

Comparison of Major Climate and Energy Proposals in the 111th Congress

In June 2009, the U.S. House of Representatives passed a comprehensive climate and energy bill, the American Clean Energy and Security Act (H.R. 2454). The U.S. Senate has been considering a number of related proposals, ranging from “energy only” bills, such as the American Clean Energy Leadership Act (S.1462) to proposals that place an economy-wide cap on greenhouse gas emissions, such as the American Power Act. This memo seeks to compare the major provisions included in the full range of legislative proposals.

American Clean Energy Leadership Act (ACELA)

Sponsored by Senator Jeff Bingaman (D-NM), ACELA (S. 1462) was passed out of the Senate Energy and Natural Resources Committee on June 17, 2009, with a bipartisan vote of 15 to 8, and was amended by the Committee with unanimous consent on May 6, 2010. This energy bill includes provisions on increased energy production, energy efficiency, renewable energy standards, technology research and development, energy market stabilization, and transmission network improvements.

Carbon Limits and Energy for America’s Renewal (CLEAR) Act

Introduced by Senators Maria Cantwell (D-WA) and Susan Collins (R-ME) on December 1, 2009, the CLEAR Act (S.2877) is intended to provide a transparent and equitable approach to energy independence and climate change mitigation. The bill couples a cap on carbon dioxide (CO₂) emissions from fossil fuel producers and importers (i.e., a cap on upstream entities), auctions off all CO₂ allowances, and provides a dividend back to individuals and funding for clean energy technology.

American Power Act (APA)

Senators John Kerry (D-MA) and Joe Lieberman (I-CT) released the discussion draft of their comprehensive climate and energy bill on May 12, 2010. The bill contains a comprehensive, sector-based approach to enhancing energy security, spurring the development and deployment of clean energy technologies, and reducing greenhouse gas (GHG) emissions. It includes a cap on GHG emissions, a mix of approaches to allowance distribution that varies by sector and over time (with initial allocations to consumers through local distribution companies), provisions on domestic clean energy development, consumer protection, job protection and growth, international climate change activities, and community protection from global warming impacts.

Practical Energy and Climate Plan Act (PECPA)

Senators Richard Lugar (R-IN), Lindsay Graham (R-SC), and Lisa Murkowski (R-AK) introduced PECPA (S. 3464) on June 9, 2010 in order to make meaningful progress on energy-driven national security, economic, and environmental concerns. Unlike other major energy-climate bills this Congress, the PECPA seeks to reduce GHG emissions by reducing oil imports, improving and creating new efficiency standards, and establishing a clean energy standard. It does not include a cap on greenhouse gases or a price on carbon.

American Clean Energy and Security (ACES) Act

Representatives Henry Waxman and Edward Markey introduced the ACES Act (H.R. 2454) in March 2009, and it was passed by the U.S. House of Representatives by a vote of 219-212 on June 26, 2009. This comprehensive national climate and energy legislation includes an economy-wide, greenhouse gas (GHG) cap-and-trade system and complementary measures, such as energy efficiency standards and carbon capture and storage and electric vehicle incentives, to help address climate change and build a clean energy economy.



Mandatory Greenhouse Gas Reduction Program

The CLEAR Act, APA, and the ACES Act all include programs to cap GHG emissions with economy-wide goals of reductions of 20% by 2020, 42% in 2030, and 83% by 2050 (relative to 2005 levels). The program included in the CLEAR Act only covers carbon dioxide emissions, whereas the cap on emissions in the APA and ACES Act covers approximately 85% of the emissions of seven greenhouse gases. All three proposals would use the majority of the allowance value or auction revenue generated to offset increases in energy costs. In contrast, ACELA and PEPCA include specific measures that will result in reductions in GHG emissions but do not include caps on emissions within specific sectors or economy-wide.

Energy Efficiency Provisions

The energy efficiency provisions in the ACES Act, ACELA, and PEPCA all include similar provisions upgrading building codes and building retrofits. They contain a range of provisions calling for appliance standards and energy efficiency in federally-owned buildings. The CLEAR Act would provide support for energy efficiency projects, such as improving the efficiency of low-income and public buildings, as well as an energy efficiency consumer loan program. The APA, except for establishing a rural energy savings program and a National Industrial Innovation Institute with a focus on energy efficiency, does not include detailed energy efficiency provisions but was drafted to possibly be combined with the energy-only provisions in the ACELA.

Renewable Energy Generation

The ACELA and the ACES Act both include a renewable energy standard. ACELA requires utilities to obtain 3% of their supplies from renewable energy sources or energy efficiency in 2011, ratcheting up to 15% by 2021. The ACES Act requires electric utilities to generate 6% of their electricity from renewable energy resources beginning in 2012, increasing to 20% in 2020. The CLEAR Act and the APA do not include renewable energy standards; however, both include financial incentives for renewable energy projects. The PEPCA does not include renewable energy provisions but does include a Diversified Energy Standard which expands upon the range of energy sources included in a renewable energy standard.

Coal and Carbon Capture and Storage

All of the proposals covered in this summary, with the exception of PEPCA, include measures to support the development of carbon capture and storage (CCS) technologies for continued coal use. Both the APA and the ACES Act include a national strategy for CCS deployment as well as financial assistance and incentives to develop and deploy CCS technology.

Oil and Gas

ACELA includes provisions to expand offshore oil and gas drilling and the APA includes a provision to set up offshore oil revenue sharing with coastal states. All of the proposals covered here include provisions to reduce oil use. These provisions range from future fuel efficiency standards to support for expanded use of alternative fuels and electrification.

