Mixed Corporate Messages in Climate Legislation: Parallels and Divergences in Energy Company Public Statements and Political Activities

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Introduction

Over the past decade mounting scientific evidence and international negotiations have placed increasing pressure on the United States to take legislative action to pass a comprehensive climate bill limiting greenhouse gas (GHG) emissions. While the House of Representatives narrowly passed the American Clean Energy and Security Act (ACESA) by 219 to 212 in June 2009, the Senate was unable to pass a comparable bill before the end of the 111th Congress. Republican gains in both houses of Congress in the 2010 midterm elections have further thwarted hopes of passing a climate bill.

Corporate influence has been widely blamed as a driving factor behind difficulties passing climate legislation and compromises in the more seriously-considered bills. This thesis will examine corporate public statements, lobbying activities, and campaign contributions as various forms of political influence, and seek to identify parallels and inconsistencies between these policy drivers. In particular, the analysis will aim to draw conclusions about how corporate lobbying activities compare to public relations statements on climate change. As detailed lobbying disclosure information is not publicly available, an analysis of campaign contribution patterns serves as the basis for inferring industry lobbying positions on climate legislation from the 109th through 111th Congresses.

The first section of this thesis tracks the evolution of corporate coalition public statements on climate change over the past two decades. The second section hones in more closely and examines public statements on climate policy made by the specific energy companies examined in this thesis. The third section provides a survey of existing literature on the impact of campaign contributions on lobbying and voting behavior as background for the fourth section which uses campaign contribution data as a proxy for determining the nature of energy companies' lobbying activities. The fifth section provides a brief analysis of these findings and attempts to explain observed patterns. The sixth section examines corporate lobbying reform initiatives that aim to limit influence, require transparency and improve compliance, all measures that would greatly facilitate future understanding of the true nature of corporate political influence on legislation, including climate bills. Appendix I includes supplemental tables summarizing campaign contribution data, and Appendix II explains the calculations used in the climate bill analyses used to standardize all emission targets for comparison. Appendix III provides detail on the stringency levels of targets in proposed climate bills for the 109th through 111th Congresses.

History of Corporate Coalition Public Relation Statements on Climate Change

Since the rise to prominence of climate change on the national agenda in the early 1990s, corporations have formed coalition groups to oppose or influence the passage of climate legislation. This section examines the evolution of these coalition positions, as well as the increasing disconnect between industry coalition public statements and private corporate political activity.

Evolution of Corporate Stance on Climate Change – The Global Climate Coalition

The Global Climate Coalition (GCC) was a group of oil, coal and automobile corporations founded in 1989 shortly after the first meeting of the Intergovernmental Panel on Climate Change (IPCC). The GCC

fought against climate legislation and attempted to discredit climate science through advertising campaigns, op-eds, media releases and reports to the news media. Over the next decade as scientific consensus that anthropogenic GHG emissions cause climate change grew, the GCC's strong stance became a liability for member companies, and the group eventually disbanded in 2002. In a 2000 speech announcing the Ford Motor Company's withdrawal from the group, CEO William Clay Ford, Jr. called GCC membership "an impediment to our ability to move forward credibly with our agenda on environmental responsibility."

While some policymakers and political groups continue to challenge climate science, industry groups and corporations have largely moved away this tactic to instead challenge the economic rationale for implementing a national climate policy. One tactic that the fossil fuel industry in particular employs is to create the appearance of public opposition to climate legislation through creating artificial grassroots organizations known as "Astroturf." One such group called "Energy Citizens" held protest rallies in oil-producing and manufacturing cities across the country following the June 2009 passage of the Waxman-Markey American Clean Energy and Security Act. While these rallies appeared to be grassroots-driven, the American Petroleum Institute (API) requested that "member companies recruit employees, retirees, vendors and contractors to attend the rallies" and demonstrate "strong support for employee participation." API facilitated these rallies by providing logistical funding, market research and targeted messaging for the rallies. Chevron and other API members also provided transportation and paid their employees to attend the rallies.²

Corporate Public Policy Influence on Cap-and-Trade

A 2007 study examining multinational corporations' (MNC) political activities on climate change surveyed 500 firms, of which there were 79 respondents from the U.S., including 50 that reported on political activity.³ Of these 50 companies, the New Jersey-based utility company PSEG is one of the only firms to mention efforts to directly lobby the federal government in favor of a cap-and-trade policy, in this case for the utility sector.⁴ Meanwhile, lobbying disclosure reports reveal that many other prominent energy and industry companies engaged in lobbying on climate legislation during this period. However, these reports do not require firms to state their position on bills or provisions in question. This could suggest that the hesitance of other U.S. MNC respondents that lobbied on climate issues to mention climate lobbying efforts in their survey responses was due to reluctance to admit to lobbying efforts against climate bills.

¹ Greenberg, Josh, Graham Knight and Elizabeth Westersund. "Spinning climate change: Corporate and NGO public relations strategies in Canada and the United States." *International Communication Gazette*. 2011. Vol. 73, Number 1-2. Pp. 65-82.

² Greenberg, Josh, Graham Knight and Elizabeth Westersund. "Spinning climate change: Corporate and NGO public relations strategies in Canada and the United States." *International Communication Gazette*. 2011. Vol. 73, Number 1-2. Pp. 65-82.

³ Kolk, Ans and Jonatan Pinkse. "Multinationals' Political Activities on Climate Change." *Business and Society*. June 2007. Vol. 46, No. 2. P. 212.

