

ISSUE BRIEF

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Carbon Tax Would Raise Unemployment, Not Swap Revenue David W. Kreutzer, PhD, and Nicolas D. Loris

I nterested in raising revenue and reducing global warming, some policymakers in Washington are floating the idea of a carbon tax. In order to sway conservatives to support a carbon tax, proponents are pushing for either revenue neutrality or replacing the Environmental Protection Agency's (EPA) greenhouse gas regulations. These proponents ignore three critical realities of implementing a carbon tax.

1. A Carbon Tax Would Damage the Economy. Since an overwhelming majority of America's energy needs are met by carbon-emitting fossil fuels, regulations of these fuels directly raise the cost of electricity, gasoline, diesel fuel, and home heating oil. Since low-income families spend a larger proportion of their income on energy, a tax that increases energy prices would

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Nothing written here is to be construed as necessarily reflecting the views of The Heritage Foundation or as an attempt to aid or hinder the passage of any bill before Congress. disproportionately affect the budgets of the poorest American families.

Businesses, faced with higher energy costs, would likely pass those costs on to consumers. However, if a company had to absorb the costs, high energy costs would squeeze profit margins and prevent businesses from investing and expanding. Investors might even move their funds away from energy companies and toward less regulated business enterprises, thus depriving fossilfuel-based companies much-needed cash for more efficient power generation. The result is higher energy costs, lower income, and fewer jobs.

In 2012, the U.S. Energy Information Administration (EIA) made a comparison analysis for a carbon tax that starts at \$25 and rises by 5 percent per year (after adjusting for inflation).¹ Compared to the baseline case, without the carbon tax, this would²:

- Cut the income of a family of four by \$1,900 per year in 2016 and lead to average losses of \$1,400 per year through 2035;
- Raise the family-of-four energy bill by more than \$500 per year (not counting the cost of gasoline);

- Cause gasoline prices to increase by up to \$0.50 gallon, or by 10 percent on an average gallon price; and
- Lead to an aggregate loss of more than 1 million jobs by 2016 alone.

In particular, energy-intensive industries and manufacturing would feel the adverse effects of a carbon tax, which comes at a time when many companies, lured by the prospect of abundant and cheap natural gas, are moving to the United States. A recent KPMG analysis of the U.S. chemical industry emphasizes, "With a new and abundant source of low-cost feedstock, the US market has transformed to become one of the most advantageous markets for chemical production in the world."3 A carbon tax would unnecessarily reverse this resurgence.

2. A Carbon Tax Would Not Save the Planet. Unilaterally reducing greenhouse gases would not make a dent on global emissions and, consequently, would do next to nothing to reduce global temperatures. Even if the U.S. were to curb carbon emissions 83 percent below 2005 levels by 2050 (what cap-and-trade bills required), it would reduce global temperatures by only a few tenths of a degree Celsius by the close of the century. $^{\rm 4}$

This is because future carbon emissions will come overwhelmingly from the developing world (China and India, for example), which shows little appetite for squeezing economic growth for the sake of the environment.

A common argument is that if the U.S. leads in reducing emissions, the rest of the world would follow suit. But this is clearly not the case. Despite actions taken by the EPA to regulate carbon dioxide, the developing world has massive expansions planned to increase coal consumption. According to a recent report from the World Resources Institute, there are plans to build nearly 1,200 coal-fired power plants in 59 different countries totaling over 1.4 million megawatts. China and India alone account for 76 percent of the proposals.5

Developing countries want access to cheap, reliable electricity (especially since many areas do not even have access to electricity) and have more pressing environmental needs. It is simply wishful thinking to assume that these countries would follow America's lead and curb economic growth to reduce greenhouse gas emissions.

3. Revenue Neutrality or a Regulations Swap Is Unrealistic. Two suggestions to garner more bipartisan support for a carbon tax have been to ensure that the tax is revenue neutral by reducing other taxes or to replace the EPA's regulations of greenhouse gas emissions with the CO2 tax. Both proposals are political impossibilities.

