

# Fuelling contradictions

## The World Bank's energy lending and climate change



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The World Bank's<sup>1</sup> energy and infrastructure lending is undermining its credibility as an institution committed to combating the impacts of climate change for the world's poor, and its attempts to play a central role in managing global climate funds. This paper examines recent World Bank lending to energy and energy-related infrastructure, including in response to the economic crisis.

It finds three areas of continuing concern.

**First**, fossil fuel lending continues to play a dominant role in the World Bank's overall energy portfolio, despite recent increases in lending for new renewables and energy efficiency. This trend has been under-reported by the Bank due to problems with its classification of energy projects and lack of transparency.

**Second**, the Bank continues to make significant and growing investments in coal-fired power plants, locking developing countries into coal-based energy for decades to come.

**Finally**, by promoting large-scale and export-oriented energy models, the Bank is engaged in some extremely problematic projects including large coal power plants, rather than supporting projects which are more directly related to its core mandate of reducing poverty and helping the 1.5 billion people without access to energy.

## Background

In 2008, the Bank adopted a 'Strategic Framework on Development and Climate Change' and approved the creation of the Climate Investment Funds (CIFs),<sup>2</sup> which have subsequently received over \$6 billion in donor country commitments. The CIFs are designed as an interim global climate change financing mechanism pending agreement on a post-2012 international climate change regime. To further demonstrate its commitment to fight climate change, the World Bank's new climate change-dedicated web portal states:

*Climate change is expected to hit developing countries the hardest...At stake are recent gains in the fight against poverty, hunger and disease, and the lives and livelihoods of billions of people in developing countries...Addressing this challenge is part of [the World Bank Group's] core mandate of helping countries deal with poverty and move towards economic prosperity.<sup>3</sup>*

While the Bank has been eager to highlight successes and lessons learned from the CIFs and often calls attention to its climate change framework, its lending portfolio, of which energy constitutes the largest sector, consistently undermines climate efforts. Not only does this have an immediate impact through the Bank's lending, but it sets precedents for other lenders as the Bank leverages \$4 for every \$1 of finance it provides, according to its own estimates.<sup>4</sup>

## Fossil fuel addiction

Finally responding to years of civil society pressure, the Bank has substantially increased financing for new renewable energy<sup>5</sup> and energy efficiency in recent years. However, Bank lending to fossil fuels is still greater than new renewable energy and energy efficiency combined, \$7.3 billion<sup>6</sup> compared with \$5.3 billion respectively for fiscal years (FY)<sup>7</sup> 2007 to 2009.<sup>8</sup> Over the same time period, fossil fuels maintained a 49% share of Bank lending by energy source, with new renewable energy at 15%, energy efficiency at 20%, and large hydropower at 16%.<sup>9</sup> In fact, fossil fuels' overall financing is actually likely to be larger than reported in these figures and renewables are likely to be smaller due to inaccurate reporting by the Bank (see below).

Moreover, the Bank's recent heavy emphasis on coal is an alarming trend. From FY2007 to the present, the World Bank Group has provided \$6.6 billion for coal-based energy development and added over 9,800 MW<sup>10</sup> in new coal-generation capacity in middle-income countries such as Chile, India, and South Africa. This ensures these countries have a significant commitment to coal for the next 40 to 50 years.

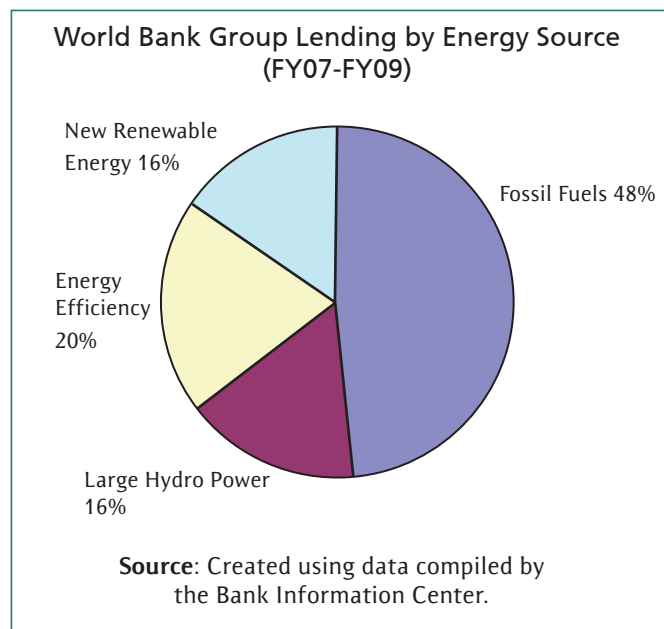
## Under-reporting of fossil fuels

The Bank's funding is even more heavily weighted in favour of fossil fuels than reported because the World Bank does not provide accurate accounting for fossil fuel development through related infrastructure, policy lending, and financial intermediaries.

