

The Pros and Cons of Carbon Taxes

By Diana Furchtgott-Roth



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In this article, Furchtgott-Roth concludes that even though a U.S. carbon tax would be preferable to government subsidies for green jobs and technology, one without international harmonization would not significantly reduce global carbon emissions.

For many years, the federal government has used subsidies and regulations to try to promote green technology — an expansive term that includes renewable energy, pollution reduction, and conservation.

But at a November 2 hearing before a House Oversight and Government Reform subcommittee, Gregory Friedman, Department of Energy inspector general, and Elliot Lewis, assistant inspector general for audit at the Department of Labor, testified that the latest funds authorized by Congress to create jobs in green technology had not been spent, or had yielded poor results.¹

Would a carbon tax produce better results? If so, should the United States put one in place?

W. David Montgomery of National Economic Research Associates Inc. testified that opportunities for green jobs are few because the price of carbon emissions in America is too low. If the government wants to create green jobs, it must tax carbon emissions directly, he said. Without a carbon tax, there is no demand for green technology, and it remains dependent on everlasting government subsidies, Montgomery argued. That's why sales of

electric vehicles are few and far between, and no broad market for green technology exists beyond the one created by federal and state governments.²

Evidence shows that green jobs programs have a poor track record. Lewis reported that as of June 30, the Labor Department's Employment and Training Administration (ETA) had awarded to state workforce agencies, community colleges, and nonprofits \$490 million of the \$500 million provided by the American Recovery and Reinvestment Act of 2009.

Yet, 2½ years after Congress passed the act and almost three-quarters of the way through the program, the grantees had spent only \$163 million, about one-third of the green jobs training program funds earmarked for them. Friedman testified that those funds appropriated by the stimulus bill for green energy had not been spent because few shovel-ready projects existed.³ Lewis recommended that any of the unspent \$327 million not being used by the states be returned to the treasury.

When the funds were spent, the work was often of poor quality. In one state audit, nine out of 17 weatherized homes failed inspection because of substandard workmanship. One subcontractor gave preference to relatives and employees, even though the target populations were elderly residents and those with disabilities.

Friedman said that state and local governments were unprepared to receive the grants. "Not to make light of a serious situation, but it was like attaching a lawn hose to a fire hydrant," he said. "The governments were overwhelmed." ETA money trained some workers in green jobs such as hybrid- and electric-car automobile mechanics, building weatherization, and solar panel installation. Other workers received job referrals, training in basic workforce readiness skills, and credentials and support services to overcome employment barriers. Out of 53,000 people who were served by the ETA programs, 26,000 enrolled in and completed training. Of those, 8,000 found jobs. Only 1,366, or

¹Testimony of Elliot P. Lewis before the House Committee on Oversight and Government Reform Subcommittee on Regulatory Affairs, Stimulus Oversight and Government Spending (Nov. 2, 2011).

²Testimony of W. David Montgomery before the House Committee on Oversight and Government Reform Subcommittee on Regulatory Affairs, Stimulus Oversight and Government Spending (Nov. 2, 2011).

³Testimony of Gregory Friedman to the House Committee on Oversight and Government Reform Subcommittee on Regulatory Affairs, Stimulus Oversight and Government Spending (Nov. 2, 2011).

2.5 percent, of the original enrollees were employed six months later. My simple mathematical calculation yields a taxpayer cost of \$121,257 per job.

A carbon tax would avoid those problems. By raising the price of energy, consumers would naturally gravitate toward renewables without any on-going government subsidies needed.

Montgomery testified:

There is another way of viewing the DOE loan program, and indeed the entire collection of current Recovery Act programs that provide direct funding, loans, or other forms of government financial support to the production of specific forms of energy or the adoption of energy efficiency measures. They are a partial, likely ineffective, and far more costly substitute for putting a price on carbon dioxide emissions.

That is because to be successful, spending on new technologies must be consistent and predictable in the long run. Putting in place short-term investment incentives will not encourage individuals to purchase new technology, or firms to take the risks in producing it.

