

Cap and Trade vs. Carbon Tax

Matthew Hennessey

December 19, 2007



The new energy efficient New York Times building.
Photo by [Nickolay \(CC\)](#).

This article was originally published by Carnegie Council's online magazine, [Policy Innovations](#).

"That's the greenest building in New York," exclaimed Vincent DeVito last month, pointing skyward from a busy corner in midtown Manhattan. The [new New York Times building](#), still under construction, loomed over us both. DeVito's employer, law firm [Pepper Hamilton LLP](#), recently moved its New York branch to the 37th floor.

The new skyscraper's views are breathtaking according to DeVito ("I can see the Atlantic ocean!"), but what really thrills him is the innovative curtain of ceramic tubing that drapes the building, reflecting sunlight and cooling the interior. "I come from the school that believes we should be doing green technology because it's good for business," he said.

It's good luck, then, that this former acting U.S. Assistant Secretary of Energy for [Policy and International Affairs](#) finds himself doing business in New York's "greenest building." In 2002, he helped launch the [U.S. Climate Change Technology Program](#), a multi-agency research and development program seeking to accelerate development of emissions-reduction technologies. He also helped craft the [Energy Policy Act of 2005](#) and was U.S. manager of

the [North American Energy Working Group](#), a task force created to fully integrate North American energy markets.

Both in government and in the private sector, DeVito's goal is to jump-start the development of new technology through the marketization of carbon emissions. "When you start deploying cleaner, renewable technologies you make us more independent when it comes to energy production and less reliant on unstable regions of the world for our energy needs," said DeVito.

Carbon emissions trading, known as cap and trade, works by imposing a restriction on the amount of emissions that power companies, oil refineries, and other energy-intensive businesses may emit. Firms are allotted permits for emissions over a specified time period, and companies that pollute less than their allotment can sell their excess permits to those that pollute more. There are no limits placed on participants in the market other than the size of the market itself, which is determined by regulators. As time passes, the size of the market is reduced, causing overall levels of atmospheric carbon to fall.

Champions of cap and trade point to its potential to generate innovation. "When you impose emissions-reduction caps and allow trading, you stimulate private sector investment in new technologies," DeVito said. "Where else can you be a part of a new market? New ideas in old markets are rare. New ideas in new markets are extremely rare. The modern energy economy requires entrepreneurship and a cap-and-trade system will help the innovators innovate."

Despite DeVito's "colossal optimism," examples of [successful cap-and-trade programs](#) are hard to come by. Economic guru and former Federal Reserve Chairman Alan Greenspan has come out against cap and trade as an effective mechanism for reducing carbon emissions. "I have grave doubts that international agreements imposing a globalized so-called cap-and-trade system on CO2 emissions will prove feasible," he wrote in his recent book, *The Age of Turbulence*.

The 2005 European Union [Emissions Trading Scheme](#) got off to a [rocky start](#). It was developed in part to help meet targets set by the 1997 [Kyoto Protocol](#), but the system ran into trouble when it became clear that too many permits had been allotted, causing their value to plummet. Distribution of permits was "grandfathered," meaning that countries received credits free of charge based on historic emissions.

Cap and trade skeptics argue that giving away permits, rather than selling them, represents a de facto wealth transfer to large polluters. As caps reduce the size of the carbon market, the increased cost is passed along to consumers in the form of higher prices. "This extra money flows to the companies that get free permits," writes Peter Barnes in [Carbon Capping: A Citizen's Guide](#).

Others have noted that carbon markets are easily manipulated by industry lobbying. "When [a market] is created through political action, rather than emerging spontaneously, business will seek to influence its design for commercial advantage," wrote economist and *Financial Times* columnist [John Kay](#) in 2006. Still others point to the price volatility of carbon credits as a [disincentive](#) to invest in emissions-reducing technologies.

Rather than trading carbon emissions, critics claim, governments should tax them. In fact, a recent *Wall Street Journal* poll found that 54 percent of economists, a constituency not normally keen on taxation, [preferred](#) a carbon tax to any other option for reducing emissions.

"A direct charge would eliminate the uncertainty that companies would face in a cap-and-trade system. It would be easier to implement and enforce, it would prevent special interests from opening up loopholes," said New York Mayor [Michael Bloomberg](#) recently in a speech to the United States Conference of Mayors.

So what's the difference between taxing carbon emissions and a market-based system of cap and trade? Which approach will more effectively reduce emissions? Which is fairer?

It depends who you ask.

"A tax is more equitable, it's more transparent, and it's more predictable. Moreover, it provides a pool of resources for the public sector to direct towards mitigation of climate change," said [Nikhil Chandavarkar](#), Chief of Communications and Information Management at the United Nations Department of Economic and Social Affairs. "What it really comes down to is, 'What will be the role of the state in this process?'" Dr. Chandavarkar [spoke](#) on the topic of fair climate negotiations for the developing world at our recent [workshop for ethics in business](#).

Sweden adopted a carbon tax in 1991. According to a 2000 [report](#) for the Organization for Economic Cooperation and Development: "The most obvious effect of the carbon tax has been an increased use of biomass in the Swedish district heating system... The demand for biomass has encouraged the development of new methods for utilising wood fuels which in turn has led to price reductions on these fuels." The Swedish government estimates that CO2 emissions were 20 to 25 percent lower in 2000 than they would have been without the tax, indicating that the policy was a success. Sweden offset the impact of the new tax by cutting its social security levy.

So is taxation the way to go? DeVito is unconvinced.

"The beauty of cap-and-trade comes from the secondary effects. If a school in San Diego wanted to install a solar panel in order to get off of the grid, it could sell the credit it earned to a factory in Mexico for cold hard cash. The school could then use that money to buy books, or Smart Boards or whatever," he said. "Where else can you have a business opportunity that is also a moral obligation?"

"The basic approach to taxation here is 'polluter pays,' which makes the system a little fairer," counters Chandavarkar. "But a mixed portfolio is probably the best strategy."



This article is licensed under a [Creative Commons License](#).

Please read our [usage policy](#).

Copyright © 2010 Carnegie Council for Ethics in International Affairs