

BACKGROUND

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Boxer–Sanders Carbon Tax Would Empower EPA to Crush Booming Energy Economy

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Abstract

The Climate Protection Act of 2013 (Boxer–Sanders bill) would inflict high costs on families, especially those in carbon-intensive states; thwart promising energy investment and development; destroy manufacturing jobs; risk triggering a trade war; waste money; fail to provide environmental benefits; and impose a massive tax and leave a command-and-control regulatory regime in place for greenhouse gas emissions. It would be politically impossible to offset a carbon tax completely with reductions in economically harmful taxes on capital or corporate income because such a scheme would be very regressive. Such a tax also would be a step away from tax reform that moves America toward the simplest system possible: one that is designed only to raise requisite revenue, not to promote social engineering.

In his 2013 State of the Union speech, President Barack Obama called on Congress to pursue a solution to climate change, or else he would do it on his own. The same week, Senate Environment and Public Works Committee Chairman Barbara Boxer (D–CA) and committee member Bernie Sanders (I–VT) introduced the first major bill that would institute a carbon tax, the Climate Protection Act of 2013 (Boxer–Sanders).

One glaring problem with the bill is that it would not preempt regulation of greenhouse gases by federal agencies. Even worse, the bill effectively turns the Environmental Protection Agency (EPA) Administrator into a venture capitalist, industrial planner, trade referee, and social welfare agent. Boxer–Sanders would:

KEY POINTS

- A carbon tax would inflict higher costs on American families and lead to lower wages and fewer jobs.
- Even if a regulatory and corporate tax swap were possible, the carbon tax would inevitably harm American families, particularly in areas outside of the Northeast and the West Coast.
- Such a tax would invite more government intervention in the form of tariffs on imports from countries without a price on carbon.
- A carbon tax would make it harder for Americans to use plentiful natural resources to improve human flourishing.
- Such a tax would be a step away from tax reform that moves America toward a system that is designed only to raise requisite revenue, not to promote social engineering.

This paper, in its entirety, can be found at <http://report.heritage.org/bg2783>

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- Inflict high costs on families, especially those in carbon-intensive states;
- Thwart energy investment and development;
- Destroy manufacturing jobs;
- Risk triggering a trade war;
- Waste money;
- Fail to provide environmental benefits; and
- Impose a massive tax and leave a command-and-control regulatory regime in place for greenhouse gas (GHG) emissions.

Congress should instead stop the Administration from regulating greenhouse gas emissions and ensure that the oil and natural gas economic renaissance is not obstructed by federal regulation.

The Bill

Citing a Congressional Budget Office (CBO) report on a generic carbon tax, the sponsors of the bill estimate that it will raise \$1.2 trillion over 10 years by imposing a tax at the rate of \$20 per ton of CO₂. The bill increases the tax rate by 5.6 percent each year until the 12th year, when the EPA Administrator is required to submit a report to Congress recommending a fee for subsequent years (without action, the fee would continue at the 12th-year rate). The tax would increase the price of conventional fuels like oil, natural gas, and especially coal.

The bill apportions 60 percent of incoming revenue from the tax for a rebate program administered by the EPA with a newly created Office of Environmental Rebate Advocate.¹ Forty percent of the revenues goes to a Pollution Reduction Trust Fund to mitigate economic effects on energy-intensive and trade-exposed industries (\$7.5 billion a year); fund a Department of Energy (DOE) weatherization assistance program for low-income persons (\$5.0 billion a year); provide job training, education,

and transition assistance for individuals employed by the fossil fuel industry who are seeking to work at clean energy jobs (\$1.0 billion a year); and support DOE's Advanced Research Projects Agency-Energy research (\$2.0 billion a year). Any remaining funds would be applied to deficit reduction.

In addition, Boxer-Sanders imposes a Carbon Equivalency Fee—essentially a tariff on goods with high carbon content. Revenues from this new trade barrier would be divided evenly between transportation and environmental objectives.

Increases Costs on Families

Although the bill does not indicate how rebates would be apportioned among legal U.S. residents, it is important to understand the purpose behind a carbon tax to predict how such a rebate scheme would work.

The major point of a carbon tax is to “put a price on carbon” to capture what proponents of climate legislation identify as an externality cost (a cost borne by society at large). If one could determine the correct “price” of a ton of CO₂—presumably a tax in the amount equal to the supposed damage caused by the ton of CO₂—then, the thinking goes, those who purchase the product would be absorbing the externality. Of course, determining any externality price of CO₂ is very difficult considering the unsettled state of the science with respect to how much man-made emissions affect the Earth's temperature.

If one assumes that the tax will be passed on to consumers, as the director of the CBO does, the tax will make it more expensive to drive a car, heat or cool a home, or buy goods made with energy. Consumers will do less of those things, thus emitting less CO₂. It is important to note that such changes in behavior will clearly lower one's comfort and enjoyment—make one worse off—in ways that are not quantifiable using economics. The simple fact is that affordable conventional fuels have vastly increased humankind's productivity, health, and standard of living. One goal of the legislation is to reduce CO₂; proponents say it will reduce GHG emissions by 20 percent from 2005 levels by 2020.²

1. The public relations talking points provided by the Senators indicate that the “Family Clean Energy Rebate Program would work off the model developed by Alaska's oil dividend to provide a monthly rebate to every legal U.S. resident.” See “Sanders/Boxer Climate Legislation,” <http://www.sanders.senate.gov/imo/media/doc/021413-2pager.pdf> (accessed February 14, 2013).

