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Climate Change Legislation in the 108th Congress

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Summary

Climate change and greenhouse gas (GHG) emissions were an issue in the 108th Congress, as they were over the preceding decade. Bills directly addressing climate change issues ranged from those focused primarily on climate change research (H.R. 1578 and S. 1164) to comprehensive emissions cap and trading programs for all six greenhouse gases (S. 139 and H.R. 4067). Additional bills focused on GHG reporting and registries (H.R. 6 (Senate-passed), H.R. 1245, S. 17, and S. 194), or on power plant emissions of carbon dioxide (H.R. 2042, S. 139, S. 366, and S. 843).

These climate change bills differed within and across categories. Among the climate change research bills, there were common and divergent research focuses. For example, a few bills, including S. 139 and S. 1164, would have directed research on historical instances of climate change to develop climate change models. Additional bills focused on research to examine vulnerabilities to climate change in the United States, particularly with respect to human health, environmental, and economic outcomes. Furthermore, some bills would have promoted research on political and technological options to reduce GHG emissions.

Among the six bills with GHG reporting and registry requirements, there were also differences. The primary difference between reporting bills was how each determined which entities must report. H.R. 6 (Senate version), H.R. 1245, H.R. 4067, and S. 139 would have established GHG emission thresholds, usually around 10,000 metric tons of carbon dioxide (or equivalent) per year, above which an entity must submit records of its GHG emissions. However, H.R. 6 and H.R. 1245 excluded farms from the reporting requirement. The remaining bills, S. 17 and S. 194, would have tasked the Administrator of the Environmental Protection Agency (EPA) with establishing the threshold requirement.

There were also similarities and differences between cap and trade bills. Specifically, H.R. 2024, S. 366, and S. 843 would have focused on fossil fuel-fired electric generating facilities, while S. 139 and H.R. 4067 would have covered a broader array of sources. Furthermore, H.R. 2024, S. 366, and S. 843 would have capped one GHG — carbon dioxide — while S. 139 and H.R. 4067 would have capped all six GHGs.

This report briefly discusses basic concepts on which these bills were based, and compares major provisions of the bills in each of the following categories: climate change research, GHG reporting and registries, and cap and trade programs. This report will not be updated.

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Since 1992, when the United States ratified the United Nations' Framework Convention on Climate Change (UNFCCC), a number of voluntary and regulatory actions have been proposed or undertaken in the United States to decrease greenhouse gas emissions. Most of these policies have been established primarily to achieve energy or environmental goals, while also having the effect of reducing GHG emissions.[1]

In the 108th Congress, numerous bills were introduced that directly or indirectly addressed climate change. Most bills focused on energy efficiency, energy conservation, or non-fossil fuels. However, the focus of this report is on bills that directly addressed climate change, not on bills that would have had indirect or ancillary impacts on greenhouse gas emissions. This report describes and compares climate-related bills, which fall into three major categories: (1) those that would have established climate change research programs to further examine the origins and effects of climate change (H.R. 6,[2] H.R. 1578, H.R. 4067, S. 17, S. 139, and S. 1164); (2) those that would have established GHG monitoring systems as a basis for research or for any future reduction program (H.R. 6, H.R. 1245, H.R. 4067, S. 17, S. 139, and S. 194); and (3) those that would have established market-based programs to directly limit emissions of CO_2, the primary greenhouse gas (H.R. 2024, S. 139, H.R. 4067, S. 366, and S. 843). The major provisions of these bills are categorized in **Appendix 1** and summarized in **Appendix 2**. While the body of this report describes what each bill would have done, none of these bills became law in the 108th Congress. If Members wish to enact similar legislation in the 109th Congress (or later), new bills must be introduced.

Climate Change Research Bills

Global climate change is a complex issue. While most scientists agree that the climate is changing in response to greenhouse gas emissions, uncertainties concerning the causes and the effects of climate change remain and are the subject

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[1] Under the United Nations Framework Convention on Climate Change (UNFCCC), greenhouse gases include carbon dioxide (CO_2, the most ubiquitous and primary greenhouse gas), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexaflurane (SF_6). Some other greenhouse gases are controlled under the Montreal Protocol on Substances That Deplete the Ozone Layer.

