

Report of a Workshop on
**Carbon Taxes - A Tool for Managing Climate Change or a
Threat to the World's Poor?**

**Tuesday, June 17, 2008, 3.00 p.m. - 6.00 p.m.
Conference Room 9, United Nations, New York**

The challenge of financing climate change adaptation and mitigation will need to be addressed by the international community in the period culminating in the UN climate change conference scheduled for the end of 2009, in Copenhagen. In the meantime, the preparatory process for the Follow-up International Conference on Financing for Development and the Doha Review Conference itself provide an important opportunity to discuss additional financing mechanisms that would allow countries to cope with climate change. Against this background, the Friedrich Ebert Foundation, in cooperation with the Financing for Development Office of UN-DESA, organized a workshop on June 17, 2008 on the topic: "Carbon Taxes- A tool for Managing Climate Change or a Threat to the World's Poor?" The focus of the event was on the feasibility of carbon taxes to control climate externalities and the potential such a tax might have in generating revenues for development. Furthermore, the distributional impact of carbon taxes, in particular on low-income households in developing countries, was examined and the meeting discussed how the regressive impact of carbon taxation could be tackled in order to enhance political acceptability of the instrument. The event also addressed the overall development implications of environmental policies, since mechanisms for financing climate change adaptation and mitigation cannot be separated from development policy. There was a consensus in the workshop that unless marked achievements are made by the international community in tackling the economic development challenges and meeting of the internationally agreed development goals, it is unlikely that the required levels of mitigation and adaptation will be met.

The workshop benefited from the rich intellectual blend and points of view of the speakers, UN government representatives, policy makers and experts from civil society. The panel was chaired by Ambassador Byron Blake from the Permanent Mission of Antigua and Barbuda to the United Nations¹. The speakers were: Michael Keen, Division Chief, Fiscal Affairs Department, IMF; Gilbert E. Metcalf, Professor of Economics, Tufts University; and Tariq Banuri, Senior Fellow and Director of the Future Sustainability Program, Stockholm Environment Institute.

¹ Antigua and Barbuda holds currently the Chairmanship of the Group of 77 in New York for the year 2008.

The speakers in the workshop emphasized that while climate change is a global challenge, developing countries are only responsible for a relatively small part of the current stock of greenhouse gases (GHGs). This is reflected by the principle of 'common but differentiated responsibilities' in the UN Framework Convention on Climate Change (UNFCCC) and the Kyoto protocol. High-income economies generated about 80 percent of past fossil fuel-based emissions, and hence account for most of the prospective damage. However, from a long-term perspective, limiting that damage also requires developing countries to shift their energy and consumption needs towards low carbon options, as they will likely generate substantively to the growth of future emissions. The impact of global warming in several areas that are of relevance to human development has already become manifest, and the workshop acknowledged that the worst impacts of climate change will fall on the poorest developing countries, in part because of their geographical location, their weak coping capacities, the large concentration of poverty in these nations and because of more vulnerable social, institutional and physical infrastructures in the Global South.

By curbing the most important greenhouse gas, carbon dioxide (CO₂), which currently constitutes more than three quarters of the global warming potential, it appears sensible that a tax on carbon emissions could have the potential to limit current GHG concentration levels. Several economists have been making the "Pigovian argument"² that a carbon tax has the potential to create an incentive for the "market" to produce and consume fewer fossil fuels and emit less carbon into the atmosphere, since such a policy measure would make it more expensive for companies as well as consumers to pollute. Moreover, in comparison to other instruments, such as performance standards, a carbon tax could be particularly well targeted by defining an appropriate price for GHG emissions. An additional argument in favor of carbon taxes rests upon the potential revenue that such a tax could generate, thereby easing pressures on public finances. In order to allow for a credible transition of the economy towards a low-carbon path it would be necessary to raise the tax from an initial lower level of the carbon price with substantial real increases in the future.