Like a carbon tax, cap-and-trade systems also raise energy prices. Output levels of emissions are fixed at a low ceiling, and firms have to buy permits for emissions above that level. However, the carbon tax is far simpler administratively to operate. It does not require initial allocation of permits among industries and firms, a process that can be subject to political favoritism. Nor does it need the cumbersome trading process whereby firms buy permits to pollute, either from the government or from other firms.

A carbon tax simply raises the price. Tufts University economics professor Gilbert Metcalf, who has written extensively on the design of a carbon tax, has said that a 10 percent increase in the price of energy will result in a 3 percent reduction in demand. He suggests a tax rate of \$15 per ton of carbon dioxide equivalent.⁴

U.S. carbon emissions in 2009 were 5,447 million metric tons, so the tax would raise about \$82 billion a year, assuming that consumers purchased the same amount of energy. If consumers instead reduced consumption in response to the higher prices by about 5 percent, an amount suggested by the Energy Information Administration, the tax would raise about \$78 billion per year.

⁴Gilbert E. Metcalf, "A Proposal for a U.S. Carbon Tax Swap: An Equitable Tax Reform to Address Global Climate Change," the Hamilton Project, the Brookings Institution (Oct. 2007). See also Metcalf and David Weisbach, "The Design of a Carbon Tax," 33 *Harvard Environmental Law Rev.* 499 (2009).

That kind of revenue stream would immediately have many takers; all or part of the revenue could be seen as a salvation to the supercommittee's deficit reduction charge. Metcalf has suggested that any carbon tax be revenue neutral, with the proceeds going to low-income individuals who are disproportionately hurt by what is in essence an energy consumption tax. That could be done by adjustments through the income tax system. Of course, many low-income earners are not required to file returns, and they would have to do so to be identified and compensated.

Another use of the revenues would be to compensate those in carbon-intensive sectors, which would be losers under the new tax. It's clear that coal producers and miners would be prime losers with a carbon tax. Politicians from coal-producing regions are influential in Congress, and they would demand a share of revenues.

Carbon taxes can be imposed upstream, at the producer level, or downstream, at the consumer level. Metcalf has argued that it is most efficient to impose the tax upstream, because there are fewer entities to tax. For instance, millions of Americans buy gasoline, but there are fewer than 150 refineries. The tax would be passed on to consumers by the producers, and retailers could choose to disclose at the point of sale the portion of a retail purchase that is the tax.

One of the most challenging details of a carbon tax is international trade. Goods imported into the United States from countries without a carbon tax would be less expensive. To complicate matters, carbon-intensive imports are used in the United States for the production of finished goods.

The obvious solution is to impose some kind of border tax adjustment and tax imports based on their level of carbon, giving a similar credit to exports. However, the legality under the General Agreement on Tariffs and Trade regulations is unclear.

Without border adjustment, energy-intensive manufacturing would migrate out of the United States, leading to a leakage of jobs and investment. Plants could simply locate across the border in Canada, whose workers have similar skill sets as American workers.

That brings up the major disadvantage of any schemes to reduce carbon, whether through industrial policy, cap and trade, or a carbon tax. Even assuming that carbon emissions contribute to global warming — and skepticism exists about that linkage — America's reductions in carbon usage will not meaningfully help climate change unless other countries also limit their emissions.

Currently, other large emitters, specifically China and India, have no plans to sign on to any reduction

scheme, either tax or regulatory. So the United States would be imposing a cost on the economy with practically no benefit to climate change.

If America wants to create jobs in the clean energy sector, a carbon tax would be preferable to industrial policy. But an even better approach would be to focus government spending on basic research and development, and leave the choice of products and technology to consumers and producers.

Even without subsidies, consumers show a preference for energy-saving automobiles, heating and cooling systems, and appliances, because they lower their fuel and electricity bills.

For America to subsidize green jobs or tax carbon without global coordination is just imposing a cost on the economy — with no gain from reduced global temperatures.