The Lieberman-Warner America's Climate Security Act of 2007

Annotated Table of Contents
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The text below describes a series of joint proposals that Senators Lieberman and Warner have put together in a framework for inclusion in the bill that they are scheduled to complete by fall. This joint proposal does not encompass all of the provisions that the bill will contain and may be enlarged as the Senators draft a final bill. Senators Lieberman and Warner emphasize that their work on the bill is ongoing, and that they remain very open to additional input from Senators and the private sector.

Findings

The bill will find that the negative consequences ascribed by scientists and many other experts to global warming pose a significant threat to US national security, the US economy, public health and welfare in the US, the wellbeing of other nations, and the global environment.

The bill will find that it is possible and desirable to cap US greenhouse gas emissions at the current level in 2012 and to lower the cap each year between 2012 and 2050, provided that the system includes cost containment measures, periodic review of the requirements, an aggressive program for deploying advanced energy technology, and programs to mitigate the impacts of any unavoidable global climate change.

The bill will find that Congress may need to update the post-2030 emissions caps prior to 2030, in order to account for continuing scientific data and steps taken, or not taken, by foreign nations.

The bill will find that policies external to a cap-and-trade program may be required, especially for the transportation sector.

Purpose

The bill will declare that its purpose is to reduce US greenhouse gas emissions substantially enough between 2007 and 2050 to avert catastrophic impacts of global climate change, and to do so while preserving robust growth in the US economy and avoiding the imposition of hardship on US citizens.

Definitions

Administrator

The bill will define "Administrator" as the Administrator of the US Environmental Protection Agency.

Covered Greenhouse Gases

The bill will define the covered greenhouse gases as: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

Covered Sectors of the US Economy

The bill will define the covered sectors of the US economy as electric power, transportation, and industry. According to the *Inventory of US Greenhouse Gas Emissions and Sinks*, those sectors currently are responsible for 80% of US greenhouse gas emissions.

Covered Electric Power Sector Facilities

The bill will define a covered facility within the electric power sector as the fossil fuel-fired electricity generating units at any facility that contains any electricity generating unit connected to a generator greater than 10 MWe.

Covered Transportation Sector Facilities

The bill will define a covered facility within the transportation sector as any refinery that produces petroleum-based or coal-based fuel for use in the transportation sector, or as any importer of petroleum-based or coal-based fuel that is refined for use in the transportation sector and that, when used, will emit more than 10,000 metric tons of greenhouse gas per year, measured in terms of carbon dioxide equivalence.

Covered Industry Sector Facilities

The bill will define a covered facility within the industry sector as: any petroleum or coal refinery; any iron or steel production facility; any aluminum smelter; any cement production facility with onsite clinker production; any lime production facility; any adipic acid, nitric acid, or ammonia production facility; any pulp production facility; any facility that produces nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, or other greenhouse gases; any entity that imports products that contain hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, or other greenhouse gases that, when used, will emit more than 10,000 metric tons per year; or any other industrial facility with boilers or turbines whose combined heat rate exceeds 100 mmbtu/hour. The bill will direct the Administrator to expand the list to include any other facilities that emit more than 10,000 metric tons of greenhouse gas per year, in terms of carbon dioxide equivalents, from non-energy industrial processes (as defined in the *Inventory of US Greenhouse Gas Emissions and Sinks*).

Allowance

The bill will define an allowance as an authorization from the Administrator to emit one metric ton of carbon dioxide equivalent from a covered facility in a single, annual compliance period. The bill will declare that each allowance has, at a minimum, a vintage and a unique serial number.

Climate Change Credit Corporation

The bill will identify the Climate Change Credit Corporation as the entity that will receive and auction allowances allocated to it by the Administrator, and that will distribute auction proceeds in the ways specified in the bill.

Carbon Market Efficiency Board

The bill will identify the Carbon Market Efficiency Board as a panel that will monitor the economy and the allowance trading system, and that will be authorized to trigger relief remedies in order to forestall any sustained adverse impact on the US economy.

National Emission Allowance Account

The bill will identify the National Emission Allowance Account as the total number of emission permits available during a single year.

Title I Reducing Greenhouse Gas Emissions

Subtitle A Tracking Emissions

The bill will establish a greenhouse gas registry that is complete, consistent, and transparent, and that will collect reliable and accurate data that can be used in implementing the greenhouse gas reduction policies in the Act.

