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Mainstreaming Climate Change Considerations at the Multilateral Development Banks

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Introduction

The multilateral development banks (MDBs) exist to realize an ambitious agenda: eliminate poverty and foster sustainable development. These organizations wield important economic and political influence in developing countries. Their core work includes financing and policy advice related to agriculture, transport, energy, and infrastructure that are essential for economic development yet also have substantial implications for climate change (*see Box 1*).

This policy brief discusses ongoing efforts by the World Bank Group and other MDBs to respond to climate change, focusing on measures to reduce greenhouse gas (GHG) emissions in client countries.[1] Specifically, the brief reviews the limited extent to which climate change issues have been included in the World Bank Group's country strategies and energy-sector operations over the past five years. Climate change is expected to have detrimental effects on the world's population, particularly the poor. Accordingly, to achieve their missions, MDBs will need to give increased consideration to climate change as an integral component of sustainable economic development and poverty reduction strategies.

Governments have responded to the threat of climate change by agreeing to develop GHG mitigation programs under the United Nations Framework Convention on Climate Change ("Climate Convention") which obligates industrialized countries to support developing countries to reduce emissions. The international community and MDBs should support developing countries to mitigate GHG emissions under the climate convention as part of meeting their development goals. Asserting the need for such support should not be construed as a call for MDBs to enforce developing country obligations through a form of "green conditionality." The MDBs should, however, support their clients to compare options for reducing emissions and to understand the costs and feasibility of different emission-reduction strategies. MDBs have recognized the importance of emissions reductions and have pioneered specialized lending programs and policies to address GHGs, but such efforts remain at the margins of their core operations.

The challenge for MDBs is to help their client countries identify opportunities to reduce the GHG emissions associated with economic development and to identify the additional costs of pursuing these opportunities. Meeting this challenge is necessary to prompt the international community to systematically finance the costs of integrating GHG reductions into development projects. MDBs, other donors, and developing countries cannot know how to bridge this financing gap if they do not know how wide it is.

BOX 1 MDBs and GHG Intensive Sectors

MDBs provide loans and grants to developing country governments and finance (debt, equity and guarantees) to private-sector actors on behalf of the international community. The World Bank Group, for example, is owned by over 180 member governments. Each member government is a shareholder of the Bank: the number of shares a country holds is based roughly on the size of its economy. The United States is the largest shareholder, followed by Japan, Germany, the United Kingdom, and France. The G8 are therefore especially influential in establishing Bank policies.

The lending profile of MDBs demonstrates significant concentrations of finance in sectors with substantial greenhouse gas (GHG) emission footprints, including transport, oil and gas, electric power, and mining. Recent annual investments in these sectors have totaled:

- World Bank: $7.6 billion (37% of total 2004 lending of $20.08 billion)
- Inter-American Development Bank: $730 million (12% of total 2004 lending of $6.02 billion)
- European Bank for Reconstruction and Development: $3.3 billion (27% of total 2003 lending of US$12.24 billion).

Source: World Bank Group Annual Report 2004 (Figures refer to IBRD/IDA), Inter-American Development Bank Annual Report 2004, European Bank for Reconstruction & Development Annual Report 2003.

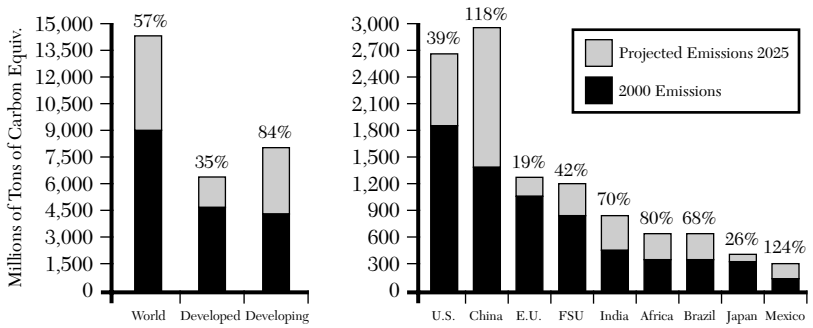
International Responses to the Challenge of Climate Change[2]

The Rising Levels of GHG Emissions

Responding to global climate change is a paramount challenge of the 21st Century. Since the beginning of the industrial revolution, atmospheric concentrations of carbon dioxide (CO_2), the main heat-trapping GHG, have risen 35 percent. This increase results primarily from the burning of fossil fuels and from deforestation. If current trends in GHG emissions growth are not altered, global temperatures are expected to rise between 1.4 and 5.8° C (2.5 to 10.4° F) by 2100, according to the Intergovernmental Panel on Climate Change. Such temperature changes are likely to have detrimental impacts on agricultural production, water supply, forests, and overall human development. The World Bank has identified critical linkages between climate impacts and poverty reduction, pointing out that if atmospheric CO_2 concentrations were to double from pre-industrial levels, "developing countries would suffer economic costs of 5 -9 percent of GDP, several times higher than industrialized countries, and the poor in the Bank's borrowing countries would be at the greatest disadvantage."[3]

