits in terms of poverty alleviation, energy security and economic growth,[117] while deliberately ignoring social and environmental costs associated with coal-fired power plants and associated coal mines. These neglected costs are tremendous. For example, a recent study by Harvard Medical School's Dr. Paul Epstein on the full cost accounting of the life cycle of coal estimates that the life cycle effects of coal and the waste stream generated cost the U.S. public a third to over one-half of a trillion dollars annually.[118]

Shoddy analysis

Prior to approving the loan, the World Bank appointed an Expert Panel to advise it on this project's compatibility with the Bank's Strategic Framework on Development and Climate Change (SFDCC). Regrettably, in deciding whether or not to finance Medupi, both the World Bank and its Expert Panel failed to take into account the impacts of the increased coal mining required to supply the new plant. And although the SFDCC requires it, the World Bank fell far short in considering alternative technologies. A switching cost analysis of the impact of prices on carbon emissions has either not been conducted, or its results not made public. Hence, the public is not aware of what alternative technologies were compared against the Medupi plant, and if such alternatives are economic at low-to-moderate carbon emission prices.

South Africa has large, unused renewable energy potential, yet the World Bank allocated less than 7% of its loan to renewable energy. NERSA calculates that wind energy will be cheaper than coal by 2025, and concentrated solar power on par with coal by 2030. These dates will likely be brought forward by the energy crunch. An alternative strategy based on renewables assumes that South Africa's economy shifts from energy-intensive to job-intensive development. Renewable technologies create more jobs than coal-fired plants. Wind, for example, creates 12.6 jobs per GWh of power sent out as opposed to coal's 0.7 jobs.[119,120] Moreover, the Bank did not consider demand-side management alternatives, especially the ending of Eskom's Special Pricing Agreements. Without renegotiating the contracts to the Energy Intensive Users Group – thirty-eight firms that receive 40% of South Africa's electricity at extremely low (undisclosed) rates – the Bank did not properly exhaust non-coal options for addressing South Africa's electricity crisis.

The Bank partially justified the loan by claiming that more efficient supercritical technology would be used and that Medupi would be "carbon

116 Environmental Defense Fund, 2006, *"The Health Risks of Burning Coal for Energy"*, 5 September. Available at http://www.edf.org/article.cfm?contentID=5433.

117 World Bank, 2010 *"Eskom Power Investment Support Project"* http://siteresources.worldbank.org/INTSOUTHAFRICA/Resources/Eskom_Power_Investment_Support_Project_Fact_Sheet.pdf.

118 Paul R. Epstein, Jonathan J. Buonocore, Kevin Eckerle, Michael Hendryx, Benjamin M. Stout III, Richard Heinberg, Richard W. Clapp, Beverly May, Nancy L. Reinhart, Melissa M. Ahern, Samir K. Doshi, and Leslie Glustrom, 2011, *"Full cost accounting for the life cycle of coal"* in Ecological Economics Reviews. Robert Costanza, Karin Limburg & Ida Kubiszewski, Eds. Ann. N.Y. Acad. Sci. 1219: 73-98. Available at http://solar.gwu.edu/index_files/Resources_files/epstein_full%20cost%20of%20coal.pdf.

119 Agama Energy, 2003, *"Employment Potential of Renewable Energy in South Africa"*. Available at http://projects.gibb.co.za/LinkClick.aspx?fileticket=S6HB67wKzQU%3D&tabid=174&mid=797.

120 World Wildlife Fund, 2010, *"WWF: 100% Renewable Power is Possible as Shown by Breakthrough McKinsey Study"*, 13 April. Available at http://wwf.panda.org/what_we_do/how_we_work/policy/wwf_europe_environment/news/?192845/WWF-100-Renewable-Power-is-Possible-as-Shown-by-Breakthrough-McKinsey-Study.

capture and storage (CCS)[121] ready"[122]. Yet regarding the availability of CCS, Eskom's top technical manager testified that, "… to be quite frank, no-one knows what that is at the moment".[123] That Medupi is "CCS ready" is a meaningless distinction. Furthermore, in 2008, Eskom was responsible for emitting nearly two million tonnes of sulphur dioxide, one million tonnes of nitrogen oxide and fifty thousand tonnes of particulates. Eskom has not installed effective sulphur scrubbers on any of its power stations. Flue gas desulphurisation (FGD) can reduce sulphur dioxide emissions by 90%, resulting in substantial human health risk reductions.[124] The scrubbers for Medupi are supposed to be retrofitted in 2018, six years after it comes on line. No mercury pollution control devices appear to be planned for the coal plant.

World Bank fails to follow its own policies

The Medupi power plant was already being built when Eskom came to the World Bank for the loan. The procurement process was well underway, with major contracts already given out, in violation of the World Bank's Procurement and Consultant Guidelines.[125] Even though the Bank had secured agreements that all of the contracts it finances would be subject to the Bank's fraud and corruption provisions, there are still multiple inconsistencies between Eskom's procurement process and the World Bank Procurement and Consultant Guidelines.[126]

The World Bank's Expert Panel concluded that the project was inconsistent with the spirit of the SFDCC, as it lacked a concrete plan to mitigate carbon emissions on the order of twenty-five million metric tonnes per year. A report by the Centre for International Environmental Law found that the Bank's Economic Analysis for the Eskom Project (OP 10.04 requirements) demonstrates that the Bank failed to fully and adequately consider the environmental and social costs that will be caused by Medupi.[127] Furthermore, Medupi is just 30km from the international boundary with Botswana. There was an obvious need to study transboundary impacts, yet the study areas for the environmental impact assessment relating to Medupi appeared to be limited to South Africa.[128] There is also no evidence that transboundary impacts were evaluated in the Economic Analysis.[129] Given the tremendous volume of water that will be required for Medupi (approximately twelve million m^3 of water per year),[130] the potential costs of water scarcity

121 Carbon capture and storage (CCS) aims to reduce the climate impact of burning fossil fuels by capturing carbon dioxide (CO_2) from power station smokestacks and disposing of it underground.

