November 3, 2010

A Review of Public Sources for Financing Climate Adaptation and Mitigation.

This paper outlines a range of views among the civil society organizations listed below regarding climate financing options and is intended to contribute to the work of the UN High Level Advisory Group on Climate Finance. While many organizations have actively contributed ideas, comments, and suggestions, their support of this paper does not imply agreement with all of the positions expressed within the paper. Rather these organizations see it as a tool and resource for catalyzing and enriching discussions and reflections towards wider consensus on crucial aspects of climate finance.

This paper was prepared by Johannah Bernstein Environmental Law and Policy Consulting in Geneva and benefited significantly from prior analysis on climate finance done by Climate Advisers in the U.S. Incorporation of that analysis does not imply endorsement by the authors of the points of view or policy recommendations in this paper. Angela Anderson, USCAN's Program Director, served as lead editor. Comments are very welcome. Please send to aanderson@climatenetwork.org.

ActionAid
APRODEV
EarthJustice
EcoEquity
Greenpeace
Grey Panthers
IndyACT
National Wildlife Federation
Nature Trust (Malta)
Oil Change International
Oxfam
Population Action International
Sustainable Energy & Economy Network at the Institute for Policy Studies
Tearfund
Union of Concerned Scientists
US Green Building Council
WWF

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Executive Summary

This submission represents range of the views of undersigned NGOs regarding potential sources of revenue for financing mitigation and adaptation in developing countries and is intended to contribute to the work of the UN High Level Advisory Group on Climate Finance (AGF).

A preliminary version of this paper was submitted to the AGF on July 12, 2010. The paper provides overall feedback on the AGF's criteria, organization and general framework for analysis. Second, it analyzes specific concrete sources of climate finance against criteria agreed upon by the AGF and others. Finally, we make recommendations for the AGF's final report.

In carrying out its mandate, the AGF must continue to identify and generate international agreement on sources of climate finance and investments needed to support the developing world in pursuing low-emissions development, adapting and building resilience to climate change, and alleviating the adverse impacts of climate change.

The Scale of Investments Needed

The International Energy Agency now estimates that US$26 trillion in capital investment is needed to meet global energy demand through 2030[1] – and more than US$1 trillion annually. Similarly, trillions of dollars will have to be invested to reduce deforestation and adapt to the impacts of climate change. To meet even modest emission reduction targets, hundreds of billions of dollars of additional investment are needed every year, and much of the BAU investment must be shifted into technologies compatible with a low-carbon and climate resilient future. Clearly the vast majority of this investment will come from the private sector, but significantly scaled up public finance will be required particularly for adaptation and other areas where the private sector is not expected to play a predominant role.

It is in this context that the US$100 billion Copenhagen Accord commitment must be seen, and it quickly becomes clear that this figure is inadequate, has no clear scientific or economic basis, and presents only a fraction of the financing needed to solve the climate crisis. However, if this commitment is interpreted as financing for the costs of climate action that will not be covered by the private sector and as seed money to leverage the needed shifts in private sector investments, then this commitment can serve as a useful milestone on the way to providing adequate finance. In any case, the reference to US$100 billion in the Copenhagen Accord or the mandate of the AGF must not prejudge the outcome of the UNFCCC negotiations, or undermine the determination of an appropriate level of financing to address climate change.

Elements That Should Count Toward the Copenhagen Pledge

At the outset, we emphasise that the AGF must be absolutely clear that only the incremental costs associated with mitigation action should count towards the Copenhagen pledge. In this case, incremental costs would refer to the additional costs associated with transforming a project with national benefits to one with global environmental benefits. However, for adaptation, it must be noted that it is extremely difficult to establish a baseline scenario against which to measure the incremental costs. Therefore, the rigid approach of incremental costs should not apply for adaptation, which must take a more flexible approach of measuring the costs needed to adapt to the impacts of climate change. The AGF should also make clear that what counts includes: grants that mobilize private financing;

[1]International Energy Agency (2009) World Energy Outlook 2009: Executive Summary, Paris, France.

only climate finance that is new and additional to pre-existing ODA targets of 0.7% of GNI and other pre-existing flows and pledges; only the public finance generated from carbon markets (i.e. through auctioning allowances); and only the grant element of a concessional loan and other lending-related instruments. Additionally, climate finance should be primarily provided through channels accountable to and under the control of the UNFCCC.

By contrast, the financing sources that should not be counted include: direct private sector investments, whether equity or loans, for any activity (from R&D to technology deployment); the private sector investments mobilized by public funding, whether grants or loans; non-concessional elements of public sector loans, whether bilateral or multilateral; any loans, including from public funds for adaptation activities; existing government-to-government climate change ODA; and all carbon market revenues and private sector flows for international "offsets".

Financing provided through carbon market "offsets" cannot be counted because these offsets are used by the developed countries to meet their own mitigation targets, in lieu of reducing their own domestic emissions. Developed countries have a dual obligation to reduce their own emissions and assist developing countries in limiting theirs through financing and technology support. Counting financing for offsets credits towards both these obligations would amount to unfair double-counting since these are separate pledges.

Moreover, while we understand the AGF's interest in identifying and assessing both public and private sources of climate finance, at this point, there are too many private sources that simply should not be counted towards the Copenhagen pledge. To guard against this the AGF could structure its final report around the role of public finance. By counting only public finance, the AGF could help the international community remain focused on the resources to meet the true costs of climate action, and keep the Copenhagen pledge tightly linked to solving the climate crisis.

In addition, the different needs and purposes that climate finance must fulfill will require different sources and types of financing. Most notably, adaptation and mitigation activities will depend on different financing types, especially when it comes to the use of loans or grants. For reasons based both on principle and effective financing, lending is not an appropriate source of finance for adaptation. As a result, sources will have to be examined to determine whether they provide adequate grants-based financing for adaptation.

Thus we encourage the AGF to organize its work and final report around the concept of incremental costs for mitigation, an approach for adaptation focused on grants-based finance additional to ODA targets but with a more flexible approach for determining incremental, and the role of government in mobilizing investments to meet those incremental costs.

Another key issue that the AGF must address is how funding should be scaled-up from current levels to reach the $100 billion annual goal by 2020. At a minimum, a constant and steady build up beginning well before 2020 is essential to avoid lock-in of high carbon infrastructure.

The Justice and Equity Imperative

The global climate justice community emphasises the urgency of bringing global emissions rapidly under control while allowing the developing world to scale-up energy services to fight poverty. This means that those living under the "development threshold" should not be expected to incur any costs for climate change mitigation and adaptation.

Climate justice and equity goals can only be fully realized with climate financing that is new and additional, public, obligatory and predictable, does not generate external debt, and is channeled through a financial mechanism that is established under the authority of the UNFCCC. Of equal importance, the instruments or mechanisms for generating climate finance "must do no harm," which is to say that they must not result in further impoverishment or disempowerment of, or discrimination against, marginalized people and communities in the South or the North, nor generate negative environmental impacts.

In order to comply with the principles of the UNFCCC, climate finance mechanisms could be differentiated in a way to ensure that no developing country Party has a net benefit of less than zero, as has been proposed for the maritime fuel levy, for example. Such a rebate mechanism could ensure that any economic cost incurred by a developing country Party participating in the climate finance source is paid (rebated) to it, unconditionally; and the remaining revenue (net revenue) is disbursed through the operating entity of the financial mechanism of the UNFCCC[2].

The rebate mechanism could be designed such that:

- Each developing country Party to the UNFCCC would be entitled to obtain an unconditional payment (rebate) equal to the cost incurred by the financing mechanism. This rebate could be earmarked for poverty eradication measures, which inherently help to build adaptive capacity.
- A developing country Party could decide to forego the rebate, or a part of it. This would provide additional flexibility to reflect differentiated national circumstances.
- The net revenue raised, after the rebates have been issued, would be allocated to covering the incremental cost of developing countries' climate change actions.
- The disbursement of this net revenue could be managed by the operating entity of the financial mechanism of the UNFCCC, according to relevant rules and provisions.

The goal of such mechanisms should be clearly stated. To wit – under the current circumstances, global approaches to climate finance are inherently problematic with respect to the "incremental costs" test, for at the end of the day they would divert developing country resources. A rebate structured approach would solve this problem. And if "pure" rebates are not acceptable, they can potentially be modified so as to earmark revenues attributed to developing countries for poverty alleviation, rather than climate finance. This would ensure that high-capacity individuals in the developing world would pay their "fair share," but it would also respect the South's need to prioritize human development.

Evaluation of Climate Finance Sources

Carbon Market Public Revenues: These mechanisms not only have significant revenue-generating potential, but they also catalyse emission reductions that incentivize additional mitigation and adaptation efforts. These mechanisms, especially international auctioning of AAUs, can generate significant and highly scalable amounts of public finance for international purposes, based on the polluter pays principle.

Revenue from International Transport: Estimates vary widely, and depending on the level at which

[2] International Maritime Organization (2010) *Prevention of Air Pollution from Ships* http://imers.org/files/docs/mepc60-4-55.pdf

the levy is set and its country coverage, the maritime levy could generate between US$1.5 and 25 billion annually. An aviation fuel levy of 4 cents per litre would annualy generate revenues of approximately USD $13 billion. The International Airline Passenger Adaptation Levy would generate $8-10 billion. Transaction costs would be relatively low for all levies since they could be collected via existing sales systems, and compliance monitoring could be assured via existing safety enforcement mechanisms. Emissions trading systems, if applied globally to both sectors, could raise a combined total of € 25-37 billion, of which the part attributed to developed countries could be used for international climate finance and count towards the $100 billion commitment.

Other Carbon-related Sources: A carbon tax levied on fossil fuels would generate significant revenue flows for climate finance and would help to mitigate climate change by encouraging the substitution of non-carbon-emitting energy sources for fossil fuels by making them relatively cheaper. Revenues will depend on the carbon tax rate, the coverage, and the market response. Estimates on the basis of a rate of US$2 per ton could generate $40-50 billion per year. While there is less risk for manipulation by special interests, there are implementation challenges related to enforcement and compliance, institutional control, political acceptability, and especially the allocation of the revenues. Only developed countries have an obligation to provide international climate finance, and thus only revenue generated from developed countries would count towards the $100 billion commitment.

Redirecting revenues from phasing out fossil fuel subsidies could help reduce wasteful consumption and enhance economic efficiency and growth. Annual subsidies to producers of fossil fuels have conservatively been estimated to be roughly $100 billion[3]. The worldwide removal of all subsidies could reduce emissions by 20%. Many countries have tried to reform their fossil-fuel subsidies with varying degrees of success, but the agreement of G20 countries to phase out inefficient fossil fuel subsidies in the medium term demonstrates a significant degree of momentum behind this idea.

Role of Multilateral Institutions: The AGF must stay within its mandate of evaluating sources of finance and not get into the role of recommending roles for institutions such as the World Bank. However, for the purpose of this paper, we offer some views on the World Bank and climate finance. The Bank's questionable energy lending practices are very problematic since fossil fuel lending still outpaces lending in the renewable and efficiency sectors and will hopefully be seriously addressed in the on-going review if its energy strategy.The Bank's Climate Investment Funds provide funding in the form of grants and loans, which is problematic for developing countries, whose current level of indebtedness impedes their poverty eradication and climate adaptation efforts. Other problems with the World Bank include its very poor history of including community participation in its projects and its undemocratic governance structure which favors developed countries.[4]

Special Drawing Rights (SDRs): There are various ways that SDRs can be used for climate finance. Developed countries could transfer some or all of their SDRs from the most recent 2009 allocation to a green climate fund or there could be new and regular allocations of SDRs, and SDRs could be used as the capital base of a green climate fund. New and regular allocations of SDRs would offer a highly predictable and scalable form of climate finance. Although SDRs were not originally intended for

[3] "*IGO4 Report"*- International Energy Agency, Organization for Economic Cooperation and Development, World Bank. Organization of the Petroleum Exporting Countries *ANALYSIS OF THE SCOPE OF ENERGY SUBSIDIES AND SUGGESTIONS FOR THE G-20 INITIATIVE JOINT REPORT* Prepared for submission to the G-20 Summit Meeting Toronto (Canada), 26-27 June 2010 http://www.oecd.org/dataoecd/55/5/45575666.pdf

[4] For more information, see ActionAid. *Equitable Adaptation Finance: http://www.actionaidusa.org/assets/pdfs/climate_change/equitable_adaptation_finance.pdf*

financing purposes, climate change represents an unprecedented crisis that may require a new application for SDRs for climate mitigation and adaptation financing. It is important to note that any interest payments that may result from use of SDRs should be paid for by developed countries, and the IMF must not have any role in the governance or management of SDRs for climate finance.

Financial Transaction Tax (FTT): The financial transaction tax (FTT) would be levied on all financial market transactions, including stocks, bonds, foreign exchange, and derivatives. It could generate annual revenues between US$100-400 billion per year, depending on the scope of transactions covered and the extent to which the tax changes market behavior. The feasibility of administering a national financial transaction tax has already been established. The administrative costs of collecting a financial transactions tax could be relatively low. The political challenges are more problematic regarding a globally administered tax. Because of the high degree of mobility of financial markets, there is a potentially high risk of relocation and tax avoidance in response to the tax if it is not applied globally.

Recommendations for the AGF's final report

We welcome the work of the AGF as an important contribution to help identify the options available for massively scaling up the level of finance required to tackle climate change.

It is critical that the AGF final report:

- Creates the right framework needed to distinguish between the funding that does and does not count towards climate finance commitments.
- Provides clear guidance on the relation between the US$100 billion Copenhagen commitment and estimates of overall climate finance needs.
- Specify what sources can be used to ensure funding is truly additional and has a transformative impact. We believe that only funding for the incremental costs of mitigation and the additional costs of adaptation should count towards the US$100 billion pledge.
- Articulate the need for different sources and types of finance for specific needs and purposes, and most important, explicitly state that loans and sources providing loans are not appropriate finance for adaptation activities.
- Specify that only the grant element of any concessional loan be counted towards climate finance commitments.
- Articulate the difference between leveraging and mobilizing and recommend that "leveraged" private finance should not be counted against the Copenhagen pledge.
- Provide guidance on a timeline for implementation of new sources. At a minimum, a constant and steady build up beginning now (or at least well prior to 2020) is essential to avoid the lock-in of high carbon infrastructure. Without an early and linear ramp up from today's "fast start" levels of funding, the Copenhagen financial pledge will ring hollow and will seriously constrain progress in global climate negotiations.
- For each source, provide a "road map" to operationalization of the mechanism, specifying the fora, bodies and jurisdictions that should play a role on decision making and operation of the mechanism generating the finance.

Based on our analysis, numerous fair and equitable sources of public financing exist, and many will likely need to be implemented in order to reach the Copenhagen pledge and beyond. **Therefore, the AGF should outline a package, or set of potential packages, of workable**

sources for governments to choose from, using balanced criteria when evaluating options. Instead of highlighting one or two sources that look most promising, the AGF should recommend that governments need to consider multiple sources and closely examine how each source could be made to work.

Introductory Highlights

- *Climate finance is a tool to realize the world we want to create; it's not just about the money, it's about people and societies enjoying security, justice and freedom from poverty.*

- *The selected sources of finance must have the maximum transformative impact, particularly since the US$100 billion Copenhagen Accord commitment is inadequate, has no clear scientific or economic basis, and presents only a fraction of the financing needed to solve the climate crisis.*

- *It is important to note that the UNFCCC has not determined the level of financing required as part of any agreed outcome under the Bali Action Plan. The reference to $100 billion in the Copenhagen Accord or the mandate of the AGF should not prejudge the outcome of the negotiation or undermine the determination of an appropriate level of financing to address climate change.*

- *The AGF can play a useful role by helping to identify the options available for massively scaling up the level of finance required to tackle climate change.*

- *The work of the AGF should further be guided by the fact that developed countries need to honor their commitments in order to ensure long term and sustainable development.*

Introduction

The mandate of the United Nations Secretary General's Advisory Group on Climate Change Financing (AGF) is, "to study the potential sources of revenue for financing mitigation and adaptation activities in developing countries". The organizations listed in appendix II have come together to provide input and recommendations to the AGF as it continues working and prepares its final report for release later this year. This paper is organized into three parts around the AGF's work streams and criteria for evaluating climate finance sources. First, we provide overall feedback on the AGF's criteria, organization and general framework for analysis. Second, we analyze specific concrete sources of climate finance and how they compare to the AGF's and other criteria. Finally, we offer recommendations for key aspects of the AGF's final report.