Industrialized countries have been the largest contributors to the historical build-up of GHGs in the atmosphere. Although they are home to only 20 percent of the world's population, industrialized countries are responsible for over 60 percent of net carbon dioxide emissions from fossil fuel burning and land-use changes over the last century. Effectively addressing climate change will require cooperation and leadership, particularly from Europe and the United States. To prevent atmospheric CO_2 concentrations from exceeding a level of 450 parts per million by volume (ppmv) – which still represents a 60 percent increase over pre-industrial levels – global emissions would have to decrease dramatically during this century, perhaps on the order of 60 to 80 percent below 1990 levels. While large decreases in global emissions are needed, current trends suggest massive future growth in energy use that will in turn drive CO_2 emissions. Mid-range scenarios suggest that global emissions will increase almost 60 percent by 2025 (*see Figure 1*).[4]

FIGURE 1 Projected Percentage Increase of Emissions of GHGs in 2025



Notes: GHGs do not include CO_2 from land use change. Projections are based on EIA Reference Case (CO_2 from fossil fuels)and POLES (non-CO_2 gases).

Industrialized countries should bear the brunt of the global GHG mitigation effort because of their historical responsibility for the build-up of GHGs in the atmosphere and their advanced technological and financial capacities. Developing countries must also play an important role in reducing emissions growth within the context of their continued economic development. Nearly 80 percent of the world's population lives in developing countries, which already account for over 40 percent of current world emissions; given current trends, this share will rise to 56 percent by 2025. Arresting and reversing these GHG emission trends is an urgent challenge of the highest order; meeting it will require technological, institutional, and behavioral change, with governments of developed and developing countries, MDBs, and the private sector all playing important roles.

The Governance Framework for Global Climate Change

Governments adopted the United Nations Framework Convention on Climate in 1992.[5] One hundred eighty-nine countries have ratified the convention,[6] including all major government members of the World Bank Group, the European Bank for Reconstruction and Development (EBRD), and the Inter-American Development Bank (IDB). The Climate Convention reflects a global recognition of the problem of climate change and the stabilization of GHG concentrations as the ultimate objective around which global cooperation should be oriented. Many governments subsequently agreed to legally binding limits on industrialized-country emissions under the Kyoto Protocol in 1997.

The Convention notes that "the global nature of climate change calls for the widest possible cooperation by all countries," and both the Convention and Protocol, as discussed below, envision an important role for developing countries. The Convention establishes basic obligations for all govern-

ments, including the development of national GHG mitigation programs, facilitation of adaptation to climate change impacts, and promotion of technological development.[7] The Kyoto Protocol specifies particular sectors where these national GHG programs should be targeted, including energy, transport, industry, and forestry.[8] As noted, these sectors are key targets of MDB policy advice and lending in developing countries, and the Convention instructs Parties to be "guided" by the principle that policies and measures to protect the climate system should be integrated into national development programs.[9] The Protocol reinforces this notion by observing that developing countries' commitments to mitigation should be advanced "in order to achieve sustainable development."[10] Thus, under the climate agreements, sustainable development and climate protection objectives are to be pursued in an integrated and complementary fashion.

BOX 2 The Special Role of the United States

The United States is the world's leading contributor of GHG emissions (see Figure 1). A global solution to climate change requires the proactive involvement of the United States in significantly reducing its own emissions, and assisting developing countries to mitigate emissions trajectories. Current U.S. Executive Branch policy opposes ratification of the Kyoto Protocol on the grounds that emissions reductions may harm the U.S. economy, and that the Protocol lacks binding commitments for key developing countries including Brazil, India, and China.

Within the World Bank Group, the U.S. Executive Director has opposed all support for projects that seek to implement the Kyoto Protocol in other countries. For example, the U.S. recently opposed International Finance Corporation support for AgCert International Ltd. to establish about 1,600 "bio-digester" sites on livestock farms to implement methane capture and management systems to reduce greenhouse gas emissions in Brazil, Mexico, and other countries.

In addition, the U.S. has been an obstacle to replenishment of the Global Environment Facility (GEF) funding for climate change on the grounds that GEF funding must be tied to performance outcomes. While GEF funding remains limited in scale, it is the primary means by which climate considerations are integrated into MDB projects and the key source for renewable energy projects.

Source: Global Environment Facility, "Trustee Interpretation: Deferment Right of the Contributing Participants with respect to conditional GEF-3 Contribution" (June 9 – 10 2005). Available Online: http://www.gefweb.org/Replenishment/Reple_Documents/GEF.R.4.Inf.4_Trustee_Interpretation.pdf

The Department of Treasury keeps a public record of U.S. ED votes on World Bank Projects and codes the basis for opposition. Available Online: http://www.treasury.gov/offices/international-affairs/multilateral_banks/mar05.xls

Developing Country Interests Consistent with Climate Change Mitigation

Integrating climate considerations into energy and other economic policies can offer developing countries additional benefits. Renewable energy capacity can enhance energy security by reducing dependence on fossil fuel imports, which present a drain on foreign currency and create international debt for many developing countries. Renewable energy systems can also improve air quality and have positive impacts on local health. Distributed electricity systems, which may include renewable energy, may provide more reliable services at lower costs than those associated with expansion of a weak national grid. Distributed approaches to rural electrification can also allow cost savings by reducing transmission losses and increasing efficiency.