⁴ *Ibid* p. 216

Corporate Involvement in Climate Associations

Another strong survey indicator of industry support for a federal cap-and-trade policy was indirect through involvement in voluntary programs, most notably the Chicago Climate Exchange (CCX).⁵ CCX members make voluntary but legally binding commitments to meet greenhouse gas (GHG) emission reductions targets. Members include Allegheny Energy, Alliant Energy, American Electric Power, Dow, DTE Energy, DuPont, Ford Motor Company, Honeywell International, Mirant, NRG Power, PSEG, and Puget Sound Energy.⁶

Other industry groups which have stated aims to reduce member firms' GHG emissions without binding commitments have also emerged. One such group is the Climate RESOLVE initiative of Business Roundtable, an association of leading U.S. businesses aimed at influencing public policy. This initiative claims it aims to reduce member emissions through voluntary measures including "one-on-one counseling, learning sessions, workshops, networking opportunities and exposure to member company best practices." Members include American Electric Power, Chevron, Dow Chemical, Duke Energy, DuPont, ExxonMobil, General Electric, General Motors, Honeywell International, and Southern Company.

Business calls for political action on climate change also occur through alliance groups, including the prominent U.S. Climate Action Partnership (USCAP), which was launched in 2007 and currently has 27 business and NGO members including Chrysler, Dow Chemical, Duke Energy, DuPont, Exelon, Ford, General Electric, Honeywell, NextEra Energy, NRG Energy, PG&E, PNM Resources and Shell.¹⁰ The group calls for federal legislation including a cap-and-trade program with mandatory emission limits that covers "as much of the economy's GHG emissions as is politically and administratively possible."¹¹ Corporations must pay in \$100,000 annually for USCAP membership and sign onto reports calling for climate legislation.¹²

Energy Corporation Public Relation Statements: 109th – 111th Congress

The analysis of campaign contribution and lobbying in the following sections examines data and documents from major players in the oil (BP America, Chevron, ConocoPhillips, ExxonMobil, Marathon

⁶ Members of CCX. Chicago Climate Exchange. Site accessed 5 February 2011. http://www.chicagoclimatex.com/content.jsf?id=64

⁵ *Ibid* p. 216

⁷ Business Roundtable. Site accessed 5 February 2011. http://businessroundtable.org/about-us/

⁸ Climate RESOLVE – Fact Sheet. Business Roundtable. 4 February 2010. Site accessed 5 February 2011. http://businessroundtable.org/studies-and-reports/climate-resolve-fact-sheet/

⁹ Climate RESOLVE Member List – 2011. Business Roundtable. 24 June 2010. Site accessed 5 February 2011. http://businessroundtable.org/studies-and-reports/climate-resolve-member-list-2010/

¹⁰ About Our Members. United States Climate Action Partnership. Site accessed 7 February 2011. http://www.us-cap.org/about-us/about-our-members/

[&]quot;A Blueprint for Legislative Action." United States Climate Action Partnership. January 2009. P. 7 http://www.us-cap.org/PHPages/wp-content/uploads/2010/05/USCAP_Blueprint.pdf

¹² Mufson, Steven. "ConocoPhillips, BP and Caterpillar quit USCAP." *The Washington Post*. 17 February 2010.

and Shell), utility (American Electric Power, Dominion, Duke, Exelon and Southern Company), coal (Alpha Natural Resources, Arch Coal, CONSOL, and Peabody) and automotive (Chrysler, Ford and GM) industries. This section will supplement the history of corporate climate coalitions by taking a closer look at recent public statements by the individual corporations used in this thesis, including easily-accessible statements on climate policy positions on company websites, press coverage and leadership testimony.

Oil

Oil company statements vary in their levels of support and dissention to climate legislation, though all are careful to mention that any climate policy should minimize economic impacts, thus highlighting the stance that GHG regulations could be economically damaging. Only one of the six major U.S. oil companies, Shell, remains a member of USCAP. ConocoPhillips and BP withdrew their memberships in early 2010, following the passage of ACESA 2009 and in advance of serious Senate discussions to introduce a parallel bill.

Shell presented by far the industry's most explicit statements in favor of climate legislation, claiming support for a "robust" CO₂ price and "the implementation of market-based approaches by governments."¹³

In a public positioning turnaround, ConocoPhillips has recently expressed direct opposition to climate legislation, despite claiming general support for policy measures to "ultimately reverse the rate of growth in global GHG emissions" without "undue harm to the economy." Shortly before the company's official announcement of its withdrawal from USCAP, ConocoPhillips formally opposed the June passage of H.R.2454. During 2009 following the House passage and in the lead-up to Senate discussions, the action page of ConocoPhillips' website warned of the economic costs of climate legislation, citing figures for higher consumer energy costs and job losses.

BP refrained from making any public press release statements on H.R.2454 or subsequent Senate proposals.^{17,18} While BP stated support for a carbon price starting at a regional and national level, the company withdrew from USCAP in 2010 claiming that membership hindered its efforts to "work with the

http://www.shell.com/home/content/environment society/environment/climate change/our approach to climate change/

http://www.conocophillips.com/EN/susdev/policies/climate change position/Pages/index.aspx

¹³ Shell and climate change. Shell. Site accessed 4 August 2011.

 $^{^{14}}$ Climate Change Position. ConocoPhillips Company. Site accessed 4 August 2011.