A review of projects from July 2008 to present reveals over \$1.5 billion<sup>11</sup> linked to fossil fuel-related infrastructure and policy lending in excess of what the Bank has reported. For example, the Bank provided \$1 billion<sup>12</sup> to India for the Fifth Power System Development Project. This project's primary activity is to enhance the energy transmission network in order to handle large

bulk power transfers from two newly commissioned mega thermal coal plants, Sasan and Tata Mundra.<sup>13</sup> In other words, this is financing the infrastructure necessary to utilise the large-scale coal plants.

In another example, the Bank provided a \$77 million development policy loan to Cote d'Ivoire for the Governance and Institutional Development project. In addition to "strengthening public financial management", the project's policy goals include "ability to attract new investment into the petroleum sector." Both of these projects, and others like them, simply fall under the Bank's "other energy" category even though advancing fossil fuel development is a primary or partial focus.



In addition, fossil fuel investments are also taking place through financial intermediaries (FIs). FI operations represent a substantial portion of Bank funding comprising over 40% of investments by the International Finance Corporation (IFC), the Bank's private sector lending arm.<sup>14</sup> In an FI arrangement, the Bank provides loans or equity financing to an entity such as a local commercial bank, a private equity fund, or a special government-managed fund, such as an infrastructure development fund. The FI disburses the World Bank's

funds to various private companies and investment projects. Each FI has a portfolio of projects that are considered World Bank/IFC-supported sub-projects. However, unlike direct Bank project investments, there is no information publicly available on these individual sub-project investments, making it difficult to track what ultimately happens to FI funding. Therefore, Bank policy lending and FI operations raise many questions about the overall transparency and accountability of the Bank's energy figures and reporting methods.

A review of project documents from January 2007 to the present reveals that over \$4 billion in investments taking place through FIs had portfolios targeting energy development. Some FIs had portfolios consisting of between 10% and over 50% of investments in the

energy sector.<sup>15</sup> Other FIs specified potential investments in oil and gas pipelines<sup>16</sup> as well as other fossil fuel-based projects. For many FIs, there is simply no information on potential investments. Although it is not known how much of the \$4 billion relates to fossil fuel development, it is clear that FIs represent a substantial pathway for fossil fuel investment that is not being accounted for by the Bank in its annual energy sector figures. Moreover, these fossil fuel investments are essential in assessing the climate and environmental footprint of the institution.

In contrast, the World Bank's annual energy figures specifically capture policy lending and FIs that are targeted at new renewable energy and energy efficiency – ensuring the Bank gets credit for climate-progressive activities without equal reporting of climate-destructive activities. A review of Bank investments revealed that in FY08 and FY09 approximately 20% of reported new renewable energy and energy efficiency funding went through FIs. However, without detailed reporting, it is unclear what projects were ultimately financed through the FIs.

Finally, while the Bank has set ambitious targets in 2008 to increase its renewable and energy efficiency share of its energy portfolio to more than 50% in 2011, a closer look at Bank figures indicates more modest advances than reported. Looking at results presented for 2009, more than half of what is reported relates to energy efficiency of fossil fuels. Furthermore, the greater part of renewable energy programs are funded by specific donor funds, such as the Climate Investment Funds, and are not a structural part of the Bank's energy lending, contrary to reporting.<sup>17</sup>

## Financial crisis and coal

Before the financial crisis, the Bank's rationale for supporting socially and environmentally controversial projects was often that the project would go ahead with or without Bank involvement and that with Bank assistance, at least the project would be improved by application of Bank standards. With the onset of the financial crisis, the opportunistic World Bank has reversed its logic, claiming that "stranded" projects, including controversial ones, need Bank finance because access to other forms of financing is now not available.

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The Bank has specifically emphasized the need to ensure continued support for developing countries' energy sectors during the crisis, as energy plays a critical role in economic growth. However, what this amounts to in some cases is the Bank providing a bailout package for fossil fuel projects that did not follow good financial due diligence. Moreover, in most cases the Bank does not provide any evidence that the aim of bailing out such troubled fossil fuel projects is for the benefit of the poor, instead relying on a theoretical trickle down of benefits.