For their part, developing countries have demonstrated substantial interest in developing renewable energy potential as showcased at the 2004 Bonn Conference on Renewable Energy.[11] China recently passed a Renewable Energy Law[12] and pledged to increase its installed renewable energy generating capacity to 60 gigawatts by 2010[13] – about ten percent of total power capacity. Brazil recently announced policies to further develop its biofuel capacity, building on long-mandated practices of mixing ethanol with vehicular fuels, and tied to recognition that processing ethanol is more efficient in Brazil than is processing gasoline. In 2002 Brazil passed a law introducing PROINFA, a renewable energy incentive program in the power sector.[14] India's 2005 Energy Policy sets an ambitious target of providing electricity to all households by 2009,[15] and notes that efficiency enhancements to existing generation capacity, distributed energy, and renewable energy will play important roles in meeting these targets.

Projected needs for global investment in energy alone are as high as $550 billion per year over the next three decades, more than half of which will be needed in developing countries. MDBs will play a crucial role in facilitating this investment. Unless active measures are taken to reduce GHG emissions associated with new infrastructure and enhance efficiency in existing capacity, it is predicted that carbon dioxide levels will rise 70 percent between 2000 and 2030.[16]

The Role of Industrialized Countries and International Organizations: Financial and Technological Assistance

The Convention establishes obligations for industrialized countries to assist developing countries in implementing mitigation and adaptation programs (*Box 2 discusses the special role of the United States in this context*).[17] In particular, industrialized countries should provide the financial resources needed to meet the "agreed full incremental costs" of implementing developing country obligations.[18] In addition, under Article

4(5), industrialized countries as well as "organizations in a position to do so" are called upon to promote, facilitate, and finance the transfer of (or access to) environmentally sound technologies. In drafting the Convention, governments envisioned an important role for non-states such as the World Bank Group with respect to financing technology transfers to mitigate GHG emissions.

The Convention designates a financial mechanism, the Global Environment Facility (GEF), to facilitate financial assistance, technology transfer, and capacity building. Industrialized countries capitalize the GEF (while also providing bilateral funding in accordance with their Convention obligations) to meet the "incremental costs" of GHG abatement efforts in developing countries.[19] During 2003-04, the GEF contributed almost $150 million to GHG mitigation efforts related to wind power, energy efficiency, and other areas. The World Bank implemented projects worth $489 million using $104 million of GEF funds.[20] But meeting the challenges of climate protection – and promoting sustainable development–will require significant increases in the scale of such efforts, and demands that climate considerations be included in mainstream MDB operations.

The Role of MDBs in International Responses to Climate Change

MDBs have developed specialized lending programs and policies to address climate change.[21] MDBs support in-country capacity building to deal with climate change. The World Bank Group (along with the United Nations Development Program and United Nations Environment Program) is an implementing agency of the GEF, helping developing countries meet incremental costs of mitigating their GHG emissions. Other MDBs, including the EBRD and the IDB, are "executing agencies" that can also implement GEF projects.

A second main area of MDB activity surrounds the Clean Development Mechanism (CDM) of the Kyoto Protocol, which assists developing countries to "achieve sustainable development" and industrialized countries to comply with Kyoto emission limits.[22] These objectives are accomplished through GHG-reducing projects in developing countries (e.g. installing wind-based power instead of coal-fired power), which generate emission credits that can then be used by industrialized countries to offset their own domestic emissions. MDBs have been active in creating and managing CDM funds that invest in GHG mitigation activities in developing countries and earn certified emission reductions for investors.

The World Bank Group leads MDBs in CDM financing, although regional development banks are also active. The EBRD in particular has been launching new efforts in this area. The World Bank's "carbon finance business" also includes the Prototype Carbon Fund (PCF) and the BioCarbon Fund. According to the Bank, its "carbon finance initiatives are part of the larger global effort to combat climate change, and go hand in hand with the Bank's mission to reduce poverty and improve living standards in the developing world."[23]

The third main area of MDB activity involves accounting for significant GHG emissions from infrastructure projects.

In 2001 the EBRD developed its own methodology for accounting for GHG emissions as part of the environmental assessment of potential projects. This assessment methodology closely follows the principles for GHG emissions reporting underlying the WRI-World Business Council for Sustainable Development's GHG Protocol.[24] EBRD is currently working to strengthen the due diligence function of its GHG accounting process through better data gathering at initial project appraisal, and is formalizing an approach for analysis. The EBRD is also implementing procedures to ensure that information on environmental activities related to climate change is provided to the public; the EBRD includes aggregate information on power sector projects with significant GHG emissions (over 20,000 tons of GHG emissions per annum) in its Annual Environmental Report.[25]

Internal practice at the World Bank Group's private-sector arm, the International Finance Corporation (IFC), is to use 100,000 tons of GHG emissions per year as a threshold for disclosure of GHG emissions in environmental impact assessments (EIA) of projects.[26]