¹⁵ ConocoPhillips Statement on House Passage of American Clean Energy and Security Act of 2009. ConocoPhillips Company. 29 June 2010. Site accessed 4 August 2011.

http://www.conocophillips.com/EN/newsroom/news_releases/2009news/Pages/06-29-2009.aspx

¹⁶ Sheppard, Kate. "ConocoPhillips works to undermine climate bill, despite pledge to support climate action." *Grist*. 17 August 2009. http://www.grist.org/article/2009-08-17-conocophillips-undermining-climate-bill

¹⁷ 2009 Press releases. BP. Site accessed 4 August 2011. http://www.bp.com/articlelisting.do?taxonomyld=-18 1&year=2009&contentId=2006635&categoryld=2012968&mon=0¤tPage=3

¹⁸ 2010 Press releases. BP. Site accessed 4 August 2011. http://www.bp.com/articlelisting.do?taxonomyld=-18 http://www.bp.com/articlelisting.do?taxonomyld=-18 http://www.bp.com/articlelisting.do?taxonomyld=-18 http://www.bp.com/articlelisting.do?taxonomyld=-18 https://www.bp.com/articlelisting.do?taxonomyld=-18 https://www.bp.com/articlelisting.do?taxon

U.S. Congress to advance climate change solutions that addressed specific legislative details."¹⁹ This statement seems somewhat disingenuous, as the goals of USCAP were broadly consistent with the climate proposals being most heavily considered in Congress at that time.

Chevron's public statements are equally vague, stating that the company is "not advocating a specific solution at this time." Chevron did express explicit support for mandatory GHG reporting at a national level, suggesting that the lack of commitment on other climate-related policies is a sign of dissension. Chevron also emphasizes that climate change requires multiple long-term solutions and warns against moving rapidly to implement new policies. 21

ExxonMobil and Marathon expressed support for an economy-wide carbon tax above a cap-and-trade approach.^{22,23} A federal carbon tax is widely viewed as politically inviable, so it is possible that the companies took this approach in order to present a climate-friendly image while endorsing a policy which they knew would not gain traction in the foreseeable future. This supposition is supported by the fact that the two oil companies that did claim to favor a carbon tax were also among the most reticent to support mandatory climate legislation generally. Marathon in particular spoke out against the ACESA 2009 bill and explicitly advocates against any new taxes, stating that the policy approach should focus instead on energy efficiency and technological innovation.^{24,25}

Utilities

Of the five major U.S. utility companies examined in this analysis, two (Duke Energy and Exelon) are USCAP members. All of them publicly advocate for a federal economy-wide approach, likely due to concerns that an initial climate bill could attempt to narrow its scope by focusing only on electric utility emissions, and the alternative of regulatory control of GHGs under the Clean Air Act. In order to reduce the cost burden on the domestic economy, these five utilities were among 18 U.S. companies to petition Senators Kerry, Lieberman and Graham to keep international offsets in their climate bill S.1733.²⁶

http://www.bp.com/sectiongenericarticle800.do?categoryId=9036321&contentId=7067103&nicam=vanity&redirect=www.bp.com/climatechange

http://www.chevron.com/globallssues/climatechange/sevenprinciples/#b8

http://www.bloomberg.com/video/58037412

¹⁹ Climate change. BP. Site accessed 4 August 2011.

²⁰ Frequently Asked Questions About Climate Change. Chevron. Site accessed 4 August 2011. http://www.chevron.com/globalissues/climatechange/faq/#q7

 $^{^{21}}$ 7 Principles for Addressing Climate Change. Chevron. Site accessed 4 August 2011.

²² ExxonMobil's views and principles on policies to manage long-term risks from climate change. ExxonMobil. Site accessed 4 August 2011. http://www.exxonmobil.com/Corporate/safety_climate_mgmt_principles.aspx

²³ Marathon Oil's Clark Interview on U.S. Energy Policy. Bloomberg. 3 March 2010.

²⁴ Ibid

²⁵ Living Our Values 2008 Corporate Social Responsibility Report. Marathon. Site accessed 4 August 4, 2011. http://www.marathon.com/lov2008/content-id3.shtml

²⁶ The Importance of International Offsets for U.S. Climate Change Mitigation Efforts. Letter from 18 companies to Senators John Kerry, Lindsey Graham and Joseph Lieberman. 10 November 2009.

As USCAP members, Duke and Exelon's own public website statements on climate legislation advocate for a mandatory market-based approach, such as cap-and-trade.^{27,28} In 2009, Duke and Exelon announced their resignation from the National Association of Manufacturers and the Chamber of Commerce, respectively, in response to these groups' vocal opposition to climate legislation.^{29,30}

American Electric Power (AEP) has supported climate bill provisions in Congress that provide incentives for technology development and deployment and credit for early actions, but has refrained from a more thorough endorsement of climate legislation on the whole.³¹

Southern Company and Dominion Resources have the least ambitious public relations activities. Southern Company fails to mention mandatory targets in its call for an economy-wide program, and stresses that emission standards should be consistent with technology and minimize consumer costs. While Dominion states support for economy-wide legislation in theory, it came out in opposition to ACESA 2009 due to "significant flaws, including unrealistic emission reduction targets" that "must be addressed in any Senate legislation." As none of the seriously-considered Senate legislation included targets much different from those in the House bill, it is reasonable to assume that Dominion opposed these bills as well.

Coal

Coal companies have generally recognized themselves as major targets for climate policy and have thus avoided stating public support for these measures, advocating instead for policies to support technological innovation to address GHG emissions.

Alpha Natural Resources' website mentions the 2007 creation of a carbon committee to monitor climate legislation, but makes no reference to the company's position. Alpha's response to the 2009 passage of the American Clean Energy and Security Act (ACESA) was equally cryptic, supporting Congressman Rick Boucher's (D – VA9) inclusion of provisions to protect the coal industry, while still taking issue with other

http://www.uscerp.org/assets/attachments/Letter%20on%20the%20importance%20of%20international%20offset s%20from%20U.S.%20industry.pdf

http://www.exeloncorp.com/environment/climatechange/Pages/overview.aspx

Duke Energy's Position. Duke Energy. Site accessed 4 August 2011. http://www.duke-energy.com/environment/climate-change/duke-energy-position.asp

²⁸ Climate Change. Exelon Corporation. Site accessed 4 August 2011.