[2] For the purposes of this report, H.R. 6 always refers to the Senate-passed bill. The conference report on H.R. 6 (H.Rept. 108-375) did not contain provisions on climate change. The conference report was approved by the House on November 18, 2003. On November 21, a cloture motion on the conference report failed in the Senate.

of scientific research.[3] Federally, much of this research is conducted through the U.S. Global Change Research Program.[4]

Research Bills. Two bills in the 108th Congress, S. 1164 (Collins) and H.R. 1578 (M. Udall), focused primarily on climate change research.[5] As shown in **Table 1**, these bills would have established research programs with different focuses. S. 1164 called for the development and testing of climate change models based on historic climatic changes. H.R. 1578 focused on using historic trends to assess the nation's vulnerabilities to climatic change and to assess climate change policy.

While S. 1164 did not have any substantial non-research provisions, H.R. 1578 would also have established an interagency committee to develop vulnerability assessments, facilitate interagency cooperation, and provide representation to international meetings. This committee would have facilitated the establishment of the United States Global Change Research Plan. The plan would have established goals and priorities and would have identified options to achieve those aims.

Research Provisions in Broader Bills. In addition to the research bills H.R. 1578 and S. 1164, four bills (H.R. 6, H.R. 4067, S. 17, and S. 139) included climate change research provisions as part of a broader climate change bill. Specifically, research in H.R. 6 would have focused on climate change mitigation technology, climate change adaptation, and resolving scientific and economic uncertainty. The research provisions in S. 17 focused on a national assessment of climate change impacts and a review of methods to address climate change. Research under S. 139 would have focused on technology transfer barriers, the impact of the Kyoto Protocol on the United States, climate change impacts, and possible methods to reduce GHG emissions. The research provisions of H.R. 4067 were similar to those under S. 139, except that H.R. 4067 did not address technology transfer or the impacts to the Kyoto Protocol, and added a section on agricultural research.

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[3] For more information on the science and policy of Global Climate Change see CRS Issue Brief IB89005, *Global Climate Change.*

[4] One such document is U.S. Global Change Research Program, *Climate Change Impacts on the United States: The Potential Consequences of Climate Variability and Change.* (Washington, DC, 2000). Available at [http://www.usgcrp.gov/usgcrp/Library/nationalassessment/overview.htm], visited August 28, 2003.

[5] The research provisions of H.R. 6 (Senate-passed), S. 17, S. 139, and S. 843 are described in later sections since these bills had other major focuses. This report does not include bills with other focuses that also had research components related to climate change (particularly sequestration, renewable energy, and energy efficiency), including H.R. 238, H.R. 984, H.R. 1213, H.R. 1395, H.R. 1645, H.R. 1777, H.R. 190, and H.R. 2088.

Table 1. Comparison of Climate Change Research Bills

	H.R. 1578 (M. Udall)	H.R. 4067 (Gilchrest)	H.R. 6 (Senate-passed)	S. 17 (Daschle)	S. 139 (Lieberman)	S. 1164 (Collins)
Research Focus	Global Measurements Studies of historic changes Information on economic and demographic trends that affect vulnerability to climate change Interaction of physical, chemical, biological and social processes related to global change Initiatives to determine, and then meet, the information needs of decision-makers. and welfare, and human social and economic systems	Create indicators to understand historic climate change Improve understanding of thresholds and nonlinearities of geophysical systems related to climate change Develop and test climate change models Climate change standards and processes Vulnerability and adaptation to climate change Technology transfer barriers Agricultural effects of climate change and opportunities for carbon sequestration	Modeling and assessment of climate change effects on economic and social systems. Understanding response of human (social and economic) and natural ecosystems to climate change. Understanding the availability, benefits and costs of policy and technology options to mitigate climate change risks. Carbon sequestration GHG emissions from federal facilities	The economic, public health, and environmental impacts of global warming and climate change on the United States. Funding and effectiveness of programs established to reduce greenhouse gas emissions.	Create indicators to understand historic climate change Improve understanding of thresholds and nonlinearities of geophysical systems related to climate change Develop and test climate change models Climate change standards and processes Vulnerability and adaptation to climate change Technology transfer barriers	Create indicators to understand historic climate change Improve understanding of thresholds and nonlinearities of geophysical systems related to climate change Develop and test climate change models

