Multilateral Development Banks' unburnable carbon

SEPTEMBER 2014

The calls to divest from fossil fuels are getting louder in response to the growing scientific consensus that emissions of greenhouse gases are causing climate change.[1] Since 2011 the Carbon Tracker Initiative has argued that the majority of the world's fossil fuel resources are 'unburnable' if we want to limit global warming, and has warned that fossil fuel reserves held by companies listed on stock exchanges are heavily exposed to a potential carbon bubble (see box below).

The objective of this research is to identify which fossil fuel investments in private companies were present on the balance sheet of five key multilateral development banks (MDBs) as of end December 2013, to see to what extent their actions are consistent with their rhetoric that urgent action is needed to tackle climate change, and to assess their exposure to a potential carbon bubble where investments in fossil fuel companies could lose significant value.

The MDBs included in this study are: International Finance Corporation (IFC, the World Bank Group's private sector arm), Inter-American Development Bank (IDB), Asian Development Bank (ADB), European Investment Bank (EIB) and European Bank for Reconstruction and Development (EBRD). The MDBs are publicly backed banks mandated to promote economic development and in the cases of the IFC, IDB and ADB to also reduce poverty.

The official database of each bank was used to log all investments in a custom database of 179 projects worth $20 billion.[2] Fossil fuel investments in the last 10 to15 years were considered to be active (the time frame depends on average loan maturity of each MDB – see methodology, page 6).

MDBs fossil fuels investments exposed to the 'carbon bubble'

The majority of the world's fossil fuel reserves are 'unburnable' if we are to keep below 2°C of global warming. The MDBs are exposed to a potential 'carbon bubble' through their investments in fossil fuel companies that could be left with significant 'stranded assets'.

'Unburnable carbon': In a speech in 2013 Fatih Birol, Chief Economist at the International Energy Agency (IEA), said that around two-thirds of the world's proven fossil fuel reserves cannot be developed if we are to keep below 2°C of global warming[3] – the limit agreed by the world's governments in 2010.

Carbon Tracker's research focuses on how much 'unburnable carbon' there is on the world's capital markets. In 2011 Carbon Tracker, a non-profit financial think-tank, showed that the world had already used over a third of its 50-year carbon budget of 886 gigatons of carbon dioxide (GtCO_2), leaving 565 GtCO_2 that can't be burnt if we are to meet the 2°C target. Carbon Tracker estimated that all future resources that could be developed by private and public companies and governments are equivalent to 2,795 GtCO_2.

In 2013 Carbon Tracker found that an estimated $674 billion is invested annually in finding and developing more fossil fuels, and argued that 60-80% of coal, oil and gas reserves held by publicly listed companies were effectively 'unburnable'. To put these figures into context the IEA forecasts that up to $23 trillion will be invested in developing more fossil fuels up to 2035[4]. Around 90% of oil and gas reserves are held by governments.

Key findings

Key multilateral development banks (MDBs), such as the IFC, IDB, ADB, EIB and EBRD, say urgent action is needed to tackle climate change but continue to invest billions of dollars in oil, gas and coal projects. These projects include extraction, infrastructure, research and financing.

On 31 December 2013 the MDBs researched had around $20 billion active investments in 179 fossil fuel projects on their balance sheets.

The MDBs publicly backed investments in fossil fuels could be at risk if the 'carbon bubble' bursts.

The MDBs have $12.8 billion invested in publicly listed companies that already have access to capital markets (excluding the IDB).

Instead of backing small and medium energy companies to support infant renewable energy projects the MDBs favour established fossil fuel companies.

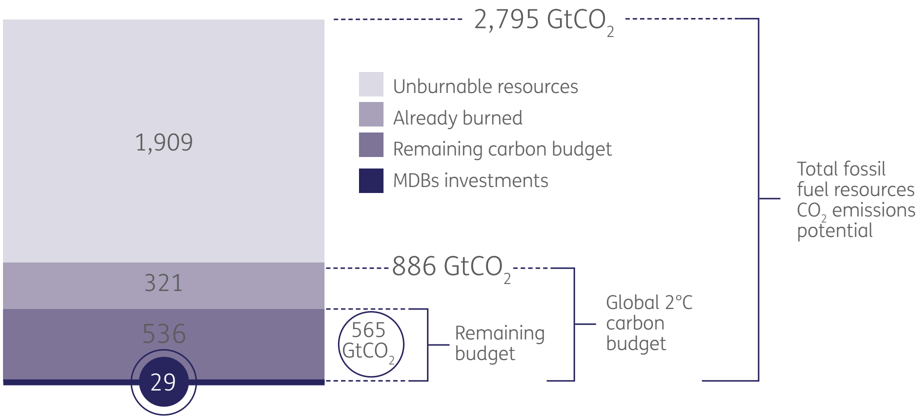
The MDBs' active fossil fuel investments have an estimated carbon potential of 29.3 gigatons of carbon dioxide (GtCO_2). This is equivalent to around 5% of the world's remaining carbon budget of 565 GtCO_2.

