

A PROPOSAL FOR A GLOBAL UPSTREAM EMISSION TRADING SYSTEM (UGETS)

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An effective policy approach to climate change would be a global emission trading system, whereby;

- (1) A stringent cap is placed on global greenhouse gas (GHG) emissions that will serve, at the very least, to halve current emissions by mid-century. The cap must achieve an acceptable level of climate stability in light of the latest analysis of the Intergovernmental Panel on Climate Change.
- (2) A credible long-term system of price signaling will ensure minimum abatement cost worldwide and will trigger technology innovation.

Opinions differ, however, as to what approach should be pursued when fostering a global emissions trading system. Many argue in favor of linking various national and regional emission trading systems as a possible way forward. However, an alternative method, which involves developing a new system from the ground up, could prove more advantageous for the following reasons.

First, some national and regional systems may be downstream, and the linking of downstream systems does not necessarily lower abatement cost to the minimum, as it does not cover economy-wide emissions. National systems, therefore, should cover far more than what the European Union Emission Trading System (EU ETS) is covering to ensure minimum cost for GHG abatement.¹

Second, the linking of downstream systems does not necessarily prevent carbon leakage, as it does not ensure a worldwide carbon price. Marginal abatement costs must converge in order to avoid leakage, and only an economy-wide global system will achieve this.

Third, the linking of downstream systems presents a major challenge with regard to the comparability and adequacy of various schemes. This challenge will be compounded relative to linked upstream systems, as downstream trading requires accurate monitoring of all data related to fossil fuels purchased and consumption at a large number of emission points—factories, mills, furnaces, power stations, etc. It represents a major administrative challenge to all countries, developed as well as developing.²

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On the other hand, an Upstream Global Emission Trading System (UGETS) meets all of these challenges. Under UGETS, all nations would use an upstream emissions trading system that would result in far fewer monitoring points than a downstream system.³ A nation would only need to keep track of domestic shipments and imports of fossil fuels. This is the simplest.

In order to realize UGETS, the international community must agree:

(1) To accept a stringent long-term global cap on GHG emissions that will lead to an accepted level of climate stability. A world-wide system is created with an authority to issue allowances in accordance with the stringent cap.

(2) That a world-wide system provides and initially allocates allowances for free to all countries on the basis of a formula agreed upon globally. Each country can then sell those allowances by auction in their domestic market.

(3) To ensure free, unrestrained, and non-discriminatory transactions of allowances domestically as well as internationally.

In this way, UGETS would allocate allowances to nations for free, after which national governments would auction the allowances in their domestic trading market, thereby creating revenue for each national treasury. Likewise, a nation and business could sell allowances in any foreign country's market and create revenue.

Experts view this initial allocation of allowances as problematic, since it involves transferring financial resources; they argue that it is too difficult to allocate such allowances equitably. The initial allocation, however, can be done on the basis of any formula that is agreeable to all countries. It can be on the basis of *per capita* emissions or any other formula combined with other indices. What is important is to recognize the Coase Theorem, which states that, as long as the trading is free worldwide, global emissions trading ensures the maximum GDP production regardless of which allocation formula is adopted. Therefore, in reality, the issue of initial allocation of allowances is not as serious as it first appears to be. Furthermore, providing a rather favorable initial allocation to developing countries in light of "common but differentiated responsibilities" does not represent an undue burden for the OECD countries, as UGETS seeks the least expensive abatement opportunities. Taking all of the above into consideration, particularly the Coase Theorem, the international community can agree to provide a rather favorable initial allocation of allowances to developing countries, at least to the extent that the principle of "common but differentiated responsibilities" justifies.

As the climate continues to deteriorate, demand for the surest and least expensive solution will increase. The international community will need to resolve expeditiously all issues, such as equitable allocation of allowances, so as to prevent the catastrophe at hand. Although still in its rudimentary stages, UGETS may prove the wisest choice in such a state of climate emergency.

¹Views expressed here are strictly personal and do not reflect those of the organizations to which the authors belong.

¹ To the extent that countries or regions adopt upstream schemes in the future, linking these would also be a way forward. We focus here on linkage of downstream systems, as the EU ETS is by far the largest trading system extant.

² A global system may still be preferable over a linked upstream system with equivalent geographical and market coverage, in that there would be no considerations of mismatched design elements (e.g., safety valve, banking) among the national upstream schemes.

³ As would also be true in national upstream systems.

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