122 World Bank. 2010, *"Project Appraisal document on a proposed loan in the amount of US$3,750 million to Eskom Holdings Limited"*, 19 March 2010 http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2010/04/12/000112742_20100412110336/Rendered/PDF/534250R20101005914.pdf.

123 groundWork, 2011, *"Response to World Bank-Eskom Panel Report and Fact Sheet"*. Available at http://www.groundwork.org.za/Publications/EskomFinalDocs/ResponsetotheWorldBankpanelreportandFactSheet.pdf [Accessed: 16 February 2011].

124 Balbus, J., Penney, S. & Bell, J., 2009, *"Estimating the Health Impacts of Coal-Fired Power Plants Receiving International Financing"*, Environmental Defense Fund. Available at http://www.edf.org/documents/9553_coal-plants-health-impacts.pdf.

125 World Bank, 2011, *"Guidelines: Procurement of Goods, Works and Non-consulting Services under IBRD Loands and IDA Credits & Grants by World Bank Borrowers"*. Available at http://siteresources.worldbank.org/INTPROCUREMENT/Resources/Procurement_GLs_Final_Jan_2011.pdf.

126 The United States Treasury April, 2010 *"U.S. Position on the South Africa - Eskom Investment Support Project and the Country Partnership Strategy Progress Report"* http://www.treasury.gov/resource-center/international/development-banks/Documents Eskom_US_Position-web_FINAL.pdf.

127 Amerasinghe, N. & Porter, S., 2011, *"Fossilized Thinking", Center for International Environmental Law"*. Available at http://ciel.org/Publications/FossilThinking_Eskom_21Mar11.pdf.

128 Eskom Project, *Environmental Impact Assessment Report for the Proposed Establishment of a New Coal-Fired Power Station in the Lephalale Area, Limpopo Province (22 May 2006), available at* http://web.worldbank.org/external/projects/main?menuPK=51447259&pagePK=51351007&piPK=64675967&theSitePK=40941&menuPK=64187510&searchMenuPK=51351213&theSitePK=40941&entityID=000020953_2009110 9115541&searchMenuPK=51351213&theSitePK=40941 supra note 17, at 50-62.

129 World Bank. 2010, *"Project Appraisal document on a proposed loan in the amount of US$3,750 million to Eskom Holdings Limited"*, 19 March 2010 http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2010/04/12/000112742_20100412110336/Rendered/PDF/534250R20101005914.pdf supra note 1, at Annex 9.

130 World Bank, 2010, "*Eskom Project Appraisal Document on a Proposed Loan in the Amount of US$3,750 Million to Eskom Holdings Limited Guaranteed by Republic of South Africa for an Eskom Investment Support Project*", i (Mar. 19, 2010). Available at http://siteresources.worldbank.org/PROJECTS/Resources 40940-1097257794915/537867-1136835492035/SouthAf-Eskom-PAD.pdf.

A giant World Bank check for coal in South Africa. Photo credit: Friends of the Earth Europe.

to Botswana, Zimbabwe and Mozambique, all of which are downstream from Medupi, must be considered. Indeed, they are required to be considered under Bank policies and under an international agreement specific to the Limpopo Basin.[131]

The Inspection Panel, the World Bank's own accountability mechanism, is currently investigating the Eskom loan[132] for violations of operational policies and procedures,[133] based on a request submitted by community members living in the project area in Lephalale in Limpopo Province. Most recently, in February 2011, the residents of Lephalale went to court to stop the destruction of an ancient river-bed for the building of Medupi.[134] This act represents a final recourse following ignored appeals to the World Bank and South Africa's parliament, as well as many objections and petitions to provincial and national departments of environmental affairs, water affairs and mineral resources.

World Bank's dirty business as usual

Contrary to the World Bank's public statements, its loan for Eskom is neither "transitional" nor a "down payment on a greener future".[135] Medupi will be belching out toxic fumes and climate impacts for decades to come. While the loan aims to expand power supply, it does so by almost doubling the power sector's CO_2 emissions by 2018, in a country that is already among the top global greenhouse gas emitters. According to the International Energy Agency, CO_2 emissions intensity (kg CO_2/US$2000) in South Africa is nearly four times that of the USA.[136]

At a time when the world desperately needs to reduce global greenhouse gas emissions, the World Bank is massively funding coal, the dirtiest fossil fuel of all. Instead of using its financial resources to help developing economies leapfrog over carbon intensive development to investment in clean, sustainable, and ultimately cheaper alternatives, such as wind and solar, the World Bank is propagating a very dangerous "business as usual" path in a climate-constrained world.

131 See generally OP 10.04, supra note 7; Agreement Between the Republic of Botswana, the Republic of Mozambique, the Republic of South Africa, and the Republic of Zimbabwe on the Establishment of the LimpopoWatercourse, (2003). Available at www.icp-confluence-sadc.org/project/docs/publicfile?id=241.

132 The Inspection Panel is an independent, "bottom-up" accountability and recourse mechanism that investigates IBRD/IDA financed projects in response to complaints from project-affected communities to determine whether the Bank has complied with its operational policies and procedures (including social and environmental safeguards), and to address related issues of harm.

