

Key Features and Dimensions of Climate Finance

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

If we are to avoid the dangerous impact of climate change we must limit global mean temperature increase to 2°C above pre industrial levels. This means stabilizing atmospheric GHG concentration below 450ppm carbon dioxide equivalent. Emission reductions required for a 450ppm pathway adapted from McKinsey global GHG abatement cost curve. Failure to cut emissions on this kind of scale would result in serious risks of temperature increases of 3,4,5 deg. C and higher. Scientists tell us that to have a 50-50 chance of holding temperature below 2°C global emissions would need to be below 35Gt CO₂e by 2030. The 2009 Copenhagen Accord pledged funds of \$10 billion a year from 2010 to 2012, increasing to \$100 billion per year by 2020 to combat climate change in developing countries through mitigation and adaptation. Even assuming ambitious GHG reductions by developed countries, large additional reductions in developing country emissions will be required in order to limit global warming to 2°C. This pathway requires global emissions to peak no later than 2015, and to fall 50% from 1990 levels by 2050, split so that developed nations shoulder the majority of the burden.

For mitigation in developing countries, approximately €55–80bn in financing from developed countries would likely be required annually in additional funds during the period 2010–2020 (an additional €10–20bn is required annually for adaptation). On the basis of the principle of compensation for incremental costs by developed countries, a total of €65 – 100 billion annually over the 2010 – 2020 period is needed to finance these reductions and meet developing countries' adaptation needs. McKinsey estimates that in order to reach a desired 450 ppm pathway, €350 billion of incremental capital investment is needed between 2010 and 2020, and €595 billion between 2020 and 2030. Developing nations require €130 billion of capital investment between 2010 and 2020, and €280 billion between 2020 and 2030: China represents a large share of this (€60 billion or 44%).

A study by the World Bank estimates that \$70-100 billion dollars per year will be needed for adaptation and indicates that costs may be even higher. For mitigation, estimates indicate that \$139-175 billion/year will be needed in 2030.

Prominent climate funds include:[a] The World Bank's Climate Investment Funds (CIFs) [b] The GEF's Least Developed Country Fund (LDCF) and Special Climate Change Fund (SCCF) [c] Adaptation Fund (AF): [d] REDD+ funding from UN-REDD, implemented by FAO, UNEP, and UNDP. The Future sources of climate finance are [i] International Maritime Shipping, [ii] International Aviation, [iii] Direct Budget

Contribution, [iv] Financial Transaction Tax (FTT): [v] Special Drawing Rights (SDR):

The Innovations of new finance are [i] A Trustee of 12 carbon funds and facilities, [ii] The green bonds, [iii] A Multi Cat program, [iv] Caribbean Catastrophe Risk Insurance Facility (CCRIF), [v] Certified Emission Reduction certificates for the UN Adaptation Fund, [vi] The International Finance Corporation.

Besides, the Durban decision on the Green Climate Fund, which was part of the Cancun Agreements, stressed the need for an "early and adequate replenishment process", based on voluntary contributions.

The governance matters for institutionalization of Green Climate Fund under the accountability to its 'parent' body, the United Nations Framework Convention on Climate Change (UNFCCC) whose elements are, [i] ownership, [ii] participation, [iii] structure, [iv] mandate, [v] membership and representation.

The GCF's governance architecture provides to:

- identify clear responsibilities and lines of accountability within the Fund's structure;
- clarify the Fund's objectives and developing the standards and metrics to assess the progress
- develop environmental and social safeguard policies to ensure the Fund's activities
- identify, informing and empowering the constituencies of beneficiaries of the
- ensure the oversight system

Lastly, climate funds have continually neglected gender issues and failed to incorporate a gendered perspective into programmes and projects.

Index Terms- Climate finance, magnitude of finance, governance of finance, sources of finance

I. INTRODUCTION

What is climate finance

Climate finance is a key issue at the heart of the international climate negotiations. These include how much additional finance is needed for mitigation and adaptation, how will the money be raised to meet these needs, how will resources be transferred to diverse recipients in developing countries and how will progress and outcomes – reducing emissions of greenhouse gases (GHGs) and adapting to the impacts of climate change – be monitored? Climate finance can be a catalyst to leverage private and public resources, open new economic opportunities, promote technology deployment and transform development pathways.

To reduce worldwide greenhouse gas (GHG) emissions, increase GHG sequestration, and adapt to the harmful impacts of

changing GHG levels, Climate finance is an effort to support developing countries by providing funding from the developed world to assist these countries in mitigation and adaptation, and to embark on green development paths.

Climate finance, measured as annual commitments of funds or capital flows (disbursements of public funds or private investment) support climate action as well as cumulative amounts of investment or public fund capital over time. Measurements should be in a common currency and real year monetary units (e.g. real USD for the most recent year). Simply, Climate finance refers to funds that will be transferred to developing countries to cover their investments in mitigation and adaptation.

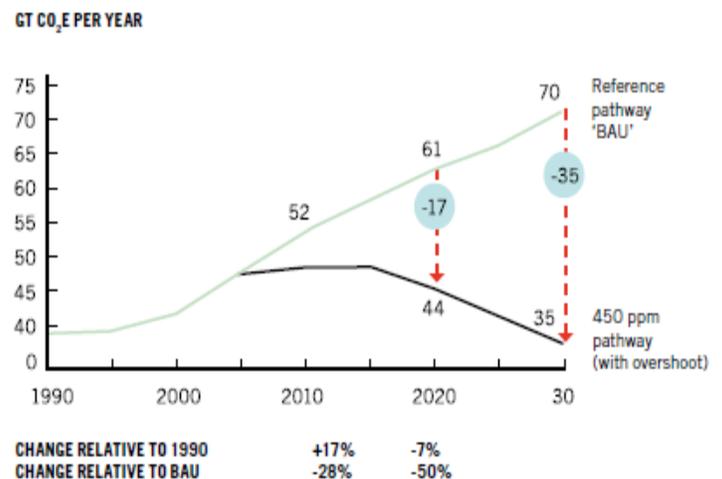
International climate finance is the transfer of funds from the North to the South to help enable developing countries adapt to the unavoidable impacts of climate change (i.e. adaptation), reduce greenhouse gas emissions (i.e. mitigation), and embark on clean energy development paths.