> *"Continued global warming is in nobody's interest, but the simple facts of the matter are that developing countries will suffer the most damage, and their poor will be at an even greater disadvantage. I see the Bank's role in climate change as providing every opportunity to developing countries to benefit from the huge investment OECD must make in reducing climate change."*
>
> - James Wolfensohn, Former World Bank President, United Nation's General Assembly, June 1997

While these MDB actions contain important elements necessary to address climate change, there is a need for improvements in policy and practice so as to mainstream climate considerations into bank operations, particularly in sectors that will impact the long-term climate footprint of a national economy. Current climate-related financing and policy activities occur on the margins of core MDB operations. Beneficial climate change-related considerations are not sufficiently pursued as a matter of policy advice (*see Box 3 on the East-Asia Infrastructure Study*) or financing.

Climate Considerations Remain at the Margins

The influence of MDBs extends far beyond their direct finance portfolios. MDBs such as the World Bank Group play an integral role in shaping the development paths of recipient countries. They routinely leverage significant levels of additional financing from the private sector and build investor confidence in particular countries and projects. The economic policy advice that these institutions provide to client governments is just as important as the monetary value of their funding. MDBs link ideas to their co-financing for large-scale private sector investments in infrastructure and heavy manufacturing, as well as to loans for sectoral and regulatory reforms in key climate-related sectors such as transport, agriculture, and energy. These activities present opportunities to address technology choices, land use choices, and efficiency strategies that affect GHG emissions.[27] This section assesses the degree to which climate change is being included in the World Bank Country Assistance Strategies and energy sector lending by the International Bank for Reconstruction (IBRD) and the International Development Agency (IDA).[28]

BOX 3 **Overlooking Climate: The East Asia Infrastructure Study**

The World Bank, the Asian Development Bank, and the Japan Bank for International Cooperation recently released a joint study to highlight the role that infrastructure can play in reducing poverty by supporting economic growth and providing access to key services. The goal of the study is to provide practical guidance and to support dialogue on infrastructure issues with development partners.

The study, however, completely fails to acknowledge the need to mitigate and adapt to climate change. It does not address environmental risk arising from climate change and variability or give client governments any guidance for dealing with the climate-related implications of new infrastructure development, from a GHG emission-reduction or vulnerability perspective.

Infrastructure development will lock in technology paths and emissions trajectories, and will therefore have lasting implications for the global climate. The prospective emergence of regimes that would tax carbon, promote emissions trading, or limit emissions in other ways would certainly influence the relative desirability of various infrastructure development strategies, especially in the power and transport sectors. A study of relevant issues should therefore actively consider opportunities to shift to less GHG-intensive infrastructure.

In addition, most of the infrastructure projects planned over the next five years in East Asia will be in service 30 years from now, by which time countries are expected to have experienced the effects of human-induced climate change and variability. But the study fails to consider possibilities such as rising sea levels (which would affect coastal infrastructure) or changes in rainfall patterns (which would affect dams and other infrastructure related to water resources management).

Source: Asian Development Bank, Japan Bank for International Cooperation and the World Bank. Connecting East Asia – A New Framework for Infrastructure (2005). This box also draws on comments on a draft of this study submitted by Frances Seymour in her capacity as a member of the External Advisory Group for the Study (World Resources Institute, 2005).

Consideration of Climate Change in Country Strategies

The Country Assistance Strategy (CAS) is the World Bank's plan for providing support to each borrowing country. The purpose of a CAS is to justify the Bank's involvement in a country based on financial risks, the country's priorities, the activities of other donors, and comparative advantages that the Bank can offer. The CAS sets the parameters for analytical work and lending operations that the Bank will support. It is based on economic and sector analysis designed to provide a thorough understanding of borrowers' development challenges. The Bank also sets priorities within the CAS according to magnitude of impact, importance, and potential impacts on poverty reduction. The CAS defines the level and composition of assistance to be provided based on needs and on portfolio performance.

A review of World Bank Country Assistance Strategies for developing countries that already account for substantial contributions to global GHG emissions reveals that such strategies do not comprehensively address climate change issues. Guidelines for the content and development of a CAS presented in the World Bank's Operational Manual merely note that "global environmental issues and the role of the GEF are discussed when appropriate."[29] Table 1 suggests that this guidance has been insufficient to prompt Bank staff to give climate change due consideration.