Making a Better World

In carrying out its mandate, the AGF must keep firmly in mind the fundamental goals principles of the UNFCCC and of climate financing: catalyzing the finance and investments needed to transition the developing world to low-emissions development, adapting and building resilience to climate change and alleviating the adverse impacts of climate change.

While the stakes are high, so are the opportunities for progress. If sufficient funding can be mobilized the world will derive a wide range of benefits:

- *Sustainable low emissions development.* Climate financing must spur transformational investments in new clean energy technologies and infrastructure, and transform or create new jobs to provide a just transition. This transformation will launch a new wave of global

companies and industries in developing and developed nations and support community-level economic growth and development.

- *Poverty alleviation*. Climate financing will help hundreds of millions of people in the developing world gain access to clean energy, as well as preserving workers' wages and strengthen the capacity of smallholder farmers and others to use sustainable agricultural practices to feed themselves, their families, and their communities in the face of adverse climate change impacts.

- *Climate security*. Climate financing will compensate countries for the damages resulting from climate change and help developing nations implement the policies necessary to achieve global emissions reduction targets and dramatically lower the risk of catastrophic and destabilizing climate impacts.

- *Forest protection*. Climate financing will help stop global deforestation, improving the livelihoods of local people who depend on forests, transforming employment in the sector in the direction of sustainable forestry, and ensuring the world does not lose forests' biodiversity and carbon sequestration benefits.

Global Financial Need

What scale of investments will be needed to solve the climate crisis in ways that improve our world? The International Energy Agency reports that $26 trillion in capital investment will be needed to meet global energy demand through 2030.[5] Similarly, trillions of dollars will be needed for investment to meet global food and fiber needs, address the adverse impacts of climate change, and ensure the appropriate insurance and compensation for unavoidable impacts. The vast majority of these investments will come from the private sector and will flow through financial markets. The challenge, of course, is to make these energy, land-use and other investments climate-friendly in order to ensure they lead to low-emission, climate resilient development. The cost of climate action, therefore, must be understood not as the total cost of development but rather the incremental or additional cost of converting expected investments into the right investments needed to address the many dimensions of the climate change.

Importantly, developed nations committed in the United Nations Framework Convention on Climate Change to provide funding for the "agreed full incremental costs" of climate change in developing nations. Estimates of agreed incremental costs for developing nations vary, and are typically divided into the following three categories:

Adaptation. Supporting poor and vulnerable people to build resiliance to the impacts of climate change will require investments in, science and knowledge in order to better understand the impacts, smallholder farmers and sustainable agriculture as a way to limit negative impacts on food security, the building of rural infrastructure needed to help rural and urban communities living in poverty secure their livelihoods, the incorporation of expected climate impacts into large-scale infrastructure project costs and decisions, the creation and funding of new climate-related insurance products, capacity building and overall the mainstreaming of climate considerations into traditional

5International Energy Agency (2009) World Energy Outlook 2009: Executive Summary, Paris, France.

development financing, and compensating countries and communities for loss and damage, for example. Estimates of developing country adaptation costs range into the multiple hundreds of billions, and the World Bank has estimated that developing countries will require $75-100 billion on average for adaptation during the years 2010-2050.

Clean technology. Regardless of decisions about climate policy, the private sector and governments will make trillions of dollars in energy-related investments over the next several decades. These investments will include new power generation, new vehicles, new buildings and new industrial production capacity. Making these investments consistent with climate change goals, including just transition and green workplaces that include workers and their unions, will require both additional financing and the implementation of new policies. The International Energy Agency (IEA) estimates that developing countries will need $197 billion in additional investment annually by 2020 to help put the world on a pathway to stabilizing greenhouse gas concentrations in the atmosphere at 450 parts per million, and the needs will be greater for a 350 ppm pathway.[6] Based on these estimates, governments will need to provide many billions of dollars in public funding to cover the incremental costs of this pathway and make targeted interventions to unlock additional financing from the private sector and shift baseline investment from dirty to clean projects. UN DESA suggests the costs will be in upwards of 600 billion[7]. Considerably higher amounts would be required for a 1.5c/350ppm pathway supported by over 100 countries. The African Group in Copenhagen called for 450 billion by 2020 with 150 billion in special drawing rights (based on a scientific/economic analysis of achieving a 350ppm pathway, assuming Annex 1 countries cut by more than 45%). Higher financing would be required if developed countries cut by less than this.

Reducing deforestation. Achieving global climate stabilization objectives will not be possible without dramatically reducing emissions from deforestation, which account for about 15% of the global total.[8] Several leading analyses have recommended the goal of halving global deforestation by 2020 and eliminating net deforestation entirely by 2030.[9] In the context of increasing global demand for food and forest products, achieving these goals will require new public funding for technical assistance and policy implementation, and ultimately financial incentives for governments and local landowners to keep forests standing instead of cutting them down. The Informal Working Group on Interim Finance for REDD+ has estimated that $20 billion total is needed by 2015 to reduce deforestation by 25% and countries have already pledged $6 billion towards this effort.[10] In order to achieve longer term goals, most analyses find that tens of billions of dollars annually by 2020 will be needed just for the forest sector.

A number of efforts have been made to aggregate these costs. It is likely that many of these studies significantly underestimate the true costs of adaptation and mitigation, as they assume a 2 degree trajectory, exclude important costs associated with adaptation, in addition to other reasons. With these

[6]International Energy Agency (2009) World Energy Outlook 2009: Climate Change Excerpt, Paris, France.
[7] United Nations, "Press Conference on World Economic and Social Survey 2009," September 1, 2009. See: http://www.un.org/News/briefings/docs//2009/090901_DESA.doc.htm For the full report, see http://www.un.org/esa/policy/wess/index.html
8Union of Concerned Scientists (2009) Scientists and NGOs: Deforestation and Degradation Responsible for Approximately 15 Percent of Global Warming Emissions, Washington, DC.
9Commission on Climate and Tropical Forests (2009) Protecting the Climate Forests, Washington, DC.
Eliasch, J. (2008) Financing Global Forests: The Eliasch Review, London, UK.
10Informal Working Group on Interim Finance for REDD+ (2009) Discussion Document. Also see the website of the Government of Norway's International Climate and Forest Initiative.

caveats, on average, the studies show that the total incremental cost of climate action is likely to be in the range of $150-200 billion annually by 2020.

In light of these estimates, civil society believes that the Copenhagen Accord pledge of $100 billion per year is inadequate, and are very concerned that the work of the AGF must not legitimize this number as the full cost or 'ceiling' for country commitments. It is important to note that the UNFCCC has not determined the level of financing required as part of any agreed outcome under the Bali Action Plan. The reference to $100 billion in the Copenhagen Accord or the mandate of the AGF should not prejudge the outcome of the negotiation, or undermine the determination of an appropriate level of financing to address climate change. Still, some segments of civil society note the significance of the fact that the $100 billion commitment represents the first specific dollar amount developed nations agreed to mobilize as part of their obligations under the Convention, and view this commitment as a promise that must be kept. We look to the AGF to offer guidance on how finance could be scaled up to meet that commitment and to much higher levels.

Chapter 1: Determining Sources of Climate Finance that Count toward the Copenhagen Pledge

Chapter 1 Highlights

- *For the AGF's consideration, we offer a potential framework for thinking about what type of sources are needed and how to determine the sources that should count as additional climate finance. This begins with a discussion about the role of governments in solving the climate crisis,a description of private investment and then some concrete recommendations about how to count to $100 billion.*

- *The world needs to be moving in a linear fashion towards and beyond the $100 billion annual commitment. We cannot stay at $10 billion a year and then jump to and beyond $100 billion in 2020. That won't solve the climate crisis nor would it be a credible assumption on which to base the negotiations.*

What Financing Should Count? The $100 billion Copenhagen Pledge in Context

As a down payment toward meeting their obligations to provide the incremental cost of climate action, developed nations agreed in Copenhagen in December 2009 to provide $30 billion in total funding from 2010-2012. Nations also agreed to mobilize $100 billion per year by 2020 from public and private sources, in the context of a global climate agreement that includes key provisions on mitigation and transparency. The AGF was created by U.N. Secretary General Ban Ki-moon to advise the U.N. system and member states on the potential sources of funding to meet the incremental cost of action.

Some NGOs and developing countries have observed that the $100 billion has no economic or scientific basis. Rather, the $100 billion commitment was based on a political agreement by a subset of nations and not an evaluation of the true incremental costs required to address climate change and ensure implementation by Annex 1 countries of their commitments. The G77 and China have been calling for considerably higher levels.

It is important to highlight that it is easier to determine the incremental costs associated with mitigation, where a clear baseline scenario can be established and the increment represents the difference between a less costly, more polluting option and a costlier, more environmentally friendly option. However, for adaptation, it must be noted that it is extremely difficult to establish a baseline scenario against which to measure the incremental costs. Therefore, the rigid approach of incremental costs should not apply for adaptation, which must take a more flexible approach of measuring the additional costs needed to adapt to the impacts of climate change.

Thus, it is absolutely essential that the AGF's final report (a) create a framework that will help governments, companies and civil society distinguish what is truly funding for the incremental and additional costs of climate and what is not and (b) only count funding for incremental and additional costs towards the $100 billion pledge and beyond. Failure to provide this clarity and follow these principles would potentially undermine the value of the Copenhagen financing pledge and would further frustrate a common understanding of the financing obligations under the Convention.

Consider the following mitigation example that illustrates this point. Suppose that India is considering building a series of wind farms at a cost of $2 billion. Assume that India intends to invest $300 million itself and will accept $200 million in equity investments from private investors, with the remaining $1.5 billion will flow through public and private loans. India and the investors intend to purchase $1 billion in equipment from European suppliers. Assume that a multi-lateral development bank is prepared to make a $500 million loan for this purpose. If this project goes forward, what amount

should be counted toward the Copenhagen pledge? The total cost of the project ($2 billion)? The total amount invested from outside India ($1.7 billion)? The total cost of public and private loans ($1.5 billion)? The total cost of equipment from outside India ($1 billion)? Or the face value of the $500 million loan? The answer may also be none of these. One answer could be to only count the subsidy value of the loan toward the Copenhagen pledge, which based on past practice would be roughly $225 million.[11] Alternatively, what could be counted is the difference between the up-front capital costs of this wind project and a coal plant India could have built in its place. Either way, only these far smaller sums are indicative of the true incremental costs of climate action. The other sums reflect the cost of development, but not the incremental cost of low-emissions development.

This example highlights a critical distinction that *must* be addressed by the AGF, at the risk of rendering the Copenhagen financing pledge completely meaningless. Although the AGF should certainly explore opportunities to "mobilize" or "leverage" financing from the private sector, the agreement under the Framework Convention to provide "agreed full incremental costs" should be the central driving force in determining whether this funding is counted. ***Therefore, we encourage the AGF in the strongest possible terms to view the Copenhagen pledge through the framework of the UNFCCC, and use incremental costs as the central guiding principle for recommending which sources should and should not be counted towards the $100 billion total. As stated, a less rigid approach of measuring additional costs for adaptation will also be needed. However, it is also essential that climate finance be clearly additional to pre-existing ODA targets of 0.7% of GNI and other pre-existing flows and pledges.***

The different needs and purposes that climate finance must fulfill will also require different sources and types of financing. Most notably, adaptation and mitigation activities will depend on different financing types, especially when it comes to the use of loans or grants. First, many have strong principled objections to the use of loans for adaptation. Since adaptation finance is not aid, but an obligation to help prevent damages in poor countries and people from the excess carbon emissions of rich countries. In this sense, offering a loan to help poor people adapt to climate change would be like someone offering a loan to repair damage to a house that they have caused.

In more practical terms, adaptation investments may be constrained if governments know they have to finance them through loans. That is because the internal rates of return for adaptation activities are generally not present in the same manner that they are for mitigation purposes such as clean energy production. Moreover, loans can inappropriately increase the financial burdens facing affected countries and communities. Because vulnerable citizens will benefit most from adaptation expenditures, using loans could also increase – rather than reduce – the burden on these marginalized populations.

As a result of these concerns about the types of financing used for specific needs and purposes, the sources of climate finance will also need to be examined in the context of needs and purposes. For example, bond instruments intended to provide the resources for loan-based financing would not be an appropriate source of adaptation finance.

One other major concern is counting revenue for carbon market "offsets" towards the $100 billion Copenhagen pledge (referred to as "double counting"). Some developed countries have suggested that

11 Holtz-Eakin, D. (2004) The Costs and Budgetary Treatment of Multilateral Financial Institutions' Activities, Washington, DC: Congressional Budget Office. Our estimate is based on the average of a range (30-60%) provided in this Congressional Budget Office testimony.

international offsets and financing from carbon markets can be counted against both domestic mitigation and international financing targets or pledges. However, from the perspective of many organizations, developed countries counting offsets towards both mitigation and financing targets is not fair or equitable since these are separate pledges. In addition, many developed countries are already not planning to meet their mitigation responsibilities which are often evaluated against the figures included in the Intergovernmental Panel on Climate Change's Fourth Assessment Report of reducing emissions at least 25-40% below 1990 levels by 2020. If developed countries set targets that are below this level and then use offsets to meet the targets, their pledges will be even less effective in driving climate solutions which will have devastating impacts particularly for developing countries. Therefore, no financing mobilized for offsets should be counted against the Copenhagen pledge. For this reason we have not provided detailed comments on the AGF's workstream 8 "Carbon Markets".

It is vital, therefore, that the AGF's final report put forward a system for evaluating the incremental cost of public and private sector action. Based on initial analysis, we recommend the following framework in Table 1.

Should Count	Should Not Count
• Grants that mobilize private financing (including paid-in capital to development banks that is used for climate finance, technical assistance, research and development, etc.). • Grant element of bilateral or multilateral loans that mobilize private financing for mitigation. • Public funding outlays or subsidy element of risk, policy, loan and other financing-related guarantees for mitigation. • Only ODA provided over and above 0.7% target that is specifically designated for climate finance. • Only climate finance that is in accordance with rules developed by the UNFCCC conference of parties. Only public auction revenues from carbon markets.	• Direct private sector investments, whether equity or loans, for any activity (from R&D to technology deployment). • Private sector investments mobilized by public funding, whether grants or loans. • Loans or lending-related instruments or sources for adaptation. • Non-concessional elements of public sector loans, whether bilateral or multilateral. • Existing government-to-government climate change oversees development assistance. • All carbon market revenues and private sector flows for international "offsets".

Further analysis by the AGF is welcomed on this issue and especially on how to count the subsidy elements of different government interventions that mobilize private financing, drawing on the methodologies used by the Development Assistance Committee (DAC) of the Organisation for Economic Cooperation and Development (OECD).

<u>Stay Focused on Public Finance</u>

While we understand the AGF's interest in identifying and assessing both public and private sources of climate finance, an in-depth examination of private sources has the potential to introduce investment sums that, if counted toward the Copenhagen climate finance pledge, would give the world the false

impression that sufficient action is being taken to solve the climate crisis and lead to inconsistencies with the UNFCCC itself.

One way to guard against this would be to structure the AGF's final report around the role of public finance. By counting only public spending and carbon market public revenues, the AGF could help the international community remain focused on the resources to meet incremental and additional costs of climate action in accordance with the UNFCCC, and keep the Copenhagen pledge tightly linked to solving the climate crisis. Thus we encourage the AGF to organize its work and final report around the concept of incremental costs and additional costs and the role of government in mobilizing public investments.

How Will Funding be Scaled-Up?

Another key issue that the AGF must address is how funding should be scaled-up from current levels to reach and go well beyond the $100 billion annual goal by 2020. At a minimum, a constant and steady build up beginning now (or at least well prior to 2020) is essential to avoid the lock-in of high carbon infrastructure. Moving quickly towards the $100 billion annual goal prior to 2020 will also be necessary to strengthen the mechanisms, systems and institutions needed to sustain and program $100 billion annually in 2020 and beyond. The World Bank estimates that $75-100 billion/year will be needed for 2010-2050 adaptation needs of developing countries.[12] Without an early and linear ramp up from today's "fast start" levels of funding, moreover, the Copenhagen financial pledge will ring hollow and will seriously constrain progress in global climate negotiations.

We recommend that the AGF explore different pathways for increasing funding and discuss how different funding sources might be sequenced in order to avoid an impending gap between fast start funding and the 2020 pledge. The challenge of achieving a linear ramp-up to and beyond 2020 is made more difficult by decisions in some countries to delay adoption of comprehensive climate programs and other legislation that includes international financing.

By highlighting the importance of developing a credible pathway toward the financing required to implement the Convention and avoid dangerous climate change at the levels outlined in the Copenhagen pledge, the AGF can help the UN system and member states accelerate climate action and maintain progress in climate negotiations.