²⁹ Whitten, Daniel. "PG&E, Duke Energy Walkouts Show U.S. Split on Climate." Bloomberg. 29 September 2009. http://www.bloomberg.com/apps/news?pid=newsarchive&sid=au4dgEfKQBXo 30 Ibid

³¹ Where AEP Stands on Climate Change. American Electric Power Company. Site accessed 4 August 2011. http://www.aepsustainability.com/ourissues/climate/

³² Climate Change: A Summary of Southern Company Actions. Southern Company. 2010 Update. http://www.southerncompany.com/planetpower/pdfs/climatechange2010.pdf

³³ Climate Change Strategy. Dominion. Site accessed 4 August 2011. http://www.dom.com/civism/dimensions/climate-change-strategy.jsp

aspects of the bill.³⁴ In its 2010 annual 10-K filing with the Securities and Exchange Commission, Alpha again failed to take a concrete position on domestic climate policy, but made strong statements against an international agreement.³⁵

Arch Coal has been similarly evasive about its position on climate policy, only pushing for strong technology research and development policies relating to climate change.³⁶ During a 2010 House Select Committee on Energy Independence and Global Warming hearing, Arch CEO Steven Leer, along with Peabody CEO Gregory Boyce, seized on the opportunity of the then-recent East Anglia scandal to once again cast doubt on climate science to evade calls for mandatory regulation.³⁷

CONSOL Energy, while touting its environmental stewardship, likewise makes no explicit statement regarding climate policy on its website. Speeches and testimony on the other hand are available, and reveal staunch opposition to proposed climate bills. With regard to ACESA 2009, CONSOL Vice President of Research and Development Steven Winberg stated that "H.R.2454 falls far short of addressing our concerns and we are opposed to this bill" due to lack of cost control mechanisms and "aggressive reduction timetables." Shortly thereafter, CONSOL spokesperson Tom Hoffman responded to the similar Boxer-Kerry climate bill in the Senate, threatening that it could cause "a lot of major coal-fired power plants to shut down." Both CONSOL and Peabody warn against the economic implications of creating mandatory GHG standards until CCS technology is commercially viable. 40,41

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Adams, Mason. "Congressional panel advances climate-aid bill; could affect SWVa. Coal industry." *The Roanoke Times*. 22 May 2009. http://www.roanoke.com/politics/wb/205626

³⁵ Berridge, Rob and Dan Bakal. Alpha Natural Resources – Grounds for a Yes vote on shareholder resolution requesting a report concerning the company's response to increasing pressure to reduce pollution from operations and from use of Alpha's products." Ceres. 7 April 2011. http://www.ceres.org/incr/engagement/corporate-dialogues/shareholder-resolutions/alpha/at_download/file

³⁶ Environment: Get the Facts. Arch Coal. Site accessed 4 August 2011. http://www.archcoal.com/environment/getthefacts.aspx

³⁷ Snyder, Jim. "Dems pressure coal execs to drop opposition to climate legislation." *The Hill*. 14 April 2010. http://thehill.com/business-a-lobbying/92341-dems-pressure-coal-execs-to-back-climate-legislation

³⁸ Testimony of Steven E. Winberg, Vice President of Research & Development for CONSOL Energy. Senate Future of Coal Roundtable: Context of H.R.2454. 15 July 2009.

http://www.consolenergy.com/Newsroom/Speeches/Testimony Urging Senators to Reexamine Climate Chang e_Legislation.pdf

Malloy, Daniel. "Climate bill stokes business debate." *Pittsburgh Post-Gazette*. 5 October 2009. http://www.post-gazette.com/pg/09278/1003093-113.stm

⁴⁰ Testimony of Steven E. Winberg, Vice President of Research & Development for CONSOL Energy. U.S. Senate Committee on Environment and Public Works Field Hearing: "Clean Energy Jobs and American Power Act." 19 October 2009. http://www.consolenergy.com/Newsroom/Speeches/Field-Hearing-Testimony-Steven-Winberg.pdf

⁴¹ Snyder, Jim. "Dems pressure coal execs to drop opposition to climate legislation." *The Hill*. 14 April 2010. http://thehill.com/business-a-lobbying/92341-dems-pressure-coal-execs-to-back-climate-legislation

In addition to its reluctance to support climate legislation as demonstrated above, Peabody has filed a petition for the U.S. Environmental Protection Agency (EPA) to reconsider its endangerment finding of GHGs that compels the agency to regulate emissions under the Clean Air Act.⁴²

Auto

Two of the big three U.S. auto manufacturers, Chrysler and Ford, are USCAP members, a greater representation than any other industry examined. Ford adheres closely to its USCAP membership by expressing general support for climate legislation, while General Motors has tended to evade the issue. Chrysler's position remains less clear despite USCAP membership.

Within the U.S., Ford has led the auto industry with consideration of climate policy, starting with its 2005 report on the business implications of climate change.⁴³ In its 2010 sustainability report, Ford advocated for an economy-wide, market-based national climate and energy policy to reduce emissions at the lowest cost and encourage consumers to purchase low-carbon vehicles.⁴⁴

In contrast Chrysler, the other auto member of USCAP, provides little information about its individual climate policy position. As late as 2007, the company's chief economist came under fire for questioning climate science, discouraging major policy action, and criticizing the European Union's more aggressive approach. In an attempt to hedge negative media attention, a Chrysler spokesperson stated support for advancing the state of climate science and developing new vehicle technologies, without going so far as to endorse any mandatory policy measures.⁴⁵

Like Chrysler, General Motors (GM) offers little in the way of public statements on climate policy positions. In January 2008 however, the company's Vice Chairman at the time, Bob Lutz, harshly dismissed the science behind anthropogenic climate change.⁴⁶