	H.R. 1578 (M. Udall)	H.R. 4067 (Gilchrest)	H.R. 6 (Senate-passed)	S. 17 (Daschle)	S. 139 (Lieberman)	S. 1164 (Collins)
Research Focus	*(Continued)* Effects of global climate change on agriculture, energy production and use, transportation, human health Adoption rates of policy and technology to reduce climate change variability and examine market and policy barriers				*(Continued)* Impact of the Kyoto Protocol on United States: industry, international cooperation on scientific research and development, United States participation in environmental climate change mitigation efforts and technology deployment	
Source of Research	United States Global Change Research Program (interagency)	National Science Foundation, Department of Commerce Department of Agriculture	National Academy of Sciences, Department of Energy (multiple offices), Department of Agriculture, and Office of National Climate Change Policy in the Executive Office of the President	Determined by the Executive Office of the President	National Science Foundation, Department of Commerce	Department of Commerce

	H.R. 1578 (M. Udall)	H.R. 4067 (Gilchrest)	H.R. 6 (Senate-passed)	S. 17 (Daschle)	S. 139 (Lieberman)	S. 1164 (Collins)
Outcomes	Vulnerability Assessment Policy Assessment Annual Report Interagency climate and other global change data management working group	Models of climate change Report on technology transfers income and royalties Report on United States impact of Kyoto Protocol New measurements and standards National Science Foundation research Education program for farmers on global climate change Technical assistance to coastal states on adapting to climate change	Regional vulnerabilities and adaptation assessment Assessment of climate change effects on economic and social systems Annual Reports Change in National Global Change Research Plan Climate change strategy	A national assessment of climate change impacts Annual description of measures the United States has adopted or implemented to reduce climate change	Models of climate change Report on technology transfers income and royalties Report on United States impact of Kyoto Protocol New measurements and standards National Science Foundation research	Models of climate change
Research Funding Authorized	None specified	Yes	Yes	None specified	Yes	Yes

GHG Reporting and Registry Bills

Under the UNFCCC, the United States annually reports on its GHG emissions.[6] The United States Environmental Protection Agency (EPA) does this reporting using various techniques (e.g., fuel analysis for CO_2). The three dominant sources of GHG emissions are electricity generation (33.1%), transportation (26.9%), and industry (19%).[7] At the national level, electric utilities must report their GHG emissions pursuant to the 1990 Clean Air Act, but there is no overall national GHG reporting requirement. However, some states also gather data through voluntary or mandatory GHG emissions reporting mechanisms.[8]

Four bills, Title 10 of H.R. 6 (Senate-passed version),[9] H.R. 1245 (Olver), S. 17 (Daschle), and S. 194 (Corzine) focused primarily on expanding emissions reporting to a broad array of sources. (See **Table 2**.) While S. 17 and S. 194 directed the EPA to determine who must report emissions information, H.R. 6 established a category of covered sources. Furthermore, these bills would have established a national registry to collect annual lists submitted by entities on their GHG emissions and sources, and would have established a national GHG registry to collect voluntarily reported information on GHG emissions reductions. S. 17 and S. 194 would also have required the EPA Administrator and the Secretaries of Commerce, Agriculture, and Energy to develop tools for quantifying, verifying, reporting, and accounting for GHG emissions, and would have required the EPA Administrator to publish an annual national GHG emissions inventory. While these bills established reporting requirements as the basis for future regulations, two other bills (S. 139 and H.R. 4067) would have established a monitoring program as the basis for a GHG cap and trade program. Specifically, these bills would have included a requirement that the Administrator of the EPA establish a national GHG database and develop methods and standards to measure and verify GHG emissions.

In addition to their different GHG reporting strategies, these bills had other major components. For example, S. 17 set a goal for the President to reduce the federal government's net GHG emissions to 1990 levels by 2013. H.R. 6 would have established the Office of National Climate Change Policy to develop a National Climate Change Strategy with the long-term goal of stabilization of greenhouse gas concentrations. S. 17 would also have authorized $2 billion per year in grants to state and local governments to reduce GHG emissions.

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[6] See CRS Report 98-235 ENR, *Global Climate Change: U.S. Greenhouse Gas Emissions — Status, Trends, and Projections.*

[7] U.S. Environmental Protection Agency, *U.S. GHG Emissions and Sinks 1990-2001*, p. ES-6. Additional sources are agriculture (7.6%), commerce (7.2%), and residential activities (5.4%).

