

# Pooling the Revenue from Solidarity Levies on Air Travel

## The Option of Funding Climate Change Adaptation Costs

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The proposition before us links two important issues in the current climate change debate: how to address emissions from the aviation industry; and how to provide the substantial amount of new funding anticipated to be needed by developing countries as they adapt to climate change.

As noted by Timmons Roberts,<sup>1</sup> emissions from the aviation sector are growing quickly and could potentially constitute 15 per cent of global carbon dioxide emissions by 2050.

At the same time, the World Bank has recently estimated that between US\$9 and \$41 billion will be needed annually to “climate-proof” new investments. Additional funds will be needed to increase the resilience of existing infrastructure and respond to unavoidable impacts. While there remains considerable uncertainty surrounding the costs associated with adaptation to climate change, this and other figures suggest that developing countries will need sizable support for adaptation in the near future.

It is also clear that existing funding mechanisms—principally through development assistance, the voluntary funds established under the United Nations Framework Convention, and the Adaptation Fund of the Kyoto Protocol—are unlikely to generate the scale of financial resources required to meet the anticipated need.

An adaptation levy on aviation, as an expansion of the Leading Group’s current efforts, or the introduction of the International Air Travel Adaptation Levy (IATAL) proposed by Müller and Hepburn,<sup>2</sup> could provide a mechanism for generating the billions of dollars of new money needed each year to meet developing countries’ adaptation needs.

Achieving this goal will require a scaling-up of efforts through the engagement of new countries willing to support the introduction of a solidarity levy or the IATAL proposal. From the perspective of an organization new to this discussion, there appears to be a number of issues related to the rationale for this approach and its possible operational structure will need to be addressed before this critical mass can be achieved.

## ***Need for a More Systematic Approach***

Having a great need on one side, and a great source of revenue on the other, does not necessarily mean that the two should become intimately linked. A more systematic argument for introducing an adaptation levy on aviation will be needed to overcome the concerns already expressed by the aviation industry and to attract the support of more countries.

First, the **purpose for which the levy is being applied must be clear**. If the objective of the proposed aviation levy is strictly to generate a new source of funding for development, and not to promote reductions in greenhouse gases, the design of the levy should reflect this goal. In particular, it will likely need to be small if its goal is to *not* change passenger behaviour. It will also be

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<sup>1</sup> Timmons Roberts was also a Lead Roundtable Speaker in Oslo. Roberts is a James Martin Research Fellow at Oxford University’s Environmental Change Institute.

<sup>2</sup> Müller, B. and C. Hepburn. 2006. “IATAL – An Outline Proposal for an International Air Travel Adaptation Levy.” Oxford Institute for Energy Studies. EV26.

important to promote the levy on the basis of its revenue generation objective. The air ticket solidarity levy introduced by France provides a useful example.

Second, it will be important to address the question of **why the levy should be applied to the aviation industry** as opposed to other parts of the transportation sector or other sources of greenhouse gases in general. In the past, the rationale for focusing on the aviation industry has generally been the rapid rise and unregulated nature of greenhouse gas emissions from this sector.

However, this argument is being eroded by recent events. The European Commission's proposal to include civil aviation in the European Union Emissions Trading System (EU ETS) (including flights to and from the EU after 2012), and the International Civil Aviation Organization endorsing the development of an open emissions trading system for international aviation, indicate that the international aviation industry's "free-ride" is progressively coming to an end.

These changes open up important questions, like why it would not be appropriate to apply a levy on marine bunker fuels as these continue to remain outside of international emission control efforts. Equally, should civil aviation be fully integrated into the EU ETS, one could question why a similar levy is should not be applied to other parts of the transportation sector also regulated under this system.

Arguments for a levy on aviation have also focused on it being a luxury good. Yet, there are a number of other luxury goods that are significant generators of greenhouse gas emissions—why should these goods also not be subject to the proposed adaptation levy?

Third, the proposition will need to address more strongly **why the levy should be used to support adaptation as opposed to other needs**. Adaptation to climate change is a considerable challenge, but so too is the development of clean energy solutions, provision of clean water and sanitation, technology development and deployment, strengthening educational systems, etc.

The aviation industry could well argue that such a levy should be used to meet its own needs, such as for funding the research and development needed to introduce new technologies and approaches that reduce greenhouse gas emissions.

Fourth, the question of **why the aviation industry, above other sectors, should be responsible for funding adaptation to climate** also needs to be more carefully addressed. At present, aviation produces three per cent of global carbon dioxide emissions. Yet this sector is being asked to fund a significantly greater proportion of the estimated costs of adaptation. Any proposed levy will need to address the issue of attribution and equitable burden-sharing among sectors. Meeting this requirement will be challenging for a variety of reasons, including the currently limited availability of estimates of the probable cost of adaptation.

Finally, we must address questions around **why this particular innovative financing mechanism**, a levy on aviation, is more appropriate for funding adaptation to climate change as opposed to other financing mechanisms, such as those being discussed during this meeting (e.g., the Currency Transaction Development Levy).

A stronger rationale supporting the proposition before us will be needed if other countries are to support the introduction of an aviation levy to help fund adaptation to climate change.