The bill will direct the Administrator to promulgate regulations within 24 months of enactment to ensure a consistent, comparable, and technically accurate record of greenhouse gas emissions.

The bill will direct the Administrator to establish an emissions tracking system to collect and manage emissions data from covered facilities. The bill will require that the system include reporting requirements, data quality and verification measures, and compliance provisions.

The bill will direct the Administrator, when developing the monitoring standards, to take into consideration: existing methods under EPA regulations; methods presented in the *Inventory of US Greenhouse Gas Emissions and Sinks*; and any public comments received through notice-and-comment rulemaking.

The bill will direct the Administrator to establish procedures for developing new methodologies and for updating existing monitoring methodologies, taking into consideration: new scientific information;

experience from reporting by covered facilities; and the need for public comment on new methodologies.

The bill will make the Administrator responsible for auditing and verifying the accuracy and completeness of data submitted by covered facilities.

The bill will require all covered facilities to report greenhouse gas emissions on a quarterly basis, following the methods set out by regulation.

The bill will direct the Administrator to establish a database, or modify the existing cap-and-trade data systems at EPA, to track all official allowance holdings and transactions, including issuance, transfer, and use for compliance. The bill will specify that compliance with the requirement to hold allowances covering greenhouse gas emissions in the new trading program will be determined on a facility-wide basis. The bill will declare that the owner or operator must hold allowances in the database for each covered facility at least equal to the total greenhouse gas emissions (measured in CO_2 equivalence) from that facility during the year.

The bill will direct the Administrator to establish procedures to publish, and make publicly available, data on emissions and allowances on a quarterly basis, subject to any procedures to protect confidential business information.

Subtitle B Reducing Emissions

The bill will specify an annual aggregate tonnage cap, expressed in terms of CO_2 equivalence, for each year from 2012 through 2050. The cap that the bill will specify for 2012 will be the 2005 emissions level. The cap that the bill will specify for 2020 will be 10% below the 2005 emissions level. The cap that the bill will specify for 2030 will be 30% below the 2005 emissions level. The cap that the bill will specify for 2040 will be 50% below the 2005 emissions level. The cap that the bill will specify for 2050 will be 70% below the 2005 emissions level.

The bill will direct the Administrator to promulgate regulations not later than two years after the date of enactment that include, but are not limited to, provisions that: establish an annual compliance period; require each covered facility to submit one allowance per ton of carbon dioxide equivalent emitted in a single compliance period; declare that allowances are the property of the US and do not represent a property right; and establish penalties for non-compliance with the requirement to hold allowances equal to emissions.

Title II Allocating Allowances

As set forth below in Subtitle A, the bill will specify the way in which the Administrator will allocate the National Emissions Allowance Account established by this title each year among covered facilities, identified public policies, and an auction conducted by the Climate Change Credit Corporation. As set forth below in Subtitle B, the bill also will specify the ways in which the Climate Change Credit Corporation will use the proceeds of the auction to advance identified public policies.

Subtitle A Allowances Allocated by the Administrator

The bill will declare that, for the purposes of allocation, each year's emissions cap will represent that year's National Emission Allowance Account. The bill will declare that the Administrator will hold the entire account at the start of each year.

Allocation to the Industry Sector

The bill will direct the Administrator, each year, to allocate 20% of that year's National Emission Allowance Account for free to covered entities within the industry sector. The bill will specify that the Administrator's per-facility allocations within the industry sector will be determined based on pre-enactment historical emissions. The bill will direct the Administrator to set aside a portion of the 20% each year for allocation for free to new entrants to the industry sector.

The bill will declare that facilities within the industry sector that shut down will forfeit their allowances unless their owners can demonstrate that they will open a comparable facility within the US within two years.

Allocation to the Electric Power Sector

The bill will direct the Administrator, in 2012, to allocate 20% of that year's National Emission Allowance Account to covered facilities within the electric power sector, based on heat input with fuel-adjustment factors. The bill will direct the Administrator to set aside a portion of the 20% each year for allocation for free to new entrants to the electric power sector. The bill will declare that this 20% allocation will remain constant for the first 5 years, and that it then will transition to 0% by 2035, with the allowances transitioning into the Climate Change Credit Corporation's auction.

The bill will direct the Administrator, each year, to allocate 10% of that year's National Emission Allowance Account to load-serving entities, based on electricity delivered. The bill will direct the load-serving entities to use the value of those allowances to defray energy-cost impacts on low- and middle-income consumers and to promote demand-side energy efficiency. The bill will direct the Administrator to set aside a portion of the 10% for allocation for free to rural electric cooperative facilities in an amount equal to their 2005 emissions plus an amount equal to the average emissions growth expected for all such facilities.