2. Ibid.

TABLE 1

How a Carbon Tax Would Increase Energy Prices

Year of Tax	Tax Rate (per Ton)	GASOLINE		COAL		NATURAL GAS (residential)	
		Price Increase (per Gallon)	Percent Above Average*	Price Increase (per Short Ton)	Percent Above Average*	Price Increase (per Million Cubic Foot)	Percent Above Average*
1	\$20.00	\$0.20	9.30%	\$38.00	169%	\$1.00	9.10%
2	\$21.12	\$0.21	9.90%	\$40.13	178%	\$1.06	9.60%
3	\$22.30	\$0.22	10.40%	\$42.38	188%	\$1.12	10.10%
4	\$23.55	\$0.24	11.00%	\$44.75	199%	\$1.18	10.70%
5	\$24.87	\$0.25	11.60%	\$47.25	210%	\$1.24	11.30%
6	\$26.26	\$0.26	12.30%	\$49.90	221%	\$1.31	11.90%
7	\$27.73	\$0.28	13.00%	\$52.69	234%	\$1.39	12.60%
8	\$29.29	\$0.29	13.70%	\$55.65	247%	\$1.46	13.30%
9	\$30.93	\$0.31	14.50%	\$58.76	261%	\$1.55	14.10%
10	\$32.66	\$0.33	15.30%	\$62.05	275%	\$1.63	14.80%
11	\$34.49	\$0.34	16.10%	\$65.53	291%	\$1.72	15.70%
12	\$36.42	\$0.36	17.00%	\$69.20	307%	\$1.82	16.60%

* Figures are percentage increases compared to average prices from 2000 to 2010, as calculated by CRS. **Source:** Heritage Foundation calculations using data from Jonathan L. Ramseur, Jane A. Leggett, and Molly F. Sherlock, "Carbon Tax: Deficit Reduction and Other Considerations," Congressional Research Service Report for Congress R42731, September 17, 2012, <http://www.fas.org/sgp/crs/misc/R42731.pdf> (accessed February 28, 2013), and U.S. Energy Information Administration, *Annual Energy Review*, September 27, 2012, p. 201, Table 7.2, <http://www.eia.gov/totalenergy/data/annual/pdf/aer.pdf> (accessed February 28, 2013).

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In short, a higher price will discourage consumption of fuels that emit greenhouse gases. As then-Treasury Secretary Timothy Geithner explained, it is necessary for the price of energy to increase if “you’re going to change how people use energy.”³ While prices for oil and natural gas will increase, coal prices will increase the most. (See Table 1.)

Because energy is an input for nearly every good or service, a carbon tax would harm families again and again, directly through energy prices and indirectly through higher prices for goods and services.⁴ As CBO Director Douglas Elmendorf has said:

[A]t any point in which we are putting a price on carbon emissions, that would be passed through to the cost that consumers face on

energy products but also all other products that are made using fossil fuels.... I don’t know if there are any goods that use no energy in their production. It seems to me unlikely.⁵

While the tax would hit families differently based on income, geography, how far they travel, their occupation, and a myriad of other factors, the legislation tells the Administrator only that a maximum of 1 percent of the revenues from the tax can be used to administer the program; that a new bureaucracy (the Office of Environmental Rebate Advocate) should be created to assist households in regaining some of the money they had to pay; and that, to the extent possible, the rebates should be coordinated with other federal and state payment

3. Timothy Geithner, testimony before the Committee on Finance, U.S. Senate, March 4, 2009, <http://www.c-span.org/Events/Treasury-sec-Geithner-at-Senate-Finance-Cmte/13037> (accessed March 15, 2013).
4. Kevin A. Hassett, Aparna Mathur, and Gilbert E. Metcalf, “The Incidence of a U.S. Carbon Tax,” American Enterprise Institute *Working Paper* No. 21, January 31, 2008, <http://www.aei.org/paper/energy-and-the-environment/the-incidence-of-a-us-carbon-tax/> (accessed April 2, 2013).
5. Douglas Elmendorf, testimony before the Committee on Ways and Means, U.S. House of Representatives, March 26, 2009, <http://republicans.waysandmeans.house.gov/News/DocumentSingle.aspx?DocumentID=116686> (accessed April 2, 2013).

TABLE 2

Carbon Tax Would Raise Taxes on Families in Most States by Hundreds of Dollars or More

