

Economy-wide Cap-and-Trade Proposals in the 110th Congress

Includes Legislation Introduced as of September 2007

Bill	Scope of Coverage	2010-2019 Targets	2020-2029 Targets	2030-2050 Targets	Offsets	Allocation	Other Cost Controls	Early Action	Technology and Misc.
Lieberman-Warner * Discussion principles – 8/2/2007 * Not yet introduced	All 6 GHGs Economy-wide, “hybrid” – upstream for oil refineries; downstream for electric utilities and large sources	2005 level in 2012	10% below 2005 level in 2020	30% below 2005 level in 2030 50% below 2005 level in 2040 70% below 2005 level in 2050	15% limit on use of domestic offsets 15% limit on use of international credits	Increasing auction: 24% from 2012-2034, rising to 52% in 2035 Some sector allocations are specified including: 4% to states, 20% to power plants (transitions to zero in 2035), 20% to industry, 10% to electricity load-serving entities	Borrowing up to 15% per company Creates Carbon Market Efficiency Board to allow for borrowing with payback	8% of allowances for early action in 2012, phasing to zero in 2020	Funds and incentives for technology, adaptation and mitigating effects on poor Target subject to periodic NAS review
Bingaman-Specter S. 1766 – 7/11/2007 Low Carbon Economy Act	All 6 GHGs Economy-wide, “hybrid” – upstream for natural gas & petroleum; downstream for coal	2012 level in 2012	2006 level in 2020	1990 level in 2030 President may set long-term target ≥60% below 2006 level by 2050 contingent upon international effort	Provides certain initial categories including bio sequestration and industrial offsets President may implement use of international offsets subject to 10% limit	Increasing auction: 24% from 2012-2017, rising to 53% in 2030 Some sector allocations are specified including: 9% to states, 53% to industry declining 2%/year starting in 2017 5% set-aside of allowances for agricultural	\$12/ton CO ₂ e “technology accelerator payment” (i.e., safety valve) starting in 2012 and increasing 5%/year above inflation Allows banking	From 2012-2020, 1% of allowances allocated to those registering GHG reductions prior to enactment	Bonus allocation for carbon capture and storage Funds and incentives for technology R&D Target subject to 5-year review of new science and actions by other nations
McCain-Lieberman S.280 – 1/12/2007 Climate Stewardship and Innovation Act	All 6 GHGs Economy-wide, “hybrid” – upstream for transportation sector; downstream for electric utilities & large sources	2004 level in 2012	1990 level in 2020	20% below 1990 level in 2030 60% below 1990 level in 2050	30% limit on use of international credits and domestic reduction or sequestration offsets	Administrator determines allocation/auction split; considering consumer impact, competitiveness, etc.	Borrowing for 5-year periods with interest	Credit for reductions before 2012 Early actors may use offsets to meet 40% of reductions	Funds and incentives for tech R&D, efficiency adaptation, mitigating effects on poor
Sanders-Boxer S.309 – 1/16/2007 Global Warming Pollution Reduction Act	All 6 GHGs Economy-wide, point of regulation not specified	2010 level in 2010 2%/year reduction from 2010-2020	1990 level in 2020	27% below 1990 level in 2030. 53% below 1990 level in 2040 80% below 1990 level in 2050	Includes provision for offsets generated from biological sequestration	Cap and trade permitted but not required. Allocation criteria include transition assistance and consumer impacts	“Technology-indexed stop price” freezes cap if prices high relative to tech options	Program may recognize early reductions made under state or local laws	Standards for vehicles, power plants, efficiency, renewables, certain categories of bio sequestration
Kerry-Snowe S.485 – 2/1/2007 Global Warming Reduction Act	All 6 GHGs Economy-wide, point of regulation not specified	2010 level in 2010	1990 level in 2020 2.5%/year reduction from 2020-2029	3.5%/year reduction from 2030-2050. 62% below 1990 level in 2050	Includes provision for offsets generated from biological sequestration	Determined by the President; requires unspecified amount of allowances to be auctioned	Not specified	Goal to “recognize and reward early reductions”	Funds for tech. R&D, consumer impacts, adaptation Standards for vehicles, efficiency, renewables, certain categories of bio sequestration