[8] See CRS Report RL32043, *Climate Change: State and Local Actions to Address Greenhouse Gas Emissions.*

[9] The Senate-passed version of H.R. 6 was identical to the Senate-passed version of H.R. 4 from the 107th Congress. There were no climate change provisions in the House-passed version of H.R. 6 from the 108th Congress, or in the conference report on H.R. 6 (H.Rept. 108-375).

Table 2. Comparison of GHG Reporting and Registry Bills

	H.R. 6 (Senate Passed)	H.R. 1245 (Olver)	H.R. 4067 (Gilchrest)	S. 17 (Daschle)	S. 139 (Lieberman)	S. 194 (Corzine)
Covered Entity	Entities that emit more than 10,000 metric tons of CO_2 (or equivalent)	Entities that emit more than 10,000 metric tons of CO_2 (or equivalent) Major manufacturers or importers of motor vehicles Manufacturers or importers of DOE-listed products	Entities that: (A) own or control sources of GHG emissions in the electric power, industrial, or commercial sectors of the United States economy, refine or import petroleum products for use in transportation, or produce or import HFCs PFCs, or SF6, and (B) emit more than 10,000 metric tons of GHG/ year (CO_2 or equivalent) or produce or import petroleum products, HFCs, PFCs, SF6, or other greenhouse gases that, when used, will emit over 10,000 metric tons of GHG/year CO_2 (or equivalent)	Entities that exceed thresholds to be set by the Administrator of the EPA	Entities that: (A) own or control sources of GHG emissions in the electric power, industrial, or commercial sectors of the United States economy, refine or import petroleum products for use in transportation, or produce or import HFCs PFCs, or SF6, and (B) emit more than 10,000 metric tons of GHG/ year (CO_2 or equivalent) or produce or import petroleum products, HFCs, PFCs, SF6, or other greenhouse gases that, when used, will emit over 10,000 metric tons of GHG/year CO_2 (or equivalent)	Entities that exceed thresholds to be set by the Administrator of the EPA

	H.R. 6 (Senate Passed)	H.R. 1245 (Olver)	H.R. 4067 (Gilchrest)	S. 17 (Daschle)	S. 139 (Lieberman)	S. 194 (Corzine)
Excluded Entities	Feedlots and Farms	Farms	None indicated	None indicated	None indicated	None indicated
Covered GHGs	The 6 GHGs: CO_2, CH_4, N_2O, HFCs, PFCs, SF_6 Other substances may be added	The 6 GHGs: CO_2, CH_4, N_2O, HFCs, PFCs, SF_6 Other substances may be added	The 6 GHGs: CO_2, CH_4, N_2O, HFCs, PFCs, SF_6	The 6 GHGs: CO_2, CH_4, N_2O, HFCs, PFCs, SF_6	The 6 GHGs: CO_2, CH_4, N_2O, HFCs, PFCs, SF_6	The 6 GHGs: CO_2, CH_4, N_2O, HFCs, PFCs, SF_6
Includes Provisions for Voluntary Reporting	Yes	Yes	Yes	Yes	Yes	Yes

GHG Emission-Reduction Bills

The United States has no federal GHG reduction requirements, though proposals to require such reductions have been made. These proposals have included "command and control" regulations on emissions, GHG emission taxes, and market-based techniques to limit emissions. The last, market-based programs, typically take as their model the Clean Air Act acid rain program.[10]

In the 108th Congress, bills were introduced that would have established market-based GHG reductions (see **Table 3**). One pair of bills, S. 139 and H.R. 4067, would have capped the emissions of the six greenhouse gases specified in the United Nations' Framework Convention on Climate Change.[11] Three other bills, H.R. 2042, S. 366, and S. 843, would have focused on reducing carbon dioxide from electric utilities. Each of these bills would have used market-based trading mechanisms to limit GHG emissions. Cap and trade programs set strict limits on specific emissions from a particular group of sources, allowing individual sources to trade reductions. This flexibility in who makes reductions leads to lower costs. One method is to allocate emissions allowances to each source. Allowances can be bought or sold. In a well-functioning market, entities that face relatively low emission-reduction costs would achieve extra emission reductions. Then these entities would sell their unused allowances to entities that face higher emission-reduction costs. An entity facing higher costs could then purchase allowances to exceed its initial emissions cap.[12]

Carbon Dioxide Reduction Bills. As shown in **Table 3**, H.R. 2042 (Waxman), S. 366[13] (Jeffords), and S. 843 (Carper) focused on electric utility emissions.[14] These bills would have limited emissions of carbon dioxide, along with other air pollutants.[15] (See **Table 3**.) The first round of emissions reductions would have gone into effect in the year 2009. S. 843 would also have included a second phase of emissions reductions beginning in 2012.