133 World Bank, Inspection Panel Report, July 2010. Available at http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2010/08/03/000334955_20100803023838/Rendered/PDF/560090IPR0P11610request0no10RQ10103.pdf.

134 Macleod, F., 2011, *"Court asked to halt river 'vandalism'"*, Mail & Guardian, 4 February. Available at http://www.mg.co.za/article/2011-02-04-court-asked-to-halt-river-vandalism.

135 World Bank 2010 *"Eskom Investment Support Project Questions & Answers"* http://siteresources.worldbank.org/INTSOUTHAFRICA/Resources Q_A_Eskom_Investment_Support_Project_031810.pdf.

136 International Energy Agency, n.d., *"Statistics & Balances"*. Available at http://iea.org/stats/index.asp.

VI. A History of Harm:
The World Bank, Large Hydropower and Nam Theun 2 in Laos

The problem with large dams

By the end of the 20th century, the dam industry had choked more than half of the earth's major rivers with more than 50,000 large dams. The consequences of this massive engineering program have been devastating. The world's large dams have wiped out species, flooded huge areas of wetlands, forests and farmlands and displaced an estimated forty to eighty million people. At present, 472 million people have been affected by downstream impacts from large dams.[137] While not every dam causes huge problems, in nearly every case the majority of people evicted by dams end up further impoverished and rarely share in the benefits. They suffer cultural decline, high rates of sickness and great psychological stress. The ones who suffer are typically those most marginalised in society – poor farmers and Indigenous Peoples. In some cases, people receive no or negligible compensation for their losses. When compensation is given, cash payments are rarely enough to compensate for the loss of land, homes, jobs and businesses.

Furthermore, contrary to World Bank assertions, dams are not clean sources of electricity. They have serious social and environmental impacts, including on climate. Scientific studies[138] indicate that reservoirs, especially in the tropics, are a significant source of methane emissions – a greenhouse gas over twenty times more potent than carbon dioxide – caused by the rotting of organic matter from the vegetation and soils flooded when reservoirs are first filled. Some reservoirs can produce more greenhouse gases than even the dirtiest fossil fuel power plants. Furthermore, climate change is causing river levels to decrease around the world, reducing potential supplies of water and energy, and making dams a weak option for climate adaptability.

Finally, large dams do not provide a good way to achieve universal energy access. Instead, large and increasingly regionalised power projects lack accountability, making them highly vulnerable to vested interests, corruption, and disrepair. In contrast, the International Energy Agency's World Energy Outlook 2010 found that it is possible to achieve universal energy access through extending decentralised renewable energy systems to 70% of the developing world's rural areas. [139]

The World Bank and dams

The World Bank has traditionally been the world's most important financier of large dams. Since its creation in 1944, the Bank has funded approximately 600 dams. With projects such as Chixoy, Kariba and Sardar Sarovar, these dams have included some of the world's most appalling development disasters. In addition to funding projects, the Bank creates dam-building institutions, devises master plans for countries' development, and generally promotes a top-down development model.

137 Richter, B., et. al, 2010, *"Lost in development's shadow: The downstream human consequences of dams",* Water Alternatives 3(2):14-42.

138 For a summary of study findings and for additional information see International Rivers, n.d., *"Reservoir Emissions",* available at http://www.internationalrivers.org/global-warming/reservoir-emissions.

139 International Energy Agency, 2010, "*Energy Poverty: How to make modern energy access universal? Special early excerpt of the World Energy Outlook 2010 for the UN General Assembly on the Millennium Development Goals."* OECD/IEA, September.

By and large, the World Bank mostly withdrew from funding large dams in the 1990s, following strong grassroots campaigning. According to John Briscoe, World Bank Senior Water Advisor in 2003, "Lending for big dams accounts for 10% of the World Bank's portfolio but 95% of its headaches". However, since 2003, the World Bank has returned to promoting large dams by adopting a new high-risk infrastructure strategy. It is also trying to weaken its own environmental standards. Some of the dams the Bank is currently funding include Nam Theun 2 (Laos), Bujagali (Uganda) and Allain Duhangan (India).

According to recent policy and strategy documents, such as the Sustainable Infrastructure Action Plan and the draft Energy Sector Strategy, the World Bank now intends to substantially increase its support for large hydropower in the coming years. In Africa and South Asia, this may take the form of direct project finance. In other regions, such as Latin America, this support may continue in the form of development policy loans, as in the case of the Belo Monte Dam Complex in Brazil.

Given the unresolved social and environmental legacy of many existing dam projects and the significant risks that new dams pose, the World Bank needs to strengthen its screening processes and safeguards for dam projects. The World Bank should only support large hydropower projects that are demonstrated to comply with the recommendations of the World Commission on Dams, which include: conducting comprehensive options assessments to identify the best energy solution; respecting the rights of affected communities by negotiating legally binding agreements and ensuring the free, prior and informed consent of Indigenous Peoples; providing for environmental flows to maintain downstream ecosystems and

The partially complete gates at the Nam Theun 2 Dam. Photo credit: 2008 © Marcus Rhinelander, International Rivers.

livelihoods; and developing funded, enforceable compliance plans.

Financing Laos' largest dam: the World Bank and Nam Theun 2

The US$1.3 billion Nam Theun 2 Hydropower Project is the largest dam in Laos and the first major dam backed by the World Bank in almost a decade. Completed in March 2010, it exports nearly 95% of its 1,070 MW of power to Thailand in order to generate revenue for the Lao government.[140] The project was developed by the Nam Theun 2 Power Company (NTPC), a consortium headed by Electricité de France International (EDF). Other shareholders include Thailand's Electricity Generating Company (EGCO), with a 35% stake, and the Government of Laos (GoL), with a 25% stake.