Economy-wide Cap-and-Trade Proposals in the 110th Congress

Includes Legislation Introduced as of September 2007

Bill	Scope of Coverage	2010-2019 Targets	2020-2029 Targets	2030-2050 Targets	Offsets	Allocation	Other Cost Controls	Early Action	Technology and Misc.
Olver-Gilchrest H.R. 620 – 1/22/2007 Climate Stewardship Act	All 6 GHGs Economy-wide, "hybrid" – upstream for transportation sector; downstream for electric utilities & large sources	2004 level in 2012	1990 level in 2020	22% below 1990 level in 2030 70% below 1990 level in 2050	15% limit on use of international credits and domestic reduction or sequestration offsets	Administrator determines allocation/auction split; considering consumer impact, competitiveness, etc.	Borrowing for 5-year periods with interest	Credit for reductions before 2012 Early actors may use offsets to meet 35% of reductions	Funds and incentives for tech R&D, efficiency adaptation, mitigating effects on poor
Waxman H.R.1590 – 3/20/2007 Safe Climate Act of 2007	All 6 GHGs Economy-wide, point of regulation not specified	2009 level in 2010 2%/year reduction from 2011-2020	1990 levels in 2020 5%/year reduction from 2020-2029	5%/year reduction from 2030-2050 80% below 1990 levels in 2050	Not specified	Determined by the President; requires unspecified amount of allowances to be auctioned	Not specified	Goal to "recognize and reward early reductions"	Standards for vehicles, efficiency, renewables

Comparison of Emissions Targets

This chart provides a rough comparison of the reduction targets for U.S. emissions contained in each legislative proposal. The percentage of emissions to be covered under a cap-and-trade program varies across the bills, as does the specificity regarding which entities and sectors are covered.

(1) Lieberman-Warner draft principles include an overall goal of reducing total U.S. emissions; these targets (e.g., 30% below 2005 levels by 2030) are reflected in the chart. The cap currently addresses about 80% of U.S. emissions (transportation, electric power, and industrial sectors); therefore, emissions from uncovered sectors may continue to grow.

(2) Bingaman-Specter includes a cap on about 88% of U.S. emissions and assumes multiple low-carbon policies, including:

- Car & light truck fuel economy of 41 mpg by 2027
- Federal RPS of 15% by 2020
- Optimistic assumptions about new technologies coming online

Under these policies, the safety valve is not triggered. Without these policies the safety valve is expected to be reached in the early years and the target will be exceeded. The chart reflects these optimistic assumptions. In addition, the overall emissions targets (e.g., 1990 levels in 2030) are applied to total U.S. emissions; however, emissions from uncovered sectors may continue to grow.

(3) McCain-Lieberman includes a cap on about 87% of U.S. emissions (transportation, electric power, industrial, and commercial sectors). The chart assumes these targets (e.g., 20% below 1990 levels by 2030) apply to total U.S. emissions; however, emissions from uncovered sectors may continue to grow.

(4) Both Sanders-Boxer and Waxman include targets for total U.S. emissions, however, the percentage of emissions or sectors to be covered by the cap are not specified in the bill. The chart reflects these overall targets.

(5) Kerry-Snowe includes targets for total U.S. emissions, however, the percentage of emissions or sectors to be covered by the cap are not specified in the bill. The chart reflects these overall targets.

(6) Olver-Gilchrest includes a cap on about 87% of total U.S. emissions (transportation, electric power, industrial, and commercial sectors). The chart assumes these targets (e.g., 22% below 1990 levels by 2030) apply to total U.S. emissions; however, emissions from uncovered sectors may continue to grow.

