

Senate Greenhouse Gas Cap-And-Trade Proposals

Includes Legislation Introduced in the 110th Congress as of August 2, 2007

Bill	Scope of Coverage	2010-2019 Cap	2020-2029 Cap	2030-2050 Cap	Offsets	Allocation	Other Cost Controls	Early Action	Technology and Misc.
ECONOMY-WIDE (MULTI-SECTOR) LEGISLATION									
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 levels in 2020	30% below 2005 levels by 2030 50% below 2005 levels by 2040 70% below 2005 levels by 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 levels by 2020	1990 levels by 2030 President may set long-term target ≥60% below 2006 levels 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	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	Not specified	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

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ELECTRICITY SECTOR LEGISLATION									
Feinstein-Carper S.317 – 1/17/2007 Electric Utility Cap and Trade Act	All 6 GHGs Electricity sector, downstream	2006 level in 2011 2001 level in 2015, 1%/year reduction from 2016-2019	1.5%/year reduction starting in 2020 (may be adjusted by Administrator)	1.5%/year reduction starting in 2020 (may be adjusted by Administrator)	Certain categories of bio sequestration and industrial offsets; 5% limit on forest mgmt; 25% limit on intl.	Increasing auction: 15% in 2011; 60% in 2026; 100% in 2036 Output-based allocation to generators	If economic harm, potential for borrowing and/or increased international offsets. Borrowing of offsets	Credit for reductions from 2000-2010, limit 10% of cap	Funds for tech R&D, habitat protection, and adaptation Bills expected on industry, efficiency, fuels, and vehicles
Alexander-Lieberman S.1168 – 4/19/2007 Clean Air Climate Change Act of 2007	4 pollutants – SO ₂ , NO _x , mercury, and CO ₂ Electricity sector	2300 MMT CO ₂ (approx. 2006 level) from 2011-2014 2100 MMT CO ₂ (approx. 1997 level) from 2015-2019	1800 MMT CO ₂ (approx. 1990 level) from 2020-2024 1500 MMT CO ₂ (approx. 17% below 1990 level) from 2025 forward	1500 MMT CO ₂ (approx. 17% below 1990 level) indefinitely	System of offsets considering RGGI model rules	75% historical allocation; 25% auction Input-based “benchmark” allocation to generators.	Auction revenue can offset costs of electricity increases to consumers and affected industries	Bonus allowances to first 30 new or modified coal-fired utilities meeting new performance standards	Standards for new power plants
Carper S. 1177 – 4/20/2007 Clean Air Planning Act of 2007	4 pollutants – SO ₂ , NO _x , mercury, and CO ₂ Electricity Sector	2006 CO ₂ level in 2012-2014 2001 CO ₂ level in 2015 1%/year reduction CO ₂ level from 2016-2019	1.5%/year reduction CO ₂ levels starting in 2020	1.5%/year reduction CO ₂ levels starting in 2020 (may be adjusted by Administrator to 3% in 2030 & beyond) 25% below 1990 CO ₂ level in 2050	Agricultural sequestration allowances	Increasing auction: 18% in 2012; 60% in 2026; 100% in 2036 and beyond Output-based allocation to generators transitioning to 100% auction	Purchase offsets from other sectors of economy; transition assistance to affected workers and communities	From 2012-2025, 3% set-aside of allowances for clean coal Credit for reductions from 2000-2012	Funds and incentives for CCS technology R&D; efficiency adaptation; mitigating effects on communities and wildlife
Sanders S. 1201 – 4/24/2007 Clean Power Act of 2007 <i>* If Congress has not passed, and the President has not signed, legislation to address 85% of GHG emissions economy-wide by 2012, further 3%/year reduction in CO₂ limits until global GHG emissions reach 450ppm.</i>	4 pollutants – SO ₂ , NO _x , mercury, and CO ₂ Electricity sector	2300 MMT CO ₂ (approx. 2006 level) by 2011 2100 MMT CO ₂ (approx. 1997 level) by 2015*	1803 MMT CO ₂ (approx. 1990 level) by 2020* 1500 MMT CO ₂ (approx. 17% below 1990 level) by 2025*	<i>Goal is to facilitate the worldwide stabilization of atmospheric concentrations of global warming pollutants at 450ppm CO₂e by 2050*</i>	Includes provision for offsets generated from biological sequestration	Administrator determines; considers consumer and corporate impact, Increasing auction: 50% in 2020; rising annually to 100% by 2035	Consideration of costs and competitiveness concerns in allocation	Credit for low-carbon generation	Standards for power plants, efficiency, renewables, certain categories of bio sequestration Funds for tech R&D, specifically geologic carbon sequestration