Disclaimer: This paper is the result of the analysis carried out by a sub-group within the AGF. However, the paper does not purport to represent the views or the official policy of any member of the AGF.

Work Stream 4: Contributions from International Financial Institutions [1]

[1] This paper draws substantially on four key inputs. 1) A background paper by Tom Heller and Mattia Romani on the role of IMF SDRs as a potential financing instrument, 2) The "Joint Multilateral Development Bank Climate Financing Report", still in draft at the time of writing, 3) An analysis of MDB financial capacity and climate change financing potential, commissioned by the Department for International Development (prepared by GBRW Ltd, May 2010). This study makes best available use of external data, and 4) An IMF staff position note on "Financing the Response to Climate Change."

1. **Purpose**

1.1 The purpose of this paper is to assess the role of International Financial Institutions (IFIs) in delivering the climate finance goal agreed in the Copenhagen Accord of $100 billion per annum in 2020 for developing countries. The paper considers the possible contributions from both the Multilateral Development Banks (MDBs) and the International Monetary Fund (IMF), and assesses these against the criteria established by the High Level Advisory Group on climate finance[2] (AGF). The remit of the paper is not to consider the role of the IFIs alongside the UN in any future climate finance governance structure or new institutions. However, it is clear that there will need to be close co-operation between in any future scenario.

Context

1.2 The IFIs involve governments pooling their resource to fund institutions to perform financial activities on behalf of them all. Both the IMF and the MDBs are funded by capital contributions that place different demands on shareholders. The IMF borrows from its membership to finance its loans to countries facing balance of payments difficulties. The IMF also has the power to borrow from private markets but has not yet done so. These borrowed resources cannot be used for climate finance without a change of the IMF's Articles of Agreement. The IMF can also allocate Special Drawing Rights (SDRs) to its members to supplement existing reserve assets. The SDRs is not a currency but a potential claim on the freely usable currencies of IMF members. IMF members may exchange SDRs with other members for freely usable currency, defined as the four currencies that make up the SDR basket (US dollar, Euro, Yen and Pound Sterling).

1.3 The World Bank Group includes different institutions which are funded in different ways. The IBRD is funded by a combination of paid-in capital, which finances its normal operations and callable capital which is a contingent claim on shareholders' funds. Unlike the IMF, the World Bank Group regularly issue bonds to private markets to finance its operations. IBRD lending to Middle Income Countries (MICs) is primarily financed in this way. The International Development Association (IDA) provides concessional resources and in largely funded through donor contributions, as well as income from lending.

Multilateral Development Banks

1.4 An assessment of how much climate finance the MDBs might provide in 2020 is an imprecise science and faces a number of uncertainties. A key uncertainty is how much climate finance developing countries themselves will demand from the MDBs in 2020, which will vary between LIC and MIC

[2] Romani, M and Stern, N, "Possible concepts and methods to support the analysis of new sources of climate finance", April 2010.

and between sovereign and private sector lending. These in turn relates to factors such as progress in international negotiations, other developing country borrowing requirements from the MDBs in the period leading up to 2020, and evolution in MDB mandates and capacity. The demand for grant financing versus loans is a further important factor affecting demand from the MDBs. A broader consideration is the financial headroom available to the MDBs within this timeframe, given other calls on development expenditure. Careful distinction would also need to be made between concessional and non-concessional, and between sovereign and private lending.

1.5 This paper makes a number of simplifying assumptions to deal with these uncertainties and models scenarios for MDB climate finance in 2020. The analysis follows a number of steps. First, the paper considers how much overall financial headroom the MDBs have following their recently approved General Capital Increases (GCIs), as a basis for assessing the "supply potential". On this basis, a sustainable level of lending can be derived within the approved capital structure of each MDB. A second step is to consider "demand potential" through assessing the determinants of developing country requirements for climate finance from the MDBs and how these might evolve within the timeframe in question. A third step is to bring these two dimensions together and consider a method for projecting a range of scenarios for MDB climate finance in 2020. A fourth step is to consider options for the MDBs to increase the funds they direct to climate change by 2020 - within existing resource envelopes and with expanded resource.

International Monetary Fund

1.6 Some commentators, most recently IMF staff and George Soros, have suggested using SDRs to help mobilise climate finance through a Green Fund. Using SDRs for climate finance would be a departure from the SDRs role as a monetary reserve asset. These proposals also require the use of subsidy resources in order to pass on the finance in the form of concessional loans and grants. As the SDR is not a freely usable currency itself, these proposals raise a number of design and financing questions, which are discussed in this paper.

United Nations

1.7 Although the focus of this paper is on the IFIs, they are not the only multilateral actor that needs to play a role in mobilising and supporting the delivery of climate finance in 2020. The UN is also active in this area, particularly in developing demand for climate finance by working with host governments to create national strategies, macroeconomic policies, and the requisite regulatory, accounting/ Monitoring Reporting and Verification (MRV) and public investment frameworks. The IFIs the UN and other relevant institutions will need to work closely together in any future governance framework to design and delivery climate finance to developing countries.

Paper structure

1.8 The paper is structured as follows. Section two outlines key background in relation to the way in which the MDBs raise finance and the current volume of their concessional and non-concessional lending. Section three considers the role of the MDBs on climate change and summarises existing progress across all of the MDBs. Section four looks at the determining factors in the overall scale of MDB finance going forward and section five gives a methodology for projecting MDB climate finance flows in 2020. Section six then looks at options for increasing MDB funds to climate finance. Section seven considers the SDR-based proposals. Section eight then considers both MDB and IMF options against the key criteria set out by the High Level Advisory Group on climate finance (AGF) and draws some conclusions.

1.9 As part of their operations, the IFIs leverage funds for climate change from the private sector through syndication with commercial banks, coinvestment, or guarantees and other risk sharing instruments. The role of Export Credit Agencies is also important in leveraging private finance. These proposals are being considered under Working Group 2 – work stream 7. For the purpose of making a clear distinction, this paper considers IFI capital/ lending scenarios. Conversely, Working Group 2 considers the best use of MDB instruments and approaches (for any given volume of capital) to maximise leverage of private finance into climate change investments at the project and programme level. Neither paper considers the advantages or disadvantages of the MDBs as a channel of climate finance. This issue is beyond the mandate of the AGF and is being dealt with directly within the context of UNFCCC negotiations.

2. Key background – how do the MDBs raise finance?

2.1 The IFIs considered in this paper include the World Bank[3] and IMF (the Bretton Woods Institutions established in 1944) and the Regional Development Banks (RDBs) established during the second half of the 20th century[4]. These account for the bulk of multilateral finance to developing countries. We have not included other "Sub-Regional" Multilateral Development Banks, other Development Finance Institutions[5] or bilateral funds. Lending from these will almost certainly also be relevant in the period leading up to 2020.

[3] IBRD/ IDA and the IFC. MIGA is covered under the AGF Working Group on private finance.
[4] The Regional Development Banks considered in this paper include the African Development Bank ('64), Asian Development Bank ('66), International American Development Bank ('59), European Bank for Reconstruction and Development, ('91) and the European Investment Bank ('58).
[5] Examples of Sub Regional MDBs are the Caribbean Development Bank, East African Development Bank, West African Development Bank, Central American Bank for Economic Integration, Black Sea Trade and Development Bank and Corporacion Andina de Fomento. Examples of other DFIs include those making up EDFI - European Development Finance Institutions

2.2 The MDBs (a term generally used to refer to the World Bank and the RDBs) are institutions created by groups of countries to provide financial and professional advice for the purpose of furthering economic growth and development amongst their members. Their membership includes both developed (donor) countries, and the developing (borrower) countries. Whilst the World Bank has a global geographic remit the RDBs, which are regionally owned and staffed, have the goal of promoting growth and development in their regional member countries (or economic transition in the case of the EBRD).

2.3 The MDBs raise funds in international debt markets against their capital base to provide finance to borrower countries. MDB credit quality is typically very high (AAA rating), given the strong support they have from member countries, their high levels of capitalisation and their relatively conservative policies with respect to risk and liquidity management. This enables the MDBs to lend at rates that reflect a relatively lower cost of borrowing[6] (lending at rates close to or just below market rates, typically at a few points above LIBOR).

2.4 A key distinction between the MDBs and commercial banks is the inclusion of callable capital in the MDBs' capital base which, together with paid in capital, provides for strong leverage potential. In general, there is a very low proportion of paid-in to callable capital (figure 1), which means that only a small portion of the MDB's capital base is paid in. The rest is "on call" in case the MDBs suffer losses that mean they are unable to pay their creditors – something that has not happened to any of the Banks to date. These score as contingent liability on shareholders' balance sheets, and are ultimately a call on their public finance and taxpayers. Increasing the MDBs exposure, which is discussed later, could of course increase the probability of callable capital being called (unless risk profile is kept constant).

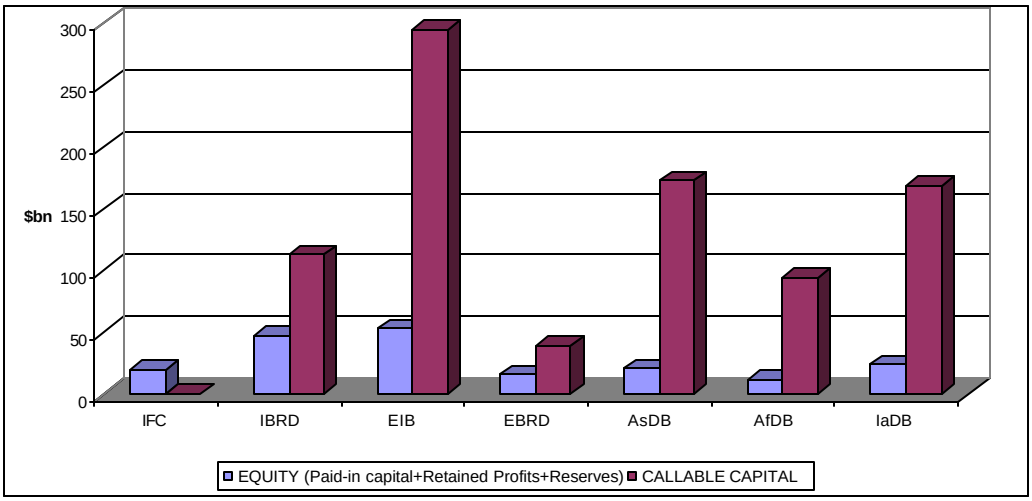
2.5 Income the MDBs earn each year from return on equity, and the margin from their lending, pay for operating expenses with the remainder paid into reserves to strengthen balance sheets. Some of this income also goes towards contributions to the Banks' concessional arms (e.g. IDA in the case of the World Bank).