For example, the IBRD is providing nearly \$2 billion to the India Infrastructure Finance Company Limited (IIFCL). According to Bank project documents, 53% of the IIFCL is comprised of power/energy infrastructure investments. The World Bank has "identified" <sup>18</sup> projects in the roads and power/energy sectors that were running into difficulties due to the financial crisis." Although the Bank again does not provide information to determine the specific sub-projects, it is very likely that several of the rescued India energy sector projects involve fossil fuels. Typically, when renewable energy and energy efficiency-related operations are involved, the Bank makes a point of highlighting them.

Most notably, in April this year the Bank approved a \$3.75 billion loan to Eskom, the South African state-owned electricity utility. The bulk of the loan (\$3.05 billion) is for the construction of the Medupi coal-fired mega power plant (4,764 MW). Eskom did not approach the World Bank for financing until the onset of the financial crisis as funding sources became more limited and more expensive.

However, by this time Medupi had already been under construction for a year and a half and procurement was 95% completed, which meant the project was in violation of the World Bank's procurement policy. This also meant that the Bank was not actively engaged in the project from its inception. Thus, the "added value" of Bank financing in terms of improving standards and providing technical expertise is extremely low.

Most importantly, many local South African groups have challenged the project because it will substantially contribute to climate change and to local environmental degradation while failing to provide affordable power for low-income consumers in South Africa.<sup>18</sup> Eskom will be raising electricity tariffs by 25% for each of the

next three years, in part to pay for Medupi. Household consumers, including low-income, will bear most of this cost as several large industrial consumers, which will consume the lion's share of the energy produced by the project, are protected from the rate hikes by confidential Special Purchase Agreements.<sup>19</sup>

The Bank argues that without this loan the South African economy would suffer dire consequences. However, the Bloomberg wire service quoted the South African Minister of Finance as emphasising that the country would cope without Bank finance and that the loan is an opportunity for the Bank to re-engage with South Africa for the first time in 16 years since the abolition of apartheid. When asked about how the loan will benefit South Africa, particularly with respect to the amount of electricity produced by Medupi for low-income consumers, the Bank says it is too difficult to estimate. In addition, the Bank loan does not finance any new electricity connections for those not on the grid.

Meanwhile, the Bank boasts that it is providing the cheapest financing available on the international market to this mega-coal operation. Instead of rewarding a financially troubled coal project with low interest rates, the Bank should be using its financial leverage to provide the finance necessary to close the gap between conventional and renewable/low carbon alternatives. For example, Eskom is sitting on substantial applications for grid connections for wind power projects, including 4 GW by 2013.<sup>20</sup> The Bank loan does include \$260 million to support a wind farm and a concentrated solar power plant of 100 MW each. However, the carbon dioxide savings that will be attributable to these renewable projects will be modest by comparison to the emissions of Medupi, at 25 million tonnes of carbon dioxide per year. Instead of advancing wind power to its full capacity in South Africa, the Bank is providing one of the institution's largest loans ever to what will become one of the world's biggest emitters of carbon dioxide.

The Eskom project has been one of the most divisive projects in the Bank's history, sparking debate among large donor countries. Five executive directors abstained from the vote, including the US, UK, and Italy.<sup>21</sup> Among several reasons for abstaining, the US stated "... concerns about the climate impact of the project and its incompatibility with the World Bank's commitment to be

a leader in climate change mitigation and adaptation."<sup>22</sup> The Bank is right to recognize South Africa's energy needs, however limited publicly-backed resources should be used in innovative ways that reduce poverty and provide access to clean energy, while facilitating the transition to low-carbon energy that might be out of reach without support from a public institution.

## Promoting large-scale and export-oriented energy

In addition to individual energy projects, the World Bank is actively involved in assisting and encouraging the development of regional power transmission and trade networks. Regional power integration initiatives that the Bank is involved in at various stages – from concept stage to construction to management – are located mainly in sub-Saharan Africa, northern Africa, Central Asia and South Asia.<sup>23</sup>

The World Bank is supporting regional power networks to set up energy trading systems that will move electricity to locations where it is "most needed". Surprisingly, for a public institution mandated to fight poverty, "most needed" does not typically refer to the country with the largest population without access to energy. Rather, it often means the country with

the largest industrial demand, including multi-national energy-intensive industries taking advantage of cheap energy rates.