In 2005, the World Bank and the Asian Development Bank (ADB) funded Nam Theun 2 with loans and guarantees totalling US$270 million and US$107 million respectively. With their endorsements, other lenders – such as the European Investment Bank; the Nordic Investment Bank; the Swedish, Norwegian, French and Thai export credit agencies; Agence Française de Développement (AFD); and a number of private banks – committed to finance Nam Theun 2. Construction at the project site had already commenced a year earlier, in 2004.

Nam Theun 2 is a trans-basin diversion dam project which has dramatically altered not one, but two key Mekong River tributaries. A 39-metre-high dam blocked the Theun River to form a 450 square-kilometre reservoir on the Nakai Plateau, from which 6,300 predominantly ethnic-minority people were displaced. Habitat for the endangered Asian elephant and other wildlife was also inundated by the Nam Theun 2 reservoir. Along the Theun River, downstream from the dam, only a small amount of water – two cubic metres per second – is being released.

Water from the massive reservoir is diverted down a 350-metre-high escarpment to a power station and then transferred to the Xe Bang Fai River via a 27-kilometre downstream channel. More than 110,000 people living in the Xe Bang Fai area are experiencing the effects of increased flows in the river, which are likely to result in fishery and aquatic resource losses, erosion, flooding and water quality problems.

Adjacent to Nam Theun 2's reservoir is the 4,000 square-kilometre Nakai-Nam Theun National Protected Area (NPA) – the largest protected area in mainland Southeast Asia – which forms the watershed of the Nam Theun 2 project. One of the selling points of Nam Theun 2 was that NTPC would provide US$31.5 million to help protect the Nakai-Nam Theun NPA, one of the Mekong region's richest areas of biodiversity.

Through its power exports to Thailand, project proponents assert that Nam Theun 2 will generate revenue for Laos which could be used to support poverty reduction. Nam Theun 2 is also lauded by the World Bank, the ADB and other project proponents as a social and environmental "model" that will pave the way for best practice dam development in the region. Conversely, Nam Theun 2's critics point to the massive scale of the project, the significant gaps in its social and environmental plans and the GoL's poor track record in managing the impacts of existing dam projects. They argue that Nam Theun 2's risks outweigh any potential rewards.

While in certain aspects Nam Theun 2 has done better than other dam projects in Laos and includes some innovative measures – such as requiring external monitoring arrangements, regular public reporting, and a revenue management framework – it has nonetheless experienced some

140 The intention behind the project was to boost the Lao government's income while helping Thailand meet its energy needs. However, there are significant questions about whether the electricity demand projections and evaluation of supply options used by Thailand to justify Nam Theun 2 were accurate and fair. For more information about Thailand's power development plan, see Permpongsacharoen, W., n.d., "*An Alternative to Thailand's Power Development Plan (PDP)*", National Economic and Social Advisory Council. Available at http://www.internationalrivers.org/files/SummaryThailandAlternativePDP2004.pdf.

significant problems and has failed to live up to a number of its promises. The most important outstanding question remains whether or not the approximately one in sixty Lao people affected by Nam Theun 2 will be able to feed their families and make a living in the medium and long term.

Troubling impacts of Nam Theun 2

Displaced by the reservoir

One of the greatest challenges for Nam Theun 2 continues to be developing and implementing sustainable livelihood programs for the more than 6,300 resettled villagers on the Nakai Plateau. They have been moved to the reservoir shores so that they can remain, by their request, on traditional lands. However, soil quality is generally poor on the Nakai Plateau, and two-thirds of the land that villagers once used for farming, grazing livestock and collecting forest products has been flooded by the large reservoir. Furthermore, in violation of the World Bank's safeguard policy on involuntary resettlement, compensation payments for the loss of paddy fields, fruit trees and riverbank gardens were not paid before villagers' lands were taken.

Four years after being resettled by the project, people on the Nakai Plateau are still struggling to recover their livelihoods. Though they now have better houses, electricity, roads, schools and health centres, it is unclear how they will feed their families in the years to come. Shortcomings in the livelihood restoration plans were identified by NGOs and experts before project approval and many of these problems have still not been addressed. Villagers are expected to grow cash crops on poor quality land to sell in an as yet unidentified market. While the reservoir fishery produced a good catch in its first season, its long-term production potential is in doubt. Illegal logging has already significantly reduced the productive potential of the resettlers' community forest area. Further encroachment by outsiders continues to threaten both the reservoir fishery and the villagers' forest area.

Struggling downstream

Downstream, along the Xe Bang Fai River, where large amounts of water have been diverted by the dam, more than 110,000 people living in seventy-one riverside villages and 101 hinterland villages have been affected by changes to the river ecosystem. Villagers are already experiencing declines in water quality and numbers of fish caught in the river, particularly in the Upper Xe Bang Fai. In the last dry season some villages also suffered from inadequate alternative domestic and drinking water supplies.

NTPC's livelihood restoration program for the area focuses on micro-credit funds to support agriculture, aquaculture and livestock projects. The reliance on a micro-credit scheme to deliver compensation creates a cycle of debt if projects fail or if repayment terms are too demanding, as some villagers are already experiencing. Furthermore, as noted by Nam Theun 2's independent monitors, there have been significant delays in program implementation and the funding is insufficient to address the impacts villagers are facing. These shortcomings make it extremely unlikely that villagers' livelihoods will be restored by 2015, when the program is scheduled to end – ultimately leaving them worse off than they were before Nam Theun 2.