2.6 At the end of the financial year 2009, the MDBs' balance sheets were very strong. Subscribed capital was over $742 billion, including paid in capital over $166 billion (see figure 1). The MDBs' key capital adequacy ratios[7] were strong, despite the demands on MDB financing caused by the 2008/9 financial crisis. (Balance sheet summaries of MDBs at Annex A).

[6] Loans must be repaid in 15-20 years and there is a 3-5 year grace period before repayment of principle begins.

[7] Key capital adequacy ratios include i) Equity / Loans + Guarantees, ii) Equity/ Development Related Expenditure, and, iii) Liquid assets/ Borrowings.

Figure 1: MDB paid-in and callable capital in 2010



Source: GBRW assessment of MDB balance sheets (May 2010)

2.7 Table 2 sets out the volume of MDB outstanding lending commitments currently projected in 2010 (around $200 billion). This high volume of commitments relative to previous years reflects the aftermath of the 2008/9 financial crisis and the resulting gear-up in MDB financing. The MDBs' concessional lending[8] currently stand at around $22 billion.

Table 2: MDB lending commitments & concessional funds in 2010 ($ billions)

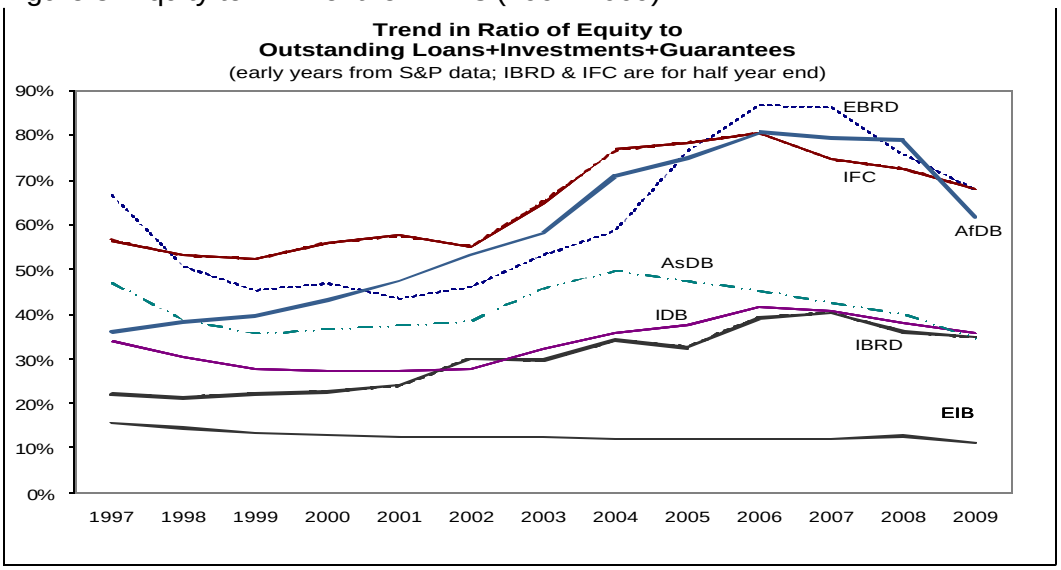
$ billions	IFC	IBRD	EIB	EBRD	AsDB	AfDB	IADB	Total
MDB stock commitments in 2010	12	51.2	4.0[9]	8.8	17.0	26.9	84	c. 204
MDB concessional funds in 2010		14.8 (IDA)			4.3 (AsDF)	2.2 (AfDF)		c.22

Source: DFID analysis

2.8 To give an illustration of MDB leverage against their capital base, figure 3 shows historical trends in the ratios of equity to development related expenditure (DRE)[10]. It is clear to see that the MDBs generally all decreased their equity/ DRE (i.e. increased their leverage) in response to the 2008/9 financial crisis, although 2009 figures generally remain higher than ten years earlier.

[8] These include IDA, Africa Development Fund, Asia Development Fund and the IaDB's Fund for Special Operations. These are funded largely by contributions from donor governments, limited net income from non-concessional lending and MDB borrowers' repayments.
[9] Assumes 5% of total EIB stock commitments
[10] DRE = loans, guarantees and equity investments.

Figure 3: Equity to DRE of the MDBs (1997-2009)



Source: GBRW assessment of MDB b alance sheets (May 2010)

3. What is the role of MDBs in climate change?

Why is climate relevant to the MDBs?

3.1 The development challenges presented by climate change are well documented and are clearly a core consideration to the MDBs' overall mandate for sustainable economic growth and poverty reduction. Even in the near term, climate change will impact the sustainability of developing countries' progress towards the Millennium Development Goals (MDGs). More broadly, climate change implies significant risks for growth, development and poverty reduction in developing countries. Vulnerable developing countries are the most at risk. Conversely, developing countries may benefit from opportunities underpinned by global action to tackle climate change. For these underlying reasons, the MDBs have a clear role to play in helping their member countries "climate-proof" their development and work towards climate-resilient, low-carbon growth over the medium term. The MDBs are able to integrate climate across their strategic priorities, making for a coherent approach to development.

3.2 However, the climate challenges for MDB borrowers vary by economy and regional circumstance. Low-income countries (LICs), particularly in Africa, face acute financing needs to meet the challenges of adaptation and sustainable, low-carbon growth. Africa in particular is expected to be strongly impacted by climate change, and faces acute energy and infrastructure needs. Moreover, LICs have relatively low levels of domestic resource to finance their development, and so require a greater overall proportion of concessional finance or grant resource relative to richer countries. Middle-income countries (MICs) also face challenges. To sustain high growth, they need rapid formation of low-carbon infrastructure particularly for energy supply, transport, buildings and sectors underpinning land use change (forestry and agriculture). The potential for increasing energy efficiency of growth is usually very high in MICs, but is

also present in LICs. In general, MICs have a relatively strong policy framework to expand the private sector, fiscal space for public capital expenditure and attract larger levels of foreign capital. These differing climate-related circumstances between countries/ regions suggest that the challenge for, and focus of, individual Banks will vary (particularly between the RDBs).

3.3 The MDBs have an important role to play in climate change through addressing market failures (internalising the carbon price), use of instruments to reduce/ share risk, supporting cross-country lesson learning and investing in infrastructure. However, the MDBs' role in climate change needs to make careful distinction between their capacities in both public and private lending – the MDBs play different roles in this regard. The latter, in particular, will require more emphasis going forward as the bulk of climate related investment will need to come from the private sector[11]. The MDBs have already demonstrated potential to leverage significant amounts of private finance for climate change. Deepening and broadening this role will require the MDBs to use their resources and instruments as efficiently and effectively as possible to leverage private finance[12]. It will also require the broader policy and incentive framework (e.g. carbon markets, regulation etc) to be conducive. The EBRD and the IFC are well placed to work effectively with the private sector in climate-related investment and are already broadening and deepening their engagement. The AfDB, AsDB and IaDB arealso expanding use of instruments to leverage private finance.

3.4 In sum, developing country climate finance needs clearly merit careful consideration in determining the appropriate scale of MDB development finance, and hence their capital requirements and concessional funds. However the terms and volume of MDB lending will depend substantially on circumstance - differing between MICs and LICs, according to regional needs and priorities, and to the nature of the investment itself.

How much climate finance do the MDBs currently supply?

3.5 Since the Gleneagles G8[13] in 2005, the MDBs have broadened their programmes on climate change in response to calls from both members and borrowers. At the Hokkaido G8 in 2008, MDB financial projections were made through the "Clean Energy Investment Framework[14]" of over $100 billion in total project cost (see table 4). These figures include estimates of the financial leverage achieved through the Clean Technology

[11] For background, see "Meeting the Climate Challenge: Using Public Funds to Leverage Private Investment in Developing Countries", (2010), Working Paper - Grantham Research Institute for Climate and the Environment, LSE.
[12] See AGF Working Group 7 for further discussion.
[13] The G8 Communique called on the MDBs to increase dialogue with client countries on climate change mitigation and adaptation activities and to scale up their lending.
[14] The three pillars of the CEIF were established as i) energy for development and access for the poor, ii) transition to a low-carbon economy (low carbon investments include and iii) adaptation to climate change.

Fund (CTF), a trust fund to promote investments in low-carbon technology[15]. (CEIF definitions at Annex B)

Table 4: MDB financing projects at the Hokkaido G8 (US$ billions)

	2007	2008	2009	2010
Energy				
Lending/ Investments	10	13.8	15.7	16.2
Total cost of projects/ programmes supported	24.9	35.8	39.5	42.4
Energy Access				
Lending/ Investments	2.4	4.4	5.3	5.8
Total cost of projects/ programmes supported	7.5	12.2	14.9	17.4
Low Carbon				
Lending/ Investments	4.7	7.6	9.4	10.6
Total cost of projects/ programmes supported	15.4	28.6	36.2	41.3
CTF	n.a.	n.a.	9	15

Source: MDB Joint Report to the Hokkaido G8 (author Richard Stern)

3.6 Since Hokkaido, the MDBs have significantly developed their climate change activities both from existing capital and through use of dedicated trust funds for co-investment and co-lending. There are two principle global fund arrangements that have helped to leverage MDB resource. The first if the Global Environment Facility, which in particular leverages resource from the World Bank and the IFC. The second are the Climate Investment Funds (CIFs), which include the CTF. Bilateral donors have played a significant role in both.