'Carbon bubble': The carbon bubble refers to investments in fossil fuels companies listed on stock exchanges that could be at risk if serious action is taken to limit greenhouse gas emissions. These investments could become 'stranded assets', leaving investors in fossil fuels facing heavy losses. Stranded assets are fuel energy and generation resources which, at some time prior to the end of their economic life, are no longer able to earn an economic return, as a result of changes in the market and regulatory environment associated with the transition to a low-carbon economy. Such a shift in the regulatory environment could take place at the United Nations Framework Convention on Climate Change conference of the parties in Paris in December 2015 (COP21), where governments are expected to agree a final binding international agreement to reduce greenhouse gas emissions. Economic and physical factors could also cause assets to become stranded.

It is difficult to accurately estimate how much of the researched MDBs' $20 billion in fossil fuel investments could become 'stranded assets'. One factor that makes projections difficult is the lack of project disclosure by the MDBs. For example, there is no information on how soon loans need to be repaid to the MDBs or how costly the projects are (see Carbon Tracker's 2014 report on carbon supply cost curves). Another challenge arises in predicting how the competition between coal, oil and gas will influence which fuel is more likely to be burnt – and therefore which fossil fuels will become 'unburnable' first.

The official average loan maturity for each bank was used to establish which investments were on the MDB balance sheet on 31 December 2013. These are: IFC (10 years), EIB (10 years), EBRD (15 years), ADB (15 years) and IDB (15 years). Some of the banks had longer average loan maturities (e.g. ADB – 32 years) but 15 years was taken as an upper limit for comparison purposes (see methodology, page 6). Out of the total $20 billion invested the EIB accounted for $11.2 billion and the IFC for $5.1 billion. The majority of investments were in gas and oil (see Table 1 and 2).

Graph 1: CO_2 potential of MDBs' fossil fuel investments in comparison with the global carbon budget (in $GtCO_2$)



MDBs positions on climate change

IFC: "The science is unequivocal: without ambitious climate action, the world could grow 4° C warmer within this century."

EIB: "Climate change is one of the most urgent challenges of this century. Consequences such as drought, flooding and extreme weather events are already being felt and threaten growth and development. A shift to a more resource efficient, climate resilient and low-carbon economy is needed."

EBRD: "Much of the region is also vulnerable to the impacts of climate change, such as water scarcity and extreme weather events. Providing climate finance for energy efficiency, renewable energy, climate change mitigation, climate adaptation and carbon finance projects is therefore a key strategic issue for the EBRD."

IDB: "Changes in climate during this century will have broad and deep impacts on human activities and ecosystems. Unless drastic and immediate action is taken, it is likely that a 2˚C rise in temperatures will occur by 2050."

ADB: "Meeting global demand for energy and natural resources is destabilizing our climate, and threatening the development and security of Asia and the Pacific."

Table 1: Investments by MDB

MDB	$ billions	Number of projects
IFC	5.12	80
IDB	0.28	10
EIB	11.23	40
EBRD	3.16	43
ADB	0.33	6
Total	20.12	179

Table 2: Investments by fossil fuel

Fossil fuel	$ billions	Number of projects
Oil	2.48	36
Gas	14.08	83
Oil/Gas	3.33	58
Coal	0.23	2
Total	20.12	179

MDBs and the global carbon budget: MDBs investments have a carbon potential of 29.3 $GtCO_2$ and are equivalent to around 5% of the world's remaining carbon budget. The carbon potential estimates potential emissions from proven recoverable reserves of fossil fuels. The carbon potential of MDB investments was calculated using the Potsdam Institute's methodology (see methodology, page 6).

Privileging fossil fuels: All five MDBs issue bonds to raise money on international capital markets.[5] The MDBs are in a privileged position because they are publicly-backed lenders and as a result benefit from a lower cost of capital. The backing from governments means these institutions hold triple-A credit ratings reflecting the assumption that if an MDB were to get into financial trouble its shareholder governments would intervene. The capital they receive from shareholding governments enables them to issue bonds to borrow more cheaply on capital markets. They currently choose to use this privilege to benefit the fossil fuel companies they invest in.