Climate finance is further grounded in the concept of the North's historical responsibility for causing the climate crisis. The provision of climate finance can be seen as part of repayment of the climate debt that the North owes to the South. It is also a legal obligation under the United Nations Framework Convention on Climate Change (UNFCCC).

II. THE NEED FOR CLIMATE FINANCE

If we are to avoid the dangerous impact of climate change we must limit global mean temperature increase to 2°C above pre industrial levels. This means stabilizing atmospheric GHG concentration below 450ppm carbon dioxide equivalent. To achieve this target we need to start now decarbonise the global economy. In absolute terms, this means a reduction in annual global emissions of 17 billion tones by 2030. Putting this into context, global GHG emission in 2005 were 49 billion tones CO₂e and they are projected to rise under business as usual scenarios to 61 billion tones in 2020 and 70 billion tones in 2030. To meet this targets we will need to raise finance at scale for climate change mitigation in developed and developing countries. In the figure, emission reductions required for a 450ppm pathway adapted from Mckinsey global GHG abatement cost curve which is shown below.(Fig.1).

Fig.-1: GHG Abatement Cost Curve



Source: Oxford Institute for Energy Studies, GCP, 2009

The world must reduce the absolute level of global emissions of greenhouse gases (GHGs) by a factor of 2½ or more in 40 years and emissions per unit of output by a factor of 7 to 8 under reasonable growth assumptions; that is what is needed to give a 50-50 chance of holding to a 2 deg C increase in global temperatures relative to the 19th century. That will require substantial investment in both developed and developing countries and major technological advance. Failure to cut emissions on this kind of scale would result in serious risks of temperature increases of 3,4,5 deg C and higher. These temperatures would likely transform the relationship between humans and the planet: we have not seen 3 deg C for 3 million years and 5 deg C for 30 million years – homo sapiens has been around for approximately 200,000 years. The rich countries are not only wealthier and better equipped technologically than developing countries but they also emitted around 75% of cumulative global GHG emissions since the mid-19th century. The anthropogenic climate change which is occurring now and will occur over the next 20 years, which is largely the result of these past emissions of rich countries, will also require substantial investment in adaptation. For these reasons an equitable climate change agreement must involve substantial support by the rich countries for the mitigation and adaptation investment which is necessary in poorer countries. The conclusions of the UNFCCC COPs held in Durban in December 2011, and in Cancun in 2010, point in this direction: action on reducing emissions will need to be taken globally, but poorer countries need to be assured, through financial support, of equal access to sustainable development. The arithmetic is clear. The current total global emissions are nearing 50Gt CO₂ equivalent (CO₂e) p.a., with approximately 20Gt CO₂e p.a. in the rich world and the remaining 30 Gt CO₂e in the developing world. Taking into account the pledges in the Cancun agreement, by 2020 total emissions would be in the 48-52Gt CO₂e range, with rich countries 16-19Gt CO₂e, and developing countries at 32-33Gt CO₂e. If the rich countries accelerated their actions to reduce emissions they could potentially get down to 10Gt CO₂e by 2030. If poor countries managed to limit emission increases per capita to modest levels, they may hold their overall per annum emissions to approximately 40Gt CO₂e by 2030. This would

mean a total global flow of emissions of approximately 50Gt CO₂e p.a. by 2030. Scientists tell us that to have a 50-50 chance of holding temperature below 2°C global emissions would need to be below 35Gt CO₂e by 2030.

In order to meet these targets there is need to raise new and additional finance at a global level. The 2009 Copenhagen Accord pledged funds of \$10 billion a year from 2010 to 2012, increasing to \$100 billion per year by 2020 to combat climate change in developing countries through mitigation and adaptation. Even assuming ambitious GHG reductions by developed countries, large additional reductions in developing country emissions will be required in order to limit global warming to 2°C. This pathway requires global emissions to peak no later than 2015, and to fall 50% from 1990 levels by 2050, split so that developed nations shoulder the majority of the burden.

In developing countries, some of these reductions have negative costs, such as energy efficiency in buildings, transport, and industry. Many areas have moderate positive costs (agriculture and forestry), and technology-intensive sectors (notably renewable energy) require significant funding.

III. MAGNITUDE OF CLIMATE FINANCE REQUIRED

The magnitude of climate finance required for developing countries must be determined by climate protection objectives. There has been wide agreement that global mean temperatures should not rise more than about 2°C. To achieve this goal, global emissions will need to peak by 2020 and fall 50 percent from 1990 levels by 2050. It is increasingly believed that achieving these reductions will require developed countries to make reductions of 25–40 percent by 2020 and 80 percent by 2050. The magnitude of these emissions reductions and the costs of achieving them in turn determine the total level of financing required for mitigation actions. For mitigation in developing countries, approximately €55–80bn in financing from developed countries would likely be required annually in additional funds during the period 2010–2020 (an additional €10–20bn is required annually for adaptation). These amounts are in addition to what

developing countries are expected to contribute and business-as-usual growth in both existing CDM offset credit markets and ODA programs. Even on optimistic assumptions about levels of private finance, mitigation funding from developed countries will have to include large public transfers as well as private transfers.