Rank	State	CO ₂ (Metric Tons)	Population	CO ₂ per Person	ROUGH APPROXIMATION OF TAXES FOR FAMILY OF FOUR	
					Gross Tax	Net Tax
1	Wyoming	64,812,837	563,626	114.99	\$9,199	\$8,297
2	North Dakota	48,747,549	672,591	72.48	\$5,798	\$4,896
3	Alaska	38,450,650	710,231	54.14	\$4,331	\$3,429
4	West Virginia	98,655,734	1,852,994	53.24	\$4,259	\$3,357
5	Louisiana	210,982,456	4,533,372	46.54	\$3,723	\$2,821
6	Montana	34,794,627	989,415	35.17	\$2,813	\$1,911
7	Kentucky	150,220,272	4,339,367	34.62	\$2,769	\$1,867
8	Indiana	215,803,601	6,483,802	33.28	\$2,663	\$1,760
9	Iowa	90,246,771	3,046,355	29.62	\$2,370	\$1,468
10	Alabama	132,095,868	4,779,739	27.64	\$2,211	\$1,309
11	Oklahoma	103,072,694	3,751,351	27.48	\$2,198	\$1,296
12	New Mexico	54,375,937	2,059,179	26.41	\$2,113	\$1,210
13	Nebraska	47,847,875	1,826,341	26.20	\$2,096	\$1,194
14	Texas	653,244,839	25,145,561	25.98	\$2,078	\$1,176
15	Kansas	73,197,560	2,853,118	25.66	\$2,052	\$1,150
16	Utah	63,450,886	2,763,885	22.96	\$1,837	\$934
17	Arkansas	66,187,189	2,915,918	22.70	\$1,816	\$914
18	Missouri	135,470,667	5,988,927	22.62	\$1,810	\$907
19	Mississippi	65,689,585	2,967,297	22.14	\$1,771	\$869
20	Ohio	247,975,249	11,536,504	21.49	\$1,720	\$817
21	Pennsylvania	253,699,171	12,702,379	19.97	\$1,598	\$696
22	Colorado	95,496,702	5,029,196	18.99	\$1,519	\$617
23	South Dakota	15,138,814	814,180	18.59	\$1,488	\$585
24	South Carolina	85,205,003	4,625,364	18.42	\$1,474	\$572
25	Illinois	230,701,064	12,830,632	17.98	\$1,438	\$536
26	Georgia	172,988,840	9,687,653	17.86	\$1,429	\$526
27	Minnesota	93,204,079	5,303,925	17.57	\$1,406	\$504
28	Wisconsin	99,145,909	5,686,986	17.43	\$1,395	\$493
29	Tennessee	108,252,231	6,346,105	17.06	\$1,365	\$462
30	Michigan	165,687,708	9,883,640	16.76	\$1,341	\$439
31	Arizona	95,606,927	6,392,017	14.96	\$1,197	\$294
32	North Carolina	142,122,941	9,535,483	14.90	\$1,192	\$290
33	Nevada	38,049,804	2,700,551	14.09	\$1,127	\$225
34	Maine	18,520,150	1,328,361	13.94	\$1,115	\$213
35	Virginia	109,710,095	8,001,024	13.71	\$1,097	\$195
36	Hawaii	18,615,692	1,360,301	13.68	\$1,095	\$193
37	Delaware	12,164,144	897,934	13.55	\$1,084	\$182
38	New Jersey	118,218,744	8,791,894	13.45	\$1,076	\$174
39	Florida	244,579,519	18,801,310	13.01	\$1,041	\$138
40	New Hampshire	16,922,518	1,316,470	12.85	\$1,028	\$126
41	Maryland	70,616,093	5,773,552	12.23	\$978	\$76
42	Washington	76,637,047	6,724,540	11.40	\$912	\$10
43	Massachusetts	73,171,369	6,547,629	11.18	\$894	-\$8
44	Rhode Island	11,158,229	1,052,567	10.60	\$848	-\$54
45	Oregon	40,310,996	3,831,074	10.52	\$842	-\$60
46	Idaho	16,317,561	1,567,582	10.41	\$833	-\$69
47	Connecticut	37,026,714	3,574,097	10.36	\$829	-\$73
48	California	370,889,944	37,253,956	9.96	\$796	-\$106
49	Vermont	6,033,507	625,741	9.64	\$771	-\$131
50	New York	173,825,354	19,378,102	8.97	\$718	-\$185
51	District of Columbia	3,290,932	601,723	5.47	\$438	-\$465

Note: Figures for taxes are rough approximations. Some states export electricity and have a relatively low population, making their tax burden appear extremely high.

Source: Heritage Foundation calculation using population data from the U.S. Census, an estimate of the illegal immigrant population, and CO₂ data from U.S. Environmental Protection Agency, "State CO₂ Emissions from Fossil Fuel Combustion, 1990-2010," http://www.epa.gov/statelocalclimate/documents/pdf/CO2FFC_2010.pdf (accessed February 28, 2013).

mechanisms and be made electronically on a monthly basis.

A “rebate” program that will spend hundreds of billions of dollars over 10 years should not be delegated to an unelected bureaucrat. The bill’s ambiguous language could allow lawmakers to claim their intent to make families whole and then blame the ultimate shortcomings on the EPA Administrator, who would have authority to design the rebate program.

Any rebate under Boxer–Sanders will not make American families whole. First, only 60 percent of the revenue from the carbon tax is used for rebates, so at least 40 percent of the carbon tax will not make it back to families who face higher costs.

Second, some American families use more energy derived from fossil fuels than others. If the rebate were based on how much of the tax the family pays, then the price signal would be significantly reduced, working against the goal of carbon reduction. It is far more likely, therefore, that the Administrator would ultimately issue a per capita rebate. Tyson Slocum of Public Citizen, quoted in Senator Sanders’ press release about the legislation, suggests as much. Moreover, the two-page summary of the bill suggests that the rebate program would be based on Alaska’s dividend program, which is distributed per eligible recipient.⁶ Such a per capita rebate program would return a smaller portion of the carbon tax paid by Americans in high-carbon states and those who use more fossil fuel energy, such as those who live in rural communities. For example, rural families drive 27,700 miles per household vs. 17,600 miles for urban households.⁷

Some states have higher carbon intensity than others. According to EPA data on CO₂ emissions from fossil fuel combustion,⁸ Boxer–Sanders’

sponsors live in states with very low carbon intensity: Senators Boxer and Sanders are from California (No. 48) and Vermont (No. 49), respectively. Both of these states have less than half the carbon intensity of Pennsylvania (No. 21). Families and individuals in states with a higher carbon intensity will pay more in taxes. Table 2 shows the CO₂ intensity, as well as a rough approximation of the gross tax⁹ and net tax¹⁰ for a family of four, in the 50 states and the District of Columbia.

Not only would the carbon tax take money directly from the pockets of American families in the form of direct and indirect taxes; it also would slow economic growth and reduce family incomes.

These rough estimates demonstrate the unfairness to residents of different states. The emissions data, based on end-use fossil fuel combustion, include electricity power generation. Some states, like Wyoming, West Virginia, and North Dakota, export large amounts of electricity and have small populations, so their carbon tax numbers are particularly inflated regarding the tax impact on their residents. As electricity producers absorb the carbon tax, they will likely pass it on to their customers, some of whom reside elsewhere. (Also, assuming that the emissions will be taxed and passed on to consumers one way or another, taxes will be higher than these numbers indicate in states that import electricity.) Income and job loss will likely be more prevalent in states that export electricity.

6. See Alaska Department of Revenue, Permanent Dividend Fund Division, website, <http://www.pfd.state.ak.us/FAQ/index#thisY> (accessed February 28, 2013).