MDBs favour fossil fuel companies that already have access to capital

The majority of fossil fuel-related investments on the MDBs' balance sheets are in publicly listed fossil fuel companies that enjoy access to international capital markets: All five MDBs aim to use their funding to be catalysts to leverage higher levels of private sector investment to maximise their impact across all economic sectors. Rather than playing a catalytic role in leading private sector investments in renewable energy, the MDBs overwhelmingly follow mainstream investors and have invested $12.8 billion of the $20 billion in publicly listed fossil fuel companies (excluding the IDB). Carbon Tracker's 2013 report identified New York and London as stock markets with significant fossil fuel investments. Our research finds that out of the 91 MDB investments in publicly listed companies researched, over half (50) are in New York (New York Stock Exchange, NASDAQ) and London (London Stock Exchange, London International), suggesting a strong correlation between MDB investments and existing trends in fossil fuel investment.

MDBs fund large fossil fuel companies instead of renewable energy SMEs

Instead of investing in small and medium enterprises (SMEs) in developing countries the MDBs chose to invest $20 billion in established fossil fuel companies that have independent access to capital. The agreements establishing the MDBs clearly state that they will not provide financing to borrowers who could obtain finance elsewhere on reasonable terms.[6] However, there are no specific limits on investments in publicly listed companies. The absence of a monetary limit and the fact the MDBs are investing in publicly listed fossil fuel companies raise doubts about their commitment to support SMEs. The fossil fuel companies in this study who receive MDB investments are often larger than many private renewable energy companies that would benefit from scarce international development resources.

Example of MDB's articles of operations

"The Bank shall not undertake any financing, or provide any facilities, when the applicant is able to obtain sufficient financing or facilities elsewhere on terms and conditions that the Bank considers reasonable".

Agreement establishing the EBRD
Operating principles Article 13.7

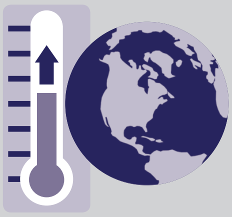
Repeat investments: instead of backing infant renewable energy the MDBs repeatedly favour the same fossil fuel companies: Our analysis shows the MDBs have several repeat investments in oil and gas, suggesting that instead of investing in infant renewable energy companies they choose to back fossil fuels. Out of the 179 projects reviewed in this study 57 (31%) were investments in companies that had previously received MDB financing (worth $6.6 billion out of the total $20 billion). Significantly these investments account for a carbon potential of 20.8 $GtCO_2$ which is 70% of the total in this sample (the total carbon potential of all MDB projects is 29.3 $GtCO_2$).

Multilateral development banks' unburnable carbon

Multilateral development banks are still investing in fossil fuels

MDBs: ● International Finance Corporation (World Bank Group) ● European Investment Bank ● Inter-American Development Bank ● European Bank for Reconstruction and Development ● Asian Development Bank.

The MDBs are publicly backed banks with mandates to promote economic development and reduce poverty.



Rhetoric MDBs' positions on climate change:
"Urgent action needed"

$20bn

Reality Currently have around $20 billion of active investments in fossil fuel companies*

*As of 31 December 2013. Estimate based on MDB fossil fuel investments in the last 10-15 years (time frame depends on average loan maturity of each MDB). See methodology for full details.

This research focuses on MDB investments in companies. Around 90% of oil and gas, and 75% coal reserves are held by governments.

Briefing, full methodology and data set:
http://www.brettonwoodsproject.org/2014/09/mdbsunburnablecarbon/

Majority of fossil fuels are unburnable

Unburnable carbon

80% of world's fossil fuel resources that could be developed can't be burnt if we are to keep below 2°C of global warming

The 2°C limit is widely seen as a key target to avoid dangerous climate change and was agreed on by the world's governments in 2010

The majority of fossil fuels could become unburnable due to changes in the market and regulatory environment, e.g. the world's governments could in 2015 agree to drastically reduce greenhouse gas emissions

Carbon bubble

Companies listed on stock exchanges are exposed to a potential carbon bubble because if the majority of fossil fuels are not burnt their investments could lose value

$12.8bn

MDB current exposure to the carbon bubble

MDBs have around $12.8 billion actively invested in fossil fuel companies listed on stock exchanges (excluding the IDB). These investments are in danger of losing value. As publicly-backed lenders the MDBs are potentially putting public funds at risk, and should immediately divest from fossil fuels.

A notable case is Lukoil subsidiaries operating in Azerbaijan and Russia which received EBRD investments of $530 million. Lukoil Holdings is one of the world's largest oil and gas companies, and is top of the 200 listed companies by estimated carbon reserves according to Carbon Tracker's 2011 report. Other examples are the Pan American Energy company that received $445 million through four investments from the IFC, and the Italian gas company SNAM that received $1 billion from EIB through four investments.