Nuclear Energy

The APA includes a number of incentives for nuclear energy, including loan guarantees, expanded tax credits, expedited nuclear licensing, and research on options for dealing with nuclear waste. ACELA and PEPCA both address nuclear loan guarantees and ACELA would increase research on spent fuel recycling.

Transportation

Three of the proposals included in this summary—ACELA, APA, and ACES—would provide financial incentives to support the deployment of electric vehicles. PEPCA would increase fuel efficiency standards for light-duty vehicles 4 percent per year from 2017 to 2030 and would expand production incentives for renewable fuels. APA and ACES also provide funding for GHG reductions through transportation initiatives such as smart growth.

Bill Provisions	ACELA (S.1462)	CLEAR (S.2877)	APA (Draft)	PECPA (S.3464)	ACES (H.R.2454)
Mandatory GHG Reduction Program		✓	✓		✓
Economy-wide Emission Targets		✓	✓		✓
Economy-wide Cap-and-Trade Program			✓		✓
Cost Containment Mechanism		✓	✓		✓
Allowance Value to Protect Consumers		✓	✓		✓
Offsets Used for Compliance			✓		✓
Limitation on State GHG Cap and Trade Programs			✓		✓
Energy Efficiency (1)	✓	✓	✓	✓	✓
Building Codes	✓			✓	✓
Building Retrofits	✓	✓		✓	✓
Appliance Standards	✓			✓	✓
Federal Energy Efficiency	✓			✓	
Smart Grid Advancement					✓
Rural Energy Savings			✓	✓	
Industrial Energy Efficiency Revolving Loan Program				✓	
Zero Net Energy Buildings	✓				
Renewable Energy Generation	✓	✓	✓		✓
Renewable Energy Standard	✓			✓*	✓
Financial Incentives for Renewable Energy Projects		✓	✓		✓
Coal and Carbon Capture and Storage	✓	✓	✓		✓
National Strategy for CCS Deployment			✓		✓
Financial Assistance for CCS Demonstration Projects	✓		✓		✓
Incentives for Commercial Deployment of CCS		✓	✓		✓
Performance Standards for New Coal Plants			✓		✓
Oil and Gas	✓	✓	✓		✓
Expanded Offshore Oil and Gas Drilling	✓				
State Revenue Sharing for Offshore Drilling			✓		
Measures to Moderate Oil and Gas Costs to Consumers	✓	✓	✓		✓
Nuclear Energy	✓		✓	✓	
Nuclear Loan Guarantees	✓		✓	✓	
Expanded Tax Credits for Nuclear Power			✓		
Expedited Nuclear Licensing			✓		
Nuclear Waste and Spent Fuel Recycling	✓		✓		
Transportation Sector (2)	✓		✓	✓	✓
Financial Incentives for Electric Vehicle Manufacturers	✓		✓		✓
Increase in Fuel Efficiency Standards				✓	
Production Incentives for Renewable Fuels				✓	
Notes:					
(1) For a detailed comparison of efficiency provisions see: http://www.pewclimate.org/docUploads/EE_provisions_energy_climate%20legislation.pdf					
(2) For a detailed comparison of plug-in electric vehicle provisions see: http://www.pewclimate.org/docUploads/PEV_provisions_climate_energy_111th_legislation.pdf					
* PECPA includes a Diversified Energy Standard which expands upon the range of energy sources included in a renewable energy standard.					

Additional Resources

For additional information on each of these legislative proposals, please see the following Pew Center resources.

Comparisons of Legislative Proposals

- For an overview of energy efficiency provisions in energy and climate legislation in the 111th Congress see: http://www.pewclimate.org/docUploads/EE_provisions_energy_climate%20legislation.pdf
- For an overview of Plug-In Electric Vehicles in Climate-Energy Legislation for the 111th Congress see: http://www.pewclimate.org/docUploads/PEV_provisions_climate_energy_111th_legislation.pdf
- For a detailed comparison of the APA and the ACES Act see http://www.pewclimate.org/docUploads/pew-comparison-matrix-wm-and-kl_0.pdf

American Clean Energy Leadership Act (ACELA)

- For a short summary see <http://www.pewclimate.org/federal/congress/111/acela-summary-and-aces-act-comparison>
- For a detailed summary see <http://www.pewclimate.org/docUploads/detailed-summary-acela.pdf>

Carbon Limits and Energy for America's Renewal (CLEAR) Act

- For a short summary see <http://www.pewclimate.org/docUploads/summary-clear-act.pdf>

American Power Act (APA)

- For a short summary see <http://www.pewclimate.org/docUploads/Kerry-Lieberman-short-summary.pdf>
- For a detailed summary see <http://www.pewclimate.org/federal/analysis/congress/111/pew-center-summary-american-power-act-2010-kerry-lieberman>
- For additional information on the distribution of allowance value see <http://www.pewclimate.org/federal/congress/111/kerry-lieberman-american-power-act>

Practical Energy and Climate Plan Act (PECPA)

- For a short summary see <http://www.pewclimate.org/docUploads/Kerry-Lieberman-short-summary.pdf>

American Clean Energy and Security (ACES) Act

- For a short summary see <http://www.pewclimate.org/docUploads/Waxman-Markey-short-summary-revised-june26.pdf>
- For a detailed summary of this bill see http://www.pewclimate.org/docUploads/Waxman-Markey%20summary_FINAL_7.31.pdf
- For additional information on the distribution of allowance value see <http://www.pewclimate.org/federal/congress/111/acesa>