Comprehensive GHG Emissions Reductions. Unlike other bills proposed in the 108th Congress, the Climate Stewardship Act (S. 139 and H.R. 4067) focused on achieving market-driven reductions in all six greenhouse gases (see **Table 3**). The legislation applied to entities in the electricity, transportation, industry, and

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[10] The acid rain program caps emissions from each source, but allows sources to exceed their caps if they purchase credits from sources that achieve extra emissions reductions.

[11] The six greenhouse gases are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexaluoride.

[12] For more information on market mechanisms, see CRS Report IB97057, *Global Climate Change: Market-Based Strategies to Reduce Greenhouse Gases.*

[13] S. 366 was similar to S. 566 from the 107th Congress.

[14] S. 485 (Inhofe), the Clear Skies Act of 2003, also established a cap and trade program for nitrogen oxides from utilities. However, S. 485 is not included in **Table 3** because it did not address carbon dioxide, the primary greenhouse gas.

[15] This report does not discuss bills that would have reduced other pollutants without including CO_2. Such bills included H.R. 203, H.R. 999 and S. 485.

commercial sectors that emit over 11,023 tons of greenhouse gases per year. Starting in 2010, the bills would have capped total GHG emissions at 6.5 billion tons (CO_2 equivalent emissions), reduced by the amount of CO_2 (equivalent emissions) from non-covered entities in the year 2000. After 2015, S. 139 would have further restricted emissions to 5.65 billion tons, reduced by the amount of emissions from non-covered entities in 1990. Both bills would also have established a formula for allocating GHG emissions allowances, and would have established a climate change credit corporation to manage allowance trading.

In addition to establishing caps on all six greenhouse gases, the bills would have supported climate change research and established a GHG emissions inventory. The bills also included a requirement that the Administrator of the EPA establish a national GHG database, and develop methods and standards to measure and verify GHG emissions. (See **Table 1** and **Table 2**.)

Table 3. GHG Cap and Trade Bills

	H.R. 4067 (Gilchrest)	S. 139 (Lieberman)	H.R. 2042 (Waxman)	S. 366 (Jeffords)	S. 843 (Carper)
Covered sources	Any electric power, industrial, or commercial entity that emits over 10,000 metric tons of CO_2 equivalent/year; any refiner or importer of petroleum products for transportation use that when combusted will emit over 10,000 metric tons of CO_2 equivalent/year; and, any importer or producer of HFCs, PFCs or SF6 that when used will emit over 10,000 metric tons of CO_2 equivalent/year.	Any electric power, industrial, or commercial entity that emits over 10,000 metric tons of CO_2 equivalent/year; any refiner or importer of petroleum products for transportation use that when combusted will emit over 10,000 metric tons of CO_2 equivalent/year; and, any importer or producer of HFCs, PFCs or SF6 that when used will emit over 10,000 metric tons of CO_2 equivalent/year.	Any fossil fuel-fired electric generating facility that has a capacity of greater than 15 megawatts and generates electricity for sale.	Any fossil fuel-fired electric generating facility that has a capacity of greater than 15 megawatts, generates electricity for sale, and emits a covered pollutant into the air	Any fossil fuel-fired[16] electric generating facility that has a capacity of greater than 25 megawatts and generates electricity for sale.
Covered pollutants	All 6 GHGs	All 6 GHGs	1 GHG: carbon dioxide Other Pollutants: sulfur dioxide, nitrogen oxides, and mercury	1 GHG: carbon dioxide Other Pollutants: sulfur dioxide, nitrogen oxides, and mercury	1 GHG: carbon dioxide Other Pollutants: sulfur dioxide, nitrogen oxides, and mercury

[16] The regulations for mercury are for coal-fired electric generating units rather than fossil fuel-fired. Covered sources are also different for sulfur dioxide.