[12] Sergio Margulis (TTL) and Urvashi Narain , et al, The Costs to Developing Countries of Adapting to Climate Change: *New Methods and Estimates;* The Global Report of the Economics of Adaptation to Climate Change Study Consultation Draft; 2009World Bank

Chapter 2: Criteria for Evaluating Sources for Climate Finance

General consensus has been reached regarding climate finance within large parts of the global climate justice community. It must be public funding, must be obligatory and predictable, impose no conditionalities on developing countries, not generate external debt, be new and additional to existing financial commitments, and be channeled through a financial architecture under the authority of the UNFCCC. Another principle is that the instruments or mechanisms for generating climate finance "Must do no harm" – that these do not result in further impoverishment, disempowerment and discrimination of marginalized people and communities in the South as well as in the North nor cause destruction of the environment.

Many of these points are also enshrined in the Kyoto Protocol and follow-up ministerial agreements. The Bali Action Plan, for example, sets out that funding must be adequate, sustainable, predictable and additional. However, the precise meaning of many of the above principles remains contested and needs to be spelled out. On the basis of their long experiences with different public and private financial flows, NGOs and social movements are defining what they mean and working to get governments to provide the necessary precision in their international and national agreements and decisions on climate finance.

	Criteria	Definition
ESSENTIAL	Adequate	Raises volume of revenue consistent with the scale of the need, in a manner that is additional to pre-existing ODA targets and flows and other pledges, and with low transactions costs.
	Predictable	Automatic, sustainable over time, not easily evadable or subject to declining returns.
	Public	Must be raised and contributed by governments.
	Equitable	Obtains money from those countries with most responsibility for causing human-induced climate change, as well as capacity to pay. The mechanisms should also not reinforce inequities in either developing countries or developed countries.
	Must "do no harm"	Should in no way result in further impoverishment, disempowerment and discrimination of marginalized people (South and North), nor cause further destruction of the environment.
	Transparent & accountable	Potential for citizen input and oversight in monitoring how and from whom revenue is raised.
DESIRABLE	Transforma-tional	Promotes economy-wide reform away from fossil fuel systems, promotes the transition to renewable energy sources and local control of natural resources.
	Financially responsible	Helps curb speculation, increase transparency of financial flows, limits trading in derivatives and other toxic financial products and move towards a balanced and well-regulated economy.

Developed countries have contributed disproportionately to global warming through centuries of unsustainable and unregulated fossil fuel based growth. This has severely limited the atmospheric

space left for countries of the global South to develop, and it has caused severe climate impacts, which will particularly affect impoverished people in the South.

Governments have agreed to respect the principles of 'responsibility' and 'capability,' but there are open debates about how to interpret these and about their relative importance. There are several independent initiatives to propose equitable arrangements to determine obligations.[13] Two approaches, in particular, are notably relevant to the AGF charter:

- Under the Climate Debt framework, developed countries are found to have used a disproportionate amount of the world's common resources: mainly the finite capacity for the earth's atmosphere to absorb man-made carbon dioxide emissions, thus creating an 'ecological debt.' The basic goal of this concept is to ensure that developed countries repay the full measure of their ecological debt to developing countries and communities via financing and technology for compensation and future losses. Developed countries must provide the financing and technology required by developing countries to deal with a hostile climate and restricted atmospheric space. This requires honoring obligations to provide "full incremental costs."

- The Greenhouse Development Rights Framework (GDRs) is a framework designed to support an emergency climate stabilization program, while at the same time, preserving the right of development. GDR stresses the need for a system in which it is not "the North" but rather the affluent and consuming classes globally that bear the burden of the climate transition. GDR's formula approach puts numbers on the table that high and middle income countries must provide to a global solution.

These approaches recognise that we need to find a climate regime to bring global emissions rapidly under control, while at the same time adequately supporting adaptation and allowing the developing world to scale-up energy services to fight poverty. People under a certain "development threshold" are not expected to share the costs of the climate transition. All populations above this threshold must ration their carbon use on the basis of a "fair shares" formula that takes into account historical cumulative emissions, and, in the GDRs case, capacity to act. The aim is to keep the warming as far below 1.5 to 2 degrees as possible.

The AGF has chosen six criteria against which to evaluate various potential sources of climate finance.We would suggest one additional criteria for the panel to consider: ***appropriateness of sources to specific needs*** -- e.g. adaptation will principally or entirely require public grants, as distinct from private or loan flows.

Below we describe the questions we ask in applying those criteria. In addition, we apply two additional criteria: leveragability and equity/justice. Chapter 3 assesses all of the AGF workstreams against these criteria.

1.Practicality Criteria

The feasibility of implementation, for example in the required institutional design and in relation to

13See, for example, initial work on a Development Rights Framework at: www.ecoequity.org, Carbon Debt, Jubilee South Journal, at: www.jubileesouth.org/journal/carbon.htm, and Adapting to Climate Change: What's Needed in Poor Countries, and Who Should Pay, Oxfam, 2007. At: www.oxfam.org.uk/resources/policy/climate_change/bp104_climate_change.html.

rules and laws in different countries.

- To what extent is there already a means to deliver climate finance from this source, if any?
- What are the institutional, policy and legislative implications?
- What political framework conditions will be required to create and implement the mechanism?
- What is the level of international cooperation required?
- How enforceable is the mechanism?
- What would it take to improve the overall practicality of the mechanism?

2. Efficiency Criteria

The relation between the source of finance and impacts on costs, market imperfections and economic development and growth.

- How well does the mechanism achieve its stated objectives?
- What is the input/output ratio?
- What is the level of international cooperation needed to ensure implementation?
- How will the new public monies be deployed and will they effectively target resources at the best projects in a cost-effective manner and aim to build a financially sustainable market upon their completion?
- What would it take to improve the overall efficiency of the mechanism?

3. Acceptability Criteria

The likelihood of acceptance in different countries and among different constituencies.

- Who are the relevant stakeholders and constituencies whose interests must be considered?
- What are their primary concerns? Are they valid concerns? How do these concerns differentiate between countries/stakeholders?
- What would it take to improve the overall acceptability of the mechanism?
- Are these issues that should properly be resolved within the UNFCCC process?

4. Reliability/Predictability Criteria

- How certain are the projected revenues?
- How dependent is the success of the mechanism on external factors such as changes in government, economic shocks, etc?
- How stable & enduring is the revenue stream (short-term or long-term)?
- How appropriate are the sources and types of finance to specific needs and purposes?

5. **Revenue and Scalability Criteria**

- What is the projected revenue?
- Can the mechanism be scaled up over time?
- How wide is the range of projection?
- Can the revenue be generated quickly enough?

- Does the revenue raised need to be netted off against, for example, increased social security costs, e.g. if people lose jobs and depend on benefits?

6. **Equity and Justice Criteria**

- How well does the mechanism reduce burdens and distribute benefits, particularly with respect to vulnerable developing countries and communities and their right to development?
- Does the mechanism currently conform to or can it be made to conform to the principle of common but differentiated responsibilities (CBDR)?
- Does the mechanism address the priorities of recipient countries? How well does it maximise social and economic development co-benefits?
- Does the mechanism provide for the repayment of the emissions debt to developing countries?
- Does the mechanism provide for the necessary level of financing and technology to ensure full compensation for losses incurred and the means to avoid future impacts? (ie. the adaptation debt)?
- Has the mechanism been developed in a manner that conforms to procedural justice, namely a process that is fair, participatory, transparent and accountable?
- Does the measure adversely affect poor people's employment or wages (or leave them worse off, accepting that there can be positive and negative impacts on jobs)?

7. **Additionality Criteria**

Relates to new and innovative sources to determine potential ranges of climate finance for each source against these criteria.

- Is there a true value added contribution? Do the revenues exceed existing targets or flows?
- Is there a displacement effect? Will it usurp funds from other important sustainability objectives?
- Is the mechanism measurable, reportable, and verifiable (where should this question be addressed)?

8. Leverageability Criteria

- How much commercial capital will be leveraged per dollar of new public monies?
- Does the mechanism have the potential to mobilise or leverage commercial investment into low-carbon technology innovation and deployment?
- Does the mechanism have the potential to create scaled up and commercially sustainable markets for low carbon technologies.
- Will the mechanism lead to an enabling regulatory/tax environment that is conducive to private investment and the development of private sources of financing?
- Does the mechanism distort the market or does it help to create new markets, reduce risk, and create conditions for a profitable sustainable energy industry?

Chapter 3: Public Sources
Introduction

According to the International Energy Agency, a $20 trillion investment in the sustainable energy sector is needed over the next 20 years. Without this level of investment and a clear policy direction set by governments, emissions are likely to increase by up to 50 percent[14].

Public financing has an important role to play to ensure that this $20 trillion goes green and not brown.[15] Public financing is also critical to ensure that the world's poorest are not excluded from investments in their future. Huge sums are needed from big business to combat dangerous climate change. However, it is unlikely that private companies will invest in small-scale projects that designed to help poor people in high-risk geographies adapt to climate change, where there is little promise of significant financial returns.[16]

History shows that public finance is more likely to deliver an equitable pro-poor outcome, enabling and maximizing co-benefits from private finance as well as prioritizing areas not attractive to the private sector, but which are indeed critical for poverty reduction.

Moreover, if well managed, public financing mechanisms will be important to bring down market barriers, bridge gaps and share risks with the private sector. However, they must be aimed at complementing national policy instruments such as regulations, taxes and market mechanisms.[17]

However, caution must be exercised so that firewalls are not created between public and private finance sources. Public finance can and must be used to change the investment parameters of the private sector and to stimulate private financing. UNEP's experience with a number of different models of public financing mechanisms shows that leverage ratios range from 3 to 15 can be achieved.[18]

Based on the criteria of predictability, adequacy, scaleability, polluter pays and common but differentiated responsibilities, the optimal sources of public financing most likely to provide revenue streams additional to 0.7% ODA targets include the auctioning of emission allowances, international aviation and maritime levies and assessed contributions under the UNFCCC.

14 http://www.reuters.com/article/idUSTRE6221BZ20100303
15 http://www.reuters.com/article/idUSTRE6221BZ20100303
16 http://www.oxfam.org/en/pressroom/pressrelease/2010-05-31/climate-cash-must-not-increase-developing-countries-debt
17 http://www.sefi.unep.org/fileadmin/media/sefi/docs/UNEP_Public_Finance_Report.pdf
18 http://www.iigcc.org/__data/assets/pdf_file/0012/462/IIGCCFinancingMechanisms.pdf

Highlights from Workstream Analyses

Workstream 1: Carbon Market Public Revenues

- The auctioning of AAU and ETS allowances and offset levies all have the potential to generate significant revenues for climate finance.
- The amount of revenue generated from approximately 5% of AAUs could generate between $22.5 and 35 billion annually.These mechanisms are not problematic from a practicality standpoint. However, the main challenge relates to the volatility of carbon prices.
- The mechanisms not only generate revenues, but also catalyse emission reductions that incentivize additional mitigation and adaptation efforts. However, they may lead to cap inflation. This would be inequitable since it would allow richer countries to have larger emissions quotas just so they can sell them to provide climate finance.
- CDM critics maintain that the revenues from carbon offsets should not be considered additional. These offsets allow richer countries to continue to pollute while compensating impoverished countries for enacting efficiency measures.

Workstream 2: Revenue from International Transport

- Greenhouse gas emissions from international aviation and shipping together constitute nearly 8% of global emissions and are growing faster than any other sector.
- Estimates vary widely, and depending on the level at which the levy is set or the emissions limitations in an emissions trading scheme (ETS), and its country coverage, a maritime levy or ETS could generate between US$1.5 and 25 billion annually. An aviation fuel levy of 4 cents per litre would annual generate revenues of approximately USD $13 billion. The International Airline Passenger Adaptation Levy would generate $8-10 billion.
- Transaction costs would be relatively low for levies or ETS related to both maritime and aviation. The levies could be collected via existing sales systems, and compliance monitored via existing safety enforcement mechanisms.
- Bunker fuel financing mechanisms raise equity concerns, but these concerns can and should be effectively addressed. It is possible to address these concerns through several means: distributing revenues in such a way that developing countries are compensated for any negative impacts, exempting certain countries (such as LDCs and SIDS) from a levy or ETS, and rebating fees, levies or allowance-based revenues to all developing countries.
- International maritime emissions cannot be easily allocated to nation states and leakage is potentially a problem, both of which make global measures the preferred option. Reliability and predictability of revenue flows would be greater if the levies, fees or allowance-based revenues are monitored or collected by an international body.

Workstream 3 Other Carbon Related Sources: Carbon Tax and Redirection of Fossil Fuel subsidies

<u>Carbon Tax</u>

- A carbon tax levied on fossil fuels would not only generate revenue flows for climate finance, but it would help to mitigate climate change by encouraging the substitution of non-carbon-emitting energy sources for fossil fuels by making them relatively cheaper .
- Revenues will depend on the carbon tax rate, the coverage, and the market response. Estimates on the basis of a rate of US$2 per tonne could generate $40-50 billion per year.
- An upstream tax on producers and suppliers could build on the administrative infrastructure for existing taxes, such as excise taxes on coal and petroleum.

- Carbon taxes can also be implemented with far less risk for manipulation by special interests, not to mention perverse incentives that can undermine public confidence and undercut effectiveness.
- There are implementation challenges related to enforcement and compliance, institutional control, political acceptability, and specially the allocation of the revenues.
- The net benefits (benefits minus costs) of a tax could be roughly five times greater than the net benefits of an inflexible cap.
- The carbon tax proposal that has been tabled by the Swiss Government would be levied on the basis of current absolute consumption, not on historical responsibility, which is problematic for developing country emitters who are expected to contribute more than half of overall revenues.
- The net benefit to developing countries will depend on how much of the proceeds flow internationally and how much is retained domestically by the country contributing the tax.

Redirection of Fossil Fuel Subsidies

- It is important that Annex 1 countries lead in eliminating their subsidies to fossil fuels, as language in the Kyoto Protocol already calls on them to do. If developed countries take the lead in eliminating producer subsidies, re-direct those revenues to climate finance, it could help address equity related constraints related to the impact on the poor that would arise from the removal of consumer subsidies in developing countries.
- Phasing out of fossil fuel subsidies can reduce wasteful consumption and enhance economic efficiency and growth. The worldwide removal could also result in the achievement of an additional 20 percent in emission reductions.
- Annual subsidies to fossil fuels in Annex 1 countries have been credibly and conservatively estimated to be at least $67 billion annually.
- The total order of magnitude of subsidies to consumers and producers – almost US$ 700 billion a year - is roughly equivalent to 1% of world GDP.
- Many countries have tried to reform their fossil-fuel subsidies with varying degrees of success and the members of the Group of 20 have agreed to phase out some fossil fuel subsidies.
- Although political momentum exists internationally for subsidy phase-out, the domestic politics are often difficult given competing domestic budget priorities.
- The reliability and predictability of revenues would depend on how the allocation of those revenues to climate finance was structured.
- The impact of removing subsidies on employment need to be considered, as this can impact equity and social justice, or, at the very least, lead to increased social security expenditure.

Workstream 4 Role of Multilateral Institutions including Special Drawing Rights

World Bank

The AGF must stay within its mandate of evaluating sources of finance and not recommend roles for institutions to deliver financing, such as the World Bank. Any discussion of the World Bank and climate finance must consider the following:

- The Bank's energy lending practices are very problematic with fossil fuel lending still outpacing lending in the renewable and efficiency sectors.
- The World Bank's review of its Energy Strategy, currently underway, provides an opportunity to improve its lending practices by establishing specific targets under its strategic goals of supporting increased energy services for the poor that are clean, reliable and sustainable; and

supporting the transition towards zero/ultra-low-carbon development.

- The Bank's Pilot Program on Climate Resilience provides funding in the form of loans for adaptation, which is highly problematic as adaptation should be seen as compensation for damages done and must not increase the indebtedness of developing countries.
- The World Bank has a very poor track record of community participation in projects, which is essential for the effectiveness of adaptation initiatives. The Independent Evaluation Group of the World Bank estimates that, in 2003, 75% of World Bank projects did not involve community participation.[19]
- Another challenge will be for the World Bank to embrace changes in its governance structures and procedures in order to give a greater voice to developing countries.