Concerning conservation impacts

Instead of ensuring the conservation of the Nakai-Nam Theun NPA and the restoration of forest cover in the watershed as promised, Nam Theun 2 has exacerbated pressures on the protected area by opening up access via the reservoir. According to Nam Theun 2's independent monitors, illegal harvesting of rosewood and poaching of wildlife within the NPA appear to be more serious than before. While not related to Nam Theun 2, mining operations pose a major threat to the NPA, calling into question the commitments made by the government and by NTPC to protect the Nam Theun 2 watershed.

Contributing to climate change

Concern about the potential for considerable greenhouse gas emissions from the Nam Theun 2 reservoir has also plagued the project. Nam Theun 2's independent monitors, as well as the World Bank, the ADB and other experts, recommended that as much biomass as possible be cleared from the 80-square-kilometres of the Nam Theun 2 reservoir that would be permanently under water. However, NTPC ultimately cleared and burned only 18–square-kilometres of vegetation before inundation. While biomass clearance was a welcome development, it may have been too little too late to minimise greenhouse gas emissions from the reservoir caused by the rotting of biomass underwater. NTPC is reportedly monitoring these emissions, but the results have not been disclosed to the public.

Lack of accountability

NTPC, the World Bank and the ADB have failed to release key project information, including monitoring reports, up-to-date project management plans and critical data on fisheries, water quality and hydrology. This is preventing full public oversight and accountability of Nam Theun 2's impacts. There are also few opportunities for public oversight of the management of Nam Theun 2 revenues.

According to the World Bank, as of September 2010 the GoL has received approximately US$5.6 million from Nam Theun 2 electricity sales to Thailand and has channelled the funds to support education, rural roads, public health, rural electrification and environmental protection. As a matter of priority, Nam Theun 2 revenues should be directed to the Xe Bang Fai area to fill the budget gap in the livelihood restoration program.

While the direction of revenues to these poverty-reduction expenditures was a requirement of World Bank support for Nam Theun 2, the revenue management framework does not provide for an independent oversight body or external independent auditing of Nam Theun 2 revenues. There is reason for concern. If the GoL loses interest in these reforms, there will be no external controls to ensure that Nam Theun 2 revenues are not misdirected. The World Bank and the ADB have no real enforcement power to ensure that the Lao government keeps its promises. Their leverage will decline further as Nam Theun 2 and other hydropower and mining projects generate revenue for the Lao government and reduce its dependence on foreign aid.

Finally, although Nam Theun 2 was supposed to improve the standards of hydropower development more generally in Laos, there is little evidence that this is occurring. Projects continue to be approved without the disclosure of environmental impact assessments and without adequate resettlement and livelihood improvement plans.

VII. Moving Money, Avoiding Accountability:
Development Policy Loans and Brazil's Belo Monte Dam

The World Bank and dams in Brazil

During the 1980s, the World Bank disbursed large amounts of structural adjustment finance to Brazil, with devastating social and environmental consequences. This finance was conditioned on the privatisation and opening of key market sectors, including energy and agriculture. Included in this finance were direct loans for the construction of development infrastructure projects, including expensive and inefficient hydroelectric dams, such as Samuel Dam and Balbina Dam, in the Brazilian Amazon, which are estimated to produce twenty to forty times the amount of greenhouse gases than comparable coal-fired power plants.

Now, the Bank has seen its share of lending to Brazil both decrease and transform. In 2008, the Standard & Poor credit rating agency gave Brazil its first ever investment-grade credit rating, as record high commodity prices helped spark large capital inflows to the Brazilian Treasury. Since then, the Government of Brazil (GoB) has embarked on large investments in its domestic markets, capitalising the Brazilian National Development Bank (BNDES) to the tune of 300 billion *reais* since 2008.[141] In 2009 BNDES' assets were second to those of the World Bank,[142] and in 2009 and 2010 BNDES' loan disbursements were larger than those of the World Bank, US Export-Import Bank and Inter-American Development Bank combined. Brazil's shift from high dependence on foreign direct investment to sustained home-grown growth has forced the World Bank to re-examine its value-added in the country, while many consider Brazil to be increasingly close to what the World Bank calls "the graduation point", the point at which the World Bank's services are no longer needed.

Following this trend, the World Bank in Brazil has adopted what is called a Country Systems Approach. One of the instruments the World Bank uses within a Country Systems Approach is what is called a Development Policy Loan (DPL). Since 2004, DPLs have become

WHAT IS A COUNTRY SYSTEMS APPROACH?

The term "Country Systems Approach" is generally used to reflect the high capacity of a borrowing country's existing institutions. According to the World Bank, "the impact of development assistance can be increased if development agencies support efforts to strengthen the institutions and systems that countries already have in place and work more directly with them."[143] As a result, World Bank loans within a Country Systems Approach often take the shape of indirect finance for policy and technical assistance, rather than direct project finance.

141 Leitão, Miriam, 2011. "Transferência de dinheiro ao BNDES anula esforço fiscal." O Globo. Available at http://oglobo.globo.com/economia/miriam/posts/2011/03/01/transferencia-de-dinheiro-ao-bndes-anula-esforco-fiscal-366332.asp.

142 BNDES, 2010, "*BNDES Financial and Institutional Aspects*" BNDES total assets totalled US$222b versus World Bank's total assets of US$275b in FY09.

