Regional and global climate

Eduardo Calvo

Peru

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Air quality management (2)

- Industrial interests pleaded for less-stringent standards.
- Claimed that air pollution control is expensive and economically damaging.
- Industries blamed the inflation of the 1970s on environmental protection legislation.
- EPA delayed requirements and devised strategies for reducing pollution without placing undue burdens on manufacturers.
- The "bubble" concept was formally adopted in a 1979 amendment to the Clean Air Act

Bubble concept

- Placed an imaginary bubble over an entire region and required the air in the bubble to meet Clean Air Act levels.
- Firms in the same bubble could trade pollution rights with each other, allowing excess pollution at one source as long as it was offset by lower emissions at another.
- The previous approach had forced each individual "stack" to meet national standards.
- By defining each factory as part of a larger air shed, the bubble concept was a step toward an ecosystem-oriented approach.
- Along these lines, the Clean Air Act of 1990 capped the nation's total sulfur oxide emissions and allowed firms to set up a nationwide market in pollution permits.

Global bubble

- On the eve of COP 3, the Russian Federation put forward a new proposal for what it termed a “universal bubble”; that is, each Annex I Party would undertake the commitment it had proposed, and the total reduction achieved would become a collective target.

Emissions trading

- At COP 2, the issue of emissions trading gained greater importance when Mr. Timothy Wirth, then US Under-Secretary of State for Global Affairs, formally announced that the US would advocate such a system in the context of legally binding targets.
- During the COP 2 sessional period, emissions trading was mentioned as a means of promoting flexibility.
- Five proposals were supporting emissions trading, from Australia, France, New Zealand et al.,60 Norway and the US (the only one in legal text). A more detailed proposal in legal text was subsequently received from New Zealand.
- Both the Islamic Republic of Iran et al. and Kenya made submissions against the adoption of emissions trading in the protocol, with Kenya specifying that emissions trading should not be adopted until it had been considered by the SBSTA and its environmental benefits demonstrated.
- The proposals from New Zealand and the US were similar. Both were simple, advocating provisions relating to reporting and verification and participation of "domestic entities". The US added that a "meeting of the Parties" could elaborate further guidelines.
- A more detailed proposal on emissions trading was put forward by the US, stipulating cases where trading would be restricted (for example if a Party was over its emissions "budget" it could no longer sell).

Fungibility

- Fungible : being of such a nature that one part or quantity may be replaced by another equal part or quantity in the satisfaction of an obligation; interchangeable
- Synonym: exchangeable
- New Latin *fungibilis,* from Latin *fungi* to perform
- First Known Use: 1818

Fungibility of gases

- An exchange rate was established by the Kyoto protocol (GWP).
- Unprecedented measure.
- Acid Rain Program established in the U.S. created an allowance market system only for sulfur dioxide.
- A NOx market was also created later.
- There is no pH or acidity exchange rate.

Kyoto protocol's basket of gases FCCC/TP/2000/2

- Australia, the EU, Iceland, New Zealand, Norway, the Russian Federation, Switzerland and the US, among others, all argued in their proposals for the so-called "basket" approach.
- This means that all gases covered by the target would be considered together for the achievement of the target according to their carbon dioxide (or carbon) equivalence based on their global warming potentials (GWPs), rather than the target applying to each gas individually (known as the "gas-by-gas" approach).
- Opponents to the basket approach included AOSIS and, initially, Japan, both of whom advocated CO2-only targets (AOSIS proposed that gas-by-gas targets should be developed for other gases by the "MOP" to the protocol).
- Germany, in an early proposal, also called for single-gas targets .
- The G-77 and China opposed the basket approach, partly because they were against the use of GWPs, pointing to inaccuracies in the use of this methodology. When the Group announced its proposed emission targets , it adopted the gas-by-gas approach. On Dec. 3, 1997, G-77 and China withdrew their opposition to the basket approach.