Special Drawing Rights

- The Special Drawing Right (SDR) is an international reserve asset created by the International Monetary Fund (IMF) that member countries can exchange for hard currency.
- Proposals to use SDRs could include two-step agreement: 1) Governments would agree that the IMF allocates new SDRs to all member countries. 2) Northern countries would donate their portion of SDRs to enable Southern countries to meet climate mitigation and adaptation financing needs.
- The two primarily proposals for how to use SDRs involve either: conversion of SDRs to hard currency to finance a fund or using SDRs as backing to raise private capital.
- Any interest payment resulting from conversation of SDRs to hard currency must be paid by developed countries. This is particularly important for adaptation, which must be paid for in the form of grants only.
- Although SDRs were not originally intended for financing purposes, climate change represents an unprecedented crisis that may require SDRs to be used in a non-traditional way.
- Many Southern movements express serious concern about the involvement of the IMF in this instrument and the implications that decisions over and implementation of the SDR issuance and donation will take place in the context of an institution with a very undemocratic governance structure.
- Beyond providing substantial sums of money to developing countries for adaptation and mitigation needs, the use of SDRs as a vehicle for climate finance could make a significant contribution to the reform of the global economy.

Workstream 5 International Financial Transaction Tax (FTT)

- The financial transaction tax (FTT) would be levied on all financial market transactions, including stocks, bonds, foreign exchange, and derivatives.
- The FTT could both reduce excessive short-term speculation generate annual revenues at least $400 billion per year, depending on the scope of transactions covered and the extent to which the tax changes market behavior.[20]
- The feasibility of administering a national financial transaction tax in the United States has

[19] Independent Evaluation Group. *World Bank Support for Community-Based-and-Driven Development.* Overview. http://web.worldbank.org/WBSITE/EXTERNAL/EXTOED/EXTEFFWBSUPCOMDRIDEV/0,,contentMDK:22228586~pagePK:64829573~piPK:64829550~theSitePK:4426144,00.html

[20] http://ec.europa.eu/economy_finance/articles/international/documents/innovative_financing_global_level_sec2010_409en.pdf

already been established[21]. More than 30 countries have either permanently or temporarily levied FTTs for the purpose of raising domestic revenue over the last 25 years. Automation makes collection of a FTT administratively simple and relatively inexpensive.

- Political progress towards greater taxation of the financial sector is already proceeding in many countries, such as the UK, France and Germany. Alongside unilateral and regional initiatives, a top-down approach at the level of the G-20 may be required to ensure that exchanges in all important financial centres are subject to a FTT.
- The high degree of mobility of financial markets with potential risk of relocation and avoidance of the tax presents a technical challenge. Harnessing certain markets before others, such as foreign exchange where a global settlement system already exists (thus making avoidance extremely difficult), would be one way to proceed.
- The FTT would be neutral in terms of its actual effect in decreasing the carbon intensity of the economy. But the FTT could also be designed to target specific industries with greater responsibility for low carbon development and adaptation.
- Care needs to be taken choosing the specific tax rate on different financial instruments to optimize revenue and avoid negative repercussions.

[21] Section 31 fees pay for the SEC.

Workstream 1: Carbon Market Public Revenues

There are several ways carbon market revenues can contribute to climate finance. The mechanisms that are addressed in this section include: auctioning of assessed amount units as created by the Kyoto Protocol; offset levies, and auctioning of allowances under the emissions trading systems.

Assigned Amount Units Auctioning

Assigned amount units (AAUs) are tradable units derived from an Annex I Party's emissions target under the Kyoto Protocol. Currently those countries with caps under the Kyoto Protocol are issued their entire allocation of AAUs free of charge. Under Norway's proposal these countries would have a certain percentage of their allocation held back by the UNFCCC, and sold in a public auction, instead of receiving all the AAUs free of charge.

This mechanism would create a worldwide a system whereby the proceeds of the auctioned AAUs would be directly contributed to climate finance. The auction process could be open to both Annex I governments with national or regional commitments and private compliance buyers with obligations under a national cap and trade system. Buyers could either be governments with national or regional emissions reduction commitments or private companies with obligations under a national cap and trade system[22].

The auctioning of AAUs has the potential to generate significant profit for climate finance depending on the amount sold and carbon price.

Emission Trading System (ETS) Allowance Auctioning

Revenue can be generated through the auction of national emissions allowances by a developed country government to private sector emitters within domestic carbon markets (ETS). The process for selling or auctioning allowances can vary and several options have been proposed under national or regional ETSs. The key feature of this mechanism is that it would require national, private sector compliance buyers to pay for their allowances instead of being allocated them for free[23].

Revenue and Scalability

AAU Auctioning

The amount of revenue generated from the auctioning of AAUs would depend on the total allocation under the second commitment period, the percentage of AAUs auctioned and the price of carbon. The most common proposals estimate percentages in the amount of 2%, 5% and 10% levies. Assuming a carbon price between $30 and $45 per tonne, an auction of 2% of AAUs is estimated to raise approximately $9 and $14 billion annually. Whereas an auction of 5% has been estimated to raise approximately $22.5 and $35 billion annually, and an auction of 10% has been estimated to raise approximately $45 and $70 billion annually. These figures assume the creation of 15 billion AAUs per year for the next 8 years[24]. Clearly the predictability and scale of financing generated will be increased by robust targets and a strong carbon market with tight limits on offsets.AAU auctioning as a revenue source is highly scalable, by increasing the percentage of allowances auctioned over time, in principal

22Wilks, Alex (2010) Sources to Generate Fair International Climate Finance: Meeting Developed Obligations
23Global Canopy Programme (2009) The Little Book on Climate Finance: A Guide to Financing Options for Forests and Climate Change
24 Global Canopy Programme (2009) The Little Book on Climate Finance: A Guide to Financing Options for Forests and Climate Change

up to the limit of 100%. Indeed this is a common feature of many existing and proposed emissions trading systems. As targets become more stringent and thus the total number of allowances issued is reduced over time, the number of allowances available for auctioning will also be reduced, but this will be offset by rising carbon prices under more stringent caps.

ETS Auctioning

The scale of revenue generated by the auctioning of ETS allowances will depend upon key factors such as the number of countries with domestic carbon markets, the percentages of allowances auctioned, the carbon price, the percentages of auction proceeds that are allotted for climate finance. Project Catalyst estimates that between $8 to $30 billion could be generated annually assuming that 10-15% of the total allowances are used for climate finance. Based on current proposals, including the Waxman–Markey Bill in the U.S. House of Representatives, it appears more likely that only 7–8% of allowances will be set aside for international abatement and adaptation efforts, which would generate as little as USD $6–8 billion per year[25] and could be as little as $1 billion per year by 2020 for international adaptation from less than 1% of allowance auction revenues.

Practicality

AAU Auctioning

The post-2012 regime could be structured in such a way that a portion of the emission permits created are auctioned to public or private entities, rather than simply being assigned for free to countries. While this approach is new in the context of international AAUs, the European Union and the U.S. are increasingly taking this path in their domestic climate policies[26].

If the auction is open to all participants (such as governments, private entities, and institutions), there will be enough buyers in the auction to generate a true market price and to guard against collusion and other gaming behaviour that may occur when only a few players are participating. To have an open auction would require domestic and regional emissions-trading programs to recognize AAUs as exchangeable with other carbon currencies (such as EU allowances). All participants would have to meet a defined set of qualification requirements, including proof of financial security[27].

ETS Auctioning

The process for selling or auctioning allowances can vary and several options have been proposed under national or regional ETSs. The key feature of this mechanism is that it would require national, private sector compliance buyers to pay for their allowances instead of being allocated them for free[28].

Getting carbon pricing schemes in place domestically may be the largest obstacle to securing this revenue, and the additional benefit of this revenue would be lower in the likely event that it crowds out existing climate-related foreign assistance. However, this is a straightforward, easy-to-understand mechanism that does not seem to be a huge political lift in the context of a comprehensive climate bill.

25 Global Canopy Programme (2009) The Little Book on Climate Finance: A Guide to Financing Options for Forests and Climate Change

26 Oxfam (2008) Turning Carbon into Gold: How the International Community Can Finance Climate Change Adaptation Without Breaking the Bank

27 Oxfam (2008) Turning Carbon into Gold: How the International Community Can Finance Climate Change Adaptation Without Breaking the Bank

28 Global Canopy Programme (2009) The Little Book on Climate Finance: A Guide to Financing Options for Forests and Climate Change

Efficiency

AAU Auctioning
This mechanism could be an excellent option to scale-up climate funds because it links to emission reduction system, incentivizes additional mitigation and adaptation efforts and implements the polluters pay principle; nevertheless there are a few obstacles in the implementation while it requires time to set up (established common rules) and to develop and integrate the market.

One of the biggest obstacles for the AAU Auctioning scheme is the amount of time it will take to set up the system with agreed upon principles and common rules.

Reliability/Predictability

AAU Auctioning
If implemented, the Norway allowance auction approach provides a consistent and relatively predictable source of funding at the international level. However, the value of funds are subject to the fluctuations of the price of carbon in markets, an issue that could be overcome with a reserve price. The carbon levy approach could also be hampered by fluctuations in the price of carbon and liquidity of markets are tied to large global economic challenges which can produce uncertain levels of funding.

AAU auctioning is a complicated mechanism to understand and follow, but if the auctions are well run and the market is open key statistics can be published and citizens can observe and check up[29].

As discussed above, if tight caps are not set for developed countries and a surplus of AAUs are brought over to the second commitment period, the revenue generated from this mechanism will be low[30].

Equity and Justice

AAU Auctioning
A mechanism for auctioning AAUs would by definition raise funds from those countries with targets, and which are thus issued AAUs. This group of countries currently includes those in Annex B of the Kyoto Protocol, with the exception of the U.S., but could expand in the future if other countries are included in Annex B, such as newly industrialized countries that meet certain criteria. Within this group there are different national circumstances, income levels and capacities to pay, which could be reflected in a differentiation of the percentage of AAUs that are held back and auctioned – rather than withholding a constant proportion for all countries. Negotiation of a formula for such a differentiation could be based on an approach like Greenhouse Development Rights31. This would ensure that each country's funding contribution is proportional to its capacity and responsibility.

Such an approach would offer a promising approach to equitable, adequate, and reliable climate funding. It should be considered because, if emissions rights allocations are not framed properly, there is a chance that, despite respecting the polluter pays principle, they would fail to support any legitimate

29Wilks, Alex (2010) Sources to Generate Fair International Climate Finance: Meeting Developed Obligations
30Canopy Programme (2009) The Little Book on Climate Finance: A Guide to Financing Options for Forests and Climate Change
31 This has been proposed by Norwegian Church Aid. See *Discussion paper: An equitable financial mechanism under the UNFCCC.* www.aprodev.eu/files/climate_change/UNFCCC/ aprodev_finance_proposal_submission_unfccc.pdf

definition of common but differentiated responsibility[32].

There are concerns that this approach will further legitimize and encourage carbon trading and the negative implications for reducing emissions at source. The counter argument is that AAUs are already being awarded for free, so it would be better to capture the financial benefit of auctioning them.[33]

ETS Auctioning

Emissions trading delivers economic efficiency by discovering and exploiting differential costs of abatement. Linking to create a larger carbon market improves the efficiency of emissions trading for two fundamental reasons. Firstly, a larger market is inherently more efficient, liquid, and competitive. Secondly, a larger market provides a broader pool and greater variety of abatement costs in which to discover opportunities for low-cost abatement.

Globally, linking allows more GHG abatement to occur with the same level of social resources, or conversely the increased efficiency can reduce the social costs of a given carbon constraint. As we contemplate more ambitious targets for 2020 reduction than those that informed the Kyoto Protocol, it becomes essential to make lowest cost a key concern[34].

Additionality

All of the mechanisms for public revenues from carbon markets discussed above would provide new and additional funds for climate finance. Both the AAU and ETS auctioning schemes would allow countries and/or sectors to use their allocated emissions from the Kyoto Protocol and domestic regulations, respectively while also setting a portion of the proceeds aside for climate finance[35]. Offset levies, in order to be additional, would need to be expanded beyond the existing schemes within the CDM and going to the Adaptation Fund. However, the expansion of such a levy to other offsets would create additional funds that may be used for climate finance.

32Wilks, Alex (2010) Sources to Generate Fair International Climate Finance: Meeting Developed Obligations
33Wilks, Alex (2010) Sources to Generate Fair International Climate Finance: Meeting Developed Obligations
[34] International Emissions Trading Association (2010) *Linking EU ETS with Emerging Emissions Trading Schemes* http://www.ieta.org/ieta/www/pages/getfile.php?docID=2419
[35] Point Carbon, Projects Survey, February 2010, p.22

Workstream 2: Revenue from International Transport

Greenhouse gas emissions from international aviation and shipping together constitute nearly 8% of global emissions and are growing faster than any other sector. CO2 emissions from international aviation are projected to grow at a rate of 4.5% per year from 2000 through 2030 and those from international marine transport are projected to grow at a rate of 0.4% to 2.5% per year. Some estimates reveal that these sectors could represent 10 to 15% of total global emissions by 2050[36] These sectors are not currently regulated under the Kyoto Protocol, and emissions from these sectors may not be covered by the AAU auction process in the post-2012 regime[37].

There have been several proposals to generate revenues from taxing marine and aviation bunker fuels, or by a ticket levy for aviation. All suppliers of fuels would be asked to register and to collect the bunker fuel levies, which would be managed by an international organization. Proposals have been advanced by Denmark, Japan and Nigeria. An airline passenger levy has been proposed by the Least Developed countries, as submitted by Lesotho to the UNFCCC on their behalf. The levies have generally been proposed mostly as a source of adaptation finance[38].

Alternatively, emissions trading schemes (ETS), with an emissions cap, could be set up for the sectors with revenue from auctioning permits earmarked for climate finance. Proposals have been advanced by Norway, France, Germany and the UK (for shipping) and by the Aviation Global Deal group of airlines. The EU and a number of other countries support a global ETS for aviation.

ETS would drive mitigation inside the sectors by pricing carbon emissions, and outside the sectors if operators were allowed access to carbon markets to offset emissions above the cap (as envisaged in all proposals to date), as well as generating a pool of revenue for climate finance.

Revenue and Scalability

Estimates vary widely, and depending on the level at which the levy is set, and its country coverage, the maritime levy could generate between US$1.5 and $25 billion per year[39]. Estimates conducted for the International Maritime Emissions Reduction Scheme (IMERS) proposal show that a levy of $27 per tonne of fuel would generate approximately $4 billion for adaptation under a uniform scheme, $4 billion for mitigation and $2 billion for technology[40].

International Air Transit Association, (IATA) forecasts that the aviation industry will burn around 1.7 billion barrels (approx 266 billion litres) of fuel in 2010, at a cost of $132 billion. As an indication, a fuel levy of 4 cents per litre (approx $6/barrel) would, if applied globally, generate revenues in the amount of $13 billion, well over the $10 billion proposed by the ticket levy. This would increase airlines' fuel costs by around 8% - well within the fuel price volatility experienced in the past few years. A tax levied on aviation fuel sold in Annex I countries would capture a substantial proportion of

[36] Oxfam (2008) Turning Carbon into Gold: How the International Community Can Finance Climate Change Adaptation Without Breaking the Bank

37Oxfam (2008) Turning Carbon into Gold: How the International Community Can Finance Climate Change Adaptation Without Breaking the Bank

[38] UN Secretary-General's High-Level Advisory Group on Climate Change Financing (2010) *Background Paper for the First Meeting, 31st March 2010 Prepared by the Secretariat*

39Wilks, Alex (2010) Sources to Generate Fair International Climate Finance: Meeting Developed Obligations

[40] http://imers.org/files/docs/Equitable_Financing_COP15.pdf; slide 13

this revenue. 67% of fuel is uplifted in Europe and North America alone. However, there may be difficulties in taxing fuel for flights from Annex I to non-Annex I countries, where there is no mutual consent to do so.

The International Airline Passenger Adaptation Levy (IAPAL) would generate $8-10 billion. Those estimates are in line with the French solidarity levy, as well as IATA figures and estimates for current international air traffic.[41]

ETS revenues depend on scheme design, but as an indication, the European Commission estimates that global measures to tackle both sectors could raise a combined total of €25-37 billion.[42]

In terms of scalability, levies are moderately scaleable by adjusting the level at which they are set, theoretically to any level, but the overall revenue is limited in practical terms by the size of the sector. Scalability of revenue through ETS systems is limited to the level generated by auctioning of 100% of allowances.

Practicality
Transaction costs would be relatively low for levies on both maritime fuel and air tickets/fuel. The levies could be collected via existing sales systems, and compliance monitored via existing enforcement mechanisms for environmental and safety regulation.