7. Oak Ridge National Laboratory, Center for Transportation Analysis, *Transportation Energy Data Book*, June 2011, Table 8.7, <http://info.ornl.gov/sites/publications/files/Pub31202.pdf> (accessed April 2, 2013).

8. “Nationally, carbon dioxide (CO₂) emissions from fossil fuel combustion represented the largest source (78%) of total GWP-weighted emissions from all emission sources in 2010 (EPA 2012). Similarly, (CO₂) emissions from fossil fuel combustion are the largest source of greenhouse gas emissions within a state. While emissions from other sources (i.e. Industrial Processes, Solvents, Agriculture, Waste, and Land-Use, Land-Use Change, and Forestry) are important and often significant within a state, they are not included in these estimates due to a lack of data availability, higher level of uncertainty in quantification methods, and smaller contribution to total emissions.” U.S. Environmental Protection Agency, State and Local Climate and Energy Program, “State Energy CO₂ Emissions,” http://www.epa.gov/statelocalclimate/resources/state_energyco2inv.html (accessed March 23, 2013).

9. CO₂ per person * 4 * the first year rate of \$20 per ton.

10. Gross tax - (per capita rebate * four).

Even taking eighth-ranked Indiana as an example, the tax and rebate differences are quite substantial. An average family of four in Indiana would emit about 133 metric tons of CO₂ a year. At \$20 per ton, that amounts to a carbon tax of about \$2,663 in year one. A family of four in Vermont would emit 38.5 metric tons of CO₂ and pay \$771. Those are the gross taxes. Assuming (generously) that administration of the program would be insignificant and that fully 60 percent of the revenue raised would be recycled to residents, that totals about \$67.3 billion. Divided by a population of 308,745,538¹¹ (minus an estimated 10.346 million illegal immigrants¹²), the rebate would amount to \$225 per capita, or \$902 for a family of four in both states. Using those assumptions, and setting aside other economic damage from the legislation, the Indiana family would be worse off by \$1,760 for the first year, while the Vermont family would be better off by \$131. (A hypothetical California family would be better off by \$106.) Each year, the tax would increase by 5.6 percent, making the differences between the states grow.

Not only would the tax take money directly from the pockets of American families in the form of direct and indirect taxes; it also would slow economic growth and reduce family incomes. In analyzing Boxer-Sanders, The Heritage Foundation's

Center for Data Analysis found lower income for a family of four of more than \$1,000.¹³

Thwarts Energy Renaissance of Jobs, Investment, and Growth

Ronald Reagan once remarked that "government's view of the economy could be summed up in a few short phrases: If it moves, tax it. If it keeps moving, regulate it. And if it stops moving, subsidize it."¹⁴ Boxer-Sanders both taxes conventional fuels and threatens to regulate the hydraulic fracturing that has unlocked substantial quantities of oil and natural gas.

A new tax and additional regulation could not come at a worse time. America remains stuck in a stubborn, lackluster "recovery" and has an unemployment rate near 8 percent and 3 million fewer jobs than when the recession began.¹⁵ A rare bright spot in this disappointing economy is the oil and gas boom that is occurring on state and private lands. More than 9 million Americans work in the oil and natural gas industry,¹⁶ and hundreds of thousands more work in coal mining¹⁷ (although coal production is challenged by competition from cheaper natural gas and the Obama Administration's numerous policies that adversely affect coal¹⁸). These jobs pay wages that are well above average and often do not require advanced education.¹⁹ Production of conventional

11. News release, "U.S. Census Bureau Announces 2010 Census Population Counts—Apportionment Counts Delivered to President," U.S. Census Bureau, Census 2010, December 21, 2010, <http://www.census.gov/2010census/news/releases/operations/cb10-cn93.html> (accessed March 4, 2013).
12. Heritage Foundation analysis based on data from Michael Hoefer, Nancy Rytina, and Bryan Baker, "Estimates of the Unauthorized Immigrant Population Residing in the United States: January 2011," Department of Homeland Security, Office of Immigration Statistics, *Population Estimates*, March 2012, http://www.dhs.gov/xlibrary/assets/statistics/publications/ois_ill_pe_2011.pdf (accessed March 4, 2013).
13. David W. Kreutzer and Kevin D. Dayaratna, "Boxer-Sanders Carbon Tax: Economic Impact," Heritage Foundation *Issue Brief* No. 3905, April 11, 2013, <http://www.heritage.org/research/reports/2013/04/boxer-sanders-carbon-tax-economic-impact>.
14. Ronald Reagan, Remarks to the White House Conference on Small Business, August 15, 1986, <http://www.pbs.org/wgbh/americanexperience/features/general-article/reagan-quotes/> (accessed February 19, 2013).
15. U.S. Bureau of Labor Statistics, "Employment from the BLS Household and Payroll Surveys: Summary of Recent Trends," March 8, 2013, p. 1, http://www.bls.gov/web/empsit/ces_cps_trends.pdf (accessed April 4, 2013).
16. American Petroleum Institute, "Policy and Issues" website, <http://www.api.org/policy-and-issues/policy-items/jobs/energy-works.aspx> (accessed April 2, 2013).
17. PriceWaterhouseCoopers, *The Economic Contributions of U.S. Mining in 2010*, report prepared for the National Mining Association, September 2012, p. 4, http://www.nma.org/pdf/economic_contributions.pdf (accessed April 2, 2013).
18. See Nicolas D. Loris, "The Assault on Coal and American Consumers," Heritage Foundation *Backgrounder* No. 2709, July 23, 2012, <http://www.heritage.org/research/reports/2012/07/the-assault-on-coal-and-american-consumers>.
19. See, for example, U.S. Department of Labor, Bureau of Labor Statistics, Quarterly Census of Employment and Wages, "Private Industry by Six-digit NAICS Industry and Government by Level of Government, 2010 Annual Averages: Establishments, Employment, and Wages, Change from 2009," <http://www.bls.gov/cew/ew10table2.pdf> (accessed August 9, 2012).

fuels, particularly natural gas and oil, is booming in places like North Dakota.²⁰

The economic gains being made now have the potential to be long-lasting. The United States has the largest reserves of conventional fuels—oil, coal, and natural gas—in the world,²¹ and the International Energy Agency predicts that America will be the world's largest oil producer by the beginning of the next decade and could be a net exporter of oil by the end of the next decade.²² America's natural gas and coal supplies are even more plentiful.