More recent Country Assistance Strategies do make increasing reference to the cross-cutting relevance of climate

TABLE 1 Consideration of Climate Change in World Bank Country Assistance and Partnership Strategies

	CAS/ CPS Sector Priorities with Significant Implications for Climate Change	Are Climate Change Considerations Noted in Relevant Sectors?	Climate Specific Indicators or Planned Outcomes	Consideration of Less-GHG-Intensive Alternatives to Chosen Path	Consideration of Incremental Costs for Addressing Climate	Climate Considerations Noted in Executive Summary
Russia 1999 – 2001	Infrastructure, Agriculture, Energy	Not consistently	Yes	Yes (Efficiency, Renewables)	No	No
South Africa 1999 – 2002	Development, Environmental Sustainability and Management	Not consistently	Yes	Yes (Efficiency, Renewables)	No	No
China 2003 – 2005	Transport, Energy	Not consistently	Yes	No	No	No
Brazil 2003 – 2007	Infrastructure, Forestry	Not consistently	Yes	No	No	No
Ukraine 2004 -2007	Energy	Yes[30]	Yes	Yes (Efficiency)	No	No
Indonesia 2004 -2007	Infrastructure, Forest Resource Management	No	None	No	No	No
India 2005 - 2008	Transport, Infrastructure, Power Sector Reforms	Climate change is noted as a cross-cutting issue, but not in the context of sector activities	Yes	No	No	Yes
Mexico 2005 – 2008	Energy, Transport	Yes	Yes	Yes (Efficiency , Mass Transport)	Yes	No

change, although the parameters for consideration of these issues are often limited to the projects supported by the GEF or Prototype Carbon Fund. For example, the 2005-2008 Mexico Country Partnership Strategy notes climate as an important consideration in planned energy and transport sector programming, and the 2005-2008 India Country Strategy notes that India "cannot afford to ignore global climate change and its implications." The real test of effectiveness for these strategies, however, lies in the extent to which climate considerations are integrated into lending programs and projects in key sectors, analyzed below.

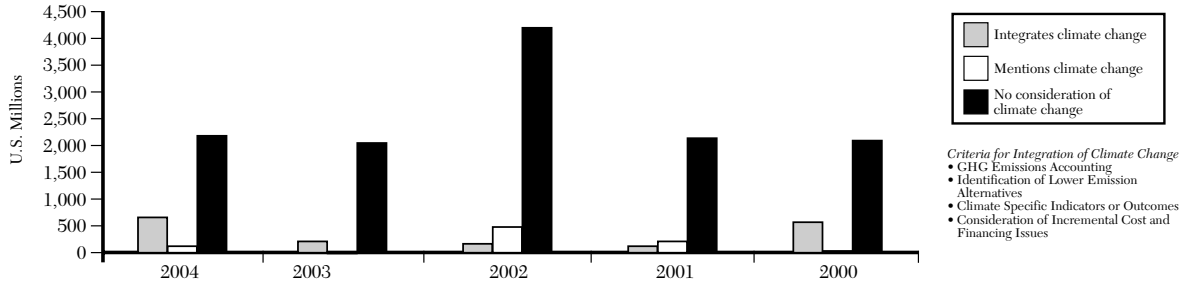
The World Bank Group also develops sector strategies that help shape the Bank's approach and activities in a given sector or thematic area. Sector strategies and papers for the energy and electricity sector do include significant attention to climate change. The Bank's 2000 Environment Strategy for the Energy Sector states that "the WBG has an important role to play in helping to avert climate change, and it will assist its clients in meeting their obligations under the United Nations Framework Convention on Climate Change."[31] The Strategy also includes a detailed consideration of opportunities presented under the Climate Convention and the Kyoto Protocol. These issues are seldom included in actual project appraisals, however, unless the project already has an explicit focus on renewable energy or energy efficiency.

Consideration of Climate Change in Loans and Project Documentation

Project appraisals and other documentation indicate the extent to which climate change considerations are actually included in the Bank's loans. A review of publicly available documents for the World Bank's energy sector lending from 2000 to 2004 assessed whether project documents accounted for GHG emissions, identified alternative approaches that might reduce emissions, considered incremental cost and financing issues for addressing climate change impacts of projects, or included specific indicators tied to climate change considerations. This review reveals that there is very little systematic incorporation of climate change issues in World Bank lending in the energy sector (*see Figure 2*).[32]

For example, the World Bank's South African Power Market Project (US$178 million of funding) Appraisal Document makes no mention of climate change, even though it makes reference to South Africa's cheap coal reserves as a source of regional electricity in the context of a power exchange system.[33] The Bank proposes to invest in transmission and distribution, which will be associated with limited direct emissions, but the goal of the project is to create an enabling environment for private investment in generation in

FIGURE 2 Volume of Wold Bank Lending that Does Not Consider Climate Change



Note: These figures are based on a desk review of publicly available documents on the World Bank's website for approved IDA and IBRD projects in the energy sector between 2000-2005. Projects that integrate climate change" meet more than one of the specified criteria. Full details on projects reviewed and the criteria used for assessment are included as an Annex

Southern Africa, which could lead to significant GHG emissions.

In large-scale sector reform (loans which tend to represent the largest volume of financial support) and assistance projects in the energy sector, climate change issues were generally not noted at all or were given limited acknowledgement. The Project Information Documents for a 2002 loan of $454 million for energy sector reform in Brazil, for example, made no mention of associated climate change considerations.[34]

Systematic consideration of climate change issues in project documentation improved in 2004, suggesting an increasing understanding of the challenges of integrating climate change into sector activities (*see Table 2*). Co-financing from the Global Environment Facility and the Prototype Carbon Fund seems to facilitate this trend by forcing more explicit attention to climate change issues.