The aviation ticket levy would be especially easy to administer and verify since airlines and regulators have all necessary systems in place and experience with the French solidarity levy has demonstrated the practicality of the approach[43]. There are, however, potential legal difficulties associated with the airline fuel levy, which is functionally equivalent to a fuel tax. Currently most bi-lateral air service agreements prohibit the taxation of fuel used on international flights. However, there is no reason such agreements could not be re-negotiated over time, and indeed the EU is currently doing exactly that, with updated agreements such as the EU-US Open Skies Agreement, which now allow for fuel taxes between consenting parties. That said, the International Civil Aviation Organization's (ICAO) current guidance calls for a moratorium on emissions charges.

The practicality of a fuel levy and ETS has also been demonstrated by the series of papers submitted to the International Maritime Organization (IMO) by Denmark, Norway, Germany and France respectively.

An emissions levy could be implemented relatively easily in the maritime sector, whereby ship owners would be charged at the developed country port of arrival based on fuel use. This levy could be tied to an emissions-reduction goal for the sector, sometimes referred to as 'cap-and-charge', and could be applied to ships en route to developed country ports only[44]. The administration of an ETS would be somewhat more complex, as it would require an entity or entities to generate and distribute allowances, to collect emissions data and ensure compliance. The EU ETS provides an example of how this could

[41] European Capacity Building Intitiative, "International Air Passenger Adaptation Levy, Benito Muller, http://www.oxfordclimatepolicy.org/publications/documents/ecbiBrief-IAPAL13Q&As.pdf
[42] Staff Working Paper accompanying Communication 'Stepping Up Climate Finance'. See http://ec.europa.eu/environment/climat/pdf/future_action/sec_2009_1172.pdf, last page.
43Wilks, Alex (2010) Sources to Generate Fair International Climate Finance: Meeting Developed Obligations
44Oxfam (2008) Turning Carbon into Gold: How the International Community Can Finance Climate Change Adaptation Without Breaking the Bank

be achieved for aviation – although it should be noted that bureaucratic complexity would be greatly reduced if there was 100% auctioning, and therefore no need for a benchmarking process for free allowances.

Acceptability

Some developing country parties are concerned that international transport policies may not be consistent with the UNFCCC principle of common but differentiated responsibilities. Strict differentiation is difficult in light of the fact that international aviation emissions cannot be easily allocated to nation states and that ships are usually registered in a different country than the origin of the ship. Several proposals have attempted to address this concern by using the revenues raised (through a levy or a cap and trade system) to finance mitigation and adaptation efforts in developing countries, as well as by exempting least developed countries and small island states from this system[45]. The idea here is that, if the international passenger aviation levy was levied on individuals rather than countries, there would be no conflict with CBDR, since it would be based on personal capacity and responsibility.

However, this approach would be problematic with respect to the "incremental costs" test, for at the end of the day it would divert developing country resources towards climate finance. As noted above, thus problem can be solved by earmarking revenues attributed to developing countries for poverty alleviation, rather than climate finance. This would ensure that high-capacity individuals in the developing world would pay their "fair share," but it would also respect the South's need to prioritize human development.

Oxfam argues that an emissions trading scheme is ultimately preferable to a levy system because it can adequately address the issue of responsibility-capability between countries and it achieves emissions reduction goals. The emissions trading approach is also consistent with how the EU is beginning to regulate greenhouse gas emissions from the aviation industry, and thus would provide for more fluid integration between these programs in the future[46].

Other alternatives include the rebating proposal set forth by the International Maritime Organization. In order to comply with the principles of the UNFCCC, the application of the maritime MBI could be differentiated in a way to ensure that no developing country Party has a net benefit of less than zero. Furthermore, the most vulnerable should benefit most. The proposed rebate mechanism is described below:

- Each developing country Party to the UNFCCC would be entitled to obtain an unconditional payment (rebate) equal to the cost incurred due to the maritime MBI.4
- The amount of rebate would be calculated annually in a proportion to a key. The proposed key is a country's share of global imports by value.
- A developing country Party could decide to forego the rebate, or a part of it. This would provide additional flexibility to reflect differentiated national circumstances.
- The net revenue raised, after the rebates have been issued, should be split between assisting developing countries in implementing climate change action, and assisting the global

[45]World Resources Institute (2010) Find It, Build It, Spend It: Report on Civil Society Climate Finance Strategy Meeting
[46] Oxfam (2008) Turning Carbon into Gold: How the International Community Can Finance Climate Change Adaptation Without Breaking the Bank

shipping sector to accelerate reductions of its growing emissions through technological advances.

- The disbursement of this net revenue could be managed by the operating entity of the financial mechanism of the UNFCCC, according to relevant rules and provisions.

Any economic cost incurred by a developing country Party participating in the MBI is paid (rebated) to it, unconditionally; and the remaining revenue (net revenue), is disbursed through the operating entity of the financial mechanism of the UNFCCC47.

With regard to the maritime levy, a number of developing countries currently support the approach, however many remain unconvinced that the revenue from such policies would actually reach them.

While there is some industry support for aviation policies (i.e. the Aviation Global Deal group, who have proposed an ETS), there is considerable resistance on the part of many industry and government representatives in the light of the potential global economic impacts of "new taxes" even if they are collected internationally as opposed to domestically[48].

Reliability/Predictability

If the levies are collected by an international body – either by UNFCCC itself, or by ICAO and IMO with funds transferred to UNFCCC – this could increase the reliability and predictability of revenue flows, since monies would not flow through national treasuries. Although there are fluctuations in the volume of both aviation and shipping traffic, they are not extreme. For example, even in the recent severe global downturn, the volume of air traffic only contracted by about 10% from its earlier all-time high.

Similarly, international shipping will continue and as long as all jurisdictions set and implement the levy at the right level, it should provide a solid income stream. The level of the levy and its exemptions would be reviewed every few years[49].

Equity and justice

In order to address potential equity impacts of the maritime levy on developing countries, some proposals recommend targeting only the 60 per cent of shipping that imports goods to richer countries. Others – concerned about evasion – call for a global scope. This raises questions about discriminating against developing country exports, but the effect of imposing a tax at a low level on shipping has been estimated to increase the costs of imports from developing countries by less than 1%[50].

Proposals have been advanced to address concerns related to equity. Revenues from international transport schemes that were attributed to developing countries could be rebated, earmarked for poverty alleviation, or voluntarily foregone. These proposals would clearly help to address CBDR concerns. In addition, there have been further proposals to fully exempt countries that could be particularly affected economically by any international transport scheme, such as Least Developed Countries and Small Island Developing States. Additional exemptions related to net-food imports and dependence on tourism could be included.

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[47] International Maritime Organization (2010) *Prevention of Air Pollution from Ships* http://imers.org/files/docs/mepc60-4-55.pdf

48World Resources Institute (2010) Scoping Memorandum: Issues and Opportunities

[49]Wilks, Alex (2010) Sources to Generate Fair International Climate Finance: Meeting Developed Obligations

[50]Wilks, Alex (2010) Sources to Generate Fair International Climate Finance: Meeting Developed Obligations

The rebating proposal described above further attempts to address CBDR concerns. Under this proposal the net revenue would come from consumers in developed countries only, while developing countries would effectively face no financial impact on a national level. Furthermore, developing countries would be beneficiaries of the MBI, with the most vulnerable countries to benefit most through the relevant rules and provisions applied at the second step. The shipping sector should also benefit at the second step, potentially through a new global Maritime Technology Fund, or similar[51.]

As regards the aviation levy, only 5% of the world's population currently use air travel. Therefore targeting them with a levy is a progressive tax measure, although some exemptions might have to be built in for specific population groups[52]. For example, impacts on employment, likely to be small, should nevertheless be evaluated and addressed.

Under other proposals to address CBDR, only shipping routes between Annex 1 countries would becovered.[53].

[51] International Maritime Organization (2010) *Prevention of Air Pollution from Ships* http://imers.org/files/docs/mepc60-4-55.pdf
[52]Wilks, Alex (2010) Sources to Generate Fair International Climate Finance: Meeting Developed Obligations
[53]Oxfam (2008) Turning Carbon into Gold:How the International Community Can Finance Climate Change Adaptation Without Breaking the Bank

Workstream 3: Other carbon related sources

Carbon Tax

A carbon charge is a tax on the carbon content of fossil fuels. It complements the conventional energy tax system in which the rates are based on energy content. A carbon tax levied on fossil fuels would not only generate revenue flows for climate finance, but it would help to mitigate climate change by encouraging the substitution of non-carbon-emitting energy sources for fossil fuels by making them relatively cheaper than coal, oil, and natural gas. The Swiss Government has proposed a uniform global levy of US$2 per tonne of CO2 on all fossil fuel emissions, amounting to 0.5 US cents per litre of liquid fuel. Switzerland proposes that a threshold would be set exempting countries below certain per capita annual emission levels.

A proportion of the revenue generated from the tax would be used for domestic action and the remainder would be channelled to a multilateral fund. The percentage contribution to the fund would vary for different country types, with higher income countries contributing a larger percentage[54].

Initially a carbon tax would affect the suppliers and producers such as coal producers, petroleum refiners, and natural gas processes. But as the price signal was passed through the economy it would drive the transformation to low-carbon technologies and efficient use of energy at every level[55].

Revenue and Scalability

The amount raised by a carbon tax will depend on the rate, the coverage, and the market response. Estimates on the basis of a rate of US$2 per ton are approximately $40-50 billion generated per year[56]. This revenue stream could be returned to economies as government expenditure on energy efficiency measures, which in turn could enhance economic growth. While a carbon tax applied globally may be advantageous to avoid leakage, it must be noted that only developed countries have an obligation to provide international support for climate action in developing countries to meet the $100 billion commitment. Carbon taxes are highly scaleable, by changing the tax rate and the gases and activities covered.

Practicality

An upstream tax on producers and suppliers would not require monitoring emissions and could be relatively easy to implement. It could build on the administrative infrastructure for existing taxes, such as excise taxes on coal and petroleum[57].

Moreover, carbon taxes can also be implemented with far less risk for manipulation by special interests, not to mention perverse incentives that can undermine public confidence and undercut effectiveness.

While a global carbon tax is a simple and flexible means to internalize the costs of emissions of GHGs, there are implementation challenges related to enforcement and compliance, institutional control,

54Wilks, Alex (2010) Sources to Generate Fair International Climate Finance: Meeting Developed Obligations

[55] The Guardian (2009) *Replace Kyoto with Global Carbon Tax, says Yale Economist* http://www.guardian.co.uk/environment/2009/mar/12/carbon-tax-should-replace-kyoto-protocol

56Wilks, Alex (2010) Sources to Generate Fair International Climate Finance: Meeting Developed Obligations

[57] Congressional Budget Office (2008) *Policy Options for Reducing CO2 Emissions* http://www.cbo.gov/ftpdocs/89xx/doc8934/02-12-Carbon.pdf

political acceptability, and specially the allocation of the revenues[58].

Efficiency
The efficiency advantage of a carbon tax stems from the contrast between the long-term cumulative nature of climate change and the short-term sensitivity of the cost of emission reductions. Specifically, available research suggests that in the near term, the net benefits (benefits minus costs) of a tax could be roughly five times greater than the net benefits of an inflexible cap. This means that a given long-term emission-reduction target could be met by a tax at a fraction of the cost of an inflexible cap-and-trade program[59].

Reliability/Predictability
The amount of revenue raised will depend on how companies and individuals respond to the tax, i.e. how rapidly they reduce their carbon usage. Tax levels might need to be raised if carbon dioxide emissions are reducing too slowly[60]. Rebating mechanisms, as above, could also be applied.

As a carbon tax is linked to the consumption of fossil fuels it should provide a sustainable source of finance. If the carbon tax operates at the national level, however, steps will need to be taken to ensure that this revenue is not captured by national governments[61]. However, since revenues from taxes will first be collected through national treasury, there is a risk that funds will be less predictable than funds generated under truly 'non-national' processes[62].

Equity and Justice
The carbon tax proposal that has been tabled by the Swiss Government would be levied on the basis of current absolute consumption, not on historical responsibility, which is problematic for developing country emitters who would contribute more than half of overall revenues. The amount of net benefit to developing countries will depend on how much of the proceeds flow internationally and how much is retained domestically by the country contributing the tax[63].

Redirecting Fossil Fuel Subsidies
Many global leaders including UN Secretary General Ban Ki Moon, Sir Nicholas Stern, Al Gore, and John Browne, BP's former Chief Executive, have all spoken out against the ongoing practice of subsidizing fossil fuels with public funds. The Obama Administration has proposed eliminating some domestic subsidies to the oil and gas industry in the US.

The recent announcements that G20 and Asia-Pacific Economic Cooperation (APEC) nations will phase out support for fossil fuels presents an opportunity to redirect substantial portions of those subsidies into international climate finance. It is important that Annex 1 countries lead in eliminating their subsidies to fossil fuels, as language in the Kyoto Protocol already calls on them to do.The use of fossil fuels is actively subsidised by the state at present. Savings from ending fossil fuel subsidies in the developed world can be used to provide climate finance for developing countries. The vast majority of

[58] Altamirano,Cabrera, Juan,Carlos. Biccheti, David. Drouet, Laurent. Thalmann, Philippe. Vielle, Marc. (2010) A Global Carbon Tax to Compensate Damage and Adaptation Costs http://gemini-e3.epfl.ch/webdav/site/gemini-e3/shared/A%20global%20carbon%20tax%20to%20compensate%20damage%20and%20adaptation%20costs
[59] Congressional Budget Office (2008) *Policy Options for Reducing CO2 Emissions* http://www.cbo.gov/ftpdocs/89xx/doc8934/02-12-Carbon.pdf
60Wilks, Alex (2010) Sources to Generate Fair International Climate Finance: Meeting Developed Obligations
61Wilks, Alex (2010) Sources to Generate Fair International Climate Finance: Meeting Developed Obligations
62G-20 (2009) G-20 Climate Finance Experts Group: Providing Public Revenue to Address Global Climate Change
63Wilks, Alex (2010) Sources to Generate Fair International Climate Finance: Meeting Developed Obligations

fossil fuel subsidies in the North are "producer subsidies" paid to large oil and coal companies for exploration, production or distribution. In many countries some or all consumers are also supported by state interventions to keep prices down. Some subsidies are paid nationally, for example as tax holidays. Others are international, provided by export credit agencies and international financial institutions.

In addition, multilateral development banks and export credit agencies continue to be a major source of funding for the production of fossil fuels globally. These bodies use public money to lock developing countries into carbon intensive paths, thus funding projects that conflict with the goals of UNFCCC.

Revenue and Scalability

The volume of money currently directed towards fossil fuels subsidies in Annex 1/OECD countries alone would cover a significant amount of what is needed for climate finance. Moreover, the elimination of these subsidies also would lead directly to greenhouse gas emission reductions in Annex 1/OECD countries[64].

The current dollar amount of subsidies going to fossil fuels is a matter of debate. However, production subsidies, which primarily occur in Annex 1 countries, and which are therefore the appropriate form of subsidies for climate finance, have recently been estimated to be roughly $100 billion annually[65]. To ensure that key fossil fuel subsidies are removed, financing from export credit agencies and multilateral development banks should be included in the definition of fossil fuel subsidies that could be targeted for phase out[66]. Note that there is an additional US $300 billion to $500 billion in Non Annex 1 subsidies to fossil fuels that exist mainly in consumer subsidies. While there are undeniable benefits to reducing these subsidies as well, this elimination should not be tied to climate finance, although it could be part of nationally appropriate mitigation actions (NAMAs)[67].

President Obama's 2011 budget proposes to eliminate nine different fossil fuel tax expenditures that could generate about $45 billion over the next 10 years. However, in 2009, a report by the Environmental Law Institute found that shifting U.S. fossil fuel subsidies would generate at least US $10 billion dollars annually. An additional US $4 billion in annual subsidies is flowing to fossil fuel interests from U.S. taxpayers via the U.S. Export-Import Bank, the Overseas Private Investment Corporation, the World Bank, and the regional development banks. These flows are technically "off budget," but could be redirected by executive order and guidance from the U.S. Treasury. All of these subsidies meet the definition of subsidies established by the World Trade Organization (WTO) within the Agreement on Subsidies and Countervailing Measures (ASCM).

None of the figures above include any money from defense spending to ensure fossil fuel supply, which is significantly higher.