## **Modalities for the Funds Generated**

Moving beyond questions regarding the rationale for introducing an adaptation levy on aviation, a number of issues also need to be addressed related to the management and purpose of the funds generated.

Whether the adaptation levy is applied on a country-by-country level, or through a coordinated international system, **the funds generated will need to be housed somewhere**. Preference has been expressed for an existing multilateral organization with a good track record for achieving results and for supporting clearly identifiable programs that have a high degree of visibility. Consideration should also be given to the ability of the selected organization to absorb funding on the scale that potentially could be raised through an aviation levy. The proposed home for the funds generated should also be favoured by the developing countries expected to access these resources.

One option would be to channel the revenue generated through an aviation levy to the **Adaptation Fund** currently established by the governing body of the Kyoto Protocol, the COP/MOP. On the surface, the Adaptation Fund seems to be a natural home for these resources as its primary source of income will also be a private sector mechanism: a two-per-cent levy on the sale of certified emission reductions generated through the Clean Development Mechanism.

As well, the Fund is intended to fund “concrete adaptation projects and programs” in developing countries that are Parties to the Kyoto Protocol. Funding targets include: water resources management; land management; agriculture; health; infrastructure development; integrated coastal zone management; and disaster preparedness and management.

However, while the modalities of the Adaptation Fund are currently being negotiated, it is clear that the Adaptation Fund will be under the direct authority of the COP/MOP. As such, allocating revenue from an aviation levy to this Fund will be less attractive to a country that has not ratified the Kyoto Protocol, such as the United States or Australia. Such countries are unlikely to participate in a solidarity levies program in which the funds generated are managed by a body over which they have no control. For this reason alone, directing levy revenue to the Adaptation Fund might not be appropriate.

The funds generated could also be funnelled into the existing Least Developed Countries Fund and the Special Climate Change Fund established under the United Nations Framework Convention on Climate Change and managed by the **Global Environment Facility**. However, considerable displeasure has been expressed on the part of developing countries regarding the GEF’s management of these funds, and particularly with respect to its management of adaptation funding.

Consideration could also be given to allocating funding from the levy directly to one or more **UN agencies**, such as the United Nations Development Programme (UNDP), the Food and Agriculture Organization (FAO) or the United Nations Environment Programme (UNEP). In making such a decision, careful consideration will need to be given not only to the ability of these organizations to deliver adaptation projects on the ground, but also their ability to absorb the size of funds potentially generated through the proposed aviation levy.

It is estimated that an International Air Travel Adaptation Levy could generate \$10 billion per year. In comparison, the GEF's fourth replenishment was for \$3.3 billion over four years; UNDP's budget in 2005 was approximately \$4.44 billion; and the FAO's budget in 2006–2007 is \$765.7 million. Support for adaptation will only be portion of these organizations' overall body of activity.

Determining a structure able to collect and distribute the sizable funding potentially available through an adaptation levy, and ensure that it is used in a cost-effective and responsible manner, will be a considerable challenge.

## ***Use of the Funds***

Finally, consideration needs to be given to what will be meant by funding for “adaptation.” Adaptation to climate change will need to be addressed at the local, national and international level by governments, communities and private industry, and across a range of socio-economic sectors.

Support for adaptation could include:

- increasing scientific knowledge and capacity to monitor current climate variability and projected climate change;
- developing and deploying tools and technologies for adaptation;
- strengthening infrastructure; or
- efforts that support adaptive capacity, such as:
  - improvements in natural resource management;
  - increasing institutional capacity and strengthening governance at the local and national level; and
  - promotion of healthy populations.

It is important to recall that development and adaptation are intimately linked, and that poverty reduction is essential to both of these processes. Consequently, the focus of the Leading Group on poverty reduction fits well with an emphasis on efforts to increase the adaptive capacity of communities and governments in developing countries. For example, the Leading Group's current focus on supporting UNITAID will increase the health and well-being of people in countries hard hit by HIV/AIDS—which, in turn, will increase their capacity to cope with the increasing number of climate-related stresses expected in the future.

If a significant amount of additional funding is raised through the proposed levy, then potential priority areas for support could be:

- *Supporting National Adaptation Plans*, particularly those of the Least Developed Countries. Funding could be directed towards implementation of the priorities identified under the nine National Adaptation Programmes of Action completed by LDCs thus far. Funding could also be directed towards helping other developing countries with the development of their own adaptation plans.

- *Ecosystem health and restoration*, to help support climate-sensitive economic sectors such as agriculture, forestry, fishing and herding that are critical to the livelihoods of millions of people around the world.
- *Disaster risk reduction*, given that the most immediate evidence of climate change is an increase in the frequency and intensity of extreme weather events. The UN International Strategy for Disaster Reduction's Hyogo Framework for Action and the UN Office for the Coordination of Humanitarian Affairs' Central Emergency Response Fund provide opportunities through which this need could be addressed.

Overall, the use of solidarity levies to support adaptation to climate change appears to be a promising approach. This proposal would be strengthened by developing a systematic approach for justifying the link between establishing an aviation levy and adaptation to climate change. A clear plan regarding the modalities under which such funding could be delivered is also needed.

I look forward to exploring these issues with you further in this session.

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