3.7 The CIFs have been a key innovation in enabling concessional finance to be combined at a large scale with MDB financing in support of transformational climate change investments. The core justification for the CIFs was they would fill a gap in the international architecture for low-carbon development/ technology finance available at more concessional rates than the standard terms used by the MDBs. Through utilising MDB capacity and expertise the CIFs aimed to mobilise new and additional resources at scale, try and test new instruments and pilot new principles. Pledges to the CIFs currently stand at $6.1 billion. The CIFs are made of two separate windows – the CTF and the Strategic Climate Fund (SCF).

3.8 The MDBs are producing a detailed report of progress in climate finance since the Gleneagles G8[16] (Executive summary at Annex C). Key findings of the report are that

a. MDB climate change mitigation financing[17] (a narrower definition than applied through the CEIF), trebled from $5.4 billion in 2006 to $17

[15] Funding to the CTF currently stands at $4.9 billion from donor countries with over $2 billion endorsed to country plans. (CTF lending terms at Annex B)

[16] "Joint MDB Climate Finance Report" for the AsDB, AfDB, EBRD, EIB, IaDB and the World Bank Group, Draft at June 2010

billion in 2009, in support of total projects/ programme value rising from $20 billion to $55 billion respectively (table 6). MDB climate change financing activities have been accompanied by increased advisory and policy services, alongside the work of the UN in this area.

Table 6: MDB Climate Change Mitigation Financing 2006-9 ($ billions)

	ACTUAL 2006	ACTUAL 2007	ACTUAL 2008	ACTUAL 2009
Demand side Energy Efficiency	1.2	1.6	2.2	3.0
Renewable Energy	1.1	2.5	3.3	4.2
Supply side energy efficiency	0.6	0.9	1.7	1.9
Forestry and land use	0.7	0.6	0.8	1.4
Other/1	1.8	1.5	2.6	1.7
Climate Related Development Policy Loans	0.0	0.0	0.2	4.9
Total investment by MDB	5.4	7.1	10.7	17.0
Total cost of projects/programs	20.7	23.2	39.3	55.6

Source: Joint MDB Climate Finance Report

1 – This includes mitigation financing for sustainable urban transportation

b. Demand side energy efficiency financing has more than doubled, reaching $3 billion in 2009. Renewable energy financing has close to quadrupled to $4.2 billion. Supply side energy efficiency financing has trebled, reaching $1.9 billion. Forestry and land use related mitigation financing has doubled to $1.4 billion. Climate related development policy loans started in 2008, reaching $4.9 billion in 2009.

c. The leverage ratio of total project cost to MDB financing ranged between 3.3 and 3.8, with an average leverage ratio of 3.4. Around half of the MDB financing was targeted to the private sector.

d. Regional and geographic composition of MDB climate change mitigation financing is in table 7. The percentage share of MDB climate finance by region reflects variation in economic size and degree of energy intensity across economies.

Table 7: Regional composition of MDB climate change financing 2006-9

	ACTUAL 2006	ACTUAL 2007	ACTUAL 2008	ACTUAL 2009	TOTAL 2006-2009	Shares 2006-2009
Geographic						
Africa	0.8	1.4	1.5	1.3	5.0	12%
Asia and Pacific	1.2	1.5	4.1	3.7	10.6	26%
EMENA and Central Asia	2.6	3.5	3.5	5.3	14.8	37%
Latin America and Caribbean	0.9	0.7	1.5	6.8	9.8	24%
Total	**5.5**	**7.0**	**10.5**	**17.1**	**40.1**	**100%**

Source: Joint MDB Climate Finance Report (NB: Subject to revision)

[17] The MDB definition includes demand and supply side energy efficiency, renewable energy (RE), and reducing carbon emissions from transport, urban areas and land use, land use changes and forestry.

e. MDB climate change financing activities have been accompanied by increased advisory policy and capacity building services. This has included an increasing volume of climate change analytical, policy and capacity building support to help countries develop low-carbon growth plans, and technical support for project preparation.

f. The MDBs have identified and developed programs to assist developing countries adapt to the adverse impacts of climate change in the short term and build climate resilient economies for the medium term. Key interventions include: strengthening macro and sector climate risk management, upgrading agricultural research, introducing climate risk insurance mechanisms, improving the climate resilience of infrastructure investments and disaster risk management.

g. In funding climate change interventions, the MDBs use a broad range of financing instruments, including sovereign and sovereign-guaranteed loans, sub-sovereign loans, non-sovereign loans, equity, guarantees and concessional funding. This reflects the mix between sovereign and private lending, and between grants and loans.

4. **What are the determining factors in the overall scale of MDB climate finance going forward?**

Context: 2010-2012

4.1 Reflecting client demand, MDB strategic objectives and an assessment of existing and potential pipeline, MDB climate mitigation financing is projected to increase by 22% from $17 billion in 2009 to $20.8 billion in 2012 with a total cost of projects and programmes projected over $55 billion (table 8). These indicative numbers reflect the current climate financing pipeline of MDBs, an assessment of potential country demand during this period and in certain cases the reflection of specific climate financing targets by individual MDBs. They do not constitute a precise forecast of future financing nor do they represent a specific target.

Table 8: Indicative MDB climate change mitigation financing 2010-12 ($ billions)

	INDICATIVE 2010	INDICATIVE 2011	INDICATIVE 2012
Demand side Energy Efficiency	3.4	3.3	3.9
Renewable Energy	5.5	5.8	5.9
Supply side energy efficiency	2.0	2.3	2.6
Forestry and land use	1.9	2.3	1.7
Other	1.7	2.0	2.0
Climate Related Development Policy Loans	4.5	4.4	4.6
Total investment by MDB	19.0	20.1	20.8
Total cost of projects/programs	47.5	53.1	55.1

Source: Joint MDB Climate Finance Report

4.2 The outlook in table 8 suggests a number of areas of progress. Significant growth is projected in MDB renewable energy financing from $5.5 billion in 2010 to $5.9 billion in 2012. Forestry and land use related mitigation financing is be around $1.9 billion in 2009 and $1.7 billion in 2012, and demand side energy efficiency is projected to increase from $3.4 billion in 2010 to $3.9 billion in 2012.

Projecting beyond 2012

4.3 MDB climate finance projections beyond 2012 are subject to a number of uncertainties. In order to make projections beyond 2012 it is necessary to look at the key determinants of both supply and demand, and make assumptions. Accordingly, this section describes some of the key factors underpinning both supply and demand and is the basis for the methodology in section 5.

Demand

4.4 The quantity and nature of developing country demand for MDB climate finance in the build up to 2020 is fundamental to how much climate finance the MDBs will generate and the terms and instruments they use. A credible incentive framework must be in place for countries to investment in climate-resilient, low-carbon growth. For this to occur, economic, political and institutional domestic and international factors must be conducive.

4.5 Assuming developing countries borrow to invest for climate purposes, the extent to which they will borrow from the MDBs is however uncertain and requires different considerations for both sovereign and private lending. For example, MDB private lending depends on the availability of investable projects or programmes, and the extent to which domestic resources are insufficient to finance these. If international finance is required then there are further issues concerning the terms, effectiveness and transaction costs associated with MDB climate finance relative to private sources. Conversely, for sovereign lending a key question is the terms on which developing countries are prepared to borrow for "climate-related policy reforms" and the prior fiscal space available to those countries without recourse to the MDBs.

4.6 In order to simplify, some key factors affecting climate finance demand are set out below. These are structured in three groups i) specific factors relating to country circumstance, ii) external/ international factors, and, iii) specific factors relating to the MDBs. The relevance of each set of factors differs between mitigation and adaptation, country/ region and the nature of the investment in question (whether for sovereign or private lending):

a. *Factors relating to country circumstance:* Key issues determining the overall economic viability of mitigation investments include natural resource endowments (renewables relative to fossil fuel), domestic regulation/ carbon markets, energy price subsidies, the sectoral/ geographical composition

of GDP growth and energy access/ coverage needs. Country or sector vulnerability to climate change impacts, and the risk/ exposure of existing investments, are factors determining preparedness to borrow for climate resilience/ adaptation investments. Absorptive/ debt carrying capacity are also important in relation to demand (and supply). Project pipeline, and project development capacity, is a further critical factor affecting demand.

b. *External/ international factors*: A key external factor affecting demand for climate finance is the existence/ coverage of carbon markets and the carbon price. Progress in international negotiations (pledges agreed and implemented) help to determine both the scarcity of carbon (hence the carbon price signal) and political/ policy reform momentum more generally.

c. *Factors relating to the MDBs*: Country preparedness to borrow from the MDBs may depend on lending terms/ instruments available. A second factor is the relative priority a country attaches to borrowing for climate versus other priority areas for development finance. MDB governance and effectiveness issues are a third factor, affecting how a country sees the political mandate and performance of MDBs in climate finance. MDB technical assistance and policy advice, and assistance from other development institutions is a fifth important factor, supporting governments to articulate their national/sector needs.

4.7 In sum, developing country demand is a key consideration. The factors affecting demand are multi-dimensional and complex. In view of the increased scale of MDB climate finance over recent years it is reasonable to assume that demand will continue to grow going forward. MDBs themselves, alongside other development actors, can play a role in facilitating and strengthening this demand, including through technical assistance, policy advice and to support for project development. However, the absence of in-depth demand analysis makes it difficult to give explicit numerical projections.

Supply

4.8 The main factors affecting MDB climate finance supply going forward include balance sheet headroom and the resulting sustainable level of lending, the availability of concessional/ grant funds for climate (e.g. CIF-type mechanisms) and the MDB's own organisational capacity/ ability to design and deliver good disbursement channels for climate projects and programmes. These are discussed in more detail below.

4.9 The volume of climate finance the MDBs could supply in 2020 depends foremost on their overall financial headroom against existing

commitments, and their financial constraints. Table 6[18] shows financial headroom after the proposed and approved GCIs against the MDBs' two main constraints of i) the provisions of their Founding Charters/ Statutes[19], and, ii) their operational and financial policies[20]. In addition to these two constraints, Single Borrower Limits (SBLs) may constrain lending to individual countries. These may need to come under review at the appropriate time.