Industry Statement Overview

In general, most energy companies avoid expressing explicit opposition to climate voting in the readily-available positioning on their websites. Many declare vague support for tackling GHG emissions generally, without mentioning specific policy approaches or legislation. On the whole, the oil and coal industries were the most vocally opposed to climate legislation, despite mostly careful language used to

http://news.bbc.co.uk/2/hi/6247371.stm

⁴² Petition for Reconsideration by Peabody Energy Company: Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act. 11 Februrary 2010.

http://epa.gov/climatechange/endangerment/downloads/Petition_for_Reconsideration_Peabody_Energy_Company.pdf

⁴³ Ford Issues Climate Change Report. Ford Motor Company. 20 December 2005. Site accessed 4 August 2011. http://media.ford.com/article_display.cfm?article_id=22233

⁴⁴ U.S. Policy: Climate Change Legislation. Ford Motor Company. Site accessed 4 August 2011. http://corporate.ford.com/microsites/sustainability-report-2010-11/issues-climate-policy-us#climate

⁴⁵ Schifferes, Steve. "Chrysler question climate change." *BBC News*. 10 January 2007.

⁴⁶ "GM exec stands by calling global warming a 'crock'." *Reuters*. 22 February 2008. http://www.reuters.com/article/2008/02/22/idUSN22372976

hedge against appearing unconcerned. Utility and auto industry positions were more mixed. USCAP membership seemed to have a significant correlation with public statements supporting climate legislation.

The Impact of Campaign Contributions on Climate Legislation Voting

The analysis in the following sections uses campaign contribution data to draw conclusions about likely corporate positioning in climate lobbying activities. This section provides a scoping of relevant literature to support this method by examining the direct link between campaign contributions and lobbying activities, as well as motivations and patterns for corporate contributions.

The Direct Link between Corporate Lobbying and Campaign Contributions

The use of campaign contribution data to draw conclusions about lobbying behavior is supported by existing analysis that demonstrates that the two corporate activities often interact and reinforce one another. In particular, corporations use campaign contributions as an initial step to "open doors" and "gain access" to legislators. The 2003 McConnell v. Federal Election Commission Supreme Court decision upheld campaign contribution limitations under the Bipartisan Campaign Reform Act of 2002 in part because "[I]arge contributions are intended to, and do, gain access to the elected official after the campaign for consideration of the contributor's particular concerns."⁴⁷ The use of campaign contributions to advance lobbying goals is further evidenced by the fact that the most active lobbyists also tend to donate most frequently and heavily to political campaigns.⁴⁸

Campaign Contribution Literature Survey

Most of the literature on campaign contributions finds a positive correlation between contributions from interest groups and Congressional votes in their favor. One analysis in particular found that interest groups gave significant contributions to Members of Congress already predisposed to vote for their interests, citing the tendency of oil companies to give more heavily to representatives from oil-producing states. Furthermore, of the seven House bills examined in this study, the vote on an oil tax rebate for further oil exploration was most strongly correlated with interest group contributions, in this case from oil companies.⁴⁹

Several other factors influence the level of campaign contributions. One study comparing contributions from 1980 to 1986 found distinctions between the House and the Senate. In both houses, Members of Congress with a conservative, pro-business voting record and Republican affiliation received more money from corporations, but these indicators were much stronger in the Senate than in the House. Because of the larger size of the House and therefore the more prominent role that committees play in

⁴⁷ McConnell v. Federal Election Commission, 251 F. Supp. 2d 176 (2003), District Court, District of Columbia.

⁴⁸ Briffault, Richard. "Lobbying and Campaign Finance: Separate and Together." *Stanford Law & Policy Review*. 2008. Vol. 19 No. 1. Pp. 105-129.

⁴⁹ Chappell, Henry W., Jr. "Contributions and Congressional Voting." *The Review of Economics and Statistics*. February 1982. Vol. 64 No. 1. Pp. 77-83.

determining policy directions, membership in committees was a significant factor in contributions to House Representatives (including the Energy and Commerce committee, which attracted corporate giving), but had little impact in the Senate. Due to the smaller size of the Senate, policy is decided to a much greater extent on the floor rather than in committees and individual Senators have greater weight. Seniority also carried greater importance in the House. Corporate contributions were therefore based more on individual voting record in the Senate. One possible reason that the House was able to pass climate legislation while the Senate was not, despite Democratic majority status in both, is that the House majority may have had more influence due to its leadership on the Energy and Commerce Committee (chaired at the time by Henry Waxman, Democrat from California). In contrast, climate legislation progress was stymied in the Senate preventing a bill from even moving past committee due to the Republican threat of filibuster, Democratic majority notwithstanding.

Majority status in the House also attracts corporate contributions. Majority party status is a significant influence on the level of corporate contributions, with the majority party attracting a higher amount of contributions. As in House-Senate comparison above however, controlling for majority party status and other variables still revealed that corporate political action committee donations favored Republican candidates. Corporations' tendency to favor the majority party is significant especially in contrast to the consistent support of labor unions for Democrats regardless of which party holds the majority. One explanation for this difference is that corporations are more likely to have majority party institutional assets such as committee assignments "mobilized in support of their legislative interests" and therefore be more successful in influencing policy through targeted campaign contributions.⁵¹

Analysis of Corporate Lobbying Activity and Campaign Contributions

This thesis examines climate legislation from the 109th through the 111th Congress (2005-2010). The review of legislation is limited to bills formally introduced in House or Senate committees that would place a mandatory cap or tax on greenhouse gas emissions. A review of lobbying disclosure forms submitted to Congress reveals consistent lobbying activity on behalf of the largest and most politically active companies in the oil (BP America, Chevron, ConocoPhillips, ExxonMobil, Marathon and Shell), utility (American Electric Power, Dominion, Duke, Exelon and Southern Company), coal (Alpha Natural Resources, Arch Coal, CONSOL, and Peabody) and automotive (Chrysler, Ford and GM) industries.