Accounting for GHG Emissions

Alternative technology paths that would reduce GHG emissions may often be associated with significant incremental costs. These costs may be particularly high for renewable energy options: the World Bank estimates that for renewables to account for 15% of electricity capacity additions, there would be an incremental cost to developing countries of about $7 billion per year.[35] But for many options — particularly energy efficiency options — incremental costs can be quite low and in fact contribute to substantial cost savings. In addition, innovative approaches to renewable energy may involve higher capital costs for energy generation but can often allow substantial savings in distribution costs. As discussed above, developing countries have demonstrated significant interest in exploring renewable energy options and have begun implementing policy frameworks that promote renewable energy.

But without a systematic and transparent framework to account for and assess options to reduce GHG emissions, it is impossible to fully understand the incremental costs in question. While GHG accounting is a fairly new area of work, the experience of companies that have begun to manage comprehensive GHG inventories demonstrates that this accounting helps identify cost-effective opportunities to reduce emissions.[36] What gets measured can be managed: transparent GHG accounting would facilitate more accurate assessments of the incremental costs associated with reducing emissions. Such accounting could in turn help project managers and MDB clients find ways to meet these incremental costs and make better use of specialized funding for GHG mitigation.

TABLE 2 Percentage of World Bank Energy Lending by Volume that Does Not Consider Climate

2000	81
2001	88
2002	87
2003	90
2004	72
Average	84

This policy brief is released as both the International Finance Corporation of the World Bank Group and the Inter-American Development Bank revise their overall environmental and social policies.[37] The standards that MDBs adopt for climate change will influence the private sector. For example, private banks that have signed on to the "Equator Principles" (*see Box 4*) may adopt the IFC's revised environmental policies and standards. Despite the broad enabling context for action established in the Climate Convention,[38] MDBs have demonstrated a reluctance to implement measures that systematically integrate climate change concerns and alternative technology paths into their lending operations and policy advice. A new generation of MDB measures to address climate change is therefore urgently needed.

BOX 4 The Equator Principles

The Equator Principles are a voluntary statement of private-sector banks' intent to adopt and implement the environmental and social policies of the International Finance Corporation, the private-sector lending arm of the World Bank Group, for project finance in emerging markets where the total project cost is at least US$50 million. The 28 signatory financial institutions to the Equator Principles provided more than $55.1 billion in project finance in 2003 alone, representing 75% of a $73.5 billion project-loan market volume. The numbers of financiers and dollars leveraged by these private banks continue to grow on a monthly basis. Signatories include ABN AMRO, Citigroup, HSBC Group and Credit Suisse Group.

Some of these private banks have demonstrated an inclination to systematically take on GHG mitigation in their financing. For example, JP Morgan recently committed to work with clients to develop new financial products that facilitate emissions reductions, conduct research into the financial implications of the rising cost of carbon, and deploy investment capital to businesses that reduce or mitigate greenhouse gases.

Source: http://www.Equator-Principles.org, http://www.jpmorganchase.com

Conclusions and Recommendations: Mainstreaming Climate Change

Through their lending and policy advice MDBs are well placed to help developing country clients consider upstream options that might mitigate climate change. The MDBs have had substantial experience implementing specialized projects addressing climate change and have technical expertise in this area. If MDBs were to identify the additional costs of financing GHG reductions, they could help mobilize the international community to finance these costs. But despite the enabling language of the Climate Convention and increasing urgency of the consequences of global climate change, MDBs do not systematically integrate climate change concerns into their operations. Over 80 percent of World Bank's publicly disclosed lending in the energy sector from 2000 to 2004 did not consider climate change issues in project appraisals and documentation. (*See Figure 2 and Table 2*).

Under the Climate Convention, developing countries have agreed to explore options to reduce emissions. The Convention also calls on the international community and international organizations such as MDBs to support developing countries in achieving this goal. Through their technical assistance, policy advice, and support for project implementation, MDBs can support developing countries in assessing their options to address climate impacts alongside options to maximize the economic development impacts of projects. This mandate should not be construed as license for the MDBs to impose a form of "green conditionality" on clients to enforce developing country climate commitments, nor that developing countries should be forced to reduce emissions at the expense of meeting economic development needs.

Instead, MDBs must recognize the relevance of climate change issues in their strategies and operations because of their integral importance to environmentally sustainable economic development. MDBs, with support from the international donor community, should therefore:

- *Revise guidelines for country and sector strategies to explicitly integrate climate change considerations.* Country Strategies need to note which sectors will impact climate change. Ensuing discussions of related activities should consider options to reduce GHG emissions (such as efficiency measures and best technology options). This integration must be approached with caution, without locking client countries into prescribed policy or technology choices, but broadening the range of choices available so as to deliberately identify opportunities to mainstream climate change. Strategies should also consider options for financing incremental costs that might be associated with reducing climate impacts. In this vein, strategies could consider options to work with and support local capacity -- particularly in the private sector -- to reduce GHG emissions, especially in the context of renewable energy and efficiency. Country strategies also need to include specific indicators or planned outcomes for mitigation or adaptation to climate change. Climate change mitigation should be linked to economic considerations in country strategies rather than be included as an afterthought.