For example, in the case of the Southern Africa Power Pool (SAPP), the Bank's energy priorities take the following form:

"While the lion's share of new [energy] load [in the region] is projected in South Africa, some of the most attractive potential generation projects, from an economic and environmental point of view, are mega-projects located in neighbouring countries – including Mozambique - where domestic demand is too small to justify the cost of the large projects unless a significant portion of the output is exported."<sup>24</sup>

The World Bank has been supporting the development of these regional power trading systems at least since mid-2000, with many related project investments in the pipeline, including high power transmission lines, interconnector grids, coal power generation, and large hydropower projects. There is no indication that these large-scale, export-oriented projects aim to provide access to energy for poor households, many of which are located off-grid and would be better served by small-scale decentralized energy solutions. With export-oriented energy projects, new household connections typically only take place in city centres close to existing or planned large-scale electricity grids. Given only 8% of the population in Mozambique has access to energy,<sup>25</sup> it could be argued that promoting export-oriented energy systems is not the best use of World Bank assistance to address the energy needs of the poor.

It is important to note that in some countries where the Bank is supporting regional power trade, the Bank also has projects underway or proposed to address some of the local population's needs, including operations involving renewable energy and energy efficiency. However, often the scale of these projects is modest compared to the number of people needing energy access and there is often no indication of longer-term Bank assistance for addressing the significant number of poor people still left without access to energy.

As indicated, these regional power trade networks are dependent on large-scale infrastructure and mega feed-in generation projects, mainly fossil fuel-based power or large hydropower. For Southern Africa, it involves the commissioning of several new mega coal power plants, which makes it difficult to understand how the Bank is prioritising environmental and climate considerations in its lending. For example, Mozambique has identified five new large-scale electricity projects for regional trade, including: combined gas (500 MW), coal generation plants (1,200 MW and 1,000 MW), and hydropower (1,500 MW and 1,000 MW). Moreover, these regional power trading systems are not being designed in an innovative manner to take advantage of potential new renewable energy projects, such as power line infrastructure near sites where potential wind or concentrated solar power would be located. The export-oriented energy infrastructure system promoted by the Bank in these cases largely locks countries into mega fossil fuel generation and large hydropower projects for the next 20 to 50 years, while failing to address the energy needs of the large majority of the population in developing countries.



## Climate Bank or Coal Bank?

The World Bank's attempts to expand its reach and play a central role in climate finance are severely undermined by the energy lending trends identified in this paper. Instead of adhering to its core mission to fight poverty and its stated concern for climate change, the Bank is too often eager to find ways to rationalise its continued support for large-scale fossil fuel projects, particularly coal in middle-income countries. In addition, through inaccurate project categorisation and opaque reporting methods, the Bank is not accountable for its true contribution to the causes of climate change. In light of these findings, the best role for the World Bank in energy lending is one which closely adheres to the Bank's mission to fight poverty. This would mean three key changes to the Bank's approach.

First, given that climate change will most severely affect the poorest people and the poorest countries, potentially reversing decades of development and poverty reduction achievements, the Bank should rapidly phase out its investments in fossil fuel extraction and energy production. Instead, it should help countries make the transition to low-carbon energy production, which would include supporting alternative, small-scale, decentralized energy options, taking into consideration the needs of the local communities and the economic realities of different countries.

Second, it must demonstrate that each of its energy sector investments ensures direct energy benefits to the poor, providing access to those who do not have it, particularly in rural and off-grid areas. Every energy sector project the World Bank funds should therefore set specific targets and monitoring guidelines to ensure that energy lending will benefit the poor, taking into account gender, ethnicity and rural-urban divides, among other factors.

Third, the institution should introduce full life cycle accounting of projects comprehensively considering and publicly disclosing the costs of greenhouse gas emissions related to its lending portfolio. It should implement accurate and transparent reporting methods and classification of energy and infrastructure sector operations, including other related investments, for example through financial intermediaries. To ensure accuracy and maintain confidence in these figures, they should be independently verified. Furthermore, reporting of renewable energy figures should truly reflect World Bank spending, rather than taking credit for specific donor funds currently channelled through the Bank, such as the Climate Investment Funds.

The needs of the 1.5 billion people without access to modern energy sources must urgently be addressed at the same time that the world rapidly transitions to low-carbon sources of energy. Too often through continued promotion of large-scale, fossil fuel solutions, the Bank remains part of the problem. It is time for it to become part of the solution.