On the basis of the principle of compensation for incremental costs by developed countries, a total of €65 – 100 billion annually over the period of 2010 – 2020 is needed to finance these reductions and meet developing countries’ adaptation needs. However, these cost figures do not capture the significant positive externalities throughout society from low-carbon investment such as increased employment, heightened energy security, improved agricultural productivity, and improved infrastructure.

The McKinsey Green House Gas Abatement Cost Curve (Fig.1) assesses the technical opportunities to abate CO₂ emissions that cost under €60/ton in the period to 2020. Abatement opportunities examined fall into three categories:[i] Energy efficiency (buildings, transport, industry), representing 5 Gt, [ii] Low-carbon energy supply, representing 4 Gt,[iii] Terrestrial carbon (forestry and agriculture), representing 10 Gt Investment in these sectors would start to turn these opportunities into real reductions. McKinsey estimates that in order to reach a desired 450 ppm pathway, €350 billion of incremental capital investment is needed between 2010 and 2020, and €595 billion between 2020 and 2030. Sector estimates are shown in Table 1.

Developed nations require €220 billion of capital investment per year between 2010 and 2020, and €315 billion between 2020 and 2030: this is mainly driven by replacement or upgrade of existing buildings (47% of the total capital need by 2020) and transportation stock (20% of the total capital need by 2020).

Developing nations require €130 billion of capital investment between 2010 and 2020, and €280 billion between 2020 and 2030: China represents a large share of this (€60 billion or 44%).

Table 1: Global climate finance requirement

Sector	Global Investment Need		Developing Nation Investment Need	
	2010-2020(€bn)	2020-2030(€bn)	2010-2020(€bn)	2020-2030(€bn)
Building(mainly energy efficiency)	125	155	25	45
Transportation(mainly energy efficiency)	70	215	25	100
Industry(mainly energy efficiency)	75	80	40	50
Power	65	125	30	70
Waste	10	10	5	5
Forestry and Agriculture(terrestrial carbon)	5	5	5	5

Source-Metz, 2009

A study by the World Bank estimates that \$70-100 billion dollars per year will be needed for adaptation and indicates that costs may be even higher. For mitigation, estimates indicate that \$139-175 billion/year will be needed in 2030. Developing

countries have advocated for a goal as high as US \$600 billion, or 1.5% of developed nations’ GDP. In 2009, developed countries committed to provide Fast Start Finance (FSF) totaling US \$30 billion between 2010 and 2012 and to mobilize US \$100 billion/year by 2020. Given the context above, this commitment

should be viewed as a starting point, not an end goal. However, an explicit plan for scaling up to that level of financing remains elusive. Governments are struggling to effectively deliver their FSF commitments. Even more worrisome, little progress is being made to commit further public funding and to develop innovative financing methods that will reach the US \$100 billion/year goal. But, the European Commission, African Group, World Bank and UNFCCC estimated the required climate finance which is not similar to others.

Table – 2: Recent Estimates of International Finance

Annual Funding Needs,2005(billions of dollars)			
Source	Year	Mitigation	Adaptation
EC,2009	2020	94	10-24
African group,2009	2020	200	>67
World Bank,2009	2030	139-175	20-100
UNFCCC,2008	2030	>65	28-59

Source-IIED,UK

It is to be noted that the developing countries of the Common Wealth Countries received the total climate fund as 400.00 million US dollar in which 106.8 million dollar for adaptation funds,264.8 million dollars for mitigation funds and 28.4 million dollar for REDD as on December 2010 which were far below the actual needs.(www.climatefundupdate.org)

IV. EXISTING SOURCES OF CLIMATE FINANCE

The relationship between the Green Climate Fund and existing funds is unclear, though existing climate funds are meant to be harmonized and better coordinated after the operationalization of the GCF. A variety of financial sources already exist, though their scales are small compared with the financial flows anticipated under the GCF. Little collaboration and coordination has taken place between existing funds to date.

The majority of these funds are managed by the World Bank, the UNFCCC Secretariat, or other UN agencies. The Global Environmental Facility (GEF), an independent financial organization, assists developing countries by providing grants in support of UN environmental agreements such as the UNFCCC. Since its founding in 1991, it has allocated a total of US \$9.5 billion to environmental initiatives. Prominent climate funds include:

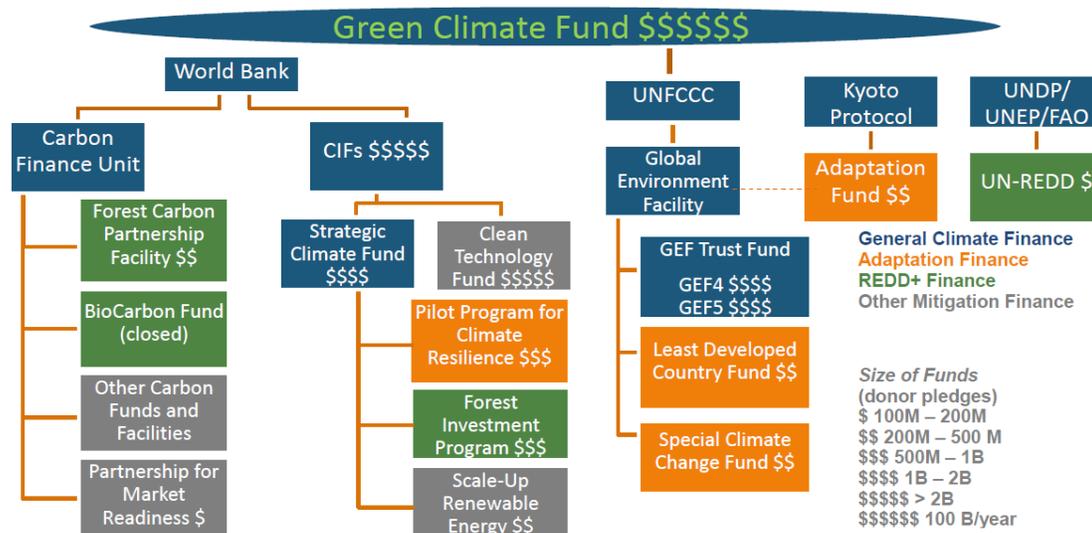
[a] **The World Bank’s Climate Investment Funds (CIFs)**: Funds to help developing countries progress in low-emissions and climate-resilient development, on a scale of US \$6.5 billion as pledged by participating countries in 2008. The funds were created with a sunset clause that will phase them out with the establishment of a UNFCCC financial mechanism.

