

Energy Market and Economic Impacts of S. 2191, the Lieberman-Warner Climate Security Act of 2007

Table ES1. Analysis Cases⁵

Case Name	Assumptions
Non-Policy Case	
Reference	<ul style="list-style-type: none"> • <i>AEO2008</i> Reference Case, which includes the provisions H.R. 6, the Energy Independence and Security Act of 2007, and assumes a continuance of other current laws and regulation • Non-CO₂ emissions growth based on Environmental Protection Agency “with measures” and “voluntary technology adoption” cases
Policy Cases	
S. 2191 Core	Primary S. 2191 policy case. Key assumptions include: <ul style="list-style-type: none"> • <i>AEO2008</i> Reference Case assumptions • Cap-and-trade policy from Title I capping the emissions of Group I GHGs (CO₂, methane, nitrous oxide, sulfur hexafluoride, and perfluorocarbons) and Group II gases (hydrofluorocarbons) emitted from HCFC production). • Key low-emissions technologies, including nuclear and coal with carbon capture and sequestration (CCS), are developed and deployed in a timeframe consistent with the emissions reduction requirements without encountering any major obstacles, even with rapidly growing use on a very large scale. • Bonus credit incentives for CCS • Nonenergy GHG abatement supply, as a function of allowance costs, derived from information provided by the Environmental Protection Agency • The Title X cap-and-trade program for other Group II GHGs (hydrofluorocarbons) is not represented.
No International Offsets	S. 2191 Core Case with the compliance option from international offsets assumed to be unavailable
S. 2191 High Cost	S. 2191 Core Case with assumed higher costs for key electricity generating technologies: <ul style="list-style-type: none"> • CCS, nuclear and biomass plant costs 50 percent higher than in S. 2191 Core Case
S. 2191 Limited Alternatives	S. 2191 Core Case with assumed limits on several carbon reduction technologies for electric power generation and limits on LNG imports: <ul style="list-style-type: none"> • CCS not available by 2030 • Nuclear and biomass power plant additions limited to <i>AEO2008</i> Reference Case level • LNG imports limited to <i>AEO2008</i> Reference Case level
S. 2191 Limited Alternatives / No International	Combines the assumptions in the Limited Alternatives and No International Offsets Cases.
S. 1766 Update	Updated evaluation of S. 1766, the Low Carbon Economy Act of 2007, recently evaluated by EIA under <i>AEO2007</i> Reference Case assumptions. Key assumptions include: <ul style="list-style-type: none"> • <i>AEO2008</i> Reference Case assumptions • S. 1766 cap and trade policy • S. 1766 bonus credit incentives for CCS • S. 1766 technology accelerator payment (TAP) price, which establishes a limit on the allowance price, growing at 5 percent per year in real dollars • Nonenergy GHG abatement supply, as a function of allowance costs, derived from information provided by the Environmental Protection Agency

⁵ All of the cases examined in this analysis incorporate the passage of the Energy Independence and Security Act of 2007, which was enacted on December 19, 2007.