

Energy Market and Economic Impacts of S.1766, the Low Carbon Economy Act of 2007

Table 1: Analysis Cases

Case Name	Description and Assumptions
Non-Policy Cases	
Reference	<ul style="list-style-type: none"> Updated <i>AEO2007</i> Reference case, which assumes a continuance of current laws and regulation Non-CO₂ emissions growth based on EPA “no measures” and “no voluntary technology adoption” cases
High Technology	Updated <i>AEO2007</i> Integrated High Technology case (without S. 1766): <ul style="list-style-type: none"> Includes more optimistic characteristics for energy technology, including a combination of earlier availability of advanced technologies, lower costs, and better performance. Assumptions apply to the residential, commercial, industrial, transportation, and electric power sectors
Main Policy Cases	
S. 1766 Core	Primary Policy case. Key assumptions include: <ul style="list-style-type: none"> Updated <i>AEO2007</i> Reference case assumptions Cap and trade policy Bonus credit incentives for CCS The TAP price establishes a limit on the allowance price, growing at 5 percent per year in real dollars Nonenergy abatement supply, as a function of allowance costs, derived from information provided by the Environmental Protection Agency
Half CCS Bonus	S. 1766 Core with the bonus incentive rate for CCS halved
S. 1766 High Technology	S. 1766 Core with High Technology case assumptions. Electricity generating technology cost and performance are reduced from the level achieved in the S. 1766 Core case
S. 1766 High Technology Plus Policies	S. 1766 High Technology case with additional supporting policies: <ul style="list-style-type: none"> Fuel economy standards from H.R. 6 as amended by the Senate in June 2007 (35 miles per gallon average for light-duty vehicles by 2020)¹¹ A 15-percent renewable portfolio standard for the electricity sector by 2020¹²
Sensitivity Cases	
S. 1766 Limited Alternatives	S. 1766 Core case with assumed limits on several carbon reduction technologies for electric power generation and limits on LNG imports: ¹³ <ul style="list-style-type: none"> CCS not available by 2030 Nuclear and biomass power plant additions limited to <i>AEO2007</i> Reference case level LNG imports limited to <i>AEO2007</i> Reference case level
S. 1766 Plus Policies	S. 1766 Core case with additional supporting policies: <ul style="list-style-type: none"> Fuel economy standards from H.R. 6 as amended by the Senate (35 miles per gallon average for light-duty vehicles by 2020)¹⁴ A 15-percent RPS for the electricity sector by 2020¹⁵