Placing a carbon tax on conventional fuels would lower investment, employment, and wealth in this growing industry.

Placing a carbon tax on conventional fuels would lower investment, employment, and wealth in this growing industry.²³ It would be bad enough to place a tax on our plentiful resources, hampering economic growth, increasing prices for families, and destroying jobs and family income, but Boxer–Sanders does even more to try to slow, stop, and reverse America's conventional fuel renaissance. Title III, for example, would begin federal regulation of hydraulic fracturing. It would change the Safe Drinking Water Act's deference to state law²⁴ by requiring disclosure of the

fluids used in the fracturing process now and opening the door for more regulation by federal agencies.

Fracturing is safe; it is regulated by states, and fluids are already disclosed. As The Heritage Foundation has pointed out before, studies by the EPA, the Groundwater Protection Council, and independent agencies have found no evidence of groundwater contamination.²⁵ Then-EPA Administrator Lisa Jackson also acknowledged that there are no proven cases to confirm the fracturing process's alleged effect on water.²⁶ Currently, this long-standing process is regulated by the 35 oil- and gas-producing states.²⁷

The Safe Drinking Water Act recognizes that states can properly regulate hydraulic fracturing—a process that uses 99.5 percent water and 0.5 percent additives and chemicals (all of which have common applications like swimming pool cleaners, cosmetics, and ice cream).²⁸ Moreover, the industry, in collaboration with the Department of Energy, lists the chemicals being used on the website FracFocus.org.

Repealing the Safe Drinking Water Act's wise determination concerning state and local governments—the entities that are the most familiar with the environment in their areas and that have regulated the practice successfully thus far—would encourage unnecessary federal regulation.

Destroys Manufacturing Jobs

The abundance of natural gas production because of hydraulic fracturing is leading a manufacturing

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20. Brandon Stewart, "A Fracking Miracle: North Dakota's Bakken Boom," The Heritage Foundation, The Foundry, June 19, 2012, <http://blog.heritage.org/2012/06/19/a-fracking-miracle-north-dakotas-bakken-boom-video/>.
 21. Carl E. Behrens, Michael Ratner, and Carol Glover, "U.S. Fossil Fuel Resources: Terminology, Reporting, and Summary," Congressional Research Service *Report for Congress* No. R40872, December 28, 2011. <http://www.fas.org/sgp/crs/misc/R40872.pdf> (accessed February 21, 2013).
 22. International Energy Agency, "World Energy Outlook 2012—Executive Summary," <http://www.iea.org/publications/freepublications/publication/name,33339,en.html> (accessed February 28, 2013).
 23. See, for example, David W. Kreutzer and Nicholas D. Loris, "Carbon Tax Would Raise Unemployment, Not Swap Revenue," Heritage Foundation *Issue Brief* No. 3819, January 8, 2013, <http://www.heritage.org/research/reports/2013/01/carbon-tax-would-raise-unemployment-not-revenue>. The paper reviews a U.S. Energy Information Administration simulation of a carbon tax of \$25 that increased by 5 percent per year (after inflation).
 24. 42 U.S.C. 300h(b)(2), 42 U.S.C. 300h(d).
 25. Nicolas D. Loris, "Hydraulic Fracturing: Critical for Energy Production, Jobs, and Economic Growth," Heritage Foundation *Backgrounder* No. 2714, August 28, 2012, p. 3, <http://www.heritage.org/research/reports/2012/08/hydraulic-fracturing-critical-for-energy-production-jobs-and-economic-growth>.
 26. *Ibid.*, note 12.
 27. For an excellent summary of state laws and the hydraulic fracturing process, see Loris, "Hydraulic Fracturing."
 28. Loris, "Hydraulic Fracturing," note 15.
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rebound in the United States. As Heritage's Nicolas Loris points out, "North America has approximately 4.2 quadrillion (4,244 trillion) cubic feet of recoverable natural gas that would supply 175 years worth of natural gas at current consumption rates."²⁹ The accounting and consulting firm KPMG says that the U.S. is "one of the most advantageous markets for chemical production in the world"³⁰ thanks to abundant natural gas, a feedstock for many chemical companies. Inexpensive and plentiful energy, a major input for many other manufacturers, is another factor that manufacturers consider when deciding where to invest. Instead of consolidating and securing these advantages, Boxer-Sanders imposes a new tax and opens the door to meddlesome federal regulation of hydraulic fracturing, a process that is providing abundant fuel supplies for the nation.

Boxer-Sanders seems to recognize that a carbon tax will be harmful to manufacturing. In Section 103, the bill provides \$7.5 billion (without further appropriation by Congress) "to mitigate the economic impacts...on energy-intensive and trade-exposed industries." Once again, it is the unelected EPA Administrator who decides which companies qualify and at what level, the only statutory guidance being that at least 25 percent must be used for energy-efficiency measures in those industries.