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## Endnotes

- 1 In this document, World Bank refers to the World Bank Group unless otherwise specified. This includes assistance provided to low-income countries through the International Development Association (IDA), to middle-income countries through the International Bank for Reconstruction and Development (IBRD), and to the private sector through the International Finance Corporation (IFC) and Multilateral Investment Guarantee Agency (MIGA).
- 2 The World Bank serves as the secretariat for the Climate Investment Funds. The CIFs are not structurally a part of the World Bank and funds have been specifically contributed to them by donors.
- 3 <http://beta.worldbank.org/climatechange/> as viewed on April 13, 2010.
- 4 Saghir, Jamal. "World Bank Group: Toward a new energy strategy". Presentation given April 12, 2010. London.
- 5 New renewable energy excludes large hydropower projects, defined by the World Bank as larger than 10 MW.
- 6 To remain consistent, the IFC CTA - Central Termoelectrica Andino project loan to Chile in the amount of \$740 million is added to the FY2008 figures obtained from the Bank Information Center (see endnote viii) because it was approved in FY2008. BIC data currently have the project in FY2010 because the loan agreement was not signed until December 2009.
- 7 The World Bank's fiscal year runs from July 1 to June 30.
- 8 Bank Information Center, 2009. World Bank Group Energy Sector Lending Trends – FY 2009. December 2009. <http://www.bicusa.org/en/Issue.Resources.48.aspx> Data on World Bank Group energy sector lending are collected by BIC through reviewing individual project documents available on the World Bank and IFC websites. Lending figures are assigned to the fiscal year in which the project received Board approval. For more details on BIC's methodology on energy sector data please see: Mainhardt-Gibbs, Heike, 2009. World Bank energy sector lending: encouraging the world's addiction to fossil fuels. Bank Information Center, February 2009. <http://www.bicusa.org/en/Article.11033.aspx>
- 9 *Ibid.*
- 10 Watts (W) are a measuring unit for power/electricity. Based on the average US household electricity consumption, one megawatt of generation capacity can roughly power 1,000 homes.
- 11 This 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.
- 12 This represents the total amount of World Bank financing for the operation, which does not go only to support the coal-related infrastructure. However, the Bank project document states that the primary activity is the high power transmission lines and did not indicate a specific breakdown of financing for secondary activities. It should be noted that this funding for coal is accounted for in the coal figure for FY2007 to present stated in the text.
- 13 The Tata Mundra Ultra Mega Coal Power Plant project received a \$400 million loan from IFC in FY2008.
- 14 There is also significant use of FIs by IBRD and IDA, but no figure from the World Bank was available.
- 15 An example is IFC's Capital Alliance Private Equity Fund III Ltd. Project in the West Africa Region. Up to 40 percent of the \$500 million Fund is expected to invest in energy projects principally in Nigeria.
- 16 An example is IFC's India Infrastructure Fund project. The Fund specifies targeted investments in energy and utilities including oil and gas pipelines and import terminals.
- 17 Netherlands Ministry of Foreign Affairs. 2010. Position Paper: Promoting World Bank investments in renewable energy. March 2010
- 18 Earthlife, 2009. Sustainable Energy Briefing 18: Eskom's costs and tariffs. Earthlife-SECCP, South Africa. September 2009.
- 19 *Ibid.*
- 20 Mainstream Renewable Power, 2009. New study reveals South Africa has enough economically viable wind energy sites to meet over 70% of its current electricity demand. December 1, 2009. <http://www.mainstreamrp.com/pages/New-study-reveals-South-Africa-has-enough-economically-viable-wind-energy-sites-to-meet-over-70%25-of-its-current-electricity-demand.html>
- 21 Last November, the Eskom Medupi project already received a 2.81-billion-dollar loan from the African Development Bank. The US government also abstained from the AfDB vote. United States Treasury Department, 2009. USG Position on the African Development Bank's investment in ESKOM Medupi Coal Fired Power Project. November 25, 2009. [http://www.treas.gov/offices/international-affairs/multilateral\\_banks/enviromental\\_impacts.shtml](http://www.treas.gov/offices/international-affairs/multilateral_banks/enviromental_impacts.shtml)
- 22 United States Treasury Department, 2010. Treasury Department Statement on the U.S. Position on the World Bank's Eskom Investment Support Project. April 8, 2010. <http://www.ustreas.gov/press/releases/tg635.htm>
- 23 Regional power trading pools include: Southern Africa Power Pool (SAPP), West Africa Power Pool, East Africa Power Pool, Nile Basin, and Central Asia South Asia (CASA).
- 24 World Bank, 2008. Project Information Document: Concept Stage. Mozambique Regional Transmission Development Program APL Series, Phase 1. June 10, 2008.
- 25 *Ibid.*

