

Summary of Notable Market-Based Climate Change Bills Introduced in the 111th Congress

Draft as of May 12, 2010

	Regulation Summary	Allowance Allocation	Cost Containment	Offsets	Technology	Competitiveness
Larson (H.R. 1337)	Economywide tax: fossil fuels taxed by CO ₂ content at production and import points. (About 80% of US GHG emissions.) 80% emissions reductions by 2050.	1/6 of revenues to R&D, 1/12 to industry transition assistance (with phase out), remainder to payroll tax rebates.	\$15/ ton CO ₂ , rising \$10 plus inflation annually. Non-attainment years increase by \$15/ton.	Tax refunds for domestic offsets, sequestrations and HFC destruction projects.	1/6 of tax revenues (up to \$10B annually) for clean energy technology R&D.	Tax applied to fossil fuel imports and fossil fuel exports are exempt with border adjustments.
Waxman-Markey (H.R. 2454)	Economywide cap: electricity and industrial facilities at emitters; producers and importers of fossil fuels and F-gases; NG distributors (Over 85% of U.S. GHG emissions covered. Entities that emit less than 25,000 tons CO ₂ e annually are exempt. HFC and black carbon regulated separately. Coverage phase-in for industry (2014) and NG distrib (2016). Economywide reductions from 2005 levels: 3% by 2012, 20% by 2020, 42% by 2030, 83% by 2050. Covered sources reductions same except 17% by 2020.	In 2012, 85% of allocations will be given away, including 30% to LDCs, 5% to merchant coal generators, 15% to trade-intensive industries, 15% to protect low income households, 11.5% to states, 9% to NG distributors, 3% to car companies, 2% to oil refineries, 5% for REDD practices, 4% for domestic and international adaptation. Most allocations phase out by 2030.	Offsets are primary containment mechanism (see offsets section). Reserve auction of 1% of total cap in 2012, rising to 3% by 2050. Reserve price \$28 (in 2009\$) in 2012; by 2015 price will be 60% above rolling 36-month ave. daily reserve price. Borrowing: up to 15% borrowing, 5-yr limit, no interest for next yr, then 8% ann. interest.	1 offset credit = 1 allowance until 2018, then 1.25 international offset = 1 allowance. Total offsets cannot exceed 2 billion tons, 50% domestic and 50% int'l, though int'l can increase up to 1.5 billion if domestic ceiling is not reached. Offset Integrity Advisory Board will monitor program integrity. USDA has oversight of domestic forestry and agriculture offsets.	Up to 15% renewable electricity standard and 5% improved energy efficiency standard by 2020 ; electric vehicle deployment and infrastructure development; incorporate Smart Grid tech into Energy Star and appliance rebate programs; energy efficiency through state building code, appliance, utilities and industry programs.	Rebates (in form of 15% free allocations) for energy or trade-intensive industries, determined by direct compliance effects and product of emission intensity and electricity efficiency factors. International Reserve allowances to be issued for eligible industries starting in 2020.
Kerry-Boxer (S.1733)	Economywide cap: electricity and industrial facilities at emitters; producers and importers of fossil fuels and F-gases; NG distributors (Over 85% of U.S. GHG emissions covered). Entities that emit less than 25,000 tons CO ₂ e annually are exempt. HFC and black carbon regulated separately. Coverage phase-in for industry (2014) and NG distrib (2016). Economywide reductions from 2005 levels: 3% by 2012, 20% by 2020, 42% by 2030, 83% by 2050. Covered sources reductions from 2005 levels are the same.	Initial reservation of 15.75% for uses including deficit reduction, and strategic reserve fund. Free allocations of 30% to LDCs, 5% to merchant coal and long-term contact generators, 15% to trade-intensive industries, 9% to NG distributors, 2.25% to oil refineries, 13.42% to states for energy efficiency and heating oil. Auctions of 15% to protect low income households, 5% for REDD practices. Many allocations phase out by 2030.	Offsets are primary containment mechanism (see offsets section). Reserve supplied with combo of part of cap and annual unsold allowances, limited to 15% of cap until 2017, 25% after 2017. Reserve price \$28 (in 2005\$) in 2012; increases by 5% plus inflation until 2017, then 7% plus inflation. Unlimited banking. Up to 15% borrowing, 5-yr limit with 8% ann. interest.	1 offset credit = 1 allowance until 2018, then 1.25 international offset = 1 allowance. Total offsets cannot exceed 2 billion tons, 75% domestic and 25% int'l, though int'l can increase up to 1.25 billion if domestic ceiling is not reached. Duration limits between 5 and 20 years. Office of Offsets Integrity in DOJ will ensure civil enforcement of program.	Establishes national strategy and early deployment program for CCS; removes some barriers to nuclear development; grants for advanced biofuels and states with RPS; efficiency standards for transportation; labeling for water efficiency and carbon footprint; energy efficiency through national building codes and retrofits done by states.	Rebates for energy or trade-intensive industries, determined by direct compliance effects and product of emission intensity and electricity efficiency factors until 2035. Will contain border measures, though no specific stipulations currently.
Cantwell-Collins (S.2877)	Economywide cap: regulates entry point (first seller) of fossil-based carbon into economy, as determined by Treasury (approx. 82% of US GHG emissions covered). 100% of emissions generated in 2012 through 2014, reduced by 0.25% in 2015 and an additional 0.25% annually thereafter. Economywide reductions from 2005 levels: 20% by 2020, 30% by 2025, 42% by 2030, 83% by 2050. Prohibition of carbon market derivative sales by regulated parties.	Monthly auctions of allowances (called carbon shares) to first sellers only. Per capita distribution of 75% of auction proceeds to US citizens. 25% of proceeds and all compliance fees and safety valve auction proceeds placed in Clean Energy Reinvestment Trust (CERT) Fund. Reimbursement for sequestered or embedded carbon and some voluntary carbon market credits.	Price collar set with a floor of \$7 and a ceiling of \$21 in 2012. Ceiling increases at rate of interest and rate of capital investment minus 0.5%. Floor increases at rate of interest and rate of capital investment plus 0.5%. Safety valve proceeds used for non-CO ₂ reductions and international offsets. Firms cannot purchase shares that 'significantly exceed' emission volume. Permits good for 10 yrs.	No market-based offsets. CERT funds, including safety valve auction proceeds can be used to curtail non-CO ₂ emissions and international forestry and agriculture project that reduce/sequester CO ₂ . Per ton carbon share reimbursement for CCS, embedded (in products), or reinjected (oil and gas) carbon.	CERT funds can be used for R&D, energy deployment, efficiency, increased productivity, weatherization, and climate mitigation/adaptation projects. Qualified individuals can borrow against future auction receipts to invest in approved energy technologies.	CERT Funds can be used to for targeted trade-exposed industries based on output and cost per unit and for worker training programs. Production process carbon adjustment (border tax) imposed on imports starting in 2013.

