



ASSESSING THE ALTERNATIVES

Financing climate change mitigation and adaptation in developing countries

The global climate is changing rapidly. The science is clear: the process of industrialisation has caused the concentration of greenhouse gases in the atmosphere to rise steadily. If we are to avoid triggering runaway, irreversible and catastrophic climate change we need to restrict global temperature increases to as far below 2°C as possible. Perhaps the most dramatic illustration is the melting of the Arctic ice cap, predicted to happen as early as 2013, the first time there will be watery emptiness at the top of the world for more than a million years.¹

Environmental impacts have begun and will continue to be felt first and hardest by some of the poorest people in the world. By 2020, parts of Africa will see crop yields from rain-fed agriculture fall by up to 50%. The costs of **mitigation** – that is, changing our activities to decrease our use of greenhouse gases – and **adaptation**, adjusting to and paying for the additional developmental consequences of increased temperatures – will run into tens, if not hundreds, of billions of dollars each year. But where will the money come from?

Answering that question is the purpose of a new report from Stamp Out Poverty which provides the basis of this briefing paper focusing on new sources of substantial on-going finance. This is one of the principal challenges in the run-up to the Copenhagen conference in December, 2009. Without a solution to how the massive costs of climate change will be met, meaningful progress will not be possible. Whilst the report concludes with the recommendation of a portfolio of mechanisms to raise substantial revenue, as important is its articulation of clear principles and criteria upon which current and future proposals can be assessed.

¹ *Climate Change: faster, stronger, sooner.*
http://assets.wwf.org.uk/downloads/cc_science_paper_october_2008_1.pdf

Adaptation financing

Clearly, an overarching concern whether speaking of **mitigation** or **adaptation** finance is that we arrive at a fair, sufficient, global deal, that does not adversely affect the world's poorest and most vulnerable people, and at the same time safeguards (rather than diminishes) current finance for development.

When addressing **adaptation**, specifically, the UN Framework Convention on Climate Change (UNFCCC) estimates costs to developing countries in the range of \$49–\$171 billion each year relating to agriculture, forestry, fisheries, water supply, human health, coastal zones and infrastructure. The central factor guiding **adaptation** finance concerns historical responsibility. Whose fault is it that the planet is warming up? Industrialisation in developed countries is responsible for the lion's share of the problem. As such, the '**polluter pays principle**' should apply – essentially, the developed world needs to make compensation payments to developing countries for the environmental damage it has caused. Beyond this a key consideration is 'ability to pay', and again, it is developed countries who have the greater capacity.

With the source of flows from North to South in mind, the report develops criteria to judge financing proposals which include:

- **Sufficiency** – where the funds generated are equal to the scale of the task
- **Predictability** – where funds are generated in as stable and predictable a way as possible
- **Equity** – where contributions reflect both historical responsibility and capacity to pay
- **Additionality** – where funds are 'new and additional' to existing aid commitments
- **Verifiability** – where funds are collected and disbursed in a transparent and verifiable manner
- **Ease of implementation** – where mechanisms are favoured that can be readily implemented.

As well as these criteria it is argued that a combination of financing mechanisms is to be preferred to one silver bullet solution and that as far as possible mechanisms should be a) broadly **international** in form, and b) **diverse** in their cost impact ie not designed to fall on one small constituency but more economically spread out.

A number of proposals have been submitted to the UNFCCC by national governments and other bodies regarding the funding of **adaptation** and **mitigation** in developing countries. In the report twelve proposals are reviewed. Please see Box 1 for a brief description of each one.

BOX 1

Twelve proposals for mitigation and adaptation financing

- 1 **The G77+ China proposal** – developed countries provide funding of 0.5% of GDP mainly for mitigation
- 2 **The World Bank's Pilot Programme for Climate Resilience (PPCR)** – discretionary loans for adaptation given by developed countries as part of ODA through the World Bank
- 3 **The Mexican Climate Change Fund (MCCF)** – countries are obliged to contribute to the fund on the basis of emissions, population and income, mainly for mitigation
- 4 **The Swiss Carbon Tax proposal** – a global tax on all carbon emissions in all countries, but with a per capita exemption that would benefit some poorer countries
- 5 **The US Auction Levy** – where a small proportion of the proceeds of auctioning carbon permits within the US are earmarked for funding adaptation activities in developing countries
- 6 **The EU Emission Trading Scheme (ETS) Auction Levy** – where a proportion of the proceeds of auctioning carbon permits within the countries of the European Union are earmarked for funding adaptation activities in developing countries
- 7 **The Global Capital Fund Mechanism** – bonds are issued on the international capital markets and the proceeds are invested in mitigation and adaptation
- 8 **The Norwegian 'Assigned Amount Units' (AAU) proposal** – the international auctioning of national carbon emission permits
- 9 **The Tuvalu Burden Sharing Mechanism** – a levy on air travel and freight shipping with different rates for developed and developing countries and exclusions for travel to and from Least Developed Countries (LDCs)
- 10 **The International Air Travel Adaptation Levy (IATAL)** – a levy on international air travel
- 11 **The International Maritime Emission Reduction Scheme (IMERS)** – a levy on international shipping
- 12 **The Currency Transaction Tax (CTT)** – a very small duty on international currency transactions as a long term funding stream for adaptation

Mitigation financing

The UNFCCC speaks of figures upward of \$200 billion per year that will be required to fund mitigation in developing countries, breaking down the costs into the following categories: energy, industry, buildings, transport, waste, agriculture, forestry and technology.