Recognition for Early Action

The bill will direct the Administrator, in 2012, to allocate 8% of that year's National Emission Allowance Account to covered entities in the covered sectors, in recognition of pre-enactment action to reduce greenhouse gas emissions. The bill will declare that the 8% will transition to 0% by 2020, with the allowances transitioning into the Climate Change Credit Corporation's auction.

Assistance to States

The bill will direct the Administrator, each year, to allocate 4% of that year's National Emission Allowance Account to state governments. The bill will specify that half of those allowances will be allocated based on state population, and that the other half will be allocated based on historical state emissions. The bill will condition receipt of the allowances on the state government's demonstration that the value will be used exclusively for mitigating energy-cost impacts on low-income energy consumers; promoting energy efficiency; promoting investment in non-emitting electricity generation technology; encouraging advances in technology to sequester greenhouse gases; avoiding distortions in competitive electricity markets; mitigating obstacles to investment by new entrants in electricity generation markets and energy-intensive manufacturing sectors; addressing local or regional impacts of climate change policy; and mitigating impacts on energy-intensive industries in internationally competitive markets.

Assistance to Coal Mining Communities

The bill will direct the Administrator, each year, to allocate 4% of that year's total National Emission Allowance Account to US coal mines.

Keeping Carbon in Plants and Soils

The bill will direct the Administrator, each year, in coordination with the US Departments of Agriculture and the Interior, to allocate 7.5% of the total National Emission Allowance Account to farmers, foresters, and other landowners for activities that keep carbon stored in soils, crops, and forests.

Incentives to Reduce Transportation Sector Greenhouse Gas Emissions

The bill will direct the Administrator, each year, to distribute 2.5% of that year's National Emission Allowance Account to regulated entities in the transportation sector for activities that reduce greenhouse gas emissions from the US transportation sector.

Allowances for Auction

The bill will direct the Administrator, in 2012, to allocate 24% of that year's National Emission Allowance Account to the Climate Change Credit

Corporation. The bill will provide that the 24% will increase to 52% by 2035 (because the credit-for-early action allocation transitions to 0% by 2020, and because the power-plant allocation transitions to 0% by 2035).

Subtitle B Allowances Allocated to the Climate Change Credit Corporation

The bill will establish the Climate Change Credit Corporation as a nonprofit corporation without stock. The bill will provide that the Corporation will have a 5-member board of directors; that the members will be appointed by the President, with the advice and consent of the Senate, and will each serve a term of 5 years; and that no more than 3 members of the board may be affiliated with the same political party. The bill will require that the Corporation submit an annual report on its operations to the Administrator, the President, and the Congress.

The bill will direct the Corporation to auction all of the allowances allocated to it by the Administrator.

The bill will direct the Corporation to use the auction proceeds every year as follows:

- 20% for a public-private partnership for commercializing low- or zero-greenhouse gas emitting electric power sector technologies, including technologies for capturing CO_2 in the generation of electricity from coal.

- 20% for a public-private partnership for commercializing geological sequestration of CO_2.

- 20% for a public-private partnership for commercializing low- or zero-greenhouse gas emitting transportation sector technologies, and for reducing vehicle-miles traveled.

- 10% for mitigating the impact of unavoidable global climate change on wildlife and America's great waters.

- 10% for incentivizing the deployment of technologies to reduce SO_2, NO_x, and mercury emissions from coal-fired power plants.

- 10% for state and local governments to mitigate the impact of unavoidable global climate change for economically disadvantaged communities.

- 10% for international global climate change relief measures in distressed and impoverished areas.

The bill will direct the Corporation to conduct an early auction, the proceeds of which must be used for the technology deployment purposes listed above.

The bill will direct the Government Accountability Office, in 2013 and biennially after that, to submit to Congress a report evaluating the performance of the auction and the use of its proceeds in fulfilling the purposes of the Act.

Title III Containing and Managing Costs

Subtitle A Allowing Trading

The bill will allow unlimited trading.