Table 9: MDB financial headroom after the proposed GCIs (US$ billions)

$ Billions	New Charter lending limit	New Charter lending Headroom	New Borrowing Headroom	New ELR[21] Headroom	Binding Constraint
IFC	N/A	N/A	43,384	20,517	ELR
IBRD	276,347	172,690	N/A	N/A	Charter
EIB[22]	778,517	147,253	N/A	N/A	Charter
EBRD	46,936	23,020	N/A	N/A	Charter
AsDB	176,316	133,285	31,411	21,424	ELR
AfDB	105,767	78,052	29,012	18,402	ELR
IADB	191,315	133,382	26,916	11,986	ELR
Totals	*1,575,198*	*687,682*			

Source: GBRW assessment (May 2010)

4.10 Table 9 shows that against the new charter lending limit of over $1,575 billion, the new total MDB lending headroom is over $687 billion. Although the specific circumstances vary for each MDB, in general the binding constraints that come into play for each MDB depend on their individual circumstance, but are mainly equity or subscribed capital.

4.11 To illustrate how many years growth in DRE the MDBs might have before pushing up against one of these constraints, table 7 illustrates an average DRE rate of growth net of repayments of 10% per annum. It also shows historical DRE growth between 2005 and 2009 by way of comparison. Table 10 shows that, overall, Charter Limits are unlikely to be a problem in the short term, but other policy limits may become a constraint. Some MDBs may be limited in terms of annual lending volume

[18] The Charter/ Statute, ELR Headroom calculation and Borrowing Limitations should be taken as indicative only, rather than reproducing the exact figures which each MDB would arrive at using its own more detailed management information figures.

[19] The Charters, Statues or equivalent documents of all the MDBs (apart from the IFC) place limits on the amount of loans, guarantees and equity investments by reference to subscribed capital and (in some cases) accumulated reserves. In some cases, further limits are placed on levels of borrowings.

[20] These set maximum/ minimum limits based on a number of criteria including minimum Equity to Loan Ratios (ELR) or minimum risk-based capital ratios, maximum borrowing limits, country/ portfolio concentration limits and minimum levels of liquidity.

[21] In this projection, ELR calculations are based on a standardised Equity to Risk-Weighted Ratio of 30% across the board. In fact, each MDB has its own policy ratios and makes adjustments to those ratios using data which is not externally available. Assumptions have also been made on the asset mix and risk weightings of each MDB's current and projected DRE portfolios, and for calculations of shareholder government risk ratings.

[22] The figures for EIB do not distinguish between EU/ accession countries and Neighbourhood Partnership countries.

due to economic capital constraints (reflecting risk) before statutory constraints are reached.

Table 10: MDB years of DRE growth

	For comparison Historical actual growth in DRE 2005-09	**Statutory Headroom estimate as years with growth at 10%**	**Borrowing Headroom estimate as years with growth at 10%**	**ELR Headroom estimates as years with growth at 10%**
IFC	*21*		16	14
IBRD	*2*	16	n/a	8
EIB	*2*	3	n/a	n/a
EBRD	*8*	10	n/a	n/a
AsDB	*15*	30	7	5
AfDB	*9*	39	18	9
IADB	*-2*	23	4	2

Source: GBRW (May 2010)

4.12 A further key question is how much of this headroom could be "available" for climate finance in 2020. Again, this is an imprecise science and requires simplifying assumptions to be made about the relative calls on "core DRE" versus "climate DRE." One method is to make an assumption about the growth of non-climate DRE over the next ten years and consider what "remainder" is available for climate-related DRE. We assume 3% growth per annum in non-climate DRE and calculate how much would be available before policy limits are reached, with the current mix of instruments unchanged[23]. Some MDBs have already made projections for future DRE growth, so this figure should not be interpreted literally.

4.13 Table 11 shows the outcome for individual MDBs in 2020. (Detailed caveats and assumptions are at Annex D). According to this calculation, an average 3% annual growth in non-DRE would leave over $278 billion (excluding EIB[24]) for climate-related expenditure up to 2020 before any of the MDBs binding constraints are reached. These figures are cumulative, rather than annual lending volumes.

4.14 It is important to treat the figures in Table 11 with caution for a number of reasons. From an operational perspective, a more appropriate way to express MDB climate finance "supply potential" might be to estimate the share of climate in annual commitments, against the sustainable level of lending underpinned by capital. For example, if climate change finance

[23] The most significant assumptions in this approach are i) Climate Change related DRE currently constitutes 20% of total DRE in the opening balance sheet of each MDB (recognising there is no common definition of climate change expenditure), ii) That is acceptable to plan for non-DRE growth at an average rate of 3% per annum over the next ten years, and, iii) That the current round of GCIs (plus SCIs in the case of EBRD and IFC) is implemented as set out in recent proposals. (GBRW)

[24] 90% of EIB operations are inside EU.

were 20% of annual sustainable lending levels, around $20 billion per year might be expected over the period.

Table 11: Potential cumulative climate-related DRE in 2020 ($ billions)

	IFC	IBRD	EIB	EBRD	AsDB	AfDB	IADB	Total	Total ex EIB
Additional CC DRE by 2020	32,545	171,463	158,175	13,953	25,467	13,531	21,995	437,129	278,953

Source: GRBW (May 2010)

4.15 In the context of Table 11, the following caveats should be noted. First, developing country demand for "core DRE" may grow at a greater rate than the assumed 3% per annum, reducing the amount of available headroom for climate-related investment and lending. For example, if non-climate DRE grew at 5% per annum, the headroom available for climate lending before constraints are reached would reduce to around $350 billion including EIB, and $250 billion excluding EIB. Growing non-climate DRE at 10% would reduce available headroom further.

4.16 Second, calculating figures in this way will always be sensitive to opening balance sheets, i.e. base starting levels. Third, these figures assume the same instrument mix going forward. However, if MDB climate finance gave greater relative emphasis to leveraging private finance, this in turn may require the MDBs to take on additional risk in the form of guarantees, equity or subordinated debt. The rate at which these more risky forms of DRE would eat into capital headroom would be higher, meaning the overall MDB DRE volume in the same calculation would be lower. MDB shareholders would need to take this into consideration in their overall appetite for risk.

4.17 Fourth, there may be insufficient mandate from the recent GCIs to justify an extra-ordinary use of capital for climate purposes. Climate change is now a pillar of several of the MDBs strategic operations. Where mandates are in place, and borrower demand is increasing, MDBs are making strong progress (as illustrated above). However, there is an open question about how explicit and quantified this has been and should be going forward.

4.18 Against these conclusions on headroom, the following are the main determinants for how much climate finance the MDBs might supply going forward:

a. *Financial space required for other priorities*: As noted above, the case for "using up" the bulk of existing MDB financial headroom for climate purposes is not clear cut. Another approach may be to estimate the appropriate climate share of sustainable lending levels. A practical constraint is the need to preserve headroom to guard against the probability of a future economic crisis. Furthermore, developing country borrowers are concerned that "green pressures"

may crowd out finance in more traditional areas such as infrastructure, health care and education.

b. *Capacity for equity/ subordinated debt:* In the context of MDB operations, the risk in different instruments varies considerably – with subordinated debt and equity representing the highest risk[25]. These instruments also make MDB risk profiles more complex. Given the importance attached to instruments to leverage private finance for climate-related investments, expanded use of equity investments would increase the rate of economic capital usage and may mean the various equity investment limits of the MDBs become relevant sooner rather than later[26].

c. *Availability of dedicated trust funds*: The availability of grant based or highly concessional funds for co-lending or co-investment alongside MDBs' own funds will continue to be a key determinant in the volume of climate finance the MDBs can generate. Depending on the carbon price, grant based or highly concessional funds may be necessary to cover the incremental cost of low carbon investments. MDB experience to date suggests the role of dedicated trust funds to leverage MDB climate finance is likely to remain important in future.

d. *MDB policy mandate and capacity:* The MDBs ability to generate climate finance is partly dependent on the extent to which climate is seen as a core part of the MDBs' policy mandate. And linked to this, the level of MDB internal organisational capacity to gear-up climate finance flows. As climate finance remains a relatively new area of development, experience in design and delivery of effective disbursement channels for climate finance remains work in progress across many of the MDBs.

5. Methodology for quantifying MDB finance in 2020

Quantifying 2020 annual finance flows

5.1 This section considers a methodology for calculating MDB contributions in 2020. It draws on the factors affecting both supply and demand of MDB climate finance set out in section 4. The key steps are as follows:

a. We start with current projected volume of MDB mitigation finance flows in 2012 of $20 billion as the base case,

b. In the period up to 2020, we use a simplified model to generate three scenarios for demand (high, medium and low case) for the

[25] Normal sovereign loans and guarantees (largest component of MDB DRE) have expected loss rates below 0.1% p.a. Private sector loans are in the range of 1-10% p.a. Subordinated and equity are generally in the range of 10-30%.

[26] Only the IFC and EBRD have sizeable limits (equivalent to their capital bases). AsDB and AfDB have limits at 10% and 15% of their equity respectively.

potential volume of MDB climate finance, distinguishing between mitigation and adaptation,

c. For mitigation, we assume that the volume of finance the MDBs can generate is demand driven and that the MDBs are able to fully meet demand. And, we assume that the key determinants of demand are i) GDP growth[27], ii) the carbon price[28], and iii) the degree of concessionality in MDB funding[29]. We draw on the scenarios in "defining common assumptions for working group papers"[30] and make assumptions about the quantitative impact on demand of each factor. In the absence of any detailed evidence about the determinants of developing country demand, these assumptions are highly simplistic and should not be interpreted literally,

d. From a supply perspective, we outline the main considerations in judging whether these scenarios can be accommodated within existing headroom or may require additional capital,

e. For adaptation finance, we assume that 100% of this should come from grant based or highly concessional funds, rather than from capital. We assume 20% of MDB core concessional funds as a proxy for adaptation-related spend, and assume three scenarios for the size of concessional funds in 2020, i) flat lined from 2010 onwards, ii) overall increase of 20% in 2020, and, iii) overall increase of 50% in 2020. Again, these are highly simplistic assumptions and should not be taken as a literal projection of how much finance the MDBs might provide to adaptation in 2020. They do not take into account the question of whether adaptation finance should be wholly additional and grant based, or integrated in core MDB development spend.