- *Develop a Greenhouse Gas Accounting and Options Analysis framework.* Current practice at the MDBs does not assess options or identify the costs of less-carbon-intensive paths in a systematic manner. MDBs need to adopt rigorous and transparent GHG emissions accounting methodologies and an analytic framework to assess alternative options that might reduce carbon emissions (*see Box 5*). Options to cut the "emission costs" of development projects need to be considered in the same way as are options to minimize financial costs. Just as the least financial cost option may not always be the best choice, the least carbon-intensive options may not always be best suited to meet development goals. Nevertheless, project implementers should explore options to meet any additional project costs through funding from special carbon funds, the GEF, or other sources.

- *Integrate this GHG Analysis framework into operations in key sectors.* The GHG Accounting and Options Analysis tools recommended should be immediately integrated into energy and power sector operations. MDBs should also invest in adopting similar approaches for the transport, agriculture, and forestry sectors, which involve GHG intensive inputs and have important implications for land use.

BOX 5 Developing a GHG Options Analysis Framework

An assessment of alternative options for a proposed project should account for direct and indirect GHG emissions. It would identify and analyze alternative approaches to achieving project objectives that might significantly reduce emissions, including alternative technology paths, and would include a full financial and economic analysis of these options. In the case of power-sector projects, least-cost power models could be supplemented with analyses of less-carbon- intensive approaches (such as alternative technologies and efficiency enhancements) to deliver the same or improved services.

MDBs should also encourage clients to consider alternative business models that might facilitate such projects, such as working with the private sector to build markets for renewable energy or helping establish green-energy service companies.

It is also important for client countries to be fully engaged in developing and applying this framework, and for the assessments and accounts be transparent. Citizens in client countries need access to this information so that they are informed about the choices that can and are being made in reaching their national economic development goals.

- *Initiate pilot work to reduce GHG emissions at the sector level in partnership with interested client countries.* MDBs should pursue opportunities for pilot implementation of this GHG Accounting and Options Analysis framework at the sector level in partnership with targeted client countries. Many clients have established an interest in addressing climate change issues in their economic development strategies, particularly in the context of developing renewable energy capacity. The MDBs can mobilize technical assistance and investment to work with these client governments and private-sector actors to implement exemplary pilot programs that address climate change at a sector level.

To support the MDBs in undertaking these measures:

- *Developed countries should support the costs of GHG accounting and options assessments.* The additional costs of project development should be supported by developed countries as part of their obligations to help developing countries meet incremental costs associated with reducing GHG emissions under the Climate Convention and Kyoto Protocol.

In selected cases, MDBs have already implemented many of the recommendations of this policy brief. These best practices need to become standard practice. MDBs can play an invaluable role investing in the analytical work to present developing country clients with options to reduce emissions. They can identify the financial gap between "business as usual" and business that integrates climate change considerations. MDBs can also help mobilize the international community to finance this gap so that client countries can choose the most climate-friendly economic development path. In order to meet these critical functions, MDBs must mainstream climate change considerations into their sustainable development and poverty reduction efforts.