MDBs' investments in companies already financed by large energy multinationals: This again raises questions about the rationale for MDB investment in these cases, and the claims that MDBs are leveraging additional investment. It is evident that the private fossil fuel companies can raise their own financing given their existing shareholders.

An example is the Baku-Tbilisi-Ceyhan pipeline which since 2006 has transported millions of barrels of oil from Georgia to Turkey. EBRD funded the pipeline with a $150 million loan (approved in October 2003) and the IFC with $300 million in loans (approved in November 2003). Leading companies and shareholders already involved in the project included major oil companies such as BP, Statoil, ConcoPhillips and Eni. The project has been criticised for its environmental impact and caused controversy because affected communities did not always receive compensation for lost land and pollution, and were allegedly intimidated by security forces protecting the pipeline.[7]

Other examples include Comgas which received a $337 million loan from the IFC in 2004 (BG Group and Shell are shareholders) and the Irkutsk Oil Company – which counts investment bank Goldman Sachs as a shareholder – which received $131 million in two loans, and $170 million in equity investments from EBRD between 2008-2013.

Questionable additionality and leverage

The decision to continually invest in fossil fuel companies that have independent access to capital raises questions about the MDBs role in catalysing additional private sector investment, as well as whether they are truly committed to supporting renewable energy and combating climate change.

All of the MDBs claim to leverage additional finance.[8] For example, the IFC says its "additionality is the benefit or value addition we bring that a client would not otherwise have. Our additionality is a subset of our role that is unique to IFC and that cannot be filled by the client or any commercial financier".[9]

There are several problems associated with using public finance to catalyse private finance. They include disproportionate private sector influence, difficulties in assessing financial additionality, lack of transparency and absence of positive development impact.[10]

Subsidising unburnable carbon through the MDBs

International NGO Oil Change International shows in its report *Subsidising unburnable carbon* that the US, UK, Canada, France, Germany, Italy and Japan continue to allocate billions of dollars a year to fossil fuel exploration. Through the MDBs (the World Bank Group, EIB, EBRD and ADB) these countries funded around $380 million a year for exploration from 2010 to 2013.

Subsidising unburnable carbon: Taxpayers support for fossil fuel exploration in G7 nations, Oil Change International (2014)

Recommendations

Despite recognising the urgent need to combat climate change these five MDBs have invested $20 billion in oil, gas and coal in the last 15 years (10 years in the case of the IFC and EIB).

Divest from fossil fuels now

- The MDBs should act in accordance with their rhetoric on the urgency of tackling climate change by divesting immediately from fossil fuels.
- The MDBs should reduce their exposure to the carbon bubble by divesting from fossil fuels. As publicly-backed lenders the MDBs are putting public funds at risk.
- The MDBs should shift their fossil fuel investments to clean renewable energy. These are energy sources that are low carbon (for example sun, wind, rain, tides and geothermal), and with low environmental and social impact. The MDBs should also support energy efficiency.
- The MDBs should use their privileged position as publicly-backed lenders with triple-A credit ratings to invest in renewable energy.

Focus on small scale

- Instead of investing in large established fossil fuel companies the MDBs should support small and medium energy companies to generate renewable energy.
- The MDBs should invest in clean renewable energy sources that increase energy access for the poorest, which is often best achieved through decentralised energy projects.

Methodology

Objective: To identify which fossil fuel investments were on the MDBs (IFC, EIB, EBRD, ADB and IDB) balance sheet on 31 December 2013. This was used to assess MDBs, exposure to a potential carbon bubble where investments in fossil fuel companies could lose significant value.

- **Sources:** The official database of each bank was used to log all fossil fuel investments in a custom database with a total of 179 projects identified. The MDBs were contacted to provide additional information, such as schedule of payments and reserve sizes, but did not reply. Without accurate and up to date data the conclusions in this research are estimates.

Due to the lack of project information additional sources were used to complete the database:

- **Annual reports of MDB clients:** Publications from the borrower (or the parent company) where assets and holdings are listed in detail for stakeholders and/or prospective investors.
- **Technical briefs:** Mainly from private engineering companies that provide technical support or work in the field site.
- **Government press releases:** Natural resource discoveries and estimated potentials announced by governments in official briefings or press releases.
- **Investor websites:** Such as Bloomberg and other energy-related sites that list the reserves and holdings of companies.