143 World Bank, 2011, *"Expanding the Use of Country Systems in Bank-Supported Operations".* Available at http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/0,,contentMDK:20266649-menuPK:538163-pagePK:41367-piPK:51533-theSitePK:40941,00.html. [Accessed: March 22, 2011]. 25 billion reais, or about US$16 billion.

an increasingly common form of Bank lending to middle-income countries that aim to facilitate investment through policy reform. By way of illustration, DPLs represented 52% of all funding in 2010 through the International Bank for Reconstruction and Development (IBRD), the Bank's middle-income lending branch.[144]

As part of its Country Systems Approach with Brazil, the Bank developed a Country Partnership Strategy (CPS) for the period 2008-2011. The CPS purports to place a strong emphasis on the need for development and environmental policy assistance for sustainable development in the Amazon, in coordination with a World Bank strategy paper called the Amazon Partnership Framework (APF), in which hydropower played a significant role for economic growth. The World Bank's Country Systems Approach with Brazil has had significant implications for Brazil's largest domestic investment ever:[145] the Belo Monte Dam Complex.

WHAT ARE DEVELOPMENT POLICY LOANS?

In general, development policy lending is a World Bank lending instrument used to support structural reforms in an economic sector or in an economy as a whole.[146] DPLs are a largely unaccountable form of moving money to borrowing countries, since the borrowing agent is expected to take full responsibility for the social and environmental impacts of its own loans. As a result, the Bank assumes that DPLs do not cause direct impacts on affected communities.

144 McElhinny, V., 2011, *"The World Bank and DPLs: What Middle Income Countries Want"* BICECA.

145 25 billion reais, or about US$16 billion.

146 World Bank, 2004, *"Development Policy Lending"*, Operational Manual OP 8.60, August. Available at http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/EXTPOLICIES/EXTOPMANUAL/0,,contentMDK:20471192-pagePK:64141683-piPK:64141620-theSitePK:502184,00.html [Accessed: March 22, 2011].

The Belo Monte Dam Complex

If built, the Belo Monte Dam Complex would be the world's third-largest hydroelectric project in installed generating capacity. One of more than sixty dams being planned for the Brazilian Amazon, the Belo Monte Dam would divert up to 80% of the annual seasonal flow of the Xingu River, one of the Amazon's major tributaries, to an artificial reservoir.[147] A significant area of the Brazilian rainforest would be directly flooded, displacing over 20,000 people. Downstream, the river's diversion would threaten the survival of 800 Indigenous Peoples. Despite these impacts, communities claim they have not been consulted and have had little opportunity to participate in decisions around relocation.

BNDES committed to financing up to 80% of the Belo Monte Dam through project finance. The loan would be the bank's largest ever, surpassing a previous record loan to build two dams on Brazil's Madeira River. Meanwhile, 20% of the cost would be covered by an 18-member project consortium called Norte Energia, S.A. (NESA), the largest holder of which is Eletrobrás (with a 49.98% stake). Construction giants Odebrecht, Andrade Gutierrez, and Camargo Corrêa are expected to lead construction, and European companies Alstom, Andritz, and Voith-Siemens, and Argentinian company Impsa, signed a contract to supply turbines. Though 70% of the electricity is meant to be consumed by the Brazilian public sector,[148] BNDES has made no effort to guarantee increased access to electricity for the rural poor in the Amazon beyond business-as-usual consumption by energy-intensive mineral plants.

Climate-friendly dams?

Belo Monte has been proposed by Brazil as a renewable energy project and as an important

147 Antunes, Walter Coronado, 2010. *"Crítica ao Aproveitamento Hidrelétrico Belo Monte."* Instituto de Engenharia, Junho/Julho" , no 59, pp. 8-9.

148 *"Contrato de Concessão N. 01/2010-MME-UHE Belo Monte Processo N. 48500.003805/2010.81,"* Ministério de Minas e Energia, Governo do Brasil.

The Xingu River at Sunset. Photo credit: Aviva Imhof, International Rivers.

part of the country's commitment to reduce greenhouse gas emissions.[149] However, the dam itself will likely be a source of greenhouse gas emissions due to decomposing reservoir vegetation and construction of the dam, which includes two dams, two artificial canals, two reservoirs (one on dry land), and an extensive system of dikes, some big enough themselves to qualify as large dams. In fact, to build Belo Monte, more earth would have to be dug than was moved to build the Panama Canal.

Positive impacts of the DPL on Belo Monte Dam – more fiction than fact?

Shortly after developing a pro-dam Country Partnership Strategy with Brazil, the World Bank disbursed a Development Policy Loan for Sectoral Environmental Management (SEM DPL I) for the Government of Brazil valued at US$1.3 billion.[150] This was the Bank's first DPL, and BNDES was one of the three borrowers, or implementing agencies, in Brazil. Though supposed to improve environmental integrity, it appears that the result may be the opposite. For example, the DPL aimed to "improve environmental and social management effectiveness in BNDES and other financial institutions"[151] measured by the creation of new environmental and social safeguards, and the screening, approval, and monitoring of all BNDES-financed projects using these new safeguards. However, as of February 2011, BNDES had not successfully completed the new safeguards policy – let alone applied it to projects

149 Brazil committed to a 38% reduction in emissions at the December 2009 UN climate summit in Copenhagen.

150 Tranche 1 was completed and disbursed in June 2010, and Tranche 2 was completed and disbursed in December 2010. A second DPL (SEM DPL II) has been discussed at a value of US$700 million, yet no loan contract has been signed as of the date of this publication.