Mitigation finance projections

5.2 Figure 12 shows the outcomes for mitigation finance projections in 2020. In the lowest case scenario (low growth, low carbon price) MDB finance is projected around $30 billion per annum. In the absence of a strong carbon

[27] We assume a "medium" scenario of 3.3% global GDP growth, low case scenario of 2% global GDP growth and high case scenario of 5% global GDP growth. In the medium scenario, we assume that demand for climate finance grows by 5% per annum up to 2020. We assume that a 1% change in GDP growth (for the high and low case scenarios) impacts the demand for climate finance by 0.5%. (NB: Each MDB is likely to have independently modelled the relationship between growth and demand for its finance. This should underline caveats with this approach.)

[28] We assume a low CP scenario as the base case, and for every $5t/ CO2e rise in the carbon price, demand for MDB finance increases by 5%.

[29] We do not assume concessionality is an independent determinant of demand for climate finance. However, some degree of concessionality is likely to be required to sustain demand in a low to medium carbon price environment. We therefore assume zero concessional terms in the low case scenario has the potential to reduce demand by up to 50%, and up to 20% in the medium case.

[30] Working Draft (07/05/10): We assume global GDP growth of 3.3% as our medium scenario and a carbon offset price of $/t CO2e of 10-15 (low), 20-25 (medium), 35-40 (high).

price signal, MDB lending would need to be more concessional in order to sustain developing country demand. Without this, developing country demand could be suppressed further – we assume by up to 50% in the low case scenario (c. $15-17 billion per annum) and 20% in the medium case scenario (c. $6-8 billion per annum). However, a low carbon price may see demand suppressed much further than that.

5.3 In the highest case scenario (high growth, high carbon price) we project that MDB finance could reach c. $44 billion per annum in 2020. The need for concessional funding decreases in this scenario, as we assume that high carbon prices and expansion of carbon markets supports developing country demand on its own. Indeed, under a high carbon price scenario it might be assumed that the bulk of finance will come through the markets. However, some concessionality may still be appropriate, depending on the presence of market failures.

Figure 12: Scenarios for MDB mitigation finance in 2020 ($ billions)

GDP Growth	*Carbon Price*		
	Low	**Medium**	**High**
Low	29.1	32.0	37.8
Medium	31.0	34.1	39.7
High	33.8	37.1	43.9

5.4 It should be emphasised that these figures are hypothetical and highly sensitive to the parameters assumed. Hence given uncertainty across a broad range of parameters over this timeframe, the projections can only be indicative. For example, if the demand for climate finance only rises at 2% per annum in the medium growth (see footnote 27), then the top left figure could be $20 billion per annum, and the bottom right at $33 billion per annum. It should also be remembered that these scenarios assume the same instrument mix hence make no attempt at considering what a more "private sector" oriented set of MDB portfolios might look like.

5.5 The main considerations in judging whether these scenarios could be accommodated within existing headroom are:

i. The corresponding rate of growth in MDB's non-climate DRE over the same period (and therefore total annual lending volumes),

ii. The impact of a change in the mix of instruments for climate change-related DRE would alter the overall risk balance of the MDB's portfolio (for example, greater proportionate use of equity and guarantees relative to ordinary lending),

iii. Whether changes to loan pricing could occur over the period, which could generate higher levels of retained net income in order to build equity,

5.6 We judge that the low/ medium case scenarios could be accommodated within existing MDB headroom, but subject to stronger shareholder consensus that the MDBs have a clear mandate to act on climate change and with confirmation from MDBs having conducted their own balance sheet calculations. However, the medium / high case scenarios, which see a more rapid rise in borrower demand for climate finance, may require consideration of additional capital in the period leading up to 2020. On the other hand, with a high carbon price the need for concessional lending would decline, and private flows are incentivised, so the overall effect on MDB borrower demand is unclear (it may be lower than in the medium case). Any future judgements about capital requirements to accommodate a demand increase in lending for climate purposes would clearly require careful analysis of need - both public and private lending, and the split between loans and grants.

Adaptation finance projections

5.7 Turning to adaptation, figure 13 gives the range of estimates in 2020 based on the methodology outlined above. It shows that a low case scenario (flat lined concessional funds) adaptation finance might be $4.4 billion. In the high case scenario, this might reach to $6.5 billion. These figures relate to MDB core spending only, and do not include use of concessional trust funds.

Figure 13: Scenarios for MDB adaptation finance in 2020 (US$ billion)

	Concessional MDB lending (proxy: 20% for adaptation)		
	Low	**Medium**	**High**
Adaptation	4.4	5.4	6.5

Grant equivalence

5.8 In assessing the contribution of the MDBs to 2020 finance goals, it may be appropriate to try and determine grant equivalence. This would require knowledge of MDB climate lending terms and repayment maturities in 2020. This in turn would require 10-year forward projections for LIBOR (the basis for MDB lending terms). In the absence of this information, a detailed calculation for grant equivalence of MDB lending has not been undertaken here.

6 What are the main options for MDBs to increase the funds they direct to climate finance?

6.1 This section considers options for the MDBs to increase their climate finance in the period leading up to 2020. First, it considers options within the existing capital base, notwithstanding the caveats noted in paragraphs 4.12-4.14. Second, it consider options where additional resource is made

available, either in the form of additional capital or through increasing the amount of finance available through CIF-type structures.

6.2 The most appropriate option for increasing MDB funds for climate finance depends to a significant extent on the external environment. In a low carbon price environment, with corresponding low demand, developing countries may require more grant-based/ highly concessional resource for low-carbon investments. Conversely in a high carbon price/ high-growth environment, where the economic incentive framework for low-carbon capital investments is strong, there may be very high demand for MDB non-concessional climate finance.

Options within existing resources

6.3 The MDBs currently do not have explicit projections for the amount of climate finance they could provide in 2020. Hence the question of how much "more" they could do against existing resource is difficult. Approaching this question pragmatically, it may be appropriate to set a financial goal for the MDBs on climate and request their response on how to achieve this (e.g. through a combination of additional resource, increased organisational capacity and a more specific mandate for climate). Against these caveats, possible options are set out below.

6.4 *Setting ambitious climate-related lending/ investment targets*: The calls at the Gleneagles and Hokkaido G8 for the MDBs to gear up their climate-related activities provided a clear external mandate for the MDBs to build their climate portfolios and to seek Board approval for these. This push from the G8/ shareholders provided an important incentive framework for the MDBs to increase dialogue with borrowers and better exploit climate-related opportunities in borrower countries. The Hokkaido targets (table 4) also provided an important focal point for shareholders to hold the MDBs to account.

6.5 The 2012 projections for $20 billion per annum set out in paragraph 4.1 provide a future point of reference. MDB shareholders and members may chose to set a framework for targets beyond 2012, considering how much future demand is likely to come from borrowers, and how much more the MDBs could supply against their current balance sheet headroom and through continuing to gear up their capacity and resource. One option might be for the MDBs to project a target percentage of their operations that will be explicitly climate-change related in 2020. The EBRD and IaDB, for example, already do this for near term projections. A further option is for the MDBs to strengthen co-ordination, in order to harmonise approaches and create the strongest possible incentive framework at country level.

6.6 However, any decision on MDB climate-related targets may need to be embedded within a wider shareholder discussion about the MDBs' role on climate change and use of capital for climate purposes. In addition, as explained above, the external environment is also critical in shaping developing country demand. Moreover, an important consideration is how

to ensure consistency across MDB operations – there is little point in setting a target for MDB low-carbon investments if the wider framework of MDB operations does not simultaneously disincentivise high-carbon alternatives (further work on the aggregate GHG impact of MDB portfolios would ensure environmental integrity stretches across the MDBs' core operations).

6.7 *Financial options*: A second option to increase funds for climate finance within existing resources may be to seek differentiated loan-pricing and cross-subsidisation to vary the relative cost/ terms of low-carbon versus high-carbon investment and lending. Loan price differentiation for low versus high carbon investments could prove an alternative means of internalising the cost of carbon within the terms of the loan (in the absence of standard practice across the MDBs for integrating a shadow price for carbon into project decisions).

6.8 It is unclear whether this option would be politically acceptable to shareholders and members, and how much finance this would generate for low-carbon investments if implemented. A key consideration would be the appropriate pricing differential between "low versus high carbon" investments and how this should evolve against the carbon price.

6.9 *Debt issuance*: A third option to increase MDB funds for climate finance may be to increase the proportion of "green bonds" in the MDBs' capital raise. The "climate association" provided through green bond issuance could entail additional appeal, for example to some institutional investors. Furthermore, earmarking capital to climate in this way could make it easier for shareholders to agree a portion of capital the MDBs can "allocate" to climate finance, without raising criticisms of resource diversion. (However, the overall level of MDB borrowing would still be constrained by its capital structure).

6.10 The World Bank has already issued green bonds[31] of around $1.5 billion. The African Development Bank also issued three "clean energy bonds" in 2010. Green bond issuance could continue to increase going forward, helping to underpin and increase in the MDBs' overall volume of climate finance.

6.11 A related proposition[32] is for sovereign, public or private entities to issue green bonds with the support and guarantee from an IFI. The borrower would need to declare IFI-authorised carbon reduction programmes, plus a marketable stream of carbon reduction credits or allowances. Failure to meet the carbon reduction programme would lead to an increase in the cost of borrowing and reduced access to low-cost debt in future. This is covered under Working Group 2.

[31] Issued by the World Bank and IFC as a fixed income product dedicated to supporting cimate change mitigation and adaptation within their countries of operation. The World Bank's green bonds were launched within the context of the "Strategic Framework for Development and Climate Change" – the WB's overarching strategy for climate change.
[32] EBRD, Office of the Chief Economist.

Options with increased shareholder/ donor contributions

6.12 The MDBs could increase the funds they are able to allocate to climate-related investment and lending through receiving additional shareholder/ donor contributions. These could take one of three forms – additional shareholder capital, additional donor funds for core MDB replenishments and/ or additional donor funds for trust funds (concessional or grant-based resource for specific climate purposes). All options may need to entail some form of ear-marking for climate change purposes, to delineate these funding streams from finance for core development spend.