The speakers acknowledged that carbon taxes are a feasible instrument and are suited to penalize greenhouse gas emitters. However, it might be difficult to determine the correct price reflecting the damage they cause and for achieving the desired change in consumer behavior. A lack of low-carbon options in the economy for transportation and energy will for instance not encourage a shift by consumers to more environmentally friendly alternatives. In the case that fossil fuels are priced too high, poor rural and peri-urban households, in particular in developing countries, will have the incentive to burn more traditional fuels such as firewood or biomasses with adverse environmental effects. Several participants raised the argument, that while several economists believe that a carbon tax would be a superior policy alternative to an emissions-trading regime, the taxation option is considered highly unpopular by policymakers. The European Union considered for many years the implementation of a harmonized carbon tax covering its member states,

² A Pigovian tax (named after the economist Arthur Pigou) is a tax levied to correct negative externalities (in this case carbon dioxide) of market activity, to accurately reflect the cost to society.

but decided instead in 2005 on a cap-and-trade approach, due to the lack of agreement on the appropriate tax rate.

It was further acknowledged that carbon pricing will affect the level and distribution of households' real incomes, directly through their own use of fossil fuels and indirectly through the prices of other commodities. The actual distributional impact will depend on to what extent the burden is borne by the consumer rather than the supplier of the commodity, but it is widely acknowledged, at least in the short run, that the consumer will carry the burden. Therefore, any carbon price will disproportionately impact the poorest citizens, as their energy consumption has a larger share in the household budget compared to other income groups. It would be necessary to mitigate the distributional impact by using the carbon tax revenue to offset the burden on poor households. One panelist suggested, that this could be achieved for instance by providing a tax credit equal to a percentage of the wage income of poor families or an explicit grant to non-workers (e.g. the elderly). Given the importance of the informal sector in developing countries which would make a tax credit on wage income difficult to implement, an alternative distributional policy for a carbon tax dividend would be necessary.

Several participants in the workshop acknowledged that market-based mechanisms such as carbon taxes, cap-and-trade, or hybrid mechanisms have gained prominence in the recent debate and provide possible policy options on the national or regional level for governments to tackle climate change. It would however be important to allow for government ownership in the design of such instruments in order to account for local and national environmental conditions and country specific priorities when addressing the distributional impact of such policy measures. Moreover, the question was raised why policy discussions have tended to be concentrated on a single policy domain, namely the use of market mechanisms for the climate transition and are often de-linking environmental policies from the development process. It was further noted that price incentives may be quite effective for introducing changes on the margin, but that there is little evidence that price mechanisms induce a fundamental transformation in the economy. Moreover, market-based instruments might bear the risk that the rights of already powerful stakeholders (such as energy producers) will enable some of them to persist with current practices.

Against this background, the workshop considered an additional approach in response to climate change, namely a globally funded public investment program for the deployment of renewable energy technologies in developing countries. The development-climate nexus of such a program originates in the understanding that developing countries should be enabled to make up for their enormous shortfalls in energy supply, without endangering their economic growth paths and poverty reduction efforts. In comparison to induced changes on the margin by market-based mechanisms, a globally funded public investment program would follow the primary goal of equity by enabling the Global South to sustain its developmental momentum while making massive cuts in emissions. The purpose would be to bring about a change in trajectory where it is most cost-effective, namely where the investments have yet to be made. This could result in a rapid decline in the emission profile of the South leading towards de-carbonization and at the same time the facilitation of technological learning that would reduce the costs of renewable

technologies for the North. Such a program would include substantial new investments in technology transfer, including by upgrading existing institutions of research, education, credit and policy. In order to induce action, a global program for renewable technologies would have to be created on a scale that is commensurate with the projected scale of investment in energy and infrastructure in the South.

Several participants noted that there is currently little faith in the promise of new and additional finance to assist developing countries in climate change adaptation and mitigation and that additional funding mechanisms need to be discussed by the Doha Review Conference. It was noted that existing resources under the Global Environment Facility (GEF), which currently operates the financial mechanism of the UNFCCC, are nowhere near sufficient to cover the estimated needs for addressing climate change externalities. Likewise, additional sources by bilateral and multilateral donors provide only a small fraction of the financial support needed and require more cooperation between the different stakeholders. Notwithstanding the strong global consensus behind the internationally agreed development goals, reaffirmed targets have only been achieved by a handful of countries. Therefore, the workshop came to the conclusion that unless marked achievements are made by the international community in tackling the economic development challenges and in acting more cooperatively towards the provision of additional resources for tackling climate change, it is unlikely that the required levels of mitigation and adaptation will be met.