151 World Bank, 2010, "*First Programmatic Development Policy Loan for Sustainable Environmental Management (P095205) Release of the Second Tranche – Full Compliance/Tranche Release Document*".

– failing to meet the conditions of SEM DPL I Tranche 2. Yet funds for Tranche 2 were still delivered. In addition, BNDES had not applied the principles of the new safeguards policy to its analysis of the technical and economic viability of the Belo Monte Dam Complex. Nonetheless, BNDES had already committed to at least 80% of the project finance, approving a 1 billion *reais* (US$600 million) bridge loan to Belo Monte construction consortium Norte Energia S.A. in December 2010.[152]

Accountability concerns

The World Bank's Development Policy Loans have become an easy way to move money without facing accountability. In the case of SEM DPL I, borrowing agent BNDES did not meet a number of the expected policy goals, and yet the money still flowed. Meanwhile, the World Bank has extended these conditions to a possible additional loan, SEM DPL II, and Brazilian investment in large dams is expected to continue. The distance between expectations and outcomes of SEM DPL I signals that, in this case, Development Policy Loans in a Country Systems Approach do not carry enough weight to address governance problems in-country, nor are they sufficiently capable of shaping bank and industry safeguards.

As new financiers such as BNDES compete with the World Bank over the financing of large dams, there is a great possibility that the World Bank will increase the number of Development Policy Loans in its portfolio. Therefore, it is important for the World Bank to open Operational Policy (OP) 8.60, which covers Development Policy Loans, for review during its 2011 World Bank Policy Safeguards Review. In addition, the Bank should promote civil society engagement with borrowing agents, so that these new financiers may also be held accountable. These are commitments that the Bank has so far failed to make.

152 BNDES, 2011, Oficio 027/2011 - BNDES GP Rio de Janeiro, 12 de Janeiro de 2011.

Conclusion

As demonstrated by these seven case studies, the World Bank Group's rhetoric frequently does not match its practices. The Bank is keenly aware of the danger that climate change poses to the development gains of Southern countries, and even to the very existence of some island nations. It has rigorously documented the disproportionate impacts that climate change will have – and is already having - on the world's poor. Yet the Bank has massively scaled up fossil fuel financing in recent years.

The very first line of the energy section of the Bank's website reads, "Access to environmentally and socially sustainable energy is essential to reduce poverty".[153] With more than 20% of the world's population without access to electricity,[154] the World Bank is well aware of the need to tackle energy poverty and to ensure that its projects and policies help, rather than harm, communities on the ground. But according to an independent review, none of the twenty six fossil fuel projects financed by the Bank in fiscal years 2009 and 2010 ensured energy access for the poor.[155] As seen throughout this report, financing large-scale infrastructure projects for energy and revenue generation, as the World Bank often does, is unlikely to lead to a trickle-down effect that alleviates poverty or brings electricity to those who lack it. Indeed, poorer countries with oil resources tend to be worse off economically and developmentally.

In a climate-constrained world, limited international development finance should only be used for truly clean, renewable resources. With some 85% of the world's energy poor living in rural areas[156], clean, decentralised energy is often the most effective, equitable way to serve these populations. The Bank's own Independent Evaluation Group has put energy efficiency at the top of the list as a cost-effective means for the institution to expand and improve energy services delivery for the poor and facilitate a transition to clean energy economies.[157] Similarly, in 2003, the Extractive Industries Review, an independent process commissioned by the Bank to examine its future role in support of oil, gas and mining (including coal), asserted that the World Bank Group should, "devote its limited scarce resources to investments in renewable energy resource development, emissions-reducing projects, clean energy technology, energy efficiency and conservation, and other efforts that delink energy use from greenhouse gas emissions".[158] It found that

153 http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTENERGY2/0,,menuPK:4114636-pagePK:149018-piPK:149093-theSitePK:4114200,00.html, accessed March 25, 2011.

154 International Energy Agency. "*Energy Poverty: How to make modern energy access universal? Special Early Excerpt of the World Energy Outlook 2010 for the UN General Assembly on the Millennium Development Goals. OECD/IEA*," September 2010. http://www.worldenergyoutlook.org/docs/weo2010/weo2010_poverty.pdf.

155 Mainhardt-Gibbs, Heike and Elizabeth Bast with Stephen Kretzmann, *"World Bank Group Energy Financing: Energy for the Poor?"* Oil Change International, 2010.

156 International Energy Agency. Energy Poverty: How to make modern energy access universal? Special Early Excerpt of the World Energy Outlook 2010 for the UN General Assembly on the Millennium Development Goals. OECD/IEA, September 2010. http://www.worldenergyoutlook.org/docs/weo2010/weo2010_poverty.pdf.

157 World Bank Independent Evaluation Group, (2008). *"Climate Change and the World Bank Group, Phase I: An Evaluation of World Bank Win-Win Energy Policy Reforms".*

158 World Bank Group, 2003. "*Extractive Industries Review-Consultation on the future role of World Bank Group in the Extractives Industries".* http://irispublic.worldbank.org/85257559006C22E9/All+Documents/85257559006C22E985256FF6006843AB/$File/volume1english.pdf.

the Bank's fossil energy projects had neither the intention nor the effect of achieving poverty alleviation, and recommended that the Bank should immediately formalise a moratorium on coal lending and phase out of oil financing by 2008.

Today, ten years after the Extractive Industries Review commenced its work, the World Bank regrettably has not prioritised investments in small, decentralised clean initiatives that could more directly benefit the poor. Rather, the debate at the World Bank for decades has hovered around "gigawatts vs. megawatts". Installed capacity -- primarily from centralized grid systems, with large hydropower, oil and gas- or coal-based power production -- for generating electricity most often serves export-oriented, energy-intensive industry and urban centers, along with large agribusiness.