6.13 *Capitalisation*: MDB re-capitalisation would generate additional non-concessional resource. Within the timeframe leading up to 2020, it is possible that the MDBs will ask shareholders for a further capital increase, depending on developing country demand and balance sheet strength. The case for a further general capital increase would require careful consideration by shareholders at the appropriate time. However, climate financing needs could be one key factor in determining the appropriate size of MDB lending.

6.14 The MDBs have projected a collective climate finance volume of $20 billion in 2012, based on their existing capital. One could make a simplified assumption that any future increase in capital would lead to a proportionate rise in MDB climate finance lending (assuming developing country demand for non-concessional lending grows at a proportionate pace).

6.15 Concessional Trust Funds: Expansion of trust funds would generate additional concessional resource. Trust funds are generally defined as separate "pots" of resource available for co-financing or co-investment with MDB lending. The CTF is one current example of a climate change trust fund which provides finance at more concessional rates than standard MDB terms, enabling the MDBs to increase their overall financial envelope for climate. Another example is the suggestion for a public-private investment fund, which would pool donor and MDB resource to leverage private investment into low-carbon infrastructure. Trust Funds are off the MDBs balance sheets and can therefore be established at any time by donors. They may operate under distinct governance arrangements, and as such may be more flexible in deployment.

6.16 Trust funds are not susceptible to MDB's capital levels, borrowing and lending capacities and ceilings. As such, use of dedicated climate-related trust funds may help to address some of the need for increased climate finance without recourse to further capitalisation of the MDBs. However, the MDBs cannot leverage trust fund resource directly, in the way they could other shareholder resource. There is also a question about the efficiency of concessional trust fund resource in a high carbon price/ high growth environment, where we assume developing country demand for non-concessional lending would be sustained.

6.17 *Replenishments*: Further replenishments would generate concessional resource, primarily for LICs as the eligible group. Replenishments take place at regular intervals, normally every 3-4 years. In some cases, LIC climate finance needs have already been integrated into replenishment discussions, or are in the process of being integrated. However, the emphasis in those discussions has been on integrating climate across MDB concessional spend rather than "carving out" a portion of resource specifically for climate. Effective allocation of climate finance between countries may require climate vulnerabilities to be taken into account in country and performance based allocation models. In our scenarios in table 10, we assume 20% as a proxy for climate resource in concessional funds, and estimate a potential range for concessional funds in 2020. Were the size of future replenishments to be higher, we could expect a proportionate increase in the "climate portion" of that spend.

6.18 For illustrative purposes only, the following box sets out an approach for considering how much additional climate investment/ lending the MDBs could provide with an extra $10 billion of resource.

How much could the MDBs lend to climate with an additional $10 billion of resource?

- The key consideration is how any new resources allocated to the MDBs would be split between concessional and non-concessional lending, and grants. This in turn may depend on the carbon price and the appropriate balance between mitigation/ adaptation and public/ private lending.

- To simplify, we assume the carbon price is the key variable – as the carbon price rises we assume greater relative demand for non-concessional versus concessional lending (because countries are willing to borrow on more expensive terms to finance low-carbon investments.) Conversely, in a low carbon price scenario, the need for concessional or grant finance increases.

- We assume 3 scenarios for how the additional resource might be allocated between concessional and non concessional lending arms:

    - Low carbon price (50/50 – non concessional/ concessional)
    - Medium carbon price (60/40 – non concessional/ concessional)
    - High carbon price (70/30 – non concessional/ concessional)

- The "MDB multiplier" (i.e. the volume of additional finance that this extra resource would generate) depends in tern on the allocation choice. We assume a multiplier of

    - 1:5 for non-concessional finance (every $1 of paid-in capital would lead to $5 of lending)
    - 1:1.2 for concessional lending (every $1 of replenishment would lead to $1.12 of lending)

- The three scenarios above then produce the following overall finance volumes:

    - Low carbon price = $31 billion
    - Medium carbon price = $35 billion
    - High carbon price = $40.5 billion

- In summary, an extra $10 billion channelled through the MDBs could deliver **$30 - $40 billion**, depending on the mix between concessional and non-concessional lending.

6.19 A more explicit discussion of the MDBs mandate on climate, and the climate finance needs of their borrowers, would merit careful consideration in future negotiations on any of the above options. In the interim, where the MDBs have secured a clear mandate on climate from their shareholders for existing capital or concessional funds, these should be put to as efficient and effective use as possible.

7 What is the role of the IMF in international climate finance

7.1 The IMF's mandate does not include a direct focus on climate change. Its work instead is centred on advising countries more broadly on challenges to macroeconomic stability and growth. In this respect, IMF staff work has included research on the economic effects of climate change – for example by taking account of climate change in its economic forecasts. Analyzing the macroeconomic impact of climate change could be particularly relevant in low-income countries, where the IMF has an additional role of supporting macroeconomic frameworks that enable poverty reduction and growth.

7.2 Several commentators have suggested using IMF-issued SDRs to help mobilise climate finance. IMF staff have contributed to this debate by considering the use of SDRs to leverage resources from private and official investors.[33] Their proposal is as follows:

- A group of countries would lend a portion of their SDRs to a "Green Fund." These SDR loans would be voluntary and scaled according to countries' quota shares at the IMF.

- The Green Fund would issue bonds to financial markets, using the borrowed SDRs to guarantee the bonds.

- Countries would make a separate subsidy contribution to the Green Fund. This would allow money raised from financial markets to be passed on as subsidised loans and grants.

7.3 IMF staff do not propose that the IMF itself would create, finance or manage the Green Fund. In addition, IMF staff note that their proposal is not dependent on the use of SDRs; in principle, any reserve asset could be used to capitalise a Green Fund.

8 Assessment of the options against key AGF criteria

8.1 Figure 14 compares the SDR proposal to the MDB options against the AGF's key criteria. Key conclusions are:

[33] See: http://www.imf.org/external/pubs/ft/spn/2010/spn1006.pdf.

- Climate change fits more comfortably within the MDBs overall mandate for economic growth and development. The IMF does not have a specific mandate on climate.

- A number of the MDBs have already agreed their climate strategies with their boards and have substantial climate change projects and programmes.

- Based on the analysis above, the demand for MDB climate lending could reach c. $35 billion per year (concessional and non-concessional) by 2020 or even higher depending on the reaction to a high carbon price. Resourcing this from the MDBs would require a policy shift by Banks' management and shareholders and a concerted effort to build the delivery capacity of the MDBs.

- In addition, the MDBs could increase the funds they are able to allocate to climate-related investment and lending through receiving additional shareholder/ donor contributions. This would require 1) countries to bear the cost of increased contributions, and 2) a policy shift by Bank management and shareholders to enable an injection of additional resource for climate purposes.

- The IMF staff SDR proposal aims to deliver $100 billion a year by 2020. This would require 1) countries to bear the (foregone interest) costs of lending their SDRs and the cost of guaranteeing the convertibility of the SDR in the event of default (private sector bond holders cannot be paid in SDRs), 2) mobilising an additional $60 billion in subsidy resources by 2020 (around half of today's global ODA), 3) private investors purchasing $1 trillion in green bonds over a 30-year period, 4) agreement by IMF members on the use of SDRs for climate finance in the context of IMF Articles of Agreement, and 5) for some countries, parliamentary authorisation to participate in such an arrangement and appropriation of new funding.

8.2 An alternative would be to use other reserve assets or a portion of MDB capital to capitalise a "green fund", which would lend at concessional rates to developing countries. A judgement about how to capitalise such a fund would need to take into consideration a range of issues, such as the feasibility/ practicality of different approaches, the respective cost to shareholders and impact on MDB balance sheets. Consideration would also need to be given to the read across between any new fund capitalised in this way and the IFIs role on climate more generally.

Figure 14: Comparison of options against key AGF criteria

	SDRs	MDBs
Range of potential revenue raised	The IMF staff's proposal envisages the Green Fund providing $17 billion a year to Middle- and Low-Income Countries during its start-up phase. This would rise to $100 billion a year by 2020. This financing assessment is based on: • Countries lending a total of $100 billion in SDRs to the Green Fund; • The Green Fund having access to subsidy resources totalling $10 billion a year during 2011-13, rising to $60 billion a year by 2020; • Financial markets purchasing $1 trillion in bonds issued by the Green Fund; and • Countries contributing to a separate pot of resources to provide additional cover against potential default by borrowers from the Green Fund.	The range of potential revenue contributed by the MDBs is determined by supply and demand factors: • Without additional capital or concessional resource, MDB supply of climate finance would be determined by mandate / capacity to use some of their existing headroom. • Additional capital or concessional resource would afford the MDBs more resource to scale-up their climate spend. • Demand is difficult to project in 2020, being determined by a range of factors that are hard to predict including growth and carbon price. • A hypothetical projection for how much non-concessional resource the MDBs might provide in 2020, dependent on factors affecting supply/ demand, is c.$29 billion p.a. (low case) and c. $44 billion p.a. (high end).
Reliability/ predictability of revenue stream	The reliability and predictability of the revenue stream from the Green Fund depends on several conditions being satisfied. These conditions include: • Securing long-term political commitments from countries to lend their SDRs and to contribute the necessary subsidy resource (for comparison, the $60 billion in subsidy resource suggested by IMF staff is around half of today's global official development assistance). • Maintaining long-term market interest and confidence in the scheme; the staff proposal envisages the Green Fund issuing highly rated (and therefore low-cost) bonds over a 30-year period.	The reliability and predictability of the revenue stream from MDBs depends on: • Endorsement by shareholders that MDBs should scale-up their climate finance from existing capital, or commitment to new capital/ replenishments for climate purposes. • Developing country borrowers continuing to increase their demand for MDB lending for climate-related activities, in a way that incentivises the MDBs to continue to provide increased and reliable forms of finance.
Efficiency / fiscal costs	Under the IMF staff proposal, participating countries would face costs from 1) the loan of SDRs[34], 2) subsidy contributions[35], 3)	Costs to shareholders relate mainly to the opportunity cost of shareholder capital. Further costs would include the fiscal cost