Most of the lobbying disclosure forms refrain from stating corporations' positions on climate issues and bills on which they lobbied. This thesis examines corporate political contributions to Senators and Representatives over the same 2005-2010 period as a proxy for lobbying position. During each of the three Congresses, the average energy corporation campaign contribution and frequency to sponsors of

⁵⁰ Grier, Kevin B. and Michael C. Munger. "Interest Group PAC Contributions to House and Senate Incumbents, 1980-1986. *The Journal of Politics*. August 1993. Vol. 55 Number 3. Pp. 615-643.

⁵¹ Rudolph, Thomas J. "Corporate and Labor PAC Contributions in House Elections: Measuring the Effects of Majority Party Status." *The Journal of Politics*. February 1999. Vol. 61, Number 1. Pp. 195-206.

climate bills are compared to those to non-sponsors.⁵² The averages are calculated over all members for the duration of each Congress, resulting in the average contribution per member of Congress over a two-year period.

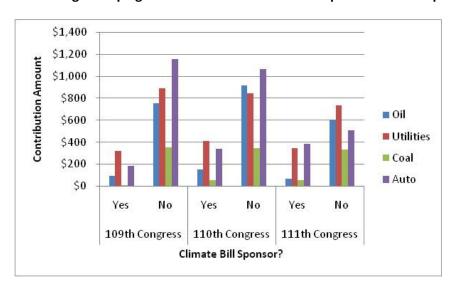


Figure 1: Average Campaign Contributions – Climate Bill Sponsor vs. Non-Sponsor

As Figure 1 above shows, the average contribution to representatives that did not sponsor a climate bill was consistently higher across all industries and Congresses. This indicates that despite membership of many corporations in a broad range of climate initiatives, support for proponents of a comprehensive climate bill lagged. Using the average figure takes into account the fact that there are more non-sponsors of climate bills than there are sponsors. The data examined all members of Congress, assigning a zero contribution value to members who did not receive contributions from given corporations during the Congresses in question.

⁵² Campaign Finance Disclosure Data Search. Federal Election Commission. Site accessed 4 August 2011. http://www.fec.gov/finance/disclosure/disclosure_data_search.shtml



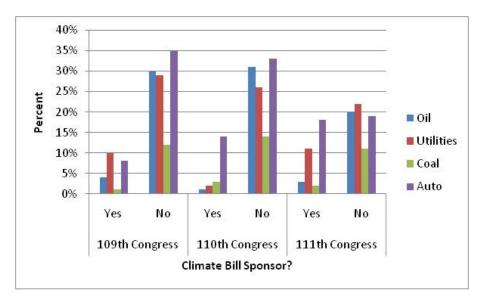
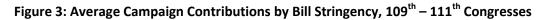


Figure 2 shows a similar pattern of contribution bias in favor of non-sponsors. In addition to receiving a smaller average contribution, climate bill sponsors were generally far less likely to receive campaign contributions at all from the industries examined, across all three Congresses.

As climate bills proposed throughout this period were of varying stringencies, breaking down campaign contribution patterns by target levels in the bills can shed further light on corporations' prerogatives. Figures 3 and 4 below show the average campaign contributions and percent of representatives receiving campaign contributions, respectively, by bill stringency. "No" once again denotes contributions to non-sponsors; Level 1 applies to bills that do not specify targets, are not economy-wide or do not extend to 2020; Level 2 applies to bills requiring less than 20% emission reductions below 2005 levels by 2020; Level 3 applies to bills requiring between 21% and 30% emission reductions below 2005 levels by 2020; and Level 4 applies to bills requiring greater than 30% emission reductions below 2005 levels by 2020. Appendix III provides further detail on which bills fall under each category. There were only eight sponsors for Level 2 during the all three Congresses. This results in a large sampling error, so contribution to Level 2 bill sponsors were removed from the charts below, but the tables are included in tables in Appendix I. For members of Congress who sponsored climate bills of more than one level of stringency during the same Congress, only the highest level of stringency is considered. As in Figures 1 and 2, averages and percentages are calculated over all members for the duration of each Congress.



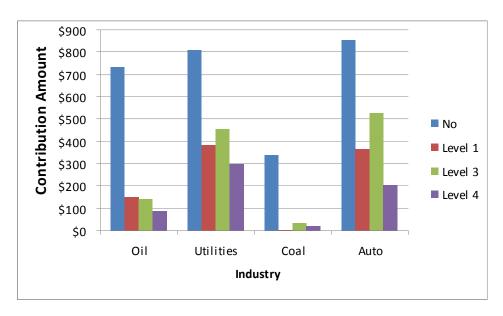
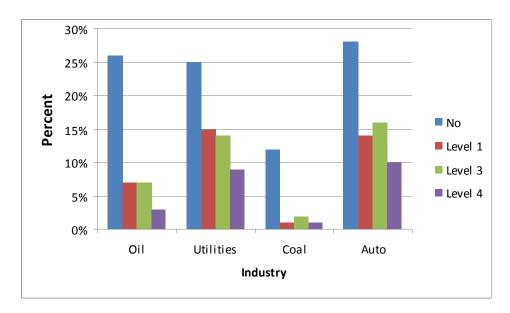


Figure 4: Percent of Representatives Receiving Campaign Contributions by Bill Stringency, 109th – 111th
Congresses



The above charts demonstrate again that non-sponsors received the most and the largest contributions. While there is some variation at the intermediate levels of stringency, the frequency and amount of contributions drop across the board at Level 4. This suggests that energy companies were somewhat willing to back of broad claims of environmental stewardship with contributions for representatives in support of light regulation, but drew the line more firmly against ambitious legislation.