[b] **The GEF’s Least Developed Country Fund (LDCF) and Special Climate Change Fund (SCCF)**: The LDC Fund promotes adaptation efforts for the least developed countries, specifically by financing mainly the design, but also the implementation, of National Adaptation Programs of Action (NAPAs), on a total scale of US \$415 million. The SCCF provides support for long- and short-term adaptation efforts and technology transfer in all developing country parties to the UNFCCC on a total scale of \$218 million. These funds will likely remain in place with the establishment of the Green Climate Fund.

[c] **Adaptation Fund (AF)**: The Adaptation Fund was created within the Kyoto Protocol in order to provide funds for adaptation programs in developing countries. The Fund is financed with a small percentage of revenue from the trade of Certified Emission Reductions (CERs) allocated for the Clean Development Mechanism and other sources. Total value of assets stood at US \$211 million as of January 31, 2011.

[d] **REDD+ funding from UN-REDD, implemented by FAO, UNEP, and UNDP**: Supports governments in designing and implementing REDD+ initiatives, on a scale of US \$150.84 million. A chart mapping out the current climate finance sources is included in the **Chart 1**.

REDD+ funding from UN-REDD, implemented by FAO, UNEP, and UNDP
Chart 1: Existing Financial Sources



Source-Rebecca , 2011

V. FUTURE SOURCES OF CLIMATE FINANCE

[i] **International Maritime Shipping:** Regulating GHG emissions from the marine transportation sector could generate finance through levies, carbon offsetting, or the sale of allowances. This method could produce between US \$2-19 billion per year.

[ii] **International Aviation:** A market-based mechanism, such as sectoral cap-and-trade, has been proposed to decrease aviation-related GHG emissions. It could also raise revenue; estimates project that such a mechanism could generate US \$1-6 billion per year where the contributions of US was 41%,EU,22%,rest annex countries 14% and non-annex countries 23% respectively

[iii] **Direct Budget Contribution:** Developed nations pledge a specific contribution to climate finance from their national budget. Developing countries prefer this method, though it depends on developed nations' willingness to make and meet pledges, which can vary greatly depending on the current political and economic climate. Currently, the scale of this source is reflected in the scale of Fast Start Finance—US \$30 billion over 3 years.

[iv] **Financial Transaction Tax (FTT):** This source would impose a global 0.005% tax on each trade of financial instruments such as currency and stocks. While implementing such a mechanism would require a device for global taxation and collection, estimates project that this could generate US \$2-27 billion/year.

[v] **Special Drawing Rights (SDR):** At the December 2009 climate change conference in Copenhagen, philanthropist George Soros drew attention to another means to generate resources for climate change: the use of Special Drawing Rights (SDRs), which are "reserve assets" created by the International Monetary Fund (IMF). Soros suggested that an immediate infusion of SDRs could create a U.S. \$100 billion "fast-start green fund" for climate finance that could be part of the answer

to developing countries' adaptation and mitigation needs. At the World Economic Forum in January 2010, IMF Managing Director Dominique Strauss-Kahn echoed Soros's words, marking the first time the IMF has favorably acknowledged the possibility of using SDRs as a finance instrument. Strauss-Kahn was vague in his proposals and said the IMF will issue a paper sometime soon to elaborate. An immediate infusion of resources can happen if developed countries decide to convert their own idle SDRs into cash – up to U.S. \$165 billion from the 2009 allocation. This funding can then be transferred to a United Nations Framework Convention on Climate Change (UNFCCC) fund or mechanism. Various options are described below for how the interest on those SDRs could be paid. However, while an immediate infusion of resources for climate adaptation and mitigation is needed, predictable and sustainable climate finance is essential. Therefore, developed country governments must also agree to support ongoing and regular allocations of SDRs for climate finance. For regular allocations of SDRs, both developed and developing countries could convert their SDR allocation into cash to be transferred to a UNFCCC fund. The fund would then make grants to developing countries for climate adaptation and mitigation, based on the rules established by its governing body. A key issue to be resolved relates to the interest charge which governments incur when they convert SDRs into hard currency. When SDRs are used for climate finance -- particularly for adaptation -- developing country governments should not bear any of the costs involved, according to the "polluter pays" principle. Adaptation finance is a form of compensation for the measures developing countries are forced to take in the face of climate change they did not create. Therefore, all adaptation finance must be in the form of grants from developed countries.

There are various alternatives for covering the interest charge for SDRs, including:

1. Selling all or part of the IMF's enormous gold stocks (approximately 100 million ounces), which would likely cover

several years of interest payments. (This option would require approval of the US Congress, among others.)

2. Requiring developed countries – those countries historically responsible for creating the climate crisis – to pay the interest charges. This could be seen as a contribution towards the climate debt that developed countries owe to countries in the global south.

3. Action by the IMF Board of Governors to "cancel" all SDRs which have been converted to hard currency for adaptation and mitigation purposes. Under this scenario, developing countries would not need to pay interest on or replenish their SDRs. This cancellation could be framed as a specific response to the global threat of climate change, and need not be seen as a precedent for the general use of SDRs.

