**Carbon Tax and Dividend**

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**By** [James Hansen](http://www.policyinnovations.org/innovators/people/data/james_hansen) | [YaleGlobal Online](http://www.policyinnovations.org/innovators/organizations/data/00838) | May 14, 2009

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Western governments are pretending to take actions that alleviate climate change. But their cap-and-trade approach is a minuscule tweak to business-as-usual. Cap-and-trade is a Temple of Doom for life on our planet, worshiped by lawmakers who are afraid to confront fossil special interests. What is needed is a gradually rising fee on the carbon content of oil, gas, and coal, with proceeds distributed fully to the public. This will spur innovation in efficiency and carbon-free energy, while providing the public the funds needed to transition toward the clean energy world of the future.

Cap-and-trade is supposed to answer climate change by setting targets for emission or capping it by issuing permits to emitting industries. To begin with, cap and trade is a misnomer. A "cap" increases the price of energy, as a tax does. It is wrong and disingenuous to try to hide the fact that a cap is a tax. Because of unpredictable price volatility it makes millionaires on Wall Street and other trading floors but offers the public little. Offsets are usually allowed and often poorly substantiated and verified, creating more uncertainty. The case in point is the European experience: They spent $50 billion on carbon trading, their CO2 emissions actually increased, and the largest payment went to a German coal-burning utility! Cap-and-trade is fraught with opportunities for special interests, political trading, obfuscation from public scrutiny, accounting errors, and outright fraud.

As with any law, caps can and will be changed, many times, before 2050. The fact is that national caps have been set and are widely rejected. When caps are accepted, they are often set too high—as happened with Russia. If a complete set of tight caps were achieved, global permit trading would likely result in a Gresham's Law effect—"bad money drives out good." Some countries will issue too many permits or fail to enforce requirements. These permits, being cheapest, will find their way into the world market and undermine the world cap. Caps are also extremely hard to enforce, as demonstrated by the Kyoto Protocol. In some cases, even with highly respected countries such as Canada, the extent of failure to meet commitments was enormous. The biggest problem with a cap tax is that it will not solve the problem. The public will soon learn that it is a tax. And because there is no dividend, the public will revolt before the cap tax is large enough to transform society.

For these reasons, and because they believe a cap-and-trade approach will continue to stymie international negotiations, many of the top American economists from across the political spectrum vigorously oppose cap and trade. Notable among these are William D. Nordhaus, Joseph E. Stiglitz (*Making Globalization Work*, Chap. 6), and N. Gregory Mankiw.

A successful plan must recognize geophysical constraints and economic reality. The geophysical fact is that most of the remaining fossil fuels must either be left in the ground or be used only where the CO2 is captured and put back underground. The economic reality is that we will not move to an era beyond fossil fuel emissions until a substantially higher price is applied across-the-board to all carbon fuels, such that efficiency and carbon-free energies rapidly increase. In addition, I will contend, public acceptance of the needed rising carbon price demands complete transparency and fairness.

It is easy to speak of a planet in peril. It is quite another to level with the public about what is needed, even if the actions are in everybody's long-term interest. It seems they would not dream of being honest and admit that an increased price for fossil fuels is essential to drive us to the world beyond fossil fuels.

How can emissions be reduced? With policies similar to those being promoted elsewhere: mileage efficiency standards for vehicles; power-usage standards for appliances and electronics; retrofitting of residential and commercial buildings for efficient heating and cooling; urban revitalization promoting walkable and bikeable communities; land-use policies encouraging proximity over sprawl; and wholesale conversion of the electricity energy source from fossil fuels to carbon-free solar and wind resources.

A higher carbon price is needed to transform consumer and life style choices, to make zero-carbon energy and energy efficiency cheaper than fossil fuels, to spur business investment, innovation and associated economic activity, and to move the nation to the cleaner environment beyond the fossil fuel era. The carbon price will need to be significant, and the public and businesses must understand that it will increase in the future. It should be applied to all fossil fuels—oil, gas and coal—uniformly at the source (the first sale at the mine or port of entry).

A price on emissions that cause harm is essential. Yes, a carbon tax. A carbon tax with a 100 percent dividend is needed to wean us off fossil fuel addiction. A tax and dividend mechanism would allow the marketplace, not politicians, to make investment decisions.

Coal is not only the largest fossil fuel reservoir of carbon dioxide, it is the dirtiest fuel. Coal is polluting the world's oceans and streams with mercury, arsenic and other dangerous chemicals. The dirtiest trick that governments play on their citizens is the pretense that they are working on "clean coal" or that they will build power plants that are "capture ready" in case technology is ever developed to capture all pollutants.

A carbon tax on coal, oil, and gas is simple, applied at the first point of sale or port of entry. The entire tax must be returned to the public, an equal amount to each adult, a half-share for children. This dividend can be deposited monthly in an individual's bank account. A carbon tax with a 100 percent dividend is non-regressive. On the contrary, you can bet that low and middle income people will find ways to limit their carbon tax and come out ahead. Profligate energy users will have to pay for their excesses.

Demand for low-carbon high-efficiency products will spur innovation, making our products more competitive on international markets. Carbon emissions will plummet as energy efficiency and renewable energies grow rapidly.

Will the public accept a rising carbon fee? Surely—if the revenue is distributed 100 percent to the public, and if the rationale has been well-explained to the public. The revenue should not go to the government to send to favored industries. Will the public just turn around and spend the dividend on the same inefficient vehicle, etc.? Probably not for long, if there are better alternatives and if the public knows the carbon price will continue to rise. And there will be plenty of innovators developing alternatives. Of course, cost incentive alone is not sufficient—efficiency and building standards also must be improved.

Marshaling public opinion and political will is a tremendous task, given the forces aligned for business-as-usual. In Washington there are four energy lobbyists for every Congress-person. Political leadership is desperately needed. We must recognize our responsibility to our children and grandchildren, as well as our moral obligation to them and the millions of species that will be affected by our choice to take, or not to take, needed actions.

Cap-and-trade is the Temple of Doom. It would lock in disasters for our children and grandchildren. It would do nothing to preserve a planet resembling the one that we inherited from our elders, and to allow continued existence of the remarkable species that co-habit Earth with humanity.

*Jim Hansen is director of the NASA Goddard Institute for Space Studies and adjunct professor of earth and environmental sciences at Columbia University's Earth Institute. He recently presented* [*Congressional testimony*](http://www.columbia.edu/~jeh1/mailings/2009/20090226_WaysAndMeans.pdf) *on his carbon tax proposal.*

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