Across all three Congresses, industry lobbying activity was concentrated more heavily around formally introduced Senate bills than House legislation as seen in Figures 5 through 7.⁵³ An examination of formally introduced bills (drafts are not included in this part of the analysis) shows that across all three Congresses, Senate bills received more lobbying attention (as determined by taking the number of X's across all companies for each house of Congress and dividing by the total potential count of lobbying activity). During the 109th Congress, the corporations in question lobbied on House climate bills 8% of the time, compared with 19% of the time for Senate bills. During the 110th Congress, the House and Senate percentages were 37% and 56%, respectively, and 38% and 70% during the 111th Congress. Specificity of lobbying activity in terms of designating climate bill numbers in lobbying disclosure forms increased by the 110th Congress.

Given the heavy imbalance of contributions in favor of recipients that did not sponsor climate legislation, this provides one possible explanation of why the House was able to successfully pass a comprehensive climate bill in 2009, while the Senate lagged and climate legislation proponents within the Senate scaled back ambitions in proposed legislation by cutting out mandatory emission limits. Energy corporations could target lobbying efforts and contributions more toward individual Senators despite the higher campaign contribution and lobbying access costs because there are fewer of them and each Senator wields more individual power, as discussed above.

Figure 5: Corporate Lobbying Activity in the 109th Congress

Climate Bill / Issue	Chevron	ExxonMobil	ConocoPhillips	Marathon	Shell	BP	Southern	Exelon	Duke	AEP	Dominion	Peabody	Arch Coal	Alpha	CONSOL	Ford	GM	Chrysler
H.R.759				Х				Χ				Х	Х			Х		
H.R.1451																		
HR1873																		
H.R.2828																		
H.R.4226																		
H.R.5049		Х		Х														
H.R.5642		Х		Х			Х											
S.150												Х	X					
S.342	Х	Х		Х			Х	Χ				Х	Х			Х		
S.730																		
S.1151	Х	Х		Х					Χ	Χ	Х		Х			Х		
S.2724				Х								Х	Х					
S.3698		Х		Х			Х											
S.4039																		
dimate change, cap-																		
and-trade, etc.	Х	Х			Χ		Х				Х	Х			Χ	Χ	Х	

⁵³ Lobby Disclosure Search. Office of the Clerk. U.S. House of Representatives. Site accessed 4 August 2011. http://disclosures.house.gov/ld/ldsearch.aspx

Figure 6: Corporate Lobbying Activity in the 110th Congress

Climate Bill / Issue	Chevron	ExxonMabil	ConocoPhillips	Marathon	Shell	BP	Southern	Exelon	Duke	ÆP	Dominion	Peabody	Arch Coal	Alpha	CONSOL	Ford	GΜ	Chrysler
H.R.620	Х	Х		Х			Х	Х	Χ	Х		Х				Х		
HR1590		Х		Х			Х	Х	Х	Х	Х	Х						
H.R.2069	Х			Х					Х	Х		Х						
HR6186	Х	Х					Х	Х	Х	Х	Х	Х						
HR6316								Х		Х		Х						
S.280	Х	Х		Х			Х	Х	Х	Х	Х	Х			Х	Х		Х
S.309	Х	Х		Х			Х		Х	Х	Х	Х				Х		
S.317		Х		Х			Х		Х	Χ	Х	Х						
S.485	Х	Х		Х				Х	Х	Х	Х	Х				Х		
S.1168				Х					Х		Х							
S.1766	Х	Х		Х			Х	Х	Х	Х	Х	Х	Х		Х			Х
S.2191	Х	Х	Х	Х	Х		Х	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х
S.3036	Х	Х			Х		Х	Х	Х	Х	Х	Х	Х			Х	Х	Х
Dingell-Boucher draft								Х	Х	Х		Х				Х		
dimate change, cap-																		
and-trade, etc.	Х	Х	Х		Χ	Х	Х	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х

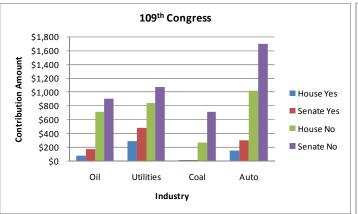
Figure 7: Corporate Lobbying Activity in the 111th Congress

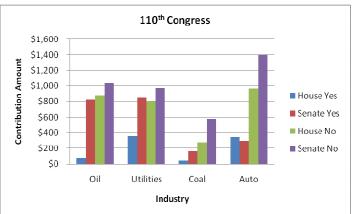
Climate Bill / Issue	Chevron	ExxonMobil	ConocoPhillips	Marathon	Shell	BP	Southern	Exelon	Duke	AEP	Dominion	Peabody	Arch Coal	Alpha	CONSOL	Ford	GΜ	Chrysler
H.R.1337		Х		Х								Х						
H.R.1683									Χ			Х						
H.R.1862	Х						Х		Х	Х		Х						
H.R.2454	Х	Х	Х	Х	Х		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
H.R.2998	Х	Х		Х	Х		Х			Х							Χ	
S.1462	Х	Х		Х	Х		Х	Х	Х	Χ	Х	Х	Х		Х	Х		
S.1733	Х	Х	Х	Х	Х		Х	Х	Х	Χ	Х	Х	Х	Х	Х	Х	Χ	Х
S.2877	Х	X		Х			Х		Χ		Х	Х						Χ
Kerry-Graham-																		
Lieberman	Х			Х	Х		Х	Х	Х	Х	Х	Х	Х		Х			
Bingaman draft	Х			Х				Х	Χ	Х	Х							
Inslee draft	Х																	
Boxer draft	Х				Х										Х			
Energy committee																		
draft				Х			Х											
Cantwell draft											Х					Х		
climate change, cap-																		
and-trade, etc.	Х	Х	X		Х		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х