[34] SDRs are a reserve asset allocated to countries by the IMF. Their use under this proposal would create two immediate costs i) Interest payments (A country must pay interest to the IMF if its holdings of SDRs fall below the amount it has been allocated. Interest is paid until the country re-acquires its original level of SDR holdings. A loan of SDRs would therefore create an open-ended interest liability for all lenders. IMF staff recognise that the Green Fund will not

	resources provided as additional cover against default risk[36], 4) the backing of SDRs with currency reserves[37], and 5) competition with sovereign bond issuances[38].	associated with any core fund or trust fund replenishments.
Incidence	Under the IMF staff proposal, countries would scale their loans on the basis of quota shares at the IMF. The IMF cannot oblige members to use their SDRs in a particular way. Participation in the Green Fund would therefore be voluntary and would likely involve only a subset of IMF members. However, investors in green bonds may particularly look for the involvement of several financially strong members to provide a suitable backing to the scheme. The cost to countries of providing subsidy resources would depend on agreed burden-sharing arrangements. The IMF staff proposal does not itself suggest a means for scaling subsidy contributions.	In the case of non-concessional funds, MDB shareholders would bear the incidence associated with use of existing, or increased, capital in accordance with their share holdings. There would be no direct cost to developing countries under either of these options. In the case of additional resource for replenishments, or for Trust Funds, the contributors would bear the incidence in proportion with their relative contributions. Under both scenarios, the any potential for "trade-off" between development and climate spend would need to be clearly set out and understood.
Additionality	N/A	Any judgement on additionality would need to be taken in the context of political negotiations on this issue.
Practicality	IMF staff have tried to propose a scheme that is flexible enough for countries to encourage them to lend their SDRs. At the same time,	Use of existing MDB capital/ concessional resource would reduce the need to set up additional funds and could be an efficient way

be able to provide dividends on SDR loans, which may help cover such costs, until later years. Ii) Opportunity cost (A country would be giving up its SDRs, which could potentially earn a more favourable return if invested elsewhere, or could be used for a different purpose).

[35] The staff proposal includes several options for raising subsidy contributions i) Direct budgetary transfers (i.e. financed from the existing tax base, general taxation and/or debt issuance), Ii) Revenue from carbon taxes or trading schemes. (Some of these already exist in some countries so would be the same as above. The incidence, efficiency and effectiveness of these sources are discussed elsewhere. Iii) Interest earned on the SDR asset base.

[36] IMF staff suggest the Green Fund would borrow enough SDRs up front to cover for potential default risk, in which case SDR creditor countries would still have to bear the costs of guaranteeing the convertibility of the SDRs in the event of default (private sector bond holders cannot be paid in SDRs). As such, IMF staff also suggest that additional resources may be needed for this purpose, which could come from income earned from Green Fund lending as well as additional budgetary transfers from countries.

[37] IMF staff envisage the Green Fund issuing highly rated bonds to financial markets. This would require investors to have sufficient confidence in the scheme. Investors would in particular look for assurance that the SDRs could be exchanged for currency if needed. This would require lender countries to collectively set aside an equivalent amount of their currency reserves for this purpose. There would be an opportunity cost for the funding countries to tying up currency reserves in this way.

[38] Bonds issued by the Green Fund could compete with sovereign bond issuances. IMF staff's initial assessment is that the cost implications may be limited. However, costs may be influenced by a variety of factors including the scale, timing and denomination of bond issuances by the Green Fund.

	staff recognise the need for the scheme to provide sufficient security to financial market investors. The ability of the Green Fund to raise the envisaged amount of resources requires balancing these competing objectives. For example, providing countries with the flexibility to withdraw SDR commitments early may reduce investors' confidence in the bonds issued by the Green Fund. This would in turn limit the Green Fund's ability to borrow cheaply from financial markets.	to scale-up climate finance in the period leading up to 2020. The MDBs are developing a strong track record on climate, which means they are well positioned. However, implementation capacity would require continuous strengthening for all the MDBs. Any agreement on additional capital or concessional resource for climate would need to be made in the context of future capital increase or replenishment negotiations. It would be necessary to factor into these discussions both the costs of climate to borrower countries and the appropriate role of the MDBs in delivering climate finance.
Political acceptability	In addition to the costs associated with this proposal, the degree of political support for an SDR-backed Green Fund would depend on several key factors: • **Institutional arrangements**: The IMF staff proposal is concerned with developing a mechanism to mobilise climate finance. It does not consider how this finance would be disbursed. Separate negotiations would need to agree on the appropriate governance arrangements. • **Use of SDRs**: The proposal would require the IMF Executive Board to agree on the use of SDRs outside of their core role as a supplementary reserve asset and consider whether use of SDRs for climate finance would require amendment of the IMF Articles of Agreement. • **Subsidy resources:** The staff proposal leaves open the question of subsidy resources. Additional negotiations would need to agree the source of subsidy as well as burden sharing arrangements. These discussions would need to be concluded for the Green Fund to provide an immediate source of finance as IMF staff envisage. • **Parliamentary approvals:** Some countries have legal constraints on the use of SDRs or reserve assets for a climate fund, which would require new legislation authorising participation in such a fund, as well as the appropriation of new funding.	Political support for the MDBs scaling-up climate finance from existing capital / concessional resource would depend on shareholder agreement and acceptability to borrower countries. This would in turn depend on the opportunity cost of climate finance versus finance for other development priorities, MDB climate finance effectiveness and mandate. Political support for additional capital/ concessional resource for climate purposes would depend on shareholder/ contributor agreement and acceptability to developing countries. It would also require a prior understanding of what the appropriate size of MDB lending to climate should be in 2020, and how it would be most effectively delivered.

Annex A: Balance Sheet summaries of MDBs, as at year end 2009

$ millions	IFC	IBRD	EIB	EBRD	AsDB	AfDB	IADB	TOTALS
Date:	Dec-09	Jun-09	Dec-09	F Sep 09	Dec-09	Dec-09	Dec-09	
Equity	17,751	40,037	51,651	15,318	15,318	7,396	20,674	168,145
Callable Capital	0	178,427	295,836	19,559	56,641	30,555	100,641	681,458
AAA Callable Capital	0	79,281	213,362	12,429	19,460	8,558	41,026	374,116
Subscribed Capital	17,751	189,801	311,407	26,524	60,751	34,035	104,980	745,249
Loans outstanding	18,334	103,657	455,660	15,850	41,713	11,601	57,933	704,747
Equity Investments	6,930	0	2,704	6,191	884	366	0	17,075
Guarantees outstanding	1,601	1,661	4,044	536	1,599	2	0	9,443
DRE	26,865	105,318	462,409	22,576	44,196	11,968	57,933	731,265
Liquid assets	29,463	44,089	30,261	8,737	14,253	12,066	20,356	159,226
Total borrowings	29,636	110,040	443,127	24,704	42,089	16,506	60,307	726,409
Commitments	13,000	51,125	86,449	8,132	17,030	7,844	21,555	205,096
Total Assets	57,938	275,420	517,651	41,740	85,667	26,808	84,006	1,089,230
Net income $ m	625	572	1,768	-682	-28	362	794	3,412
Comprehensive Income	1,629	3,114	-3,056	-903	-28	255	1,230	2,241
Grants and Transfers	200	738	0	221	0	107	0	824
RATIOS								
Equity to (loans +guarantees)	89%	38%	11%	93%	35%	64%	36%	24%
Equity to DRE	66%	38%	11%	68%	35%	62%	36%	23%
Equity plus AAA Callable Capital to DRE	66%	113%	57%	123%	79%	133%	107%	74%
AAA Callable Capital as % Equity	0%	198%	413%	81%	127%	116%	198%	222%
Loans to Borrowings	62%	94%	103%	64%	99%	70%	96%	97%
Liquid assets to Borrowings	50%	16%	6%	21%	17%	45%	24%	15%
Liquid assets to Commitments	227%	86%	35%	107%	84%	155%	94%	78%

Annex B: Clean Energy Investment Framework Definitions

Low Carbon: Low-carbon projects include RE projects (including all hydropower projects), EE (including EE resulting from investments in water sector, mass transit, and industrial investments), power plant rehabilitation, district heating, biomass waste, gas flaring reduction, high-efficiency, coal-fired thermal plants (supercritical and ultra-supercritical), methane capture and reduction, and forestry.

Energy Access: For countries eligible for access to the soft loan windows of the MDBs, these include all generation, transmission, and distribution projects, since they are all needed for increased electrification. For the other developing countries, only projects specifically aimed at increasing electricity access, such as rural electrification, are included.

Clean Technology Fund: This assumes that $1.5 billion of CTF will be committed in 2009 and $2.5 billion will be committed in 2010.

CTF lending terms:

	Maturity	Grace Period	Principal Repayments Year 11-20	Principal Repayments Years 20-40	FY09-10 MDB Fee	FY09-10 Service Charge	Grant Element
Harder Concs.	20	10	10%	N/A	0.10%	0.75%	~45%
Softer Concs.	40	10	2%	4%	0.10%	0.25%	~75%

Annex C: *DRAFT* - JOINT MDB CLIMATE FINANCING REPORT - EXECUTIVE SUMMARY

Introduction

The 2005 Gleneagles communiqué on Climate Change (CC), which recognized the "serious and linked challenges of tackling climate change, promoting clean energy, and achieving sustainable development globally," and the Bali Action Plan provided the impetus for the implementation of an enhanced, coordinated Multilateral Development Banks (MDBs) response to the climate change challenge.

Over these past five years, the MDBs have built up a track-record in climate financing with cumulative MDB CC mitigation financing reaching around $40 billion for the period 2006 to 2009 while simultaneously developing a strong body of experience on supporting climate action in developing countries intrinsically linked to the fulfilment of their mandates. This *scale-up of climate financing and technical assistance has come in response to a rapid growth in country-led demand,* as governments have increasingly recognized the urgency as well as the necessity of climate action, both with respect to mitigation and adaptation, if they are to achieve their sustainable development objectives.