	H.R. 4067 (Gilchrest)	S. 139 (Lieberman)	H.R. 2042 (Waxman)	S. 366 (Jeffords)	S. 843 (Carper)
Emissions cap	6.49 billion tons of CO_2 equivalent/year from 2009 to 2015 for all covered entities taken together.	6.49 billion tons of CO_2 equivalent/year from 2009 to 2015 for all covered entities taken together. 5.64 billion tons of CO_2 equivalent/year after 2015.	Reduce CO_2 emissions to 1990 levels by 2009	CO_2 emissions to 2.05 billion tons/yr[17] beginning in 2009	Tons of CO_2 emitted from affected units in 2006, beginning in 2009 Tons of CO_2 emitted from affected units in 2001, beginning in 2012
Implementation Strategy	Tradeable allowance system. EPA shall determine allocations based on several economic and equity criteria including efficiency and impact on consumers. Allowances to be allocated upstream to refiners and importers of transportation fuel along with producers of HFCs, PFCs, and SF6; downstream to electric generation, industrial, and commercial entities	Tradeable allowance system. EPA shall determine allocations based on several economic and equity criteria including efficiency and impact on consumers. Allowances to be allocated upstream to refiners and importers of transportation fuel along with producers of HFCs, PFCs, and SF6; downstream to electric generation, industrial, and commercial entities	To be determined by EPA — market mechanisms permitted (except for Hg)	Tradeable allowance system. Allowances allocated to various sectors and interests, including households, dislocated workers and communities, electricity intensive industries, affected utilities, energy efficiency and renewable energy activities, and sequestration activities.	Tradeable allowance system. Allocation formulas based on generating efficiency. Allocations includes a new source reserve to provide allowances to newly constructed sources.

[17] S. 366 would further limit the number of emission allowances in present year by the number of tons emitted two years prior by small electricity generating facilities, and by any number required to protect the public health, welfare, or the environment.

	H.R. 4067 (Gilchrest)	S. 139 (Lieberman)	H.R. 2042 (Waxman)	S. 366 (Jeffords)	S. 843 (Carper)
Percentage change v. business as usual by 2010	-5% [c]	-5% [b,c]	-9.5%	-7.5%	-5.1% [a]
Percentage change v. 1990 levels (UNFCCC baseline year)	+27.7% [c]	+27.7% [b,c]	+21.7	+24.2%	+27.5% [a]
Penalties for non-compliance	Excess emission penalty equal to three times the market price for allowance on the last day of the year at issue	Excess emission penalty equal to three times the market price for allowance on the last day of the year at issue	none specified	Same as CAA, title IV except excess emission penalty is three times the average market price for allowances	Excess emission penalty of $100 per ton plus one-for-one offset from future emissions allocations

[a] Assumes requirement of S. 843 is achieved in 2010, rather than 2013.
[b] Phase 1 only. Phase 2 would involve a 2016 reduction down to 1990 levels by affected sources.
[c] Depending on actual coverage and the implementation strategies employed by affected sources, reductions achieved could be above the 5% estimate presented here. CRS estimates based on 85% coverage and U.S.-only implementation would be about 8.8% in 2010, 22.6% above 1990 levels.

Source: CRS calculations based on projections contained in the UNFCCC Secretariat's *2002 Climate Action Report*. Available at: [http://www.epa.gov/globalwarming/publications/car/index.html]. For more information see CRS Report RL31779.

Appendix 1. Climate Change Bills in the 108th Congress

Bill (s) and Short Title (s)	Climate Change Research	Clarify Research Methods	GHG Reporting and Registry	Set Emissions Goal for U.S.	CO2 & NOx Emission Caps for Utilities	CO2 and NOx Allowance Trading Program	Comprehensive Emissions Caps and Allowance Trading for all GHGs	Other
SENATE BILLS								
S. 17 (Daschle) *Global Climate Security Act of 2003, National GHG emissions Inventory and Registry Act of 2003*	X	X	X	X				X
S. 139 (Lieberman) *Climate Stewardship Act of 2003*	X	X	X				X	X
S. 194 (Corzine) *National GHG Emissions Inventory and Registry Act of 2003*		X	X					X
S. 366 (Jeffords) *Clean Power Act of 2003*					X	X		X
S. 843 (Carper) *Clean Air Planning Act of 2003*					X	X		X
S. 1164 (Collins) *Abrupt Climate Change Research Act of 2003*	X							
H.R. 6 (As passed by the Senate)[a] *Energy Policy Act of 2003*	X	X	X					X
HOUSE BILLS								
H.R. 1245 (Olver) *National GHG Emissions Inventory Act of 2003*			X					X
H.R. 1578 (M. Udall) *Global Change Research and Data Management Act of 2003*	X							X
H.R. 2042 (Waxman) *Clean Smokestacks Act of 2003*					X	X		
H.R. 4067 (Gilchrest) *Climate Stewardship Act of 2004*	X	X	X				X	X