Subtitle B Establishing a Carbon Market Efficiency Board

The bill will establish a Carbon Market Efficiency Board, modeled after the Federal Reserve, to oversee the market for allowances. The bill will provide that the Board will be comprised of 7 experts, appointed by the President with the advice and consent of the Senate. The bill will charge the Board with ensuring that the market functions efficiently. The bill will provide the Board with limited regulatory powers to control costs. The bill will provide the US Department of the Treasury with oversight over the Board.

Subtitle C Containing and Managing Climate Change Costs Effectively

The bill will allow covered entities to bank emissions reductions without limitation.

The bill will provide that up to 15% of the allowances that a covered entity must submit each year for compliance may be comprised of borrowed allowances. The bill will authorize the Board to establish a default interest rate. The bill will specify 5 years as the default term of a loan.

The bill will provide that up to 15% of the allowances that a covered entity must submit each year may be comprised of offset credits.

The bill will set forth detailed, rigorous requirements for offsets, with the purpose of ensuring that they will represent real, additional, verifiable, and permanent emissions reductions.

The bill will direct the Administrator to promulgate regulations to implement the Act's detailed, rigorous offset requirements by no later than 2 years after enactment.

The bill will direct the Administrator, by 2015, to submit to Congress a study of the impacts of the offset provisions.

The bill will provide that up to 15% of the allowances that a covered entity must submit each year may be comprised of allowances purchased on a foreign greenhouse gas emissions trading market certified by the Administrator. The bill will direct the Administrator, prior to certifying such a foreign market, to determine that the market is premised on mandatory caps that are of equivalent rigor to those in the Act, and that the market uses monitoring, compliance, and enforcement methods that are of equivalent rigor to those established in the Act.

The bill will direct the Carbon Market Efficiency Board to monitor the emissions trading market and periodically report to the President and Congress on its operations. The bill will authorize the Board, in the first two years of the cap-and-trade program, to increase the amount of credits that covered entities may borrow, but only in the event that the average daily closing price of an emissions credit exceeds the upper end of the range predicted by the Congressional Budget Office prior to the start of the program. The bill will authorize the Board, in all subsequent years, but only as needed to avoid significant harm to the economy: (1) to temporarily increase the amount that covered entities may borrow, lengthen the payback period of loans, and/or lower the interest rate on loans; and, in the event of more extreme economic circumstances, (2) to temporarily expand the National Emission Allowance Account, provided that subsequent years' caps are tightened sufficiently to ensure that the cumulative emissions reductions over the long term remain unchanged.

Title IV Inducing Foreign Nations to Join in a Global Effort to Reduce Greenhouse Gas Emissions

The bill will direct the Executive Branch to intensify its efforts to convince other nations to start reducing their greenhouse gas emissions. The bill will provide that if, at dates to be determined by the President but no later than eight years after the enactment of the US program, it is determined that a given major emitting nation has not taken commensurate action, the President will be authorized to require that importers of greenhouse-gas-intensive manufactured products from that nation submit emissions allowances of a value equivalent to that of the allowances that the US system effectively requires of domestic manufacturers.

Title V Periodic Review

The bill will provide for the National Academy of Sciences, at such time after 2012 as is deemed appropriate, and at regular intervals thereafter, to prepare and submit to Congress an evaluation of the extent to which the emissions reductions achieved under the Act will, together with actual steps taken by other nations, stabilize atmospheric greenhouse gas concentrations at a level adequate to forestall catastrophic impacts of climate change.

Title VI Establishing the Legal Framework for the Sequestration of Carbon Dioxide

The bill will amend the Safe Drinking Water Act to require the Administrator to form a Federal Advisory Committee (FAC) not less than 120 days after enactment to develop regulatory options and identify any additional research needed to support the development of regulations for permitting commercial-scale underground injection of carbon dioxide for the purposes of geologic sequestration. The bill will direct the Administrator to promulgate regulations not later than two years after formation of the FAC and report to Congress every five years after promulgation on the effectiveness of the permitting program.

The bill will provide that the regulations must include requirements relating to siting, injectivity, monitoring and verification, maintenance, closure, and post-closure that: encourage storage; reward early action; and provide for the protection of public health, safety, and the environment.

The bill will require the Director of the US Geological Survey to prepare, within one year of enactment, and with an opportunity for public comment, a draft methodology for conducting a national detailed assessment of the nation's geological capacity to store CO_2. The bill will require the Director to complete the assessment of the nation's geologic storage capacity within three years of enactment.

The bill will establish a public-private task force to propose to Congress, within two years of enactment, a legal framework for the Federal assumption of liability with respect to closed geological storage sites.