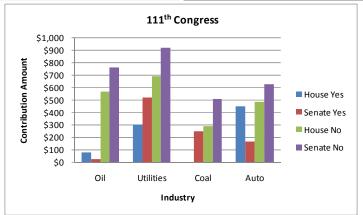
This bias toward the Senate in lobbying focus also coincides with article by Grier and Munger cited above that finds a much stronger correlation between corporate campaign contributions and a conservative, pro-business voting record in the Senate than in the House. Further analysis of the campaign contribution data introduced above reveals patterns consistent with these findings, with generally higher contribution averages and frequencies for Senators compared to House Representatives, as seen in the graphs of Figure 8, below. As in the data analysis above, within the same

house of Congress non-sponsors received higher average contributions. In nine of the twelve cases examined below (four industries each across the three Congresses), Senators received higher average contributions than members of the House. Two of the three exceptions occur in the 111th Congress where there were very few climate bill sponsors, making these anomalies less significant given the limited data set.

Figure 8: Average Campaign Contributions – House vs. Senate and Climate Bill Sponsor vs. Non-Sponsor







Campaign Contributions and the American Clean Energy and Security Act of 2009

The Waxman-Markey climate bill, H.R.2454, the American Clean Energy and Security Act of 2009 (ACESA 2009) is the only stand-alone comprehensive climate bill that has been brought to a vote in either house of Congress. In 2005, Senator John McCain proposed an amendment that would have modified the Energy Policy Act of 2005 with the provisions included in his bill S.1151, the Climate Stewardship and Innovation Act, which failed to make it past committee earlier that year. The Amendment, S.826, was rejected by a vote of 38 to 60 on June 22, 2005, the day after it was introduced to the Senate.

Table 1 displays the total campaign contributions by industry in the thirty days on either side of the June 29, 2009 vote on H.R.2454. The thirty day window was chosen to provide a long enough period to include a significant amount of contribution data, but short enough to reflect the direct influence of the

vote. The data also includes contributions from all companies within the four industries (not just the eighteen major corporations analyzed in detail above) to provide a large enough sampling of data and display trends across the entire industries. Using data both before and after the vote reflects the dual purpose of campaign contributions described above to influence future voting behavior as well as to reward votes in favor of corporate interests. While oil industry contributions were still significantly biased in toward climate bill opponents, the other three industries examined split their contributions much more evenly for yea and nay votes than they did for climate bill sponsors vs. non-sponsors.

Table 1: Summary of Industry Campaign Contributions in the 30 Days Surrounding the H.R.2454 Vote⁵⁴

Industry	Voted Yes	Voted No	Did Not Vote
Oil	\$5,000	\$115,000	N/A
Utilities	\$81,500	\$99,050	\$2,000
Coal	\$10,000	\$8,500	N/A
Auto	\$9,000	\$5,500	N/A

Industry interests may have been more likely to support representatives that simply voted in favor of a climate bill rather than members of Congress that made climate change an explicit legislative priority by sponsoring a bill. This fairly even split can also be explained in part by the Democratic majority in the 110th Congress. The climate bill vote was fairly evenly split along party lines, with most Democrats voting in favor and most Republicans voting against. 55 As the literature scoping above demonstrates, corporate contributions lean toward the majority party, a trend that likely caused some of the observed sway toward pro-ACESA Representatives.

Involvement in business associations without a concrete political message or member commitments was a much weaker indicator of contributions, as demonstrated by the significant contribution bias on the part of oil companies. There is a large amount of overlap in membership for most industries between different groups including CCX, USCAP and Climate RESOLVE. The notable exception is lack of large oil company membership in the associations with concrete policy positions or binding commitments. In February 2010 for example, oil giants BP and ConocoPhillips withdrew their memberships from USCAP, just months after the passage of H.R.2454 and before serious discussions of a comparable Senate bill had commenced.⁵⁶ In ConocoPhillips' official statement announcing that the company would not renew

⁵⁴ H.R.2454 – American Clean Energy and Security Act of 2009. Total contributions given to House members within 30 days of the vote. Maplight.org. Site accessed 15 August 2011. http://maplight.org/us-congress/bill/111-hr-2454/371786/near-votes

⁵⁵ H.R.2454 Vote Result. OpenCongress. Site accessed 4 August 2011. http://www.opencongress.org/vote/2009/h/477

Mufson, Steven. "ConocoPhillips, BP and Caterpillar quit USCAP." The Washington Post. 17 February 2010.

its membership, CEO Jim Mulva stated that "House climate legislation and Senate proposals to date have disadvantaged the transportation sector and its customers, left domestic refineries unfairly penalized versus international competition, and ignored the critical role that natural gas can play in reducing GHG emissions." Similarly, in a September 2009 speech just a few months before failing to renew its membership, BP America Chairman and President Lamar McKay focused concern on the equitable distribution of costs of GHG reduction across all sectors, especially heat and electricity, and focusing on natural gas as the central approach for emissions reductions. Both companies claimed that they continued their support of mandatory federal GHG reductions despite withdrawal from USCAP membership. Shell oil remains a member of USCAP.

The oil industry is also the only energy or industrial interest group which demonstrated a strong campaign contribution bias in favor of Representatives who voted against ACESA 2009, as seen in Table 4 above. When examined in conjunction with the literature survey on campaign contributions and voting behavior above, this analysis suggests a far greater reluctance on the part of the oil industry to support a climate bill.

Comparison of Sectoral Economic Impacts of Major Climate Bills

The U.S. Environmental Protection Agency (EPA) has conducted economic analyses of major climate bills starting in the 109