Why cap and trade could backfire

Credits remove stigma - and may increase pollution.

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Environmentalists claim that capping greenhouse-gas emissions and creating a market for emissions trading – a policy prescription called "cap-and-trade" – would reduce carbon dioxide output and with it the risk of global warming.

But it could achieve the opposite.

Here's how: By turning carbon emissions into commodities that can be bought and sold, cap-and-trade policies could remove the stigma from producing such emissions.

In the late 1990s, Israeli researchers Uri Gneezy and Aldo Rustichini performed an experiment that provides a useful model. They chose six random day-care centers in Haifa at which parents sometimes arrived late to pick up their children. Intending to reduce the frequency of tardiness, the two imposed a fine on late parents. Mr. Gneezy and Mr. Rustichini explain that, typically, "when negative consequences are imposed on a behavior, they will produce a reduction of that particular response." But the experiment did not produce the anticipated results. Instead, the incidence of late arrivals increased.

In fact, the percentage of parents who were late more than doubled.

Behavioral law and economics help explain this counterintuitive result.

Prior to the imposition of the fine, parents – recognizing it is wrong to make a teacher stay past normal hours with their children – experienced feelings of guilt and shame when they were late. In other words, some parents were motivated to arrive on time by the stigma attached to arriving late. Imposing the fine reduced the stigma. The fine created a good, and a market where none previously existed. Parents were no longer "arriving late," but rather, purchasing extra child-care hours.

A similar situation could occur under a cap-and-trade regime. Under cap-and-trade rules, the government places an artificial cap on the amount of carbon each regulated facility may emit. Facilities producing more carbon than they are allowed are required to purchase additional credits to make up the difference. The opportunity to purchase these credits creates a market where none previously existed.

As in the example of the fined parents, the purchase of the right to emit greenhouse gases would likely reduce any stigma associated with doing so. Emission levels, consequently, could rise.

This phenomenon is already seen on an individual level. Al Gore says the risk of catastrophic global warming is so great that Americans should act immediately to reduce greenhouse-gas emissions. Yet his home uses 20 times more energy than the average American home, according to the Tennessee Center for Policy Research. That's OK, the former vice president assures us, because he purchases offsets to ensure that he lives a carbon-neutral lifestyle.

His message – albeit unintentional – is simple: Produce carbon to your heart's content; just pay a carbon broker to "neutralize" your carbon footprint and your guilt.

If Mr. Gore could not purchase offsets, would he feel more pressure to reduce his energy use? The likely answer is "yes."

Columnist Charles Krauthammer explains in Time magazine that "purchasing carbon credits is an incentive to burn even more fossil fuels, since now it is done under the illusion that it's really cost free to the atmosphere."

Perhaps that helps explain why most European nations have increased their carbon emissions since adopting the Kyoto global-warming treaty in 1997. By most accounts, the European Union's cap-and-trade system isn't working. In its first year of operation (2005-06), emissions covered by the trading scheme rose 0.8 percent. During the same time, according to the Energy Information Agency, emissions in the US – which hasn't ratified the Kyoto Protocol or adopted a cap-and-trade system – dropped 1.8 percent.

Samuel Bowles, a professor at the Santa Fe Institute, has noted that "[p]olicies designed to harness self-regarding preferences to public ends may be counterproductive. These failures occur when conventional self-interest-based policies compromise the beneficial effects of intrinsic motivation and ... a desire to uphold social norms."

The social stigma of carbon emissions grows stronger each day. As this stigma grows, companies are increasing their investments into research and technologies to reduce and store carbon. If Congress removes the stigma associated with these emissions by assigning a price to them, it may not like the results.

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