[a] No climate provisions in House-passed H.R. 6, or in the conference report on H.R. 6 (H.Rept. 108-375)

Appendix 2. Key Provisions of Climate Change Legislation in the 108th Congress

Bill No.	Sponsor	Last Major Action	Key Provisions
S. 17	*Daschle*	Referred to Senate Environment and Public Works — January 7, 2003	Establishes a mandatory greenhouse gas database. In addition, it establishes a commission to help implement the UNFCCC. Authorizes $2 billion annually in grants to state and local governments to reduce greenhouse gas emissions. It does not mandate emissions reductions.
S. 139	*Lieberman*	Considered by Senate, referred back to Senate Environment and Public Works — October 30, 2003	Requires any entity that emits more than 10,000 metric tons of greenhouse gases (CO_2 equivalent) to reduce emissions to year 2000 levels by 2010, and 1990 levels by 2016. Allows: tradeable credits for reductions beyond those required, reductions from non-covered entities, increases in carbon sequestration, increases in passenger vehicle fuel economy, and emissions reductions in other countries.
S. 194	*Corzine*	Referred to Senate Environment and Public Works — January 17, 2003	Establishes mandatory greenhouse gas registries, but does not require emission reductions.
S. 366	*Jeffords*	Referred to Senate Environment and Public Works — February 12, 2003	The Clean Power Act of 2003 amends the Clean Air Act to require the Administrator of the Environmental Protection Agency to promulgate regulations to achieve specified reductions in emissions of sulfur dioxide, nitrogen oxides, carbon dioxide and mercury from certain electric generation facilities by January 1, 2009.
S. 843	*Carper*	Referred to the Senate Environment and Public Works — April 9, 2003	Amends the Clean Air Act to establish a national uniform multiple air pollutant regulatory program, including for carbon dioxide, for the electric generating sector.
S. 1164	*Collins*	Referred to the Senate Commerce, Science and Transportation — June 2, 2003	Provides for research to understand, assess, and predict human-induced and natural processes of abrupt climate change.

Bill No.	Sponsor	Last Major Action	Key Provisions
H.R. 6 (Senate-Passed version)	Tauzin	Passed Senate — July 31, 2003; Conference report approved by House — November 18, 2003 Cloture motion on conference report failed in Senate — November 21, 2003 *(Conference report and House-passed version have no climate-related provisions)*	Establishes research programs focusing on vulnerabilities, technology, sequestration, and other topics. Establishes emissions monitoring and reporting mechanisms.
H.R. 1245	*Olver*	Referred to House Energy and Commerce — March 24, 2003	Requires EPA to establish a GHG emissions information system to collect information submitted regarding an entity's GHG emissions. Establishes voluntary registry to collect information on emissions reductions.
H.R. 1578	*M. Udall*	House Science Committee motion to report failed — May 1, 2003	Directs the President to develop a National Global Change Research Plan. Requires plan to set recommendations for research, research priorities, and establish a data management working group to coordinate global GHG research.
H.R. 2042	*Waxman*	Referred to House Energy and Commerce — May 20, 2003	Amends the Clean Air Act to require the EPA to promulgate regulations to achieve specific reductions of carbon dioxide from power plants.
H.R. 4067	*Gilchrest*	Referred to House Science, Energy and Commerce — March 30, 2004	Requires any entity that emits more than 10,000 metric tons of greenhouse gases (CO_2 equivalent) to reduce emissions to year 2000 levels by 2010. Allows: tradeable credits for reductions beyond those required, reductions from non-covered entities, increases in carbon sequestration, and emissions reductions in other countries.