As seen throughout this report, the World Bank - with its troubling record on the environment, human rights, climate impacts, and development - needs to clean up its act as a major climate polluter with a poor development track record before aiming to put itself at the center of international climate finance. The Bank must not play any role in designing or managing the new Green Climate Fund under the UN Framework Convention on Climate Change.

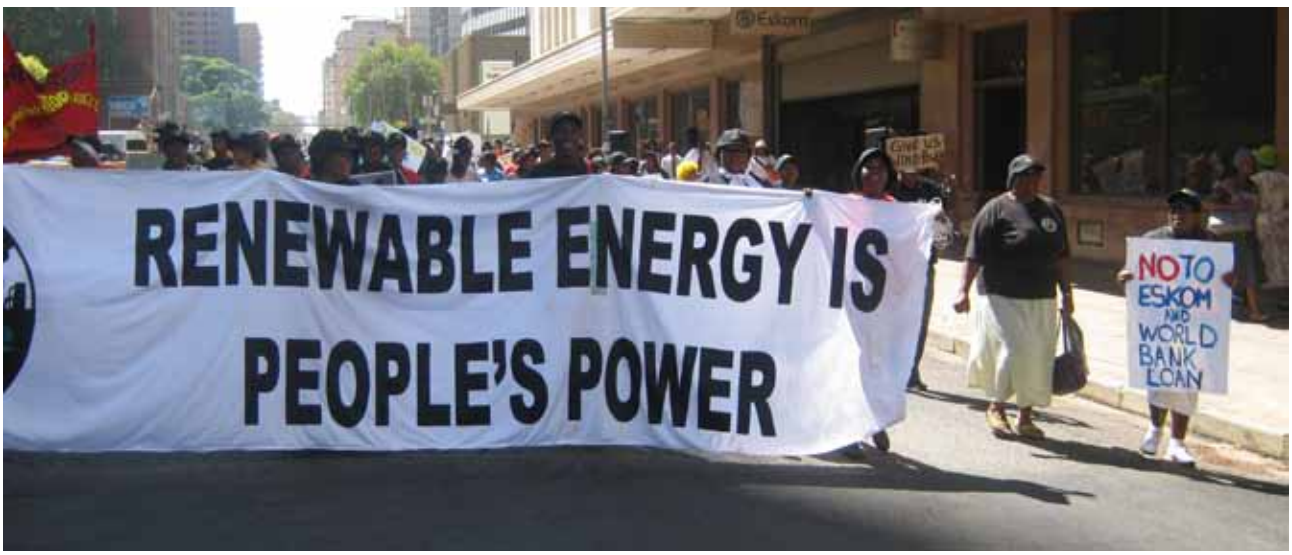
In today's world, growth is limited not only by the resources in the earth's crust but also by the atmosphere. In an era of double crises of poverty and climate change, leadership and tectonic changes are called for, not business as usual. We therefore urge the World Bank Group to abide by the following recommendations.

Recommendations

The World Bank Group should:

Energy and Extractive Industry Portfolio

- End all fossil fuel financing, period. This must be fully reflected in the new Energy Sector Strategy. This prohibition on fossil fuel financing should include deals for fossil fuel-related infrastructure and transactions by financial intermediaries.
- Mainstream and prioritise energy efficiency at all levels of policy, financing and project implementation. This should be done on the generation and transmission side, with greater emphasis put on improving end-use efficiency as well.



People demanding renewable energy in South Africa. Photo credit: groundWork/Friends of the Earth South Africa.

- Finance only clean energy projects (i.e. solar and wind; mini, micro and pico hydropower) for energy access that directly target energy-poor populations, with a focus on decentralised projects.
- Immediately halt all lending and policy prescriptions that compel borrowing governments to pursue energy policies that prioritise greenhouse gas-intensive and/or socially harmful investments that favour large industry over the needs of the poor, especially in rural areas.

Carbon Finance Unit and International Offsetting

- Close down the Carbon Finance Unit and get out of the business of international offsetting.
- Immediately halt all actions supporting Clean Development Mechanism gas flaring reduction projects, and support the implementation of Nigerian laws and court orders requiring the cessation of gas flaring in that country.

Safeguards and Accountability

- Apply performance standards (under the International Finance Corporation, IFC) and safeguards (under the International Development Association, IDA and the International Bank for Reconstruction and Development, IBRD) to all World Bank Group-financed policies, projects, and sub-projects, including those financed through financial intermediaries and development policy loans.
- Open Operational Policy (OP) 8.60 – which covers development policy loans - for review during the 2011 World Bank Policy Safeguards Review.
- Systematically disclose the beneficial ownership of all IFC-supported companies and financial intermediaries, to improve accountability of the IFC and external stakeholders to affected communities.
- Develop and implement a process for divesting from financial intermediaries that are not adhering to IFC safeguards or demonstrating development effectiveness.

UNFCCC Green Climate Fund

- Strictly limit its role in the UNFCCC Green Climate Fund to that of interim trustee, meaning the World Bank's role is solely to implement instructions on fiduciary matters as directed by the Board of the Fund.
- Refrain from any involvement in designing the Green Climate Fund, and any other role related to the governance of global climate finance.

World Bank, Climate Change and Energy Financing:
Something Old. Something New?

Action against the World Bank at a UN climate summit in Poznan, Poland. Photo credit: Elena Gerebizza, CRBM.