The IMF Executive Board would eventually have to agree to use regular allocations of SDRs for climate finance and to transfer these resources to a UNFCCC fund. However, the first place of agreement on using SDRs for climate change should be through the UNFCCC, where all negotiations on climate change should take place. The G20 could help advance this process by supporting this non-traditional use of SDRs.

One risk is giving the IMF – an institution with an undemocratic governance structure and a history of attaching very harmful conditions to its loans – any role at all in climate finance. However, it is important to note that it is not the IMF, but the governing body of a UNFCCC fund, which controls the disbursement of SDRs. Furthermore, the IMF has no hand in how SDRs get used and the IMF cannot attach any conditions to the SDRs. The only role the IMF has is to actually create the SDRs. Another possible risk is that developed country governments could use SDRs as a way to get out of paying their full climate debt. This is because, depending on how repurchases and interest payments are handled, SDRs could generate significant sums of money without necessarily burdening the Treasuries of developed countries. In the face of this risk, it is incumbent on the climate justice community to insist that SDRs are one of the options to generate climate finance. However, in order to meet developing countries' staggering adaptation and mitigation needs, and to ensure that developed countries live up to their responsibility for providing public finance to developing countries for climate change, a combination of innovative mechanisms to generate climate finance is needed.

The developed country governments could try to use SDRs as a way to get out of paying their full climate debt. Even with these potential risks, the many potential benefits of SDRs make them an option which must not be ignored. Given the current levels of attention from policymakers and the media to the potential for SDRs as a solution to climate finance, developing countries and the climate justice movement must deepen their understanding and debate on this complex topic. In the next couple of weeks the IMF will be issuing a paper on "out-of-the-box ideas" to generate revenue for climate change, including the use of SDRs. Developing countries and the climate justice movement must be ready to respond to the IMF's proposal and ideally come to agreement on whether and how to firmly place SDRs in the debate at the next round of UNFCCC negotiations. This brief aims to promote a deeper understanding and discussion on this complex topic.

Using SDRs for climate finance could be a way to help address the urgent need for the transfer of resources from north to south to address the climate crisis while having co-benefits for the global economy. SDRs should be thought of as part of the puzzle. In order to meet developing countries' adaptation and mitigation needs, a combination of innovative mechanisms is needed. Such mechanisms may include the use of current fossil-fuel subsidies for climate finance, creation of a financial transaction tax, and application of levies in the aviation and shipping industries.

VI. INNOVATIONS OF NEW FINANCE

[i]A Trustee of 12 carbon funds and facilities capitalized at \$2.74 billion, which are directly helping developing countries finance climate action. Sixteen governments and 66 private companies from various sectors, have made financial contributions to these funds and facilities.

[ii]The green bonds introduced specifically to finance climate mitigation and adaptation work in developing countries. To date, over \$2.3 billion in Green Bonds have been issued through 43 transactions in 16 currencies.

[iii]A Multi Cat program is a catastrophe bond issuance platform. It enables governments from developing countries to access affordable insurance coverage through the capital markets. Mexico used the platform to issue a \$290 million series of notes in October 2009 to insure against earthquake and hurricane risks.

[iv]16 Caribbean countries establish the Caribbean Catastrophe Risk Insurance Facility (CCRIF). It offers insurance against major hurricanes and earthquakes. Similarly, we worked to develop a Central American Weather Risk Management Program in Honduras, Guatemala, and Nicaragua to help farmers hedge against weather risk.

[v]The Treasury monetizes Certified Emission Reduction certificates for the UN Adaptation Fund, with 9.5 million CERs sold, raising nearly \$163 million to finance adaptation projects in developing countries (as of June 15, 2011)

[vi]The International Finance Corporation (our private sector arm) worked with Standard & Poors to develop the first Global Emerging Market Carbon Efficiency Index. Launched in December 2009, it gives carbon-efficient companies access to long-term investors.

VII. OPTIONS FOR IMPROVEMENT

One of the policy brief presents options for improving and expanding climate finance. These options include:

(1) Reforming the Clean Development Mechanism (CDM) offset market to leverage large-scale foreign direct investment in emission-reducing activities in developing countries, most importantly in technology transfer;

(2) Allocating emissions allowances in an international cap-and-trade scheme such that developing countries are (partly) compensated for their emission reductions;

(3) Establishing an international greenhouse gas charge or other mechanism in major developing countries that creates domestic streams of revenue;

- (4) Reforming energy subsidies to free funds for government expenditure for climate mitigation and adaptation;
- (5) Employing export credit agencies to leverage foreign direct investment in climate-related activities;
- (6) Increasing bilateral and multilateral official development assistance for climate-related projects; and
- (7) Providing large-scale financing for incremental costs contingent on implementation of emission reduction policies in developing countries.

VIII. THE GREEN CLIMATE FUND

The decision at the COP17 in Durban, South Africa, to adopt a governing instrument for the Green Climate Fund (GCF), as well as a transitional process for its full operationalisation by 2014, was a key component of the “Durban Package”. Without agreement on the GCF, the “African COP” would have been considered a failure. The GCF was designed by a Transitional Committee (TC) in 2010 with the goal of becoming the main multilateral financing mechanism to support climate action in developing countries. Under a compromise decision reached at the last minute in Durban, the new GCF will be a legally independent institution with its own separate secretariat and the World Bank as its interim trustee, but functioning under the guidance of and accountable to the COP. Since the Durban Package did not reach any agreement on long-term sources of climate financing, the biggest challenge for the GCF will be to secure adequate and sustained funding. Otherwise, the GCF is in danger of becoming a beautifully articulated, but largely empty shell. Substantial, financial pledges made quickly by contributing countries would be necessary to show broad political support for the GCF and secure its viability; whether this actually happens in 2012 remains to be seen.