When Heritage's Center for Data Analysis ran Boxer-Sanders in its Heritage Energy Model, a derivative of the National Energy Model System created by the Department of Energy, it found 447,000 fewer jobs in 2016.³¹ While the analysis did not describe the job loss by sector, it is a reasonable to conclude that many of those jobs will be manufacturing jobs, where energy is a major input. This intuition is also supported by a National Association of Manufacturers study, which indicated that a

carbon tax would lead to lower manufacturing output for energy-intensive and non-energy-intensive manufacturing.³²

Risks Triggering a Trade War

The Boxer-Sanders bill also tacitly recognizes its potential harm to manufacturing competitiveness by levying a "carbon equivalency fee"—effectively a tariff—on imported "carbon pollution-intensive goods," including the amount of carbon used to transport the goods.³³ Once again, the unelected EPA Administrator is given authority to implement the measure, determining both the fee³⁴ and when such a fee is no longer appropriate.³⁵ (The President could also determine that the country of export has implemented substantially equivalent measures, or the bill would cease to have effect if the countries of export ratify an international agreement with equivalent measures in effect.)³⁶

Setting aside any problems under existing trade treaties, giving the EPA Administrator wide discretion in setting the trade policies of the United States is unwise and risks retaliation from countries that have indicated that they do not plan to impose significant limitations on their greenhouse gas emissions.

Wastes Money

The Climate Protection Act wastes significant amounts of money. First, in addition to determining trade policy, industrial policy, and welfare policy, the EPA Administrator is given \$5 billion a year (without further appropriation) from the Treasury (not directly from the tax or tariff proceeds) for the costs "of grants, loans and loan guarantees."³⁷ This Sustainable Technologies Finance Program also is under the authority of the Administrator. Eligible projects include energy efficiency; combined heat

29. *Ibid.*, p. 3.

30. Mike Shannon, Paul Harnick, and Tom Meike, "The Future of the U.S. Chemical Industry," *KPMG Reaction Magazine*, <http://www.kpmg.com/global/en/issuesandinsights/articlespublications/reaction/pages/the-future-of-the-us-chemical-industry.aspx> (accessed March 4, 2013).

31. Kreutzer and Dayaratna, "Boxer-Sanders Carbon Tax: Economic Impact."

32. NERA Economic Consulting, *Economic Outcomes of a U.S. Carbon Tax*, report prepared for the National Association of Manufacturers, February 26, 2013, p. 29, <http://www.nam.org/-/media/64FDD87B13C44C3E8E95CC805E4E5952.ashx> (accessed March 15, 2013).

33. Sec. 197(a)(2)(A)(ii).

34. Sec. 197(a).

35. Sec. 197(c)(2).

36. Sec. 197(c)(1)(B).

37. Title II, Sec. 201(e).

and power; solar energy; biomass; non-food-crop biofuels; ocean, tidal, and hydropower; electric vehicle infrastructure; advanced battery or energy storage; rail, transit, or public transportation; or any other transportation technology that offers a reduction in greenhouse gas emissions, as determined by the Administrator.

Green energy subsidy programs create dependence on government and distort markets by ensuring funding of otherwise non-competitive projects. The Department of Energy has a horrible record of selecting commercially viable technologies,³⁸ and there is little reason to expect that the EPA would do much better. That suspicion is further compounded by the criteria the bill directs the Administrator to follow when granting, loaning, or guaranteeing loans, with priority financial assistance given “to projects that provide the largest greenhouse gas emissions reductions per Federal dollar invested” rather than any commercial viability. At least DOE is supposed to consider commercial viability. Of course, in theory, no subsidies are necessary if a technology is actually commercially viable.³⁹

Green energy subsidy programs create dependence on government and distort markets by ensuring funding of otherwise non-competitive projects.

In addition to the green venture capitalism waste, the bill provides for \$5 billion more for weatherization projects. The Weatherization Assistance Program for Low-Income Persons is meant to make

the homes of the poor more energy-efficient in order to lower their utility bills. Created by the Energy Conservation and Production Act, it is typically funded in the hundreds of millions of dollars per year. The American Recovery and Reinvestment Act (the “stimulus” bill) allocated \$5 billion for weatherization, and such a huge influx of money was difficult to spend efficiently: The DOE Inspector General said it was like hooking up a garden hose to a fire hydrant.⁴⁰ The program was notorious for waste and abuse, especially in the early years.⁴¹ Recently, the U.S. House of Representatives Committee on Oversight and Government Reform issued a staff report detailing the inefficiencies in the weatherization program.⁴²

No matter the efficiencies, it seems odd to raise utilities prices for the poor and everyone else and then use some of the money to pay for expensive efficiency programs for the poor to save on utility bills. Micromanaging the affairs of working families in this way is bound to misallocate the scarce resources of the poor. They might prefer to spend money on education, transportation, food, or any number of other items.

Without private market incentives to deliver a desirable product at a good price, the weatherization program was perhaps doomed from the start. The Oversight Committee staff report noted that:

It appears that DOE’s failure to put in place effective oversight mechanisms in the Weatherization Program created a situation where no one was checking the quality of the work performed, allowing poor workmanship to go undetected and undeterred. As a result, many DOE contractors did not do the quality work that DOE promised, and many DOE contractors actually

38. Nicolas D. Loris and Jack Spencer, “The Department of Energy Should Not Be the Green Banker,” Heritage Foundation *Background* No. 2613, October 6, 2011, http://thf_media.s3.amazonaws.com/2011/pdf/bg2613.pdf.

39. See, for example, David W. Kreutzer, “The American Energy Initiative: The Cost of Loan Guarantees,” Heritage Foundation *Testimony*, July 25, 2012, <http://www.heritage.org/research/testimony/2012/07/the-american-energy-initiative-the-cost-of-loan-guarantees>.

40. Testimony of Gregory H. Friedman, Inspector General, U.S. Department of Energy, in Hearing, *The Green Energy Debacle: Where Has All the Taxpayer Money Gone?* Subcommittee on Regulatory Affairs, Stimulus Oversight and Government Spending, Committee on Oversight and Government Reform, U.S. House of Representatives, 112th Cong., 1st Sess., November 2, 2011, p. 75, <http://oversight.house.gov/wp-content/uploads/2012/06/11-2-11-Subcommittee-on-Reg-Affairs-Hearing-Transcript.pdf> (accessed March 15, 2013).