Moving away from fossil-fuel dependence for energy generation is predicted to be the most expensive category. The Stern Review states that 'investing' today to move the economy onto a low carbon footing would certainly be expensive, but far less so than dealing with the economic consequences of the level of climate change resulting from continuing with 'business as usual' – a colossal 5%–20% of global GDP on an on-going basis.

In terms of ways forward the report describes two approaches: quantity-based or price-based. That is, to shift to a sustainable, low carbon trajectory we can either **restrict the quantity** of global emissions, or we can **increase the costs** of these emissions to achieve the same result. In policy terms these two options equate to a global limit, or 'cap'; or to a global carbon tax. Either option can only work in the context of a sound and effective global deal to limit climate change, which is based on historical fairness and where future human development is an integral part.

Responsibility and capacity to pay

It is essential that decisions on climate change financing be made on a **fair and equitable basis**, using clear principles, and that national contributions should vary to reflect responsibility and capacity to pay. One of the recognised systems by which to assess **which** developed countries ought to shoulder **what** proportion of financial responsibility, in respect of both **mitigation** and **adaptation**, is the **Greenhouse Development Rights (GDR) framework**.² Fundamental to the GDR approach is firstly the need for emergency measures to reduce global carbon emissions rapidly to avoid global temperature rise of 2°C; and secondly the overriding need for poverty reduction in developing countries.

Under the framework,³ **Responsibility** is calculated by taking each country's total 'cumulative' emissions per capita, and **Capability** is calculated using per capita national income data, adjusted to reflect differences in purchasing power and inequality from one country to another. As well, the rights of poor people to develop are safeguarded through the use of an **income threshold**; the greater the proportion of a country's population that falls below this poverty line, the less that country is required to invest. Finally, proportionate responsibility can be determined through the use of a **Responsibility and Capacity Index**.

² *The Greenhouse Development Rights Framework: The right to development in a climate constrained world*. Paul Baer, Tom Athanasiou, Sivan Kartha, and Eric Kemp-Benedict. Published by the Heinrich Böll Foundation, Christian Aid, EcoEquity and the Stockholm Environment Institute. Revised second edition. Berlin, November 2008. Available at: www.ecoequity.org

³ The GDR framework is one option amongst a number of alternatives for assessing responsibility and capability while taking into account development needs. In this report we do not seek to establish a definitive framework.

RECOMMENDATIONS

Adaptation

A set of criteria was applied to the twelve proposals which, through the use of an indicative scoring system, enabled them to be compared. At the end of this process it was clear that no one instrument would generate a sufficient volume of finance and that a portfolio approach be adopted. One possible combination, the report recommends, applies the **Norwegian 'Assigned Amount Units' Levy** at 2%, raising around \$14 billion pa, combined with the **International Air Travel Adaptation Levy**, raising \$13bn pa, and the **IMERS levy on international shipping**, raising \$15bn pa. This would amount to \$42 billion a year; however by adding in the **Currency Transaction Tax**, which could raise in the region of \$40 billion pa, the total generated would climb to approximately \$82 billion a year.

BOX 2

Governance and disbursement of funds

While this paper focuses solely on the raising of finance, the following are key principles regarding institutional arrangements and the spending of funds:

GOVERNANCE

- 1 Representation – governing bodies should have equitable, and balanced participation
- 2 Decision making and activities must be transparent
- 3 Financing must be accessible to all developing countries, specifically poor and vulnerable ones such as LDCs which often struggle to access funding
- 4 Financing should be carried out under the auspices of the UNFCCC
- 5 Funds for adaptation should not be made in the form of loans

DISBURSEMENT

- 1 Funding must be distributed fairly and through existing mechanisms, where possible: for adaptation, priority must be given to the poorest and most vulnerable countries and communities within those countries
- 2 Principles of sustainable development must be taken into account, and projects should comply with international and national environmental agreements

Mitigation

The report proposes that an equitably designed global carbon market or a global carbon tax could constitute the principal source of funding for mitigation if based on the ambitious global climate deal that is needed. It is likely, however, that this would not provide sufficient transfers from North to South to finance mitigation fully, nor would these funds necessarily reflect equity considerations. To ensure sufficiency and equity for financing mitigation, it is proposed that the total volume could be augmented through measures such as the **Mexican Climate Change Fund**. Such a mechanism

could be constructed to maintain equitable contributions on an ongoing basis.

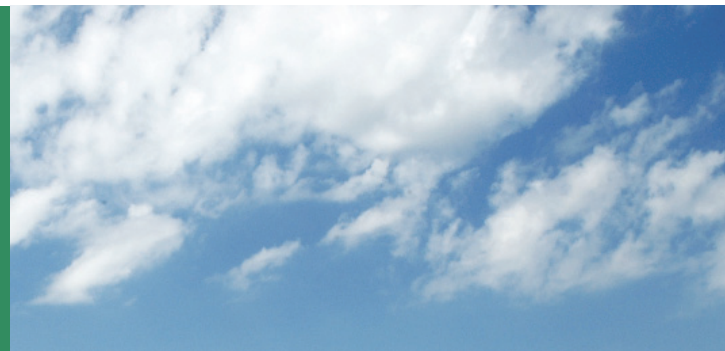
Political will and decision-making

The purpose of this report is to set out a way of thinking to help assess the financing proposals now before us. In the end, it is political intention and feasibility that will determine whether some or any of these mechanisms will be adopted. However, the need is so great and the cost of failure so immense, that we hope there is a determination to agree a mix of instruments in Copenhagen and that this report can assist in that decision-making.

This briefing is available at:
www.stampoutpoverty.org/climatefinancebriefing

The report on which it is based is available at:
www.stampoutpoverty.org/climatefinancereport

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