Practicality

[64] Climate Action Network (2010) *Investing in the Future: Options for Climate Finance the US can Support*
[65] IEA, OPEC, OECD, WORLD BANK JOINT REPORT ANALYSIS OF THE SCOPE OF ENERGY SUBSIDIES AND SUGGESTIONS FOR THE G-20 INITIATIVE Toronto (Canada), 26-27 June 2010 http://www.oecd.org/dataoecd/55/5/45575666.pdf
[66] Oil Change International (2010) *Shifting Fossil Fuel Subsidies to Increase Energy Access and Support Climate-Affected Communities* http://priceofoil.org/wp-content/uploads/2010/06/ffsubshiftbrief062210final.pdf
[67] US Climate Action Network (2010) *Investing in the Future: Options for Climate Finance the US can Support*

The Kyoto Protocol and subsequent decisions of the Parties already call on developed member countries to reduce fossil fuel subsidies as a matter of priority. And a number of other international agreements have also used subsidy limitations to achieve their stated purposes. Last year's G-20 Leaders Statement specifically called for the phasing out of inefficient fossil fuel subsidies in light of the resulting unsustainable consumption, reduced energy security, and investment constraints.

Many countries have tried to reform their fossil-fuel subsidies with varying degrees of success[68]. The US has already begun the process of subsidy removal (although not shifting to climate finance) in the 2010 budget proposal by identifying almost USD $4 billion annually in fossil fuel subsidies.

Although the benefits of fossil-fuel subsidy reform are clear, entrenched subsidies are notoriously difficult to remove in practice[69].

Developing countries are legitimately concerned about access to energy for their populations, and the removal of fossil fuel subsidies to consumers can be seen as a threat to that access – unless the subsidy removal is accompanied by increased climate finance. For example, nine World Bank Directors representing 90 countries recently stated that the US Treasury's guidance note on halting Bank support for coal *"may have been acceptable if it had been accompanied by a US commitment to provide such enabling finance and technology"*.

As the response to US Treasury's coal guidance note shows, non-Annex 1 countries are unlikely to agree to phase out subsidies in the absence of new and additional finance that can meet the energy needs of their populations. The key to the implementation of the G20 agreement regarding subsidy removal will be the provision of climate finance and the sequencing of the subsidy phase out. [70].

This obstacle can be addressed by an agreement to a scheduled phase out of fossil fuels subsidies, with developed countries taking the lead, and directly linking fossil fuel subsidy removal to climate finance .

In any case, to establish trust and build momentum, the subsidy removal should be phased, gradually decreasing the level of support, and differentiated by country income level. For example, wealthy countries could commit to phasing out energy subsidies completely within five to seven years, and those funds could be redirected to climate finance.

Middle-income developing countries could aim for 10 years. Low-income countries could target 50% within 10 years and a complete elimination in 15 years. This strategy offers benefits to all parties. Wealthy countries would take a significant step forward in reducing their emissions, while also producing needed funding for climate finance. Developing countries would benefit from reduced exposure to the fluctuations in the oil market as well as financial and technology transfers for mitigation. In addition, subsidy phaseout could become a central part of nationally appropriate mitigation actions (NAMAs) required of countries under the UNFCCC.

Efficiency

68Global Subsidies Initiative (2010) Reform http://www.globalsubsidies.org/en/research/reform
69The IISD Blog (2010) Rio 2012 Prep-committee Urged to Plan Summit That Facilitates Transformational Change http://blog.iisd.org/category/news/
70Oil Change International (2010) Countries Shifting Fossil Fuel Subsidies to Increase Energy Access and Support Climate-Affected Communities, http://priceofoil.org/wp-content/uploads/2010/06/ffsubshiftbrief062210final.pdf

Phasing out of fossil fuel subsidies can reduce wasteful consumption and enhance economic efficiency and growth. As such, it is a desirable policy choice apart from the question of what is done with the government revenues recovered from subsidy reform. The redirection of fossil fuel subsidies could therefore be an efficient way to generate climate finance.

Higher emission rates and per capita subsidies in wealthy countries suggests that greater than 20 percent emissions reductions could be achievable if all subsidies were removed in industrialised and developing countries[71].

According to the OECD, phasing out consumer subsidies for fossil fuels between 2011 and 2020 would cut global oil demand by 6.5 million barrels per day in 2020, or about one-third of current U.S. demand. It would also cut global energy demand by 5.8% by 2020, the equivalent of the energy consumption of Japan, New Zealand, Korea, and Australia combined. Reduced greenhouse gas emissions would be the equivalent of current emissions from France, Spain, Germany, the U.K., and Italy combined.

The OECD further estimates that removing consumer subsidies in the 20 largest subsidised developing countries would also yield environmental benefits, reducing global greenhouse gas emissions by 10% in 2050[72]. The G-20 study estimates that the elimination of subsidies in 37 developing countries alone would reduce greenhouse gas emissions 6.9% by 2020.

Acceptability

Although political momentum exists internationally for subsidy phase-out, the domestic politics of redirecting funds for climate finance could be difficult given the influence of the entrenched interests of the fossil fuel industry. Nonetheless, these interests will need to be confronted in order to solve climate change, and ending taxpayer giveaways to these already highly profitable industries is an excellent place to start.

Developing countries are legitimately concerned about access to energy for their populations, and the removal of subsidies can be seen as a threat to this – unless it is accompanied by increased climate finance. Linking subsidy removal with increased climate finance quickly addresses the legitimate concerns that subsidy removal could decrease energy access.

Nine World Bank Directors representing 90 countries recently stated that the U.S. Treasury's guidance note on halting Bank support for coal "may have been acceptable if it had been accompanied by a US commitment to provide such enabling finance and technology"[73].

Eliminating subsidies to fossil fuels on their own is not adequate to establish trust and build momentum towards a global transition to a clean energy economy. Subsidy removal must be sequenced and linked to climate finance. The most feasible solution would be an ongoing removal of fossil fuel subsidies, gradually decreasing the level of support, and differentiated in time and by country while increasing climate finance to developing countries based on their income level or vulnerability to climate impacts. In addition, subsidy phase out could become a central part of nationally appropriate mitigation actions.

71Oil Change International (2009)
72Global Subsidies Initiative (2010) Economic, Social and Environmental Effects
http://www.globalsubsidies.org/en/research/economic-social-and-environmental-effects
73Oil Change International (2010)

There is currently momentum at the international level for rationalization and phase out of fossil fuel subsidies. Beyond the commitment among the Group of 20 major economies, the leaders of countries in the Asia-Pacific Economic Cooperation (APEC) last year similarly committed to rationalize and phase out over the medium term fossil fuel subsidies over the medium term.

While the specific circumstance of each country is unique, the following factors are important in the development of effective subsidy reform[74]:

- Deep understanding of the subsidy, its original objectives, the rationale for reform and the likely impacts;
- Building support by communicating the benefits of reform and consulting stakeholders;
- Policy measures to reduce negative impacts on affected groups;
- Independent pricing mechanisms to prevent the government being drawn back in to subsidization.

From a policy perspective, it is important to note that actually shifting producer subsidies (which are often in the form of tax credits) and specifically redirecting them to international climate funds, poses some technical and accounting challenges. In practice, the climate finance might have to be appropriated separately from the budget lines that eliminate the subsidies. Another possibility is to create a new legislative vehicle that both eliminates subsidies and redirects them to climate finance[75].

Reliability/Predictability
The amounts of money currently going to fossil fuels in wealthy countries – Annex 1 countries under the UN Framework Convention on Climate Change and/or members of the Organization for Economic Co-operation and Development (OECD) – alone would cover a significant amount of what is needed for climate finance (clean energy and adaptation needs) in developing countries.

Equity and Justice
Internationally, the politics of ending fossil fuel subsidies are already intertwined with climate finance. Developing countries are legitimately concerned about access to energy for their people, and the removal of subsidies can be seen as a threat to this unless it is accompanied by increased climate finance and sequenced to remove producer subsidies in Annex 1 first.

Non-Annex 1 countries are unlikely to agree to phase out subsidies in the absence of new and additional finance that can meet the energy needs of their populations. The key to the implementation of the G-20 agreement regarding subsidy removal may be the provision of climate finance and the sequencing of the subsidy phase out[76].

Within developed countries, the removal of subsidies will tend to impose costs on a concentrated group of producers, but consumers should not bear any significant new cost. Subsidies for fossil fuels in developed countries are often directed at domestic production and have a small impact on market energy prices.

74Global Subsidies Initiative (2010) Reform http://www.globalsubsidies.org/en/research/reform
[75] Oil Change International (2010) *Shifting Fossil Fuel Subsidies to Provide Energy Access and Climate Finance* http://pdf.wri.org/wri_climate_finance_meeting_fossil_fuel_subsidies_feb_2010.pdf
[76] Oil Change International (2010) *Shifting Fossil Fuel Subsidies to Increase Energy Access and Support Climate-Affected Communities* http://priceofoil.org/wp-content/uploads/2010/06/ffsubshiftbrief062210final.pdf

However, the impact the phase-out on workers in the fossil fuel industry needs to be evaluated and addressed, both in developed and developing countries.

At the World Bank and other multilateral development banks, subsidy removal should be placed in the context of support for increased energy access for the poor and climate finance. This would mean:

- Prioritizing the energy needs of the millions of people living in areas not connected to the grid;
- Focusing on decentralized sustainable energy solutions that meet the energy needs of the poor in a cost-effective and energy efficient manner;
- Ending investments in fossil fuel extraction and use;
- Shifting the portfolio of the development banks to be based on efficiency and renewables.

Unfortunately, the World Bank continues to be a leading source of support of fossil fuels. From fiscal year 06'-10' bank lending for fossil fuels increased from $1.5 billion to $6.2 billion. FY 2010 represented a record year for fossil fuel lending at the Bank with $4.4 billion for coal projects alone.[77]

Shifting fossil fuel subsidies to fund energy access and climate finance is good politics, as well as good policy. Subsidy removal with increased climate finance quickly addresses the legitimate concerns that subsidy removal could decrease energy access. Developed countries can generate necessary trust and support from the developing world to secure a global clean energy transition by committing to improving energy access globally through renewables while phasing out fossil fuel subsidies domestically and via export credit agencies and development banks[78].

Additionality
Subsidy shift is additionaly over and above existing ODA commitments, except in the case of subsidies to fossil fuel technologies currently being routed through bilateral aid agencies and international financial institutions.

The elimination of fossil fuel subsidies would lead directly to greenhouse gas emission reductions. The G-20 study estimates that the elimination of subsidies in 37 developing countries alone would reduce greenhouse gas emissions 6.9% by 2020. Higher emission rates and per capita subsidies in wealthy countries suggests that greater than 20% emissions reductions could be achievable if all subsidies (wealthy country and developing country) were removed[79].

Leverageability
Ongoing producer subsidies in the developed world gives fossil fuels a competitive advantages. Ending this practice signals to the markets that clean energy investments will be encouraged and supported.

[77] Bank Information Center, 2010, http://www.bicusa.org/en/Document.102339.aspx
[78] Oil Change International (2010) *Shifting Fossil Fuel Subsidies to Increase Energy Access and Support Climate-Affected Communities* http://priceofoil.org/wp-content/uploads/2010/06/ffsubshiftbrief062210final.pdf
[79] Oil Change International (2010) *Shifting Fossil Fuel Subsidies to Increase Energy Access and Support Climate-Affected Communities* http://priceofoil.org/wp-content/uploads/2010/06/ffsubshiftbrief062210final.pdf

Workstream 4: Role of Multilateral Organizations, including SDRs

The AGF must stay within its mandate of evaluating sources of finance and not put itself in the position of recommending roles for institutions such as the World Bank. However, for the purpose of this paper, we wish to express some views on the World Bank and climate finance, listed below.

World Bank Financing The World Bank is positioning itself to play a key role in the management of climate financing. The Bank is the largest implementing agency of the Global Environment Facility (GEF) and hosts several climate related trust funds, including the Climate Investment Funds.

The World Bank's review of its Energy Strategy, currently underway, provides an opportunity to improve its lending practices by establishing specific targets under its strategic goals of supporting increased energy services for the poor that are clean, reliable and sustainable; and supporting the transition towards zero/ultra-low-carbon development.

The success of the strategy should be measured against these targets:

- Increase financing for renewable-based distributed energy systems by 40% annually starting from FY 2011;
- Provide 700 million poor with clean, reliable, and sustainable energy services by 2021;
- Increase average annual income by 30% per household or small business and decrease by 30% social costs associated with lack of education, health care and drinking water supply as a result of improved energy services;
- Increase by 30% the annual revenue for local energy supply/maintenance companies;
- Increase financing for energy efficiency by 40% annually starting in FY 2011;
- Double the share of clean, reliable and sustainable renewable energy sources in the energy mix of client nations by 2021.[80]

The Climate Investment Funds (CIF) are a pair of financing instruments to catalyze low carbon and climate-resilient development in developing countries through scaled-up financing. With $6.3 billion for innovative climate financing in developing countries for renewable energy and other low-carbon technologies, climate resilience, and forestry, the CIF represent a large share of current available resources[81]. The CIFs have been designed as an interim global climate change financing mechanism pending agreement on a post-2012 international climate change regime[82].

Despite the development of the CIFs, the key issue is whether the Bank should be entrusted with an even larger role in the future of climate finance in light of its energy lending trends[83]. In response to civil society pressure, the Bank has increased financing for new renewable energy and energy efficiency in recent years. However, World Bank lending to fossil fuels is still greater than new renewable energy and energy efficiency combined, US$7.3 billion compared with $5.3 billion

[80] Bank Information Center (2010) *BIC Releases Model World Bank Energy Strategy*
81CIF website
82Bretton Woods Project (2010) Fuelling Contradictions: The World Bank's Energy Lending and Climate Change
83World Resources Institute (2010) Will Climate Finance Mean a New Path for the World Bank? http://www.wri.org/stories/2010/05/will-climate-finance-mean-new-path-world-bank

respectively for fiscal years(FY) 2007 to 2009[84]. Another key issue is what kind of precedents they set for other funds whether at the World Bank or elsewhere in terms of criteria for funding, civil society engagement, application of social and environmental safeguards, and governance and recipient country ownership in start up of funds and development of investment plans.

Revenue and Scalability

The largest portfolio of non-UNFCCC funds were established under the World Bank, about US$8 billion of capital has been cumulatively committed to a range of climate-specific funds like the Climate Investment Funds (CIF). The CIFs are channelled through four regional banks as well as the World Bank. Some banks, such as the EBRD, have specific targets to ensure that a share of their lending helps meet climate goals. And the World Bank has already issued green bonds worth over US$ 1 billion[85]

The creation of the Climate Investment Funds (CIFs) have subsequently received over $6 billion in donor country commitments. However, the CIFs are designed as an interim global climate change financing mechanism pending agreement on a post-2012 international climate change regime[86]

Practicality

The most likely mechanisms for long term climate financing will come through multilateral development banks and bilateral agencies. The Climate Investment Funds (CIFs) appear to be favoured by many donors for channeling the almost US$30 billion in fast-start finance in 2010-2012. Some developed countries are also advocating for a role for the CIFs to house the new foreseen Copenhagen Green Climate Fund. The amounts of money that have been pledged to the CIFs in comparison to alternatives show a preference among powerful donors to channel public funding through the World Bank[87]. However, countries made larger than ever record commitments to the GEF in 2010, and first significant contributions are going to the Adaptation Fund established under the UNFCCC.

Efficiency

The CIFs set out to be transformational, but there are several ways in which they fail to achieve that standard. In the case of the Clean Technology Fund, there are concerns over insufficiently rigorous funding criteria, which continue to allow funding for coal power plants. Furthermore, in many of the programmes being funded, the rush to attract large-scale private sector investment and to get programme work going does not leave adequate time for instituting an appropriate regulatory environment. An appropriate regulatory environment would set policies and regulations through investment plans which promote renewable, sustainable energy, and build institutional capacity to implement this[88].

The MDBs also have a role to play in innovative sources of finance. For example, the World Bank has played a leading role in the design and implementation of the Advanced Market Commitment (AMC) for vaccines, a model which could be applied to the development and diffusion of climate-related technologies in developing countries. MDBs can also help underwrite climate risks in developing

[84] Bretton Woods Project (2010) Fuelling Contradictions: The World Bank's Energy Lending and Climate Change
[85] UN Secretary-General's High-Level Advisory Group on Climate Change Financing (2010) *Background Paper for the First Meeting, 31st March 2010 Prepared by the Secretariat*
[86] Bretton Woods Project (2010) Fuelling Contradictions: The World Bank's Energy Lending and Climate Change
[87] Bretton Woods Project (2010) Fuelling Contradictions: The World Bank's Energy Lending and Climate Change
[88] Eurodad (2010) *Why the World Bank is Ill-fitted for Climate Finance*

countries and leverage private investment, through innovations like cornerstone climate funds, guarantees and other risk sharing and mitigation activity[89].