41. See, for example, David Kreutzer, “Caulk the Leaks in Weatherization Spending,” The Heritage Foundation, *The Foundry*, November 15, 2010, <http://blog.heritage.org/2010/11/15/caulk-the-leaks-in-weatherization-spending/>.

42. Staff Report, *The Department of Energy’s Weatherization Program: Taxpayer Money Spent, Taxpayer Money Lost*, Committee on Oversight and Government Reform, U.S. House of Representatives, March 20, 2012, <http://oversight.house.gov/wp-content/uploads/2012/04/Corrected-Weatherization-Report-Final-2.pdf> (accessed February 28, 2013).

damaged houses, created new hazards, or made houses less energy efficient.⁴³

“For many of the recipients,” the report noted, “the DOE contractor who showed up at their door did not ‘make their lives and homes better,’ and in most cases even left the homeowner worse off.”⁴⁴ A Department of Energy Inspector General’s report found failure rates of up to 80 percent.⁴⁵

In addition to weatherization, Boxer–Sanders appropriates \$1 billion per year for 10 years to the Secretary of Labor “for job training, education, and transition assistance for individuals employed by the fossil fuel industry seeking transition to clean energy jobs.”⁴⁶ Job training programs are notoriously ineffective.⁴⁷ It appears from this provision that the drafters of the bill are also preparing for layoffs in the large conventional fuels industry.

Without Boxer–Sanders, jobs in the Bureau of Labor Statistics’ “Oil and Gas Extraction” category have *increased* by 26 percent in the past five years.⁴⁸ Looking at a recent jobs report, American Enterprise Institute analyst Mark Perry wrote, “[i]n just the last three months, energy companies have hired 5,500 new employees for oil and gas extraction activities, which is a hiring rate of almost 100 new workers every business day.”⁴⁹ Jobs in oil and natural gas often have high average salaries (for example, on average, rotary drill operators make

\$58,540, and derrick operators make \$47,120)⁵⁰ and help create other jobs. One study put the “multiplier effect”—how many other jobs these jobs help to create—at more than three.⁵¹

Discouraging jobs that pay well and spending tax money on retraining displaced workers in a field that is otherwise growing makes little economic sense and is morally questionable, to say the least.⁵²

Not content to waste funds derived directly from the carbon tax, Boxer–Sanders also poorly directs funding (without additional appropriation from Congress) from the climate tariff. One-half of the funds would go to the EPA Administrator for two purposes, primarily for state and local programs to adapt to climate change, improve infrastructure, and protect environmental quality and wildlife.⁵³ Secondly, the funds would be used “to meet international commitments made by the United States to assist with climate change adaptation.”⁵⁴ The other half of the funds would go to the Secretary of Transportation to “improve the resiliency of critical infrastructure” and “for projects that provide preferential parking for carpools, including the addition of electric vehicle charging stations...”⁵⁵

Risking a trade war is irresponsible for any reason, and using a tariff to fund carpools and charging stations is also poor policy.

43. *Ibid.*, p. 5.

44. *Ibid.*

45. *Ibid.*, p. 6.

46. Sec. 103(c)(3).

47. See, for example, David B. Muhlhausen and Paul Kersey, “In the Dark on Job Training: Federal Job-Training Programs Have a Record of Failure,” Heritage Foundation *Backgrounder* No. 1774, July 6, 2004, http://s3.amazonaws.com/thf_media/2004/pdf/bg1774.pdf.

48. Mark Perry, “America’s Job-Creating Energy Miracle,” American Enterprise Institute Ideas blog, February 4, 2013, <http://www.aei-ideas.org/2013/02/americas-job-creating-energy-miracle/> (accessed February 28, 2013).

49. *Ibid.*

50. U.S. Bureau of Labor Statistics, Occupational Employment Statistics, “May 2011 National Occupational Employment and Wage Estimates, United States,” http://www.bls.gov/oes/current/oes_nat.htm#47-0000 (accessed February 28, 2013).

51. Ken Cohen, “Energy’s Multiplier Effect: Oil and Natural Gas Created 9% of New U.S. Jobs in 2011,” ExxonMobil Perspectives blog, March 13, 2012, <http://www.exxonmobilperspectives.com/2012/03/13/energys-multiplier-effect-oil-and-natural-gas-created-9-percent-of-new-u-s-jobs-in-2011/> (accessed February 28, 2013).

52. As noted elsewhere, the President’s coal policies and lower natural gas prices are causing the coal industry to contract, but oil and gas are booming. Without unnecessary government regulation, coal would also be performing better.

53. Sec. 197(b)(2)(A)(i).

54. Sec. 197(b)(2)(A)(ii).

55. Sec. 197(b)(2)(B).

Does Practically Nothing for the Environment

Even if one assumes that rising levels of carbon dioxide in the atmosphere lead to higher global temperatures, a carbon tax in the United States that reduces emissions domestically would have zero direct effect on foreign emissions if we acted alone. In fact, unilateral action by the U.S. would have very little effect on total global emissions, as then-EPA Administrator Jackson testified,⁵⁶ and with little effect on emissions, there would be an almost imperceptible impact on global temperatures.

Boxer–Sanders, therefore, would impose a tax of \$1.2 trillion without achieving its stated goal of “address[ing] climate disruptions.” If drafters of the bill thought that it would actually achieve their environmental goals of sufficiently reducing greenhouse gas emissions, then they would not continue to allow EPA and other agencies to impose strict regulations in addition to the carbon tax.

Spawns a New Tax and Burdensome Regulation

The Climate Protection Act does nothing to stop the EPA and other federal agencies from regulating greenhouse gas emissions. If proponents had confidence in the environmental aims of the bill—that a carbon tax will place an appropriate “price” on carbon to capture the cost of externalities—then other regulations would be unnecessary.