The GCF was conceived as the main multilateral financing mechanism to support climate action in developing countries at the Copenhagen COP in 2009, as parties pledged to mobilize \$100 billion in long-term financing per year by 2020. The GCF is also supposed to channel “a significant share of new multilateral funding for adaptation,” which is structurally underfunded in the current global climate finance architecture. The GCF will be an operating entity of the financial mechanism of the Convention under Article 11, and will be “accountable to and function under the guidance of the COP”. Although the Durban decision on the GCF stressed the need for an “early and adequate replenishment process”, based on voluntary contributions, it does not address how to secure sufficient long term capitalization of the Fund. The Durban Package committed only to a very weak program of workshops until COP 18.

[i] The GCF Design Process and COP Decision: The decision to establish the GCF was part of the Cancun Agreements of COP 16 in Cancun, Mexico in 2010, which also set up a Transitional Committee (TC) – composed of 25 representatives from developing countries and 15 from developed countries – to work out design recommendations for the GCF and present them to the COP 17 in Durban. Over the course of a seven-month period, the TC held four official meetings and several information gathering workshops addressing comprehensive terms-of-reference for its work. The

TC work was centered along four thematic work streams: on i) objectives and guiding principles of the GCF; ii) its governing arrangements; iii) operational modalities; and iv) monitoring and evaluation. Developing countries throughout the TC process had elaborated on their vision of a GCF with a capitalization of close to US\$ 100 billion annually by 2020. By contrast, developed countries sketched the outlines of a GCF with reduced links to the COP and the UNFCCC principles and mandates. Limited public finance would primarily be used to catalyze and leverage private sector investment. Private money would form the core of the sum needed to help developing countries to make the transition to ambitious low-emission development pathways. GCF financing would be based on measurable and verifiable results, subject to implementing entities fulfilling high fiduciary standards. Ultimately, these opposing positions could not be reconciled in the TC.

[ii]The GCF Governing Instrument- Some of the key issues and key provisions of GCF board are listed below:[a] **Objectives and guiding principles:** To capture a high level of ambition for the GCF, as well as define its added-value to existing climate funds, the governing instrument refers to supporting a “paradigm shift towards low-emission and climate-resilient development pathways by providing support to developing countries to limit or reduce their greenhouse gas emissions and to adapt to the impacts of climate change.” However, there is no explicit reference to equity considerations in conjunction with recognized Fund core objectives of efficiency and effectiveness. The objectives recognize the need for GCF actions to promote “environmental, social, economic and development co-benefits and taking a gender-sensitive approach” in all climate actions. With its reference to a gender-sensitive approach in all its funding, as well as calls to strive toward gender-balance in the GCF Board and Secretariat staff, the GCF is the first dedicated climate fund to include gender considerations from the outset.

[b]**Governance Structure:** While the governing instrument gives clear guidance for the representation of developing countries on the Board (including dedicated seats for the Least Developed Countries and Small Island Developing States), developed country representation on the GCF board may be decided on the basis of their financial contributions. The GCF will have a fully independent secretariat headed by an Executive Secretary to be determined based on merit in a transparent process. In the interim (until COP19), a temporary secretariat will be staffed by technical experts from the UNFCCC and the GEF, and the new Board in one of its first actions will have to decide on an Interim Secretariat head with expertise in the design and management of funds. [c] **GCF Relationship to the UNFCCC and the COP:** This was key point of contention during the TC process. Developing countries insisted on establishing the GCF with close ties to the UNFCCC, while some developed countries would have preferred to have no ties to the convention. The GCF is now designated as an operating entity of the UNFCCC’s financial mechanism like the GEF – for some recipient countries this relationship is not close enough, and for other contributing countries, it is too close. This also explains why some disputed questions about the GCF-UNFCCC relationship were addressed in the cover note to the decision, for example that the COP will have to endorse the Board decision

about the host country for the GCF. Probably the most important task for the new GCF Board in 2012 will be to define the arrangements between the COP and the GCF by COP18. Developing countries are likely to disagree on how close the oversight of the GCF by the COP should be in order to fulfill the mandate to be “accountable to and function under the guidance of the COP”. Currently, the governing instrument dictates the Board will submit annual reports and take action responding to guidance it receives from the COP on its programs, policies and priorities. This is essentially the GEF-model. However, developing country board members may well aim for the GCF to go beyond the existing memorandum-of-understanding (MOU) between the UNFCCC and the GEF. [d] **Legal Personality:** Both the governing instrument and the cover note spell out that the GCF will have its own juridical personality and legal capacity, a key demand of developing countries wanting to avoid setting up the GCF under the auspices of an existing institution. Having legal personality will be an important attribute for the GCF should it wish to provide more than grant finance. Several countries, including South Korea and Germany have expressed interest, with the latter already hosting the UNFCCC Secretariat and having conferred judicial personality to the Kyoto Protocol Adaptation Fund. [e] **Operational Modalities:** The GCF will start out with only adaptation and mitigation funding windows, but the Board retains the flexibility to add other ones. Possible candidates would be a REDD+ window, one for technology transfer or a small-grants facility. Grants, concessional loans and other financial instruments, to be approved by the Board, will be used.

Why Governance Matters:

The GCF and its governance and institutional arrangements are crucial to its success: the architectural design must secure its credibility with potential donors, its legitimacy with recipient countries and their domestic social stakeholders, and its accountability to its ‘parent’ body, the United Nations Framework Convention on Climate Change (UNFCCC).

In these respects, climate finance governance essentially boils down to a discussion about power and authority: the diffusion of power amongst its various core stakeholder communities – the donors who liquidate existing and new funds; the legal entities that govern the funds on behalf of the international community; the secretariats that execute mandates and policies; and the recipient countries and communities who benefit from the resources.