This report describes the MDBs collective climate financing activities together with specific results for the past four years, provides an indicative estimate for the next three years and highlights the inadequacy of current concessionary CC financial flows in relation to needs considering the current climate framework. It also summarizes their CC advisory, policy and capacity building services and lessons from experience highlighting challenges going forward.

Scaling up MDB climate financing

Climate financing is by now a priority activity in all the MDBs. It is increasingly integrated and mainstreamed into the MDBs development and operational strategies. Over 60% of all their new country strategies, which are jointly developed with client governments and other key stakeholders, now address climate issues in some form.

Mitigation

2006-2009. MDBs have significantly scaled-up their CC *mitigation activities*, including demand and supply side energy efficiency, renewable energy (RE), and reducing carbon emissions from transport, urban infrastructure, and land use, land use changes and forestry (LULUCF). Total MDB mitigation financing increased from $5.4 billion in 2006 to $10.7 billion in 2008, and $17 billion in 2009 in support of a total projects/programs value rising from $20 billion in 2006 to $55 billion in 2009. These achievements were significantly in excess of the MDBs indicative objective of $7.6 billion for 2008 and $9.4 billion for 2009 set out in their report to the G8 in Hokkaido.

2010-2012. Driven by country demand and the urgency of supporting developing countries to address their mitigation objectives, MDB CC mitigation financing is indicatively projected to increase from $17 billion in 2009 close to $21 billion in 2012 for a total estimated project value of $55 billion. Development policy loans are projected to account for about a quarter of MDB climate financing in 2012.

Adaptation

The MDBs and their clients have been identifying, developing and implementing programs designed to help developing countries *adapt to existing adverse impacts of climate change* in the short term, and to build climate change resilient economies for coping with its impact in the medium and longer terms. Interventions include: strengthening macro, sector and project climate risk management, upgrading agriculture research, introducing climate risk insurance mechanisms, and improving the climate resilience of infrastructure investments. It is important to emphasize that many mitigation interventions, particularly those related to LULUCF, also serve to increase CC resilience and enable countries to adjust to the impact of climate change.

Financing instruments. In funding these CC interventions the MDBs are *using their broad*

range of financing instruments including sovereign and sovereign-guaranteed loans, sub sovereign loans, non-sovereign loans, equity, guarantees, concessional financing and grant funded technical assistance in various forms. Building on this broad range, MDBs have been able to blend financing sources to address specific market distortions in the process leveraging significant public and private financing. Climate change policy-based loans are playing an important role to achieve systemic change and to scale up financing needed by countries for clean energy and climate adaptation activities.

Private sector. These instruments have been particularly important in *catalyzing CC investments by the private sector* with about half of MDB climate financing between 2006 and 2009 estimated to have been to the private sector. The private sector has clearly demonstrated its capacity to engage in substantial CC investments. It is equally clear however, that a supportive and predictable economic and regulatory environment is essential if CC private sector financing is to achieve its scale-up potential. The new CC development policy loans are important vehicles for securing the needed policy and regulatory changes. The MDB traditional range of financing instruments is particularly appropriate for investments with positive rates of return and CC mitigation benefits. However, when CC benefits cannot be fully captured by investors, or client governments, MDBs have been developing *innovative climate financing instruments* which blend concessional funding with MDB financing to address market failures (notably in the adaptation sector) and leverage investment, particularly from the private sector.

Operational capacity. Project sustainability, including financial sustainability, is core to the MDBs operations. Lending discipline, return-to-capital objectives, rigorous due-diligence and environmental procedures, selective engagement rules, are common traits of the MDBs and the way they operate. Frequent co-financing with other MDBs or commercial banks also enhance these traits. These factors support project implementation and sustainability.

Carbon markets. The carbon market, where carbon emission reductions can be monetized, is a potentially powerful tool to reduce greenhouse gas emissions, mobilise private sector investment and transfer new and additional financial resources and clean technology to the developing world. The MDBs have been instrumental to the development of the carbon market, including by building host countries capacities, reducing regulatory and other uncertainties for buyers and sellers, preparing methodologies, and promoting environmental, social, financial legal and other best practice standards. However, in the absence of commitments for deep cuts in emissions coupled with a strong legally binding framework, the overall availability of carbon finance will become constrained, reducing the contribution of the carbon market to climate financing. *Access to significant concessional funding is thus critical* if developing countries are to respond to the climate change challenge.

In the aftermath of the Bali conference and following an intensive consultation process between the MDBs, their clients and prospective donor countries, two *Climate Investment Funds - the Clean Technology Fund (CTF) and the Strategic Climate Fund (SCF)* - were established to provide grant and concessional financing to developing countries. The objective of these new facilities is to achieve transformational outcomes and to demonstrate what can be achieved jointly by the MDBs through programmatic approaches to scale-up resource availability to a set of pilot countries for climate resilient and low carbon development. Contributions of $6.3 billion have, so far, been pledged by 13 countries. A high share of these funds have been committed to support mitigation and adaptation programs in about 30 middle income and least developed countries. Consistent with its objective the CTF, which primarily focuses on mitigation, has been able to achieve a financing leverage ratio of about 1:8.

MDB advisory, policy and capacity building services

Framework for climate action. The MDB CC financing activities have been accompanied by a significant and increasing volume of technical assistance focused on providing CC analytical, policy and capacity building support. MDB *sector analysis* has provided the basis for targeted advice on detailed policies, regulatory regimes and the strengthening of CC incentives. The MDBs have also responded to country requests for assistance in preparing national studies on the economics on climate change and long term *low carbon growth plans*

in over 10 countries, including the largest carbon emitters . An important feature of these studies is that they are all country owned and led. In addition the MDBs are providing an increasing level of technical support to the preparation of *National Adaptation Programs for Action (NAPAs) and National Appropriate Mitigation Actions (NAMAs)*.

Getting results on the ground. The MDBs have also extended significant technical support to their clients during *CC project/program identification, preparation andimplementation* . This is important as the ability to achieve, monitor and verify concrete results in-country depends to a large extent on strong project preparation and implementation capacity.

An inclusive approach. Climate change is central to the global development challenge. It can only be effectively tackled if key global and country stakeholders work together. A *partnership* philosophy and approach has thus characterized the MDBs CC programs since their inception. While developing strong and collaborative partnerships involves time and effort, they are essential to building the necessary ownership and to implementing effective and sustainable CC interventions.

Building expertise. The MDBs can only provide their clients state of the art policy, operational and capacity building support if they themselves are at the professional cutting edge. In the last five years the MDBs have thus made a major effort to build and strengthen their own CC expertise and knowledge.

Lessons of experience and challenges going forward

While the collective experience of the MDBs in integrating CC mitigation and adaptation issues into their development assistance agendas is still relatively new, some important lessons and challenges are already apparent and are highlighted below:

- Levelling the playing field for climate friendly technologies and fuels remains a key priority.
- Most importantly there is a need to substantially reduce existing subsidies for fossil fuels, and for greater transparency of costs within the energy system.
- Addressing regulatory risk in a number of countries remains a high priority, particularly with respect to RE. Guarantee of grid access, adequate tariff levels and clear rules to pass through the incremental costs of RE are key to scale up RE market penetration, particularly for IPPs.
- Significant scale and transformational impacts can be achieved by linking project interventions to policy in a programmatic way.
- Many aspects of adaptation opportunities are still poorly understood e.g. risk management tools, linkages to deforestation and understanding better the role of private investment streams.
- Given that most CC investments will be undertaken through relatively small projects and by the private sector the development of innovative programmatic approaches designed to address these issues is an operational priority.
- Combining resources across climate financing instruments not only supports scaling up but, if used correctly, can stimulate transformational processes.
- While absorptive capacity constraints remain significant, the CC policy, regulatory, institutional and programmatic initiatives that have been undertaken by developing countries with the support of the MDBs and other donors provide a good basis for an accelerated scale-up of CC interventions.
- The availability of new and additional *concessional funds for mitigation and adaptation* will be a key determinant of the ability of MDBs to further scale up their climate financing activity particularly in the absence of a significant strengthening of the climate framework, including the carbon markets. Current committed donor finance plus projected CDM funding through 2012 amount to less than $8 billion per year. This compares to the estimated mitigation costs in developing countries of $140 billion to $175 billion a year by 2030 and an adaptation funding requirement of $30 billion to $100 billion a year over the medium term.

Annex D: Potential MDB climate -related DRE in 2020 – Table 8

Caveats to projections

- A proper assessment of MDB capacity under policy constraints requires projecting the balance sheets of *individual* MDBs. The amount of finance they will be able to provide depends on a host of factors that are not easily determined through data that is externally available. These include the amount of equity built up, the amount of borrowing incurred, maintaining adequate liquidity and a number of other factors including repayment schedules of existing loans, average maturities, expected loss rates etc.

Key assumptions underlying projections in CC financing

- The starting level of CC DRE is based on an assumed average across the MDBs of 20% of their 2009 DRE growth.
- Demand for climate change financing always exceeds supply. The projections are based on MDB finance being driven by infinite borrower demand,
- The mix of instruments does not change from current proportions,
- DRE projections are based on outstanding balances as at year end 2009 at rates of growth that are consistent throughout the period,
- "Non-climate DRE" will continue to grow at a fixed rate considerably lower than the climate change-related portion – hence the CC portion will account for the bulk of available headroom of each MDB,
- There is a current average base level of climate change related DRE which can be applied (as a % of total DRE) across all MDBs,
- Special purpose CC funds or programmes (e.g. the Climate Investment Funds, or Global Environment Facility) are not explicitly incorporated for the purpose of projected capacity since these are assumed to be reflected in further demand for OCR loans, guarantees and investments from the MDBs,
- If the MDBs make equity investments in CC funds, then their additional capacity to invest can be measured by their Equity Investment Headroom,
- The economic capital or risk adjusted capital is *estimated* based on simplified BIS risk weights and a limited number of asset categories. These estimates are not based on MDBs own calculations for risk adjusted capital requirements (where they do this),
- The shift to climate change financing would not be limited by institutional capacity constraints. In practice, an increase in climate change financing on the scale implied would require a substantial review of MDB strategies and portfolios.