



CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

June 2, 2008

Lieberman-Warner Climate Security Act of 2008

A substitute amendment for S. 3036 transmitted to CBO on June 2, 2008

BACKGROUND

S. 3036 would set an annual limit or cap on the volume of certain greenhouse gases (GHGs) emitted from electricity-generating facilities and from other activities involving industrial production and transportation. Under this legislation, the Environmental Protection Agency (EPA) would establish three separate regulatory initiatives known as cap-and-trade programs—one covering most types of GHGs, one covering hydrofluorocarbons (HFCs), and a third program to cover the carbon emissions embodied in imported goods.

EPA would establish a quantity of allowances for each of calendar years 2012 through 2050 and would auction some of those allowances. The proceeds would be used to finance various initiatives, such as developing renewable technologies, assisting in the education and training of workers, and providing energy assistance for low-income households. EPA would distribute the remaining allowances at no charge, to states and other recipients, which could then sell, retire, or use them, or give them away. Over the 40 years that the proposed cap-and-trade programs would be in effect, the number of allowances and emissions of the relevant gases would be reduced each year.

Funds from the auction of allowances are considered to be federal revenues and the spending of the auction proceeds to be federal outlays. In addition, because the government would be essential to the existence of the allowances and responsible for the readily realizable monetary value of them through its enforcement of the cap on emissions, and because the market for non-HFC allowances would be relatively liquid, CBO considers the distribution of those allowances at no charge to be functionally equivalent to distributing cash. Finally, because the receipts from selling or giving allowances away would effectively be an indirect business charge that reduces the federal tax base for income and payroll taxes, in most cases, CBO adjusted a portion of the gross gain to the federal government from auctioning and giving away allowances to account for reductions in other federal revenues; we assume that tax offset totals 25 percent—an approximate marginal tax rate on overall economic activity.

CBO's cost estimate for S. 2191 (the Lieberman-Warner Climate Security Act of 2007), as ordered reported by the Senate Committee on Environment and Public Works on December 5, 2007, includes a detailed discussion of how the budgetary treatment of the cap-and-trade program, including a discussion of how tax offsets are applied to the revenues generated by allowances auctioned and given away. It also describes the methodology that CBO uses for analyzing this type of legislation. That estimate was provided to the Congress on April 10, 2008.

ESTIMATED COST OF THE AMENDMENT

CBO estimates that enacting the amendment would increase revenues by about \$902 billion over the 2009-2018 period, net of income and payroll tax offsets. That estimate excludes revenues from the sale of international reserve allowances for imported goods because CBO has not had sufficient time to analyze the impact of such allowances and to assess either the number or value of those allowances that would be auctioned. Over the next 10 years, we estimate that direct spending would total about \$836 billion. That figure also excludes any spending of proceeds from the auction of international reserve allowances for imported goods because the spending of any such receipts would be subject to future appropriation acts. The additional revenues from enacting this legislation would exceed the new direct spending by an estimated \$66 billion, thus decreasing future deficits (or increasing surpluses) by that amount over the next 10 years (see table below).

CBO has not completed its estimate of spending that would be subject to future appropriation action. Therefore, this estimate does not address such spending. In years after 2018, net revenues attributable to the legislation would exceed annual direct spending through 2050.

INTERGOVERNMENTAL AND PRIVATE-SECTOR MANDATES

The amendment would impose private-sector mandates, as defined in the Unfunded Mandates Reform Act (UMRA), with costs that substantially exceed the annual threshold established in UMRA for private-sector mandates (\$136 million in 2008, adjusted annually for inflation). The most costly mandates would require certain private-sector entities to participate in the cap-and-trade programs for greenhouse gas emissions created by the bill. CBO estimates that the cost of complying with those mandates would total tens of billions of dollars annually.