Accountable governance always matters. The core design elements of an accountable governance system are:

- *Ownership:* where does ultimate legal authority sit? Who are the ‘owners’ and how do they come to be ‘owners’? Where is the balance of power?

- *Participation:* how, and to what extent, are other stakeholders provided with a vote and/or voice in the governance institutions?

- *Structures:* what are the mechanisms and bodies necessary to provide the initiative with the legitimate decision-making capabilities it needs?

- *Mandate:* what are the respective roles and responsibilities of the different bodies, and how do they relate to each other procedurally?

- *Membership and representation:* who serves on each body and how are they selected?

These elements must be coupled with a clearly identified purpose. In short, new and existing climate finance mechanisms:

- need to capture the attention of the private sector (diversity of sources);

- need to win the confidence of donor countries (to bring the capitalisation of the funds to scale);

- need to maintain the perception of equity and fairness of access (legitimacy); and

- need to deliver on the mitigation and adaptation targets set by the international community (effectiveness).

To accomplish this ambition, the GCF’s governance and institutional arrangements will have to provide it with the following attributes:

- Global scope, credibility and expertise;

- Appropriate political balance and representation;

- Full transparency, with a state-of-the-art information disclosure regime;

- Strong fiduciary checks and balances;

- Nimbleness and efficiency (in administration and decision-making).

Thus, the primary institutional design and arrangements must all feed into these overall objectives. This incorporates those that concern the governing body (Board), the executive capacity (Secretariat) and accountability and administrative oversight (Trustee and Monitoring & Evaluation) bodies as well as those that encompass the relationship of these institutions to the ‘parent’ body (in the case of the GCF, the COP).

The remaining issues to be ironed out with respect to the GCF are core to governance architecture:

- identifying clear responsibilities and lines of accountability within the Fund’s structure;

- clarifying the Fund’s objectives and developing the standards and metrics to assess progress towards those objectives at the level of project, programme and portfolio;

- developing environmental and social safeguard policies designed to ensure the Fund’s activities ‘do no harm’;

- identifying, informing and empowering the constituencies that are the intended beneficiaries of the Fund’s activities so that they can participate in the process of independent oversight; and

- ensuring that the oversight system has the independence, expertise and capacities necessary to carry out its assigned functions.

IX. CONCLUDING REMARKS

Notably, the 2011 emerged as yet another turbulent year for capital markets. Volatility increased for energy-related commodities, including carbon, with the onset of the Arab Spring, the shutdown of nuclear power stations in Japan and Germany in the wake of the Fukushima disaster, and the downgrade of the United States’ AAA credit rating. Equally relevant was the crisis of confidence that ensued as the Greek debt crisis intensified, spurred by fears that it would spread to

other European Union (EU) economies and lead to a double-dip recession. Foreign direct investment (FDI) is a key financing vector and can play an important role in support of the diffusion of low-carbon technologies. Until recently, however, the potentially important role of FDI has received little systematic attention in the climate change debate. In partnership with others, the OECD is working on how to define and measure green FDI, with a view to promoting a better understanding of the contribution FDI can make to the shift to a low-carbon, climate-resilient economy and the role policies may play in the greening of FDI.

Secondly, climate funds have continually neglected gender issues and failed to incorporate a gendered perspective into programmes and projects. The climate sector often presents women as passive victims of climate change, rather than effective agents of change, ignoring women’s extensive knowledge and expertise with regard to climate change mitigation and adaptation strategies. If climate funds are to be used equitably and effectively to support the different needs of men, women, boys and girls, they must incorporate gender analysis throughout project design, implementation, monitoring and evaluation. Climate funds must also recognise that women are well positioned to be agents of change through mitigation and adaptation activities in their households, workplaces, communities and governments. Global efforts to address the challenges of climate change cannot afford to ignore them.

Thus, A comprehensive approach to gender mainstreaming is required. Women’s and men’s concerns and experiences should be integral to the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and social spheres to ensure that inequality is not perpetuated. This means that the implications for women and men of any planned climate action, including legislation, policies or programmes, in all areas and at all levels, must be assessed. To

reach those who need it most, the GCF must integrate gender considerations from top to bottom.

[i] Put gender balance at the heart of the governance structures of the fund: The governance structures of the GCF should reflect principles of gender equity through the ambition of equal gender representation in all decision-making bodies of the fund, from the board down, and all governance structures, including the board and secretariat, should include expertise in gender issues.

[ii] Specify gender equality as a guiding principle of the fund’s work:

The full integration of gender considerations must be identified as a core objective of the fund, and gender-sensitive funding guidelines and criteria – both for allocation and evaluation, including the collection of sex-disaggregated data – should be developed for each of the thematic funding areas (for example, adaptation, mitigation and forestry).

[iii] Ensure gender equality and women’s leadership in the central to the development and implementation of national strategies:

Gender-specific objectives and indicators should be core components of national climate change strategies, which should be developed on the basis of the full and meaningful participation of civil society, especially that of affected and marginalised communities, including women’s organisations. Any national level co-ordinating entities should have the objective of equal gender representation. Where they exist, women’s ministries and gender units within all ministries need to play a more central role in climate finance, and should establish climate change action as a core element of their mandate. A systematic capacity-building process, including the necessary funds, should be available to these departments and units, as well as to national women’s organizations and gender experts.