Assumptions: The following assumptions were made and included in the final data set:

- **Fossil fuel type:** All investments were divided into oil, gas, oil/gas and coal investments. This includes support for various fossil fuel projects including:

1) Extraction. Examples of keywords: "development of proven fields", "drilling".

2) Infrastructure for transportation or refining. Examples of keywords: "pipelines", "refineries", "liquefied gas stations".

3) Research and financing. Examples of keywords: "exploration", "feasibility studies", "technical assistance", "debt refinancing", "capital expenditures".

- **MDB balance sheet:** Due to the lack of disclosure of project information by the MDBs the official average loan maturity for each bank was used to estimate which investments were on the MDB balance sheet on 31 December 2013. These are: IFC (10 years), EIB (10 years), EBRD (15 years), ADB (15 years) and IDB (15 years). Some of the banks had longer average loan maturities (e.g. ADB – 32 years) but 15 years was taken as an upper limit for comparison purposes.
- **Project status:** Due to the diverse classification and labelling of each institution, project statuses were standardised and defined in this research as: 1) Active: The bank currently holds a stake in the project and the borrower is still making payments; 2) Completed: Based on the information provided by the MDBs the debt has been fulfilled or has been transferred to another creditor. However, the MDBs do not reveal the exact date when the debt was paid back ("fulfilled" or "transferred"). Therefore there are 54 projects that are listed as complete but are included in this research because the project year is within the official average loan maturity for that bank i.e. 10 or 15 years depending on the bank; 3) Signed and investment pending: This applies to 10 projects that were signed off in 2013. The investments were still pending at the time of writing.
- **Stock exchange:** If the main borrower (including subsidiaries of multi-national corporations) was a publicly listed company, then the project was labelled as "listed" for stock exchange comparison purposes. This was in accordance with Carbon Tracker's methodology and used for further contrast with lending amounts to non-listed companies.
- **Exchange rates:** The EIB and EBRD list their loans and investment in Euros. For matters of comparability and consistency, Euros were converted to US dollars utilising the exchange rate as of 31 December 2013 (1 EUR = $1.3579). For any other currencies the same conversion date was used.
- **Carbon potential:** Due to the lack of information provided by the MDBs it was not possible to accurately determine the exact amount of unburnable carbon on MDBs balance sheets. The formula for calculating the carbon emissions from the reserves was taken from the methodology used by the Potsdam Climate Institute (2009) and the *Unburnable Carbon* report (Carbon Tracker, 2011).

For full methodology and dataset see: www.brettonwoodsproject.org/2014/09/mdbsunburnablecarbon/

Endnotes

1 Climate Change 2013: The Physical Science Basis, Intergovernmental Panel on Climate Change (2013)

2 The MDBs also invest in renewable energy projects. Based on information from their official websites IFC invested $1.4 billion in renewable and energy efficiency in 2014; In 2011 ADB invested $2.1 billion in clean energy; EIB invested €3.3 billion in 2012; EBRD invested €13 billion between 2006-2013 in sustainable energy projects.

3 Fossil fuel supply, green growth and unburnable carbon, Stockhold Environment Institute (2014)

4 World Energy Investment Outlook 2014, International Energy Agency (2014)

5 The MDBs issue bonds to raise money on international capital markets. See the websites of the IFC, EIB, EBRD, IDB and ADB.

6 IFC Articles of Agreement (Article 3.3), Agreement establishing the IDB (Article 3.7.2), EIB Statute (Article 16.1), Agreement establishing the EBRD (Article 13.7), Agreement establishing the ADB (Article 14.5).

7 World Bank increases extractive lending despite human rights abuses, Bretton Woods Project (2011) Oil addicts find new veins as BTC pipeline finally opens, Platform (2006)

8 See IFC Road Map FY 14-16. EIB: Project Loans. EBRD: Sustainable Energy Initiative. IDB: Our products. ADB: Private sector financing.

9 IFC's Role and Additionality: A Primer, IFC (2009).

10 'Leveraging' private sector finance: How does it work and what are the risks?, Bretton Woods Project (2012)

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Carbon Tracker reports:

Unburnable carbon – Are the world's financial markets carrying a carbon bubble? (2011)

Unburnable carbon 2013: Wasted capital and stranded assets (2013)

Key terms

The Bretton Woods Project in an ActionAid hosted project, UK registered charity no. 274467. Funding for the production of this report has been provided by by a network of UK NGOs, the C.S. Mott Foundation and Rockefeller Brothers Fund. The report should in no way be construed as reflecting the views of the funders.

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We would like to thank Carbon Tracker for feedback on the project.

Remaining errors and omissions are solely the responsibility of the author.

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