ESTIMATED IMPACT ON REVENUES AND DIRECT SPENDING OF A SUBSTITUTE AMENDMENT TO S. 3036, TRANSMITTED TO CBO ON JUNE 2, 2008

	By Fiscal Year, in Billions of Dollars											2009-	2009-
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2013	2018	
CHANGES IN REVENUES ^a													
Proceeds from Auctioning Allowances:													
Allocated for Government Activities	0.7	0.7	0.8	17.8	18.2	19.3	20.3	21.3	22.3	26.0	38.1	147.3	
Allocated for Spending Subject to Appropriation	0.5	0.5	0.6	11.0	11.7	12.3	13.9	15.1	16.1	18.1	24.3	99.9	
Free Allocation of Allowances	0	0	19.6	83.1	84.4	83.6	88.4	93.9	98.8	102.3	187.1	654.1	
Other Revenues	<u>0</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.3</u>	
Total Estimated Revenues	1.2	1.3	21.0	111.8	114.3	115.2	122.6	130.4	137.3	146.5	249.6	901.6	
CHANGES IN DIRECT SPENDING													
Spending from Auction Proceeds													
Estimated Budget Authority	0.9	1.0	1.0	23.7	24.3	25.8	27.0	28.4	29.7	34.6	50.8	196.4	
Estimated Outlays	0	0.2	0.5	5.6	11.3	16.4	21.3	24.8	26.7	28.5	17.5	135.2	
Spending from Freely Allocated Emission Allowances													
Estimated Budget Authority	0	0	19.6	88.5	90.2	89.7	94.8	100.9	106.2	110.1	198.3	700.0	
Estimated Outlays	0	0	19.6	88.5	90.2	89.7	94.8	100.9	106.2	110.1	198.3	700.0	
TVA and Other Spending													
Estimated Budget Authority	0	*	*	*	*	*	0.1	0.1	0.3	0.5	*	1.0	
Estimated Outlays	0	*	*	*	*	*	0.1	0.1	0.3	0.5	*	1.0	
Total Changes													
Estimated Budget Authority	0.9	1.0	20.7	112.2	114.4	115.5	122.0	129.3	136.1	145.2	249.1	897.3	
Estimated Outlays	0.1	0.2	20.1	94.1	101.4	106.1	116.2	125.7	133.1	139.1	215.8	836.1	
NET CHANGE IN THE BUDGET DEFICIT OR SURPLUS FROM CHANGES IN REVENUES AND DIRECT SPENDING													
Impact on Deficit/Surplus ^b	1.2	1.1	0.9	17.8	12.9	9.2	6.3	4.7	4.2	7.4	33.8	65.5	

Notes: * = less than \$50 million; TVA = Tennessee Valley Authority.
 Components may not sum to totals because of rounding.
 The bill would affect spending subject to appropriation, but CBO has not yet completed its estimate of such spending.

- a. Revenue estimate does not include proceeds from the sale of international reserve allowances for imported goods.
- b. Positive numbers indicate decreases in deficits (or increases in surpluses); negative numbers indicate increases in deficits (or decreases in surpluses).

The amendment also contains several intergovernmental mandates as defined in UMRA. CBO estimates that, during the first five years following enactment, states would realize a net benefit as a result of this bill's enactment (resulting from the allowances they would receive). Therefore, the annual threshold for intergovernmental mandate costs established in UMRA (\$68 million in 2008, adjusted annually for inflation) would not be exceeded.

PREVIOUS CBO ESTIMATES

On April 10, 2008, CBO transmitted a cost estimate for a substitute amendment to S. 2191, the Lieberman-Warner Climate Security Act of 2007, as ordered reported by the Senate Committee on Environment and Public Works on December 5, 2007. That substitute amendment to S. 2191 was introduced as S. 3036, the Lieberman-Warner Climate Security Act of 2008, on May 20, 2008. CBO has estimated the budgetary impact of those versions of this legislation as follows:

- S. 2191, as ordered reported by the Senate Environment and Public Works Committee on December 5, 2007, would increase deficits (or decrease surpluses) by \$15 billion over the 2008-2017 period; and
- An amendment to S. 2191 that was introduced as S. 3036 on May 20, 2008, would reduce deficits (or increase surpluses) by \$78 billion over the 2008-2017 period.

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