ANNEXURE

Table 1: Estimating incremental mitigation costs

Sources of estimate (\$bn per annum)	2010-2020	2020	2030	Assumptions
European Commission (2009)		118		In 2005 prices (\$1.25 to €1 exchange rate, total net additional (“incremental”) costs, assuming successful agreement -30% reduction for developed countries by 2020 compared to 1990, and NAMAs by developing countries.
McKinsey & Co (2009)	81-113		175	In 2005 prices, includes tech R&D
Pacific Northwest National Lab (2008)			139	Taken from World Bank World development Report (2010)
UNFCCC (2007)			92-97	In 2005 prices
Project Catalyst (2009)	69-100			In 2005 prices, 450 ppm stabilisation case
G77 + China (2009)		200-400		Estimate includes both Adaptation and Mitigation. Proposed at: 0.5% to 1% of GNP of Annex II Parties
African Group (2009)		200		0.5% of GDP of Annex II Parties

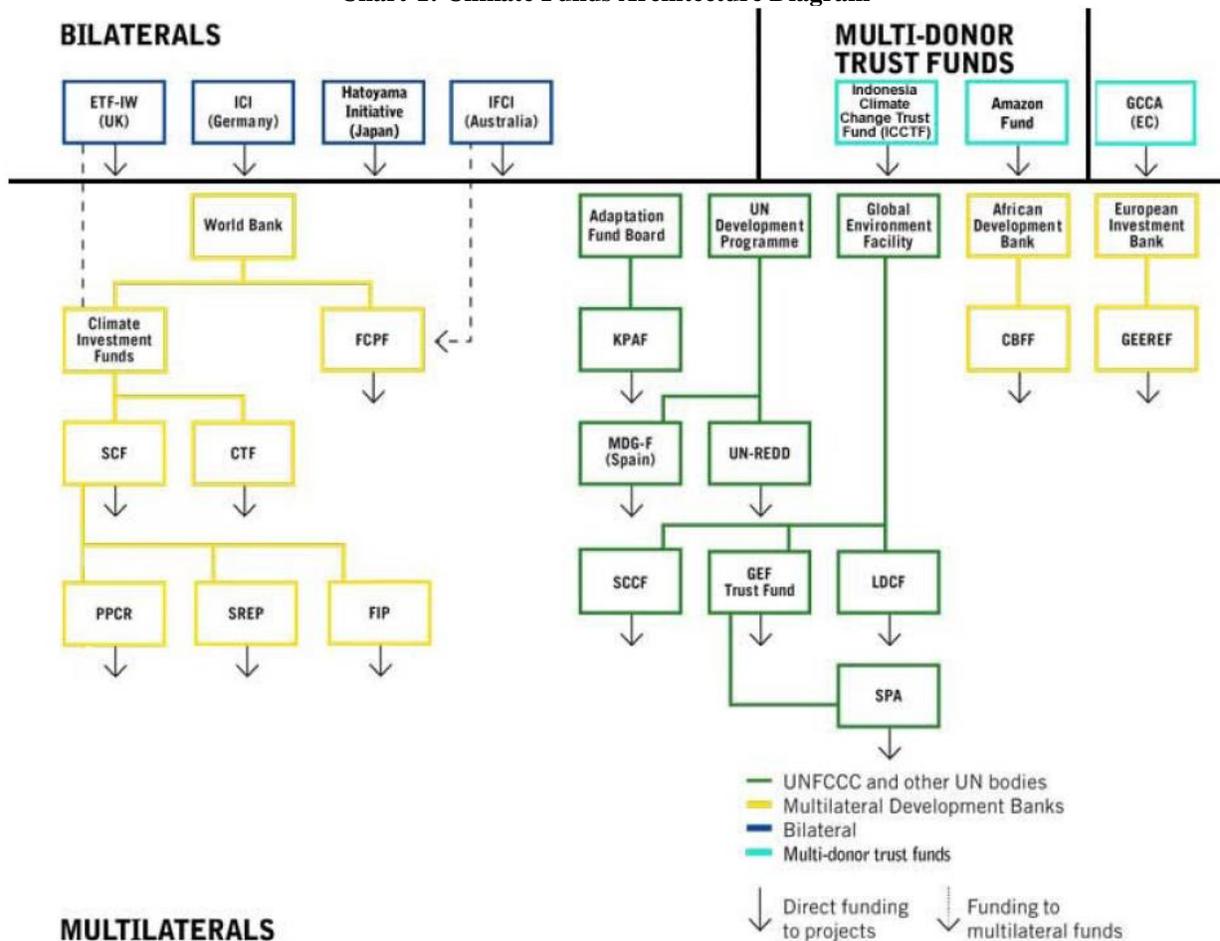
Source: Climate Funds update, available on: <http://www.climatefundsupdate.org/resources/estimated-costs-climate-change>

Table 2: Estimating incremental adaptation costs

Sources of estimate (\$bn per annum)	2010-2015	2020	2030	Assumptions
European Commission (2009)		13-30		In 2005 prices (\$1.25 to €1 exchange rate, total net additional (“incremental”) costs, assuming successful agreement -30% reduction for developed countries by 2020 compared to 1990, and NAMAs by developing countries.
World Bank (2006)	9-41			450 ppm stabilisation case
Stern Review (2006)	4-37			450 ppm stabilisation case
UNDP HDR (2007)	83-105			450 ppm stabilisation case
UNFCCC (2007)			28-67	450 ppm stabilisation case
World Bank EACC (2010)			70-100	In 2005 prices, average annual costs between 2010-2050. Additional public sector costs, not costs incurred by private agents.
G77 + China (2009)		200-400		Estimate includes both Adaptation and Mitigation. Proposed at: 0.5% to 1% of GNP of Annex II Parties
African Group (2009)		>67		Estimate based on the programme for Adaptation Action under the AWG-LCA
IIED (2009)	No specific figures cited			Costs estimated to 2 or 3 times higher than UNFCCC figures

Source: Climate Funds update, available on <http://www.climatefundsupdate.org/resources/estimated-costs-climate-change>

Chart-1: Climate Funds Architecture Diagram



Source: Climate Funds Update, available on: <http://www.climatefundsupdate.org/listing/architecture>

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