Just the sniff of a new revenue stream to the tune of hundreds of billions of dollars annually has the special interests in Washington running to Congress for more handouts. Before carbon tax legislation has even been introduced, ideas on how to use the revenue already include income transfers, paying for defense spending cuts, reducing the deficit, transferring money to developing countries to adapt to climate change and the list goes on. History shows that any time more money comes into the coffers of the federal government, there is a political interest to spend it one way or another.⁶

Some proponents of a carbon tax believe that the tax properly prices the externalities that vex opponents of fossil fuels and, therefore, eliminates the need for regulation of carbon dioxide. By this logic, cap and trade would also have eliminated the need for carbon regulation. However, instead of reducing regulations, the cap-and-trade bills would have added to them. For instance, the Waxman-Markey bill went on for nearly 700 pages before it even began the capand-trade section.

Just in case there is any confusion as to whether the left is willing to trade off regulation for a carbon tax, Representative Henry Waxman (D–CA) recently cleared things up: "A carbon tax or a price on carbon would be a strong incentive for the development of new technologies. But because it's so complicated, I would not support preempting EPA. EPA can assure us that we can actually get the reductions we need."⁷ In short, a carbon tax would be no substitute for regulation.

Bad Policy All Around. The economic, environmental, and political realities surrounding a carbon tax are clear indications that this is bad policy. Recently, two bipartisan resolutions publicly denounced the possibility of a carbon tax, highlighting the crushing economic and minimal environmental effects of the tax. One

- The EIA makes a variety of assumptions for the projections in its Annual Energy Outlook (AEO) 2012. It alters those assumptions to produce the side cases. For instance, in its reference case, it assumes that there is no tax on carbon dioxide. In the carbon tax side case we use, the EIA assumes that there will be a carbon tax starting at \$25 per metric ton in 2012 and rising by 5 percent per year in real dollars. The reference case and side cases for the AEO 2012 can be downloaded at ftp://ftp.eia.gov/pub/forecasts/aeo/full/textdata/ (accessed January 8, 2013).
- 2. The EIA reference case imposes a 3 percentage point premium on the cost of capital for coal-fired power plants to account for the risk of possible regulation. This undercounts the cost of regulation by attributing a portion of it to the reference case. Therefore, we use the "No Greenhouse Gas Concern" side case as our baseline.
- 3. Mike Shannon, Paul Harnick, and Tom Meike, "The Future of the US Chemical Industry," *Reaction*, 2012, http://www.kpmg.com/Global/en/IssuesAndInsights/ ArticlesPublications/Reaction/Documents/reaction-magazine-seventh-edition.pdf (accessed December 5, 2012).
- 4. Chip Knappenberger, "Climate Impacts of Waxman-Markey (Part II)—Global Sign-Up," Master Resource, May 7, 2009, http://www.masterresource. org/2009/05/part-ii-a-climate-analysis-of-the-waxman-markey-climate-bill%e2%80%94what-if-the-world-played-along/ (accessed December 5, 2012).
- Ailun Yang and Yiyun Cui, "Global Coal Risk Assessment: Data Analysis and Market Research," World Resources Institute, 2012, http://www.wri.org/ publication/global-coal-risk-assessment (accessed December 5, 2012).
- 6. Robert Higgs, Crisis and Leviathan: Critical Episodes in the Growth of American Government (New York: Oxford University Press, 1987), pp. 6-34.
- See David W. Kreutzer, "The Right Time for a Carbon Tax Is Never," National Journal, Energy Experts blog, November 20, 2012, http://energy.nationaljournal. com/2012/11/is-washington-ready-for-a-carb.php#2268790 (accessed December 5, 2012).

resolution, sponsored concurrently by Senator David Vitter (R–LA) and Representative Mike Pompeo (R– KS), and a second by Representative David McKinley (R–WV) and cosponsored by five other Republicans and three Democrats expressed their disapproval of the idea.⁸

Whether the American economy is booming or heading off a fiscal

cliff, the right time for a carbon tax is never.

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News release, "Sen. Vitter, Rep. Pompeo to Introduce Concurrent Resolution Opposing 'Carbon Tax," November 29, 2012, http://www.vitter.senate.gov/public/ index.cfm?FuseAction=PressRoom.PressReleases&ContentRecord_id=4d391f67-047f-79c4-2f71-920cedc32259 (accessed January 4, 2013), and U.S. House of Representatives, 112th Congress, H. CON. RES. 142, November 20, 2012, http://www.govtrack.us/congress/bills/112/hconres142 (accessed December 5, 2012).