The bill’s primary objective, therefore, seems to be to raise taxes and increase government spending—but not so much that the environmental goals are reached. Boxer–Sanders instead provides revenue to pay for green venture capitalism and other objectives while simultaneously shifting income among states and citizens. Not having to increase the tax to the level they believe is necessary has the added benefit for lawmakers of making the true cost

of their environmental goals less transparent for citizens.

In short, Boxer–Sanders makes no pretense that it is trying to regulate greenhouse gases more efficiently; instead, it seems to be designed to raise and spend revenue on favored green energy projects while amassing massive powers in the EPA. While a carbon tax that preempted regulation would still be poor policy, creating a carbon tax on top of federal regulation is terrible policy.

Taxes should raise the revenue to fund necessary government operations in ways that cause the least possible economic damage and not “pick[] winners and losers with preferential or punitive policies.”

Taxes should raise the revenue to fund necessary government operations in ways that cause the least possible economic damage and not “pick[] winners and losers with preferential or punitive policies.”⁵⁷ In a way, while simultaneously shifting income among states and citizens, the carbon tax would treat using air conditioning, turning on lights, driving a car, and charging a cellular phone—all of which use primarily conventional fuel resources—much as using disfavored goods such as alcohol and cigarettes is treated. This is exactly backwards because conventional fuels have led to great human flourishing.⁵⁸

Using the tax code to discourage behavior may be seen more frequently post-*NFIB v. Sebelius*, the health care case in which the Supreme Court held that the federal government has broad authority to tax behavior.⁵⁹ We have already seen taxes on

56. See, for example, Derrick Morgan, “A Carbon Tax Would Harm U.S. Competitiveness and Low-Income Americans Without Helping the Environment,” Heritage Foundation *Backgrounder* No. 2720, August 21, 2012, <http://www.heritage.org/research/reports/2012/08/a-carbon-tax-would-harm-us-competitiveness-and-low-income-americans-without-helping-the-environment>.

57. Curtis S. Dubay, “Obama FY 2013 Budget Violates Basic Principles of Tax Reform,” Heritage Foundation *Backgrounder* No. 2665, March 19, 2012, <http://www.heritage.org/research/reports/2012/03/obama-fy-2013-budget-violates-basic-principles-of-tax-reform>.

58. See, for example, Indur M. Goklany, “Humanity Unbound: How Fossil Fuels Saved Humanity from Nature and Nature from Humanity,” Cato Institute *Policy Analysis* No. 715, December 19, 2012, <http://www.cato.org/publications/policy-analysis/humanity-unbound-how-fossil-fuels-saved-humanity-nature-nature-humanity> (accessed March 15, 2013).

59. *National Federation of Independent Business v. Sebelius*, 567 U.S. ____ (2012).

plastic bags and soft drinks in some localities.⁶⁰ Conservatives in particular should reject a carbon tax and would be on a more solid foundation advocating for a simplified tax code whose purpose is to raise revenue, not influence behavior.⁶¹

What Needs to Be Done

Instead of instituting a new tax and stopping the hydraulic fracturing–driven energy boom, Congress should:

- **Stop** command-and-control climate regulation under the Clean Air Act and other federal statutes through the Congressional Review Act and, if necessary, through prohibitions on funding in appropriations measures.
- **Protect** the Safe Drinking Water Act from politically motivated changes that could slow or stop the practice of hydraulic fracturing, currently regulated appropriately and safely at the state level. Prevent any federal agency from adding new regulations on hydraulic fracturing.
- **Allow** more energy production on federal lands and off the coast of the United States.
- **Ensure** that conventional fuels can be exported without impediment from federal agencies.

Conclusion

Boxer–Sanders has many flaws. It would inflict high costs on families, especially those in carbon-intensive states; thwart promising energy investment and development; destroy manufacturing jobs; risk triggering a trade war; waste money; fail to

provide environmental benefits; and impose a massive tax and leave a command-and-control regulatory regime in place for greenhouse gas emissions.

While some apologists for a carbon tax may argue that these problems can be fixed, proponents should realize that flirtation with the carbon tax is unwise policy, whatever its form. It would be politically impossible to offset a carbon tax completely with reductions in economically harmful taxes on capital or corporate income because such a scheme would be very regressive. Moreover, liberals are very unlikely to preclude regulation of GHG emissions by federal agencies.

Even if it were possible to get a regulatory and corporate tax swap, the carbon tax would inevitably harm American families, particularly those who reside in areas outside of the Northeast and the West Coast. Such a tax would also invite more government intervention in the economy in the form of tariffs for imports from countries without a price on carbon. (Or, if a carbon tax did not have a tariff, it would lead to an even more massive loss of manufacturing jobs due to American uncompetitiveness and perhaps *increased* environmental impacts, since enterprises that relocated to foreign countries would likely face more lax emissions and toxic pollution controls.)

Additionally, a carbon tax would make it more difficult for the American people to make use of plentiful natural resources to improve human flourishing. Finally, such a tax would be a step away from tax reform that moves America toward the simplest system possible: one that is designed only to raise requisite revenue, not to promote social engineering.

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60. "Sugar-Sweetened Beverages" were one potential pay-for considered by the Senate Finance Committee for the health care reform law. Senate Finance Committee, "Financing Comprehensive Health Care Reform: Proposed Health System Savings and Revenue Options," May 20, 2009, p. 35, <http://www.apapracticecentral.org/advocacy/reform/finance-may20.pdf> (accessed February 28, 2013).

61. Admittedly, using the tax code as the only form of regulation of pollution and emission of GHGs would be more efficient and allow greater liberty than command-and-control regulation. "Pigovian" taxes are efficient in theory but seem to be much more difficult to make work in practice.