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NOTES

1. Multilateral Development Banks not surveyed in this report include the Asian Development Bank and the African Development Bank. The explicit focus of this policy brief is on reduction of GHG emissions. It does not address the important challenges of vulnerability and adaptation to climate change.
2. This section draws on J. Houghton et al., eds., *Climate Change 2001: The Scientific Basis*. Contribution of Working Group I to the Third Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) (Cambridge: Cambridge University Press, 2001) and J. McCarthy *et al.*, eds., *Climate Change 2001: Impacts, Adaptation and Vulnerability*. Contribution of Working Group II to the Third Assessment Report of the IPCC (Cambridge: Cambridge University Press, 2001). Prospective Outlook on Long-term Energy Systems (POLES) is a world simulation model for the energy sector, developed by the European Commission (European Commission, *World Energy, Technology and Climate Policy Outlook: WETO 2030* (Directorate-General for Research Energy, EUR20366, 2003).
3. World Bank. "Thematic Knowledge: Climate Change," available at http://www4.worldbank.org/legal/legen_int/legen_climate.html (citing IPCC studies).
4. K. Baumert and J. Pershing. *Climate Data: Insights and Observations* (Washington, DC: Pew Center on Global Climate Change, 2004), pp. 15-16, relying on data from the U.S. Energy Information Administation (EIA) and Prospective Outlook on Long-term Energy Systems (POLES).
5. United Nations Framework Convention on Climate Change, opened for signature June 4, 1992, 1771 U.N.T.S. 164, 31 I.L.M. 849 (1992) (entered into force Mar. 21, 1994) [hereinafter Climate Convention or UNFCCC].
6. "UNFCCC: Status of Ratification" (last modified May 24, 2004), available at http://unfccc.int/files/essential_background/convention/status_of_ratification/application/pdf/ratlist.pdf. The only non-Parties are Brunei, Iraq, and Somalia.
7. UNFCCC, Art. 4, ¶ 1(b)(c) and (e). Art. 4, ¶ 1(b) states that "all Parties shall "[f]ormulate, implement, publish and regularly update national … programmes containing measures to mitigate climate change…"
8. Kyoto Protocol, Art. 10(b)(i).
9. UNFCCC, Art. 3, ¶ 4.
10. Kyoto Protocol, Art. 10, chapeau.
11. Bonn Conference 2004, International Action Program (June, 2004). Available online: http://www.renewables2004.de/pdf/List_of_Actions_and_Commitments.pdf.
12. China Renewable Energy Law 2005. Available online: http://www.reeep.org/index.cfm?articleid=1091
13. Bonn Conference 2004, "International Action Programme – China Formulating National Renewable Energy Development Strategy and Plan (NREDSP)" (June, 2004), p 43 Available online: http://www.renewables2004.de/pdf/International_Action_Programme.pdf.
14. Ibid, p 36.
15. India National Electricity Policy. Available online: http://powermin.nic.in/whats_new/national_electricity_policy.htm
16. International Energy Agency, *World Energy Outlook 2004* (Paris, 2004).
17. UNFCCC, Art. 4, ¶ 7.
18. UNFCCC, Art. 4, ¶ 3.
19. UNFCCC, Art. 4, ¶ 3 (stating that the developed country Parties shall provide "financial resources, including for the transfer of technology, needed by the developing country Parties to meet the agreed full incremental costs of implementing" their obligations).
20. This amount includes full- and medium- sized projects. *Implementation of Decisions 12/CP.2 and 12/CP.3: Determination of Funding for the Implementation of the Convention,* at ¶ 5(b). UNFCCC Doc. FCCC/SBI/2004/6 (Apr. 6, 2004), available at http://unfccc.int/resource/docs/2004/sbi/06.pdf.
21. In addition, to the three main areas of activity discussed in this section, the World Bank recently completed work on a pilot screening toolkit to help project implementers assess the vulnerability of development projects to global climate change. The Bank's policy on adaptation focuses on reducing vulnerability through the implementation of "no regrets" measures and coordination with its Disaster Management Facility. There have been calls from within the Bank, however, for the institution to exercise greater leadership on this matter.
22. Kyoto Protocol, Art. 12, ¶ 2.
23. "Carbon Finance at the World Bank," at http://carbonfinance.org.
24. More information on the Greenhouse Gas Protocol Initiative can be found at: http://www.ghgprotocol.org.
25. This is pursuant to the Reporting and Accountability section of EBRD's Environmental Policy and consistent with the EBRD's Public Information Policy.
26. Interview with IFC Staff, March 2005.
27. For example, WRI research has demonstrated that environmental considerations have played almost no role in the design of electricity sector reform efforts. See Navroz Dubash, *Power Politics - Equity and Environment in Power Sector Reform* (Washington, DC: WRI, 2002).
28. The IBRD lends to credit-worthy governments; while it has developed a range of lending products, its loans generally consist of investment lending for specific projects and "development policy lending" linked to structural or policy reforms to be undertaken by the borrower. The IDA – the Bank's "concessional" lending arm – provides funding to the poorest member governments of the World Bank.
29. World Bank, Operational Mannual-BP 2.11—Annex A (January 1995). Available Online: http://wbln0018.worldbank.org/Institutional/Manuals/ OpManual.nsf/ea5916efc9250d10852
30. However, a more detailed plan for energy sector investments is planned for 2006, so these issues are not dealt with in depth in the CAS.
31. World Bank, *Fuel for Thought – An Environment Strategy for the Energy Sector*(2000), p 60.
32. Based on a review of publicly disclosed IBRD and IDA loan documents available on the World Bank website (May 2005). The details of this review are available as an Annex to this paper online at http://www.wri.org/iffe.
33. World Bank Project Appraisal Document, South Africa Power Pool Project, 2003. http://wwwds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2003/09/23/000094946_0309060404042/Rendered/PDF/multi0page.pdf. This project uses funds from the International Development Agency arm of the World Bank Group.
34. World Bank, Brazil Energy Sector Reform Loan Project Information Document 10911 (2002). Available online: http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2002/02/08/000094946_02020804011691/Rendered/PDF/multi0page.pdf .
35. Jamal Sahgir, "World Bank Renewable Energy and Energy Efficiency Finance and Policy Forum – World Bank Energy Week", 11 March 2005. Available online: http://www.worldbank.org/energy/energy-week2005/pdfs/JamalFPNWrapUp.pdf.
36. World Business Council for Sustainable Development / World Resources Institute, *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, revised edition* (March 2004).
37. IFC is developing a set of "Performance Standards" to be complemented by Implementation Guidance Notes. The Performance Standards are currently scheduled to come into effect on January 1, 2006. The IDB's Environment Policy is the first set of policies prepared by the Bank since 1979.
38. The Convention on Climate Change sets an overall framework for intergovernmental efforts to tackle the challenge posed by climate change. See http://unfccc.int/2860.php.

About WRI

The World Resources Institute is an environmental think tank that goes beyond research to create practical ways to protect the Earth and improve people's lives. Our mission is to move human society to live in ways that protect Earth's environment for current and future generations. Our program meets global challenges by using knowledge to catalyze public and private action:

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