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	Who's Regulated	Allowance Allocation	Cost Containment	Offsets	Technology	Competitiveness
Carper-Alexander (S.2995)	Electricity sector cap: Amends Clean Air Act to continue trading programs for SO ₂ and NO _x and limitations on mercury emissions. For SO ₂ , 3.5 mil tons in 2012-2014, 2 mil tons in 2015-2017, 1.5 mil tons after 2018. For NO _x , two markets: Zone 1 (eastern half of US) allowed 1.39 mil tons in 2012-2014, 1.3 mil tons after 2015; Zone 2 (western half) allowed 510 k tons in 2012-2014, 320 k tons after 2015. Mercury to be cut by 90% starting in 2012.	Distribution and allowance pools to be determined by EPA. For SO ₂ , allocations split into two pools (units that received Phase II allocations and units that did not). Amounts auctioned in 2011 shall be available in 2012-2017, then decreasing 10% annually. For NO _x , no auction in 2011-2013. In 2014, amount auctioned is same as SO ₂ market and increasing 10% annually. No allocations for mercury.	For SO ₂ , banked allowances issued before 2010 are equal to 1 ton, 2010 and 2011 allowances equal to ½ ton. For NO _x , any Zone 1 banked allowances issued before 2012 equal 1 ton. Any allowances issued for 2012 and beyond have no value. No mercury credits are bankable.	No applicable provisions.	If EPA doesn't set mercury standards to achieve 90% reductions by 2012, then by 2015 limits must be met through maximum available control technology on case-by-case basis.	No applicable provisions.
Kerry-Graham-Lieberman (draft text)	Economywide cap: electricity and industrial facilities at emitters; producers and importers of fossil fuels and F-gases; NG distributors (Over 85% of U.S. GHG emissions covered). Entities that emit less than 25,000 tons CO ₂ e annually are exempt. HFC and black carbon regulated separately. Coverage phase-in for natural gas (2015) industry (2016). Economywide reductions from 2005 levels: 4.75% by 2013, 20% by 2020, 42% by 2030, 83% by 2050. Only regulated entities can participate in auctions and primary cash markets.	Quarterly auctions starting in 2013 at \$12 (in 2009\$). In 2016, 35% to LDCs, 9% to NG LDCs, 15% to trade-sensitive industries, 9.2% to transportation efficiency, 3.75% to refiners, 1.5% to strategic reserve. In 2035 and after, 77.8% to Universal Trust Fund for rebates to eligible taxpayers. Volume of allowances equal to emissions footprint from refined products set aside to be sold at most recent clearing auction price. Many allocations phased out by 2030.	Price collar set with floor price at \$12 (increasing at 3% annually above interest) and ceiling price at \$25 (increasing at 5% annually above interest). Strategic reserve capped at 4 billion allowances, filled with allocations and offset credits. Firms can purchase up to 15% of their emissions portfolio from reserve. Unlimited banking. Unlimited borrowing from one year in future. Up to 15% borrowing from 1-5 yrs in future with 8% interest.	1 offset credit = 1 allowance until 2018, then 1.25 international offset = 1 allowance. Total offsets cannot exceed 2 billion tons. 75% domestic and 25% int'l, though int'l can increase to 1 billion (50%) if domestic ceiling is not reached. USDA has oversight of domestic forestry and agriculture offsets. Separate integrity advisory committees for domestic and international offsets.	Incentives for new nuclear facilities and R&D on small generators and waste reprocessing. \$2 billion for CCS research and incentives for commercial deployment for 72 GW. Establishes Clean Energy Technology Fund, loans for consumer efficiency efforts, and provides allowances for state efficiency and renewable programs. Pilot projects for regional plug-in vehicles	Delayed entry under cap in 2016 Rebates (in form of 15% free allocations) for energy or trade-intensive industries, determined by direct compliance effects and product of emission intensity and electricity efficiency factors until 2030. Expands clean energy manufacturing tax credit by \$5 billion. Phases in border adjustment sometime after 2020.