

Why Emissions Trading is More Effective Than a Carbon Tax

International Emissions Trading Association

A cap and trade system is the best means to establish a quantifiable, legally enforceable limit on emissions which will ensure that essential climate change targets are met at the lowest possible cost. Such a program, when combined with offsets, will accelerate global emissions reductions. In addition, cap and trade provides the private sector with the flexibility required to reduce emissions while stimulating technological innovation and economic growth. Cap-and-trade is already the policy instrument of choice in many US States, the EU, New Zealand and Australia, and has proven to be effective in the US Acid Rain Program.

Advantages of emissions trading are:

- **Cap-and-trade is designed to deliver an environmental outcome, in that the cap must be met.**

This certainty is critical for the environment. While a carbon tax ensures an increase in energy prices, it does not ensure that emissions will be reduced to the necessary level. It may take some years for policy makers to establish the level of tax necessary to deliver a given emissions reduction pathway. The climate problem needs very urgent attention: it is widely accepted that global emissions have to begin to decline by 2020 in order to avoid the worst impacts of climate change.

The true price of carbon is not yet known, and cannot be identified to create a tax rate. Markets are critical for price discovery, and in the case of cap-and-trade can determine how efficiently and effectively emissions reduction targets will be achieved.

- **Cap-and-trade will deliver its environmental objective at lowest cost to the economy.**

By combining trading with a price for emitting CO₂, cap-and-trade seeks out the most efficient reduction projects within the market, delivering a lowest cost outcome. Emissions trading has been applied to the problem of sulfur emissions from power stations in the US, where the overall cost of meeting environmental targets has been much lower than anticipated. Achievement of the required SO₂ emission reductions in the Acid Rain Program (when the program is fully implemented in 2010) are now projected to cost \$1 to \$2 billion per year, just one quarter of original EPA estimates.^[4]

Dependent on the varying situation of any particular economy, the price for emissions self-stabilizes when using a market-based approach. This can be witnessed in regards to the recent price fluctuation in the European Union carbon markets, where signs of economic down turn reflected, quite properly, by a softened price for emissions.

- **Cap-and-trade can form the bulwark for a global agreement to reduce emissions.**

Climate change is a global problem requiring a global solution. Cap-and-trade provides a means of establishing rigorous, measurable, and enforceable targets across the globe. National trading systems can be linked with other such systems, delivering over time a global carbon market. Developing

countries can be linked through project based crediting. The bigger and broader the market, the wider the range of projects, leading to a lower overall cost.

- **A trading system offers both compliance and policy flexibility that is important for business.**

Compliance flexibility is delivered through the ability to “make or buy”, i.e. to implement a project and make reductions (including selling allowances), or to buy allowances from the market. A tax is unable to replicate the incentive for companies to reduce emissions that a trading system brings. Cap-and-trade delivers a profit-incentive to companies which discover stronger and more effective ways of reducing emissions. Perhaps because of the lack of positive incentive, energy tax elasticities are not high, and their impact on behaviors and consumption is low.

Policy flexibility comes through the mechanism for distribution of allowances. For example, in Phase III of the EU ETS some allowances will be distributed for free to deal with competitiveness concerns. Despite this, the incentive to reduce emissions remains in that the allowances have a value. Replicating this approach in a tax-based system—through tax credits or exemptions—would add the complexity that tax-proponents claim to avoid.

Emissions trading is remarkably simple, although, like the tax code, it can be made more complex to meet a variety of different ends. To compare the two systems;

- Both require a baseline; both require monitoring and verification of emissions
- Both produce revenue (typically via auctions for trading), which can be distributed as Government or society prefers.
- Proponents of a carbon tax often argue for a simple point of tax collection at the top of the value chain (e.g. at the coal mine or oil well or point of import). However, a crediting system would have to be devised for downstream projects that eliminate emissions (e.g. a carbon capture and storage project). Crediting would then require project oversight, measurement and verification, adding to complexity.
- Both require a bureaucracy to oversee compliance.

- **Cap-and-trade has proven effectiveness.**

Cap-and-trade has proven its effectiveness in the US through the acid rain program, where it quickly and effectively reduced pollution levels at a far lower cost than expected. The European Union Emissions Trading System has shown that cap-and-trade can be extended to carbon and can be done so in a agreed-upon manner across many countries, and in doing so creates a price on carbon that drives emissions reductions. In contrast, legislating a carbon tax has proven to be unattainable in the past. The EU tried and failed to implement a carbon tax in the early 1990s. The political stigma of “another tax” significantly stacks the argument in favor of a trading approach.

[1] <http://www.epa.gov/airmarkets/cap-trade/docs/ctresults.pdf>