Acceptability

Each of the CIFs offer funding as a mixture of grants and loans, which is problematic particularly for the Pilot Program for Climate Resilience (PPCR), the Bank's only fund designed to address adaptation. According to the polluter pays principle, adaptation should be delivered as grants, not loans, because it is intended to enable Southern countries to cope with the negative impacts of climate change, primarily caused by developed countries. The use of loans rather than grants will lead to a further illegitimate indebtedness in Southern countries. Finally, there are disparities in which countries will most benefit from the CIFs. For example, the Climate Technology Fund – where the vast majority of the CIF finance is based – is targeted at middle income countries for industrial purposes, while programmes targeted at poorer countries to promote energy access for the poor, such as the SREP, have far more limited resources to offer[90].

While the Bank has been eager to highlight successes and lessons learned from the CIFs and often calls attention to its climate change framework and its lending portfolio, in which energy constitutes the largest sector, consistently undermines climate efforts. Of particular concern, is the Bank's continuing large-scale investment in coal-fired power plants and other fossil fuel projects, which lock developing countries into fossil fuel-based energy for decades to come. This pattern in the World Bank's lending sets precedents for other lenders as the Bank leverages US$4 for every $1 of finance it provides, according to its own estimates[91].

Another challenge will be for the World Bank to embrace changes in its governance structures and procedures in order to give a greater voice to developing countries to ensure:

- Recognition of common but differentiated responsibilities between countries, taking into account national circumstances and the needs of those who are most vulnerable.
- Country ownership of plans that are rooted in development objectives. These plans should be developed with the participation of civil society and non-state actors.
- Provision of incremental financing and technology and financial support to help developing countries leapfrog into low carbon or zero carbon trajectories.

If the World Bank is to play a role in climate finance, then the current policy and governance reforms under discussion at the Bank must produce real changes in direction order to establish its legitimacy as a potential trustee or channel for climate finance. Still, it must be acknowledged that many segments of civil society believe that given the tremendous past and present problems with the World Bank, the institution must not be empowered to manage climate finance.

Reliability/Predictability

The World Bank has repeatedly failed to effectively provide reporting at the project level, a problem that has been highlighted in numerous reports by the Independent Evaluation Group, among others. This lack of competency presents significant risks for the effectiveness of the CIFs and other climate

[89] UN Secretary-General's High-Level Advisory Group on Climate Change Financing (2010) *Background Paper for the First Meeting, 31st March 2010 Prepared by the Secretariat*
[90] Eurodad (2010) *Why the World Bank is Ill-fitted for Climate Finance*
[91] Bretton Woods Project (2010) *Fuelling Contradictions: The World Bank's Energy Lending and Climate Change*

finance placed at the World Bank. Weak accountability is worsened by an increasing trend for the World Bank to lend through financial intermediaries, which are not required to implement World Bank environmental and social standards[92.]

Equity and Justice
Although the CIF committees have equal representation of developing and developed countries, there have been shortfalls in the level of involvement from developing countries. The design of the CIFs was largely donor driven; encouraged by the UK's commitment of US$800 million and without much consultation with the countries the funds seek to benefit. A discussion paper commissioned by the World Bank on lessons learned from the CIFs so far found that in-country stakeholder engagement on investment plans and proposals has been limited. While civil society representatives have been permitted to CIF committee meetings as observers, in many cases they are not allowed to be present when decisions are made, nor do they feel that their views have adequately been taken up. Fast-start finance should support the democratic country ownership including the full and effective participation of local and affected communities and people, particularly women, in decision making at all stages of activities. The projects supported by these funds must respect human rights and international environmental and social standards. This is an area in which the World Bank has repeatedly shown shortcomings[93].

Special Drawing Rights The Special Drawing Right (SDR) is an international reserve asset created by the International Monetary Fund (IMF) that member countries can use to build reserves or exchange for hard currency. SDRs have rarely been used since their creation in the 1960s, but US$250 billion worth of SDRs were issued in 2009 in response to the financial crisis. There are now several proposals for issuing SDRs for climate finance. To date, four allocations of SDRs have taken place and there are 204 billion SDRs worth approximately US$320 billion. Countries earn interest on any SDRs they hold in excess of their allocations, and pay interest on any SDR deficit in relation to their allocations.

Revenue and Scalability
The amount of SDRs to be issued would be subject to negotiation among governments. The IMF issued US$250 billion in SDRs in 2009, of which some US$165 billion were allocated to developing countries. If a similar issuance – with full transfers to developing countries – took place regularly, SDRs would meet the adequacy test.There is no technical limit to the amount of SDRs that can be created except political will of governments.

As long as SDRs are designed to be allocated on a regular basis, this source is highly scalable.

Practicality
An important fear of financing through SDRs is that as soon as SDRs are activated in order to be used outside of central banks' balance sheets, it is akin to money creation, which is inflationary. However, upon closer examination, even regular allocations of $100 billion worth of SDRs are highly unlikely to be inflationary. This is because right now world GDP is approximately US$60 trillion dollars. Injecting another US$100 billion into the economy each year—only about one-sixth of one percent of world GDP—should not have any inflationary effect. Another way to use SDRs is to treat them as a

[92] Eurodad (2010) *Why the World Bank is Ill-fitted for Climate Finance*
[93] Eurodad (2010) *Why the World Bank is Ill-fitted for Climate Finance*

guarantee for debt securities issued by the fund in capital markets. One benefit of such a design is that leverage would help to increase the overall amount of funding available[94].

There are various proposals for how SDRs could be used for climate finance, which broadly fall into two main categories – conversion of SDRs to hard currency to finance a fund or using SDRs as backing to raise private capital. The conversion proposals require developed countries to either give or lend their SDRs to a dedicated climate fund. In December 2009 philanthropist George Soros put forward a proposal which would have developed countries lend US$100 billion worth of their SDRs from the 2009 allocation to a green climate fund. He proposed that the IMF's gold reserves could guarantee the interest payments and repayment of the principal.

In addition to using developed countries' SDRs from the 2009 allocation, the IMF should also make new and regular allocations of SDRs to be used for climate finance. In this scenario, the SDRs could be allocated to all IMF member countries, which would then transfer them to a multilateral climate fund under the UNFCCC. The interest rate associated with converting SDRs to cash must be paid by developed countries.

Although SDRs were not originally intended for financing purposes, climate change represents an unprecedented crisis that may require SDRs to be used in a non-traditional way. In fact, Article 18.3 of the Articles of Agreement, allows for changes to the fund when "unexpected major developments" occur. The current and anticipated future impacts of climate change should be seen as a "major development," and one that was not anticipated at the time SDRs were devised. Additionally, the fact that the IMF Articles of Agreement do not specify how countries could use cash derived from the conversion of SDR should dispel the notion that SDRs can only be used to build reserves.

Acceptability

As a result of falling currencies, decreased foreign investment, and lower trade, many developing countries have smaller reserves and have less money to spend on national development and climate related activities. At the same time, some countries, such as Bangladesh, are beginning, out of necessity, to draw on their own national budgets to fund climate activities. In this context, climate change – in addition to the financial crisis — can be seen as having a draining effect on developing countries' budgets and reserves and should help justify why SDRs should be used for climate finance.

The only real limit on reliability is political will (and, at some point, inflation). Governments can easily design new allocations of SDRs to take place each year. Or they can be designed as a one-off mechanism.

Many Southern movements express serious concern about the involvement of the IMF in this instrument and the implications that decisions over and implementation of the SDR issuance and donation will take place in the context of an institution with a very undemocratic governance structure. The decisions and transactions may reinforce and legitimize hegemony of the IMF and the power relations between the IMF Board and developing countries. Variations of the proposal that retain the SDR concept but take the IMF out of the picture should be further explored.

On the other hand, there is a risk that developed country governments could use SDRs as a way to avoid repayment of their climate debt[95]. Furthermore, the use of SDRs implies the need for a

[94] European Commission (2010) Innovative Financing at a Global Level
[95] Action Aid (2010) Using Special Drawing Rights for Climate Finance

multilateral climate finance framework, which at this point is not viable given the state of play of the international climate negotiations[96].

Reliability/predictability

An SDR-financed climate fund would be used to issue bonds on a yearly basis, providing a highly reliable revenue stream. However, this revenue stream would most likely be offered as loans, and therefore only for mitigation. The reliability would depend on the ability for the fund to sell bonds and the repayment of loans, both of which are favourable[97].

Structuring SDRs so as to allow for new and regular allocations could also prove to be highly reliable and would generate grant funding as long as developed countries paid any associated interest fees.

Equity and justice

SDRs are not a loan in the traditional sense. There is no fixed repayment schedule for SDRs and there is no specified date of repayment. Additionally, there are no conditions attached to the use of SDRs. For example, Tanzania converted a portion of its SDRs and is now paying an annual interest charge of $273,000. While the yearly charge of $273,000 may be a burden on Tanzania, in the case of using SDRs for climate finance, this burden would not exist if developed countries agree to pay the interest on the SDRs. In this scenario, the interest charge paid for by developed countries would constitute part of their contribution to climate finance.

The ability for countries to contribute SDRs to the fund would depend on the number of SDRs they hold relative to their potential need for liquidity during a crisis. SDRs are distributed based on IMF quotas, and hence are not directly correlated to the fiscal situation of the individual country. This is a potential advantage of SDRs, as countries with a strong fiscal position and an over-allocation of SDRs may find it a convenient way of backing a green fund. One measure of the ability to contribute is the number of SDRs they hold relative to their size vs. an assessment of the debt/GDP[98].

Additionality

Beyond providing substantial sums of money to developing countries for adaptation and mitigation needs, the use of SDRs as a vehicle for climate finance could make a significant contribution to the reform of the global economy. The recent global financial crisis has exposed the urgent need for a more equitable financial system for both developing and developed countries[99].

SDRs are clearly additional to ODA. However, if developed countries pay interest on SDRs, that money would come out of appropriations. So there is still a need to ensure that money is counted separately from ODA commitments.

[96] WRI (2010) Find It, Build It, Spend It: Report on Civil Society Climate Finance Strategy Meeting
[97] SDRs as a Potential Financing Instrument
[98] SDRs as a Potential Financing Instrument
[99] Action Aid (2010) Using Special Drawing Rights for Climate Finance

Workstream 5: International Financial Transaction Taxes

As a result of the financial crisis, many politicians and regulators are proposing a "financial transaction tax," (FTT) which would be levied on all financial market transactions, including stocks, bonds, foreign exchange, and derivatives[100].

Ordinary consumer transactions such as payments for goods, paychecks, ATM withdrawals and cross-border remittances would not be subject to the FTT, nor would short-term inter-bank lending and central bank operations[101].

This tax could reduce excessive short-term speculation, and could also raise a great deal of revenue for governments. Moreover, the FTT allows those who engage in high-frequency stock-flipping and speculation, to contribute in a simple and equitable way to provide the resources needed to invest in the new energy economy and help the most vulnerable countries and communities adapt to the reality of climate change.

The bank tax proposed by President Obama is different in scope, purpose, and function from a financial transaction tax. The bank tax applies only to firms with more than US$50 billion in consolidated assets, which would include 50 banks, insurance companies, and large broker-dealers. An FTT covers a much wider range of financial activity, including hedge funds and other unregulated financial activities that are not in the top 50. As a result of the broader scope, the FTT could generate billions of dollars, reduce the volume and spread of the most complex derivatives markets and increase financial stability. The revenue raised would be allocated for public goods such as adapting to climate change and creating green jobs in a low carbon economy – both at home and abroad.

Revenue and Scalability

Potential revenues have been estimated at between US$100-400 billion per year depending on the scope of transactions covered and the extent to which the tax changes market behavior. However, some estimates are substantially higher, from US$410–1060 billion.[102] A proportion would be spent on developing country climate finance. Other proposed uses for the money include bank bail-out funds, jobs creation and deficit reduction schemes, support anti-poverty measures in countries where the money is raised, and support international anti-poverty goals[103].

Many international advocates for an FTT have proposed that revenues be split equally between domestic and international needs, with the international portion divided equally between climate and global health programs. Under this scheme, an FTT could easily generate the US$100 billion per year in finance that governments have committed to spending to support developing country adaptation and mitigation.

The Center for Economic and Policy Research estimates that a varied FTT (0.5% on stock trades; 0.01% on bond trades; 0.01% on swaps) would raise more than US$175 billion a year in the US alone,

100World Resources Institute (2010) Find It, Build It, Spend It: Report on Civil Society Climate Finance Strategy Meeting
101USClimate Action Network (2010) Investing in the Future: Options for Climate Finance the US Can Support
102 According to Schulmeister (WIFO Austria) it was 410-1060 billion (0.8-2.0 % of global GDP), see calculations based on Schulmeister in the EU document, p. 21, http://ec.europa.eu/economy_finance/articles/international/documents/innovative_financing_global_level_sec2010_409en.pdf
103Wilks, Alex (2010) Sources to Generate Fair International Climate Finance: Meeting Developed Obligations

even assuming a 50% reduction in trading volume. The North-South Institute estimates that a levy of 0.005% on only currency transactions in dealer markets of the four most heavily traded currencies alone would yield approximately US$33 billion annually, assuming a 14.5% drop in trading. Of that total, US$28 billion would be raised in the U.S. Globally, an average tax of 0.05% on all financial transactions would generate an estimated US$400 billion per year[104].

Because of the immense activity base a FTT can be applied to, this source is highly scaleable, to levels well beyond the needs of climate finance. Restrictions on scaleability come from the potential reduction in the volume of transactions as the tax level increases, and leakage if such taxes are not applied globally.

Practicality

The feasibility of administering a national financial transaction tax in the United States has already been established. The U.S. has a $0.0042 "fee" applied to transactions in all publicly traded securities and exchange traded futures and options (including the New York Stock Exchange and the American Stock Exchange) and other self-regulated financial organizations.

It is important to stress that the FTT is not a tax imposed by an international regulatory body, international financial institution, or international agency. Revenue generated through a national financial transaction tax, however, could be directed to an international climate fund, such as a Global Green Climate Fund that is under the authority of the UNFCCC[105].

The banking sector has made collection of a tax on foreign exchange in particular far simpler over the last few years as it has worked to remove settlement risk from the system. The introduction of Real Time Gross Settlement (RTGS), the Continuous Linked Settlement (CLS) bank (which now settles 75 percent of all wholesale foreign currency trading worldwide), and the almost universal use of SWIFT messaging means that a simple electronic tag on existing settlement systems would automatically transfer the FTT to the relevant tax office. Taxes on "over-the-counter" financial transactions can be collected at the point of clearing or settlement[106].

The administrative costs of collecting a financial transactions tax could be relatively low. Data from the United Kingdom, where a stamp duty is levied, show that the collection cost is only 0.21 pence per pound collected. As for foreign exchange transactions, the process of revenue collection could be easier. Since the market is fully computerised, the tax payment would be automatic when a currency trade is settled. The introduction of both Real Time Gross Settlement (RTGS) and the Continuous Linked Settlement (CLS) Bank in order to remove settlement risk from the system has made collection far simpler. Because of the global messaging circuitry supplied by SWIFT the required information could be efficiently copied to tax authorities. Automated payment would be received at central banks before being passed on to governments through their exchequers. However, if the tax is applied through the above systems, there is an incentive to find other instruments to settle transactions that are not covered by the tax[107].

However, there are a number of institutional challenges to the FTT. Individual governments could impose the tax unilaterally, although ideally governments would agree to apply the tax globally. In that

104US Climate Action Network (2010) Investing in the Future: Options for Climate Finance the US Can Support
105US Climate Action Network (2010) Investing in the Future: Options for Climate Finance the US Can Support
106Climate Action Network (2010) Investing in the Future: Options for Climate Finance the US Can Support
107European Commission (2010) Innovative Financing at a Global Level

case, administration of the tax would become more complicated, not to mention the political viability of a global tax. There are also questions about whether a national tax could guarantee a stream of revenue to a global fund. In the United States, for example, climate finance revenue would potentially vary depending on annual legislative budget appropriations unless legislation directed revenue generated into a standing fund[108].

Efficiency

The FTT would be neutral in terms of its actual effect in decreasing the carbon intensity of the economy, although it could slightly dampen some speculation in carbon markets[109].

Because of the high degree of mobility of financial markets, there is a potentially high risk of relocation and tax avoidance in response to the tax. However, this depends to a certain extent on how it is levied. Compare the impact of the Swedish and UK taxes on share dealing, which saw high levels of relocation in the former and virtually none in the latter.

Since the transactions tax does not differentiate between different segments of the market, the reaction might even depend on the characteristics of single product markets. This might be a disadvantage compared to more targeted instruments like levies on leverage and risk-taking. Recent research finds that the number of transactions declines in markets where a transactions tax is levied. In general, this coincides with a reduction of liquidity in these markets. However, the effects of this decline in transactions and liquidity on price volatility and market efficiency remain subject of debate[110].

Acceptability

There is now significant interest across the G20 in new taxes on the banking sector to repay the costs of the economic recession, which can also pay for pressing global challenges[111].

Essentially, the debate on financial transactions taxes boils down to the question of the influence of transaction costs on trade volume and price volatility, and whether they can serve as a corrective device to reduce the number of allegedly harmful short-term traders[112].

Powerful interests in the financial sector have been resistant to any regulation that is perceived to diminish their economic gains. However, the rates of taxation on financial transactions are intentionally set low enough – hundredths or thousandths of a percent – not to affect retail trading and everyday access to capital, but high enough to dissuade short-term and low-margin transactions, particularly risky derivatives speculation by the biggest financial actors.

Renowned socially responsible investors like George Soros and Warren Buffet have supported a modest financial transaction tax to raise trading costs back to the level of two or three decades ago in order to reduce the volume of speculation in financial markets and provide substantial revenue for public goods and deficit reduction[113]. A reduction of the market liquidity also might be reasonable because the economic benefit of hyper-liquidity is rather dubious, as formerly John Maynard Keynes and James Tobin have pointed out too.

108World Resources Institute (2010) *Find It, Build It, Spend It: Report on Civil Society Climate Finance Strategy Meeting*
109Wilks, Alex (2010) Sources to Generate Fair International Climate Finance: Meeting Developed Obligations
110European Commission (2010) Innovative Financing at a Global Level
111Oxfam (2010) Climate Finance Post-Copenhagen: The $100bn Questions
112European Commission (2010) Innovative Financing at a Global Level
113USClimate Action Network (2010) Investing in the Future: Options for Climate Finance the US Can Support

Japan's Foreign Minister Katsuya Okada favors the FTT, along with several European heads of state including French President Nicholas Sarkozy, German Chancellor Angela Merkel, and former U.K. Prime Minister Gordon Brown. Austria and Belgium have also expressed support for taxation of financial transactions. The EU Parliament recently passed a resolution to study the implementation of a regional FTT. An agreement by G8 countries to enact these taxes in a coordinated fashion would minimize competitiveness issues.

The FTT could also be narrowly designed to target specific industries with greater responsibility for low carbon development and adaptation. This approach would raise less money but could also reduce political opposition. It could be designed to target specific types of transactions in the future, such as carbon derivatives transactions, helping curb speculation that could threaten the integrity of a carbon market[114].

Reliability/Predictability

A major revenue flow is predictable as long as the measure is well-drafted and implemented by all relevant countries to prevent leakage. Its allocation is less certain, however, as the money would be collected nationally and could be diverted to other purposes. Evasion through financial innovation or jurisdictional arbitrage is a risk[115].

Equity and Justice

The FTT would tax financial transactions that do little to support economic well-being, and a sector that has led the growth of economic inequality within and between countries over the last 30 years. The world's largest commercial banks made profits of between US$700 billion and $1 trillion most years of the last decade and represent a good source of income. Developing country financial services companies would also contribute to the tax if it were to be implemented worldwide to prevent leakage[116]. Yet the inclusion of developing countries would seem to violate the CBDR principle. However, as discussed above in the section on international transport schemes, some useful proposals have indicated approach that could well ameliorate this problem. Revenues could be directed to developing countries, and to the extent that these revenues were attributed to developing countries they could be rebated or earmarked for poverty alleviation. These proposals would clearly help to address CBDR concerns.

It is often argued that the tax could potentially have progressive characteristics on the assumption that only wealthy individuals engage in the type of financial activities that would be captured by the tax. However, it cannot be taken for granted that this assumption necessarily holds since it also concerns the activities of pension funds and other investment funds, which also manage the savings of middle- and lower-income earners. The main impact of an FTT is on short-term trades. As pension funds are more likely to be engaged in long-term investment, it is much less likely to impact them. Also, the FTT could incentivize pension and fund managers to make longer-term investments.[117] German economists have found that the effect for pension funds with long-term investment strategies is negligible, especially compared to the fees paid for the management of the funds. Funds are often paid related to the trading volume on a provisionary basis and thus have an incentive to trade as much as possible (churning). This could be decreased by a FTT.

114USClimate Action Network (2010) Investing in the Future: Options for Climate Finance the US Can Support
115Wilks, Alex (2010) Sources to Generate Fair International Climate Finance: Meeting Developed Obligations
116Wilks, Alex (2010) Sources to Generate Fair International Climate Finance: Meeting Developed Obligations
117European Commission (2010) *Innovative Financing at a Global Level*

Leverageability

Some argue that the tax poses a risk of increasing the cost of capital for business and the cost of financial risk distribution. The latter is relevant for the use of derivatives for risk-hedging[118]. Others argue that it is highly uncertain what benefit the financial innovations really have for the whole economy. The net real investment rates in the developed countries have declined for decades, let alone current crisis and former crises as the Asian one. An indication that financial sector interest is not equal to business interest in general is that the Austrian Economic Chamber is in favor of an FTT. Also, the crisis has ultimately shown that the existing financial markets are not able to manage risks appropriately.

There is some fear that if the tax is not introduced on the global scale, it has the potential to divert economic activity - when tax avoidance is possible, leading some economists to conclude that the transactions tax has to be as comprehensive as possible in terms of its geographical scope and its coverage of products as to minimise this risk[119]. However others believe that, while coordination is desirable it is not essential. For example, the UK has had a tax of 0.5 percent on stock trades for decades. It raises an amount of revenue that is almost equal to 0.3 percent of its GDP ($40 billion a year in the U.S.) and still has a very vibrant stock market.

118European Commission (2010) *Innovative Financing at a Global Level*
119European Commission (2010) Innovative Financing at a Global Level

Conclusion

Although the AGF must maintain a clear focus on sources, the panel's effort should also be placed squarely within the context of the world countries are seeking to create by mobilizing climate finance. Climate finance will protect the poorest and most vulnerable people from the impacts of climate change, help countries increase energy access for the poor through clean energy sources instead of dirty ones, drive economic growth by creating new business opportunities, and preserve the benefits forests provide for people and the planet. These benefits should never be disconnected from the climate finance discussion.

Civil society believes that the AGF has an important role to play in helping governments think through different financing sources. This document is intended to provide guidance for the AGF on the funding sources it is currently considering, the criteria the AGF is using to evaluate sources and the broader questions the AGF should be examining as part of its work. The following issues should be addressed in the AGF's final report:

- *What the overall need is*. By providing guidance on how the US$100 billion Copenhagen pledge relates to estimates of overall climate finance needs, the AGF can help governments set intermediate and future funding targets at the appropriate scale.

- *What counts and does not count*. Without guidance on what sources or mechanisms should count towards the Copenhagen pledge, some governments may choose to count general private investment and thus render the pledge ineffective in solving the climate problem. The AGF should recommend to governments what sources can be used to ensure funding has a transformative impact. W*e encourage the AGF in the strongest possible terms to view the Copenhagen pledge through the framework of the UNFCCC, and use incremental and additional costs as the central guiding principle for recommending which sources should and should not be counted towards the US$100 billion total.*

- *A credible pathway for increasing to US$100 billion and beyond*. In order to solve the climate problem and for the world to effectively use US$100 billion per year in climate financing by 2020, governments will need to steadily increase funding each year over the next decade. The AGF should provide guidance on what targets are appropriate and how sources could be sequenced. Our analysis reveals that an average of US$30 billion per year from 2013-2015, or US$60 billion total over three years in new funding, is consistent with a US$100 billion pathway.

Based on our analysis numerous fair and equitable solutions exist, but numerous solutions will also need to be implemented in order to reach the Copenhagen pledge. Therefore, the AGF should outline a menu of workable sources for governments to choose from, using balanced criteria when evaluating options. Instead of highlighting one or two sources that look most promising, the AGF should recommend that governments need to consider multiple sources and closely examine how each source could be made to work.

Appendix I: Using Public Finance to Leverage Private Investment/Finance

While countries are scaling up action on climate finance, the private sector will be investing trillions of dollars in new energy and other climate-related infrastructure over the next several decades. Investments on a similar scale will be needed to meet global food and fiber needs. Governments and public institutions can and should make strategic interventions that help direct this funding towards projects that solve rather than exacerbate climate change. Therefore, we strongly encourage the AGF to continue considering how governments and public sector institutions can intervene to make climate-friendly investments more financially attractive to the private sector.

A wide variety of mechanisms and interventions exist, including research cooperation, development policy loans, guarantees and risk reduction, project investments, improving return on investment, insurance and technical assistance. Since the effectiveness of different mechanisms will vary widely depending on country and project conditions, the AGF should highlight how each mechanism can be effective by providing detailed real world case studies. We believe each of the above mentioned mechanisms can be effective when applied in the right way at the right time in the right country.

Total private sector investment mobilized by these mechanisms will depend on the amount of public or carbon market funding available to support them. Based on available estimates of leverage potential, tens of billions in public and carbon market funding could leverage hundreds of billions in private financing. For the reasons discussed in the introduction to this paper, however, it is essential that only the public or subsidy component of interventions be compared against the US$100 billion pledge.

Some of this funding could be redirected from existing sources, especially in the context of the World Bank's ongoing Energy Strategy Review. Shifting World Bank energy sector lending from fossil fuel to clean energy financing would provide an immediate boost to private sector investment in clean energy.

While countries are scaling up action on climate change and climate finance, the private sector will be investing trillions of dollars in energy-related infrastructure over the next several decades and making decisions about how to incorporate climate adaptation into investment decisions and insurance offerings. Currently, a variety of real and perceived risks and costs make clean energy-related infrastructure projects less financially attractive to investors compared to other options. The failure by many governments to require climate polluters to internalize the negative societal costs of emissions makes dirty energy seem cheap compared to clean energy. In addition, uncertainty about climate change impacts remains a barrier to the private sector incorporating adaptation concerns into investment decisions and offering new products that can help individuals and companies hedge against climate risks. Absent outside intervention, a business-as-usual scenario will likely consist of continued investment in dirty infrastructure that does not build in safeguards for climate impacts.

Governments and international financial institutions (IFIs) have a variety of tools at their disposal to steer investment towards clean energy projects and help the private sector account for climate adaptation (although most costs of adaptation will need to be provided from public funding). While these interventions help leverage private sector investment, it is important to note that most will still require substantial outlays of public funding because of the way governments and institutions account for these interventions in budgeting processes. As discussed in the introduction to this paper, only the public funding component or subsidy value of these interventions (including loans) should be counted

against Copenhagen pledges. General funding leveraged from the private sector tends not to go towards the incremental cost of climate action.

Mechanisms to consider include:

- *Research and development*. Governments and public institutions can leverage private sector funding through joint contributions to research and development partnerships. With regards to climate change this can include both technologies needed for reducing emissions and improved knowledge about the impacts of climate change on investment decisions. Governments are especially needed to provide funding for early-stage research that may be considered too risky by the private sector.

- *Development policy loans for mitigation*. Often one of the major barriers to private sector investment in clean energy projects in developing countries is inadequate or improper energy or environmental regulatory frameworks. Examples include developing and enforcing national building energy efficiency codes or requiring new infrastructure projects to assess expected climate impacts. Governments can provide concessional and non-concessional loans to support the reforms and capacity building needed to implement these policies.

- *Guarantees or risk reductions*. Investors in developing country clean energy projects face a variety of risks specific to both the location and nature of these investments. Risks include developing country default on loans, changes in domestic policies, political unrest, difficulty converting currency and unproven technologies. Governments and international institutions can provide guarantees or other risk reduction mechanisms to shift the burden of this risk away from private sector investors and onto their budgets. Mechanisms can include loan guarantees and pooling large amounts of a specific currency to lower convertibility risks.

- *Project investment*s. Governments and public institutions can make debt (concessional or non-concessional) and equity investments in clean energy projects in developing countries. Depending on the risk-return profile of a specific project, these investments can help project developers raise the additional capital needed to complete the project from the private sector by changing the risk-return profile faced by other project investors.

- *Insurance or insurance pooling*. Because of limited knowledge about climate impacts and the high costs of climate-related insurance for many poor countries, private sector investors are currently not purchasing adequate climate-related insurance and private sector insurance companies are currently not supplying enough. Governments and public institutions can work with the private sector to help them understand expected impacts, create innovative products like micro insurance and launch insurance pooling schemes that reduce costs.

- *Technical assistance*. Governments and public institutions can provide or finance technical assistance for clean energy or adaptation projects that can help leverage financing from the private sector. One example is an assessment of emissions reduction potential from the application of building energy efficiency standards that spurs the development of standards that drive private sector investment in efficiency improvements.

While these mechanisms can be effective if implemented on their own, often they are most effective if implemented in combinations.

APPENDIX II
July 12, 2010

RE: Civil Society Contribution to the High-level Advisory Group on Climate Change Financing

Dear Secretary General Ban Ki Moon, Prime Minister Meles and Prime Minister Stoltenberg,

We welcome the work of the Secretary-General's High-level Advisory Group on Climate Change Financing and hope that it will make a positive contribution towards developing proposals on how to generate resources at the necessary scale, particularly through innovative sources of public finance.

We were pleased that the Secretary General's mandate to the Advisory Group instructs them to "consult widely." Public transparency and the inclusion of civil society observers have traditionally enabled the UN to capture vital experience, expertise, and perspectives from non-governmental organizations. We are strong supporters of the United Nations' general principles on transparency, participation, and inclusivity.

In that spirit, we welcome your help in establishing an open dialogue between the Advisory Group and civil society organizations. To ensure a robust discussion of the substantive issues, we request that you create a clear channel for submitting written comments and provide an opportunity for expert presenters to share our views in person to the Advisory Group. We believe the process would benefit from an on-going, structured dialogue with the Sherpas of the Advisory Group's members.

We are pleased to begin our dialogue with the AGF by sending you a preliminary discussion paper titled, **A Review of Public Sources for Financing Climate Adaptation and Mitigation.** This paper assesses several promising climate finance revenue-raising mechanisms against the AGF criteria and principles. The report makes a couple of very strategic contributions. It makes clear that the Copenhagen commitment on finance is not sufficient to meet the need; indicates what should and shouldn't count as climate finance; and demonstrates that all of the public innovative sources of climate satisfy the AGF's criteria and can, if properly structured, play a role in climate finance.

The paper outlines a range of views regarding climate financing options. While many organizations have actively contributed ideas, comments, and suggestions, their signature on this letter does not imply agreement with all of the positions expressed in the paper. Rather these organizations see it as a tool and resource for catalyzing and enriching discussions and reflections towards wider consensus on crucial aspects of climate finance.

Our expectations for the work of the AGF are very high. Our organizations stand ready to assist in this endeavour. Full participation by civil society can help assure that the final product truly advances the climate negotiations and addresses the real need of people most impacted by climate change. If you need additional information about the paper, please contact Angela Anderson at US Climate Action Network, aanderson@climatenetwork.org.

Sincerely,

ActionAid
Greenpeace
Gray Panthers

IndyACT
Nature Trust (Malta)
Oxfam
Population Action International
Sustainable Energy & Economy Network at the Institute for Policy Studies
Tearfund
Union of Concerned Scientists
WWF

CC
Bharrat Jagdeo, President of the Republic of Guyana

Ambassador Pedro Luiz Carneiro de Mendonça, Under-Secretary General for Economic and Technological Affairs, Ministry of External Relations, Federal Republic of Brazil

Soumaïla Cissé, President, Commission of the West African Monetary Union

Ernesto Cordero Arroyo, Minister of Finance, Mexico

Sri Mulyani Indrawati, Minister of Finance, Republic of Indonesia

Donald Kaberuka, President, African Development Bank

Caio Koch-Weser, Vice-Chairman, Deutsche Bank Group

Christine Lagarde, Minister of the Economy, Industry and Employment, France

Trevor Manuel, Minister in the Presidency for National Planning, Republic of South Africa

Bob McMullan, Member of Parliament and Parliamentary Secretary for International Development Assistance, Australia

Mutsuyoshi Nishimura, Special Advisor to the Cabinet Office, Japan

Tharman Shanmugaratnam, Minister for Finance, Republic of Singapore

Lawrence H. Summers, Director of the National Economic Council and Assistant to the President for Economic Policy, United States of America

Montek Singh Ahluwalia, Deputy Chairman, Planning Commission, Republic of India

George Soros, Chairman, Soros Fund Management

Nicholas Stern, Professor of Economics and Government, London School of Economics

Zhu Guangyao, Assistant Minister, Ministry of Finance, People’s Republic of China

Janos Pasztor, Director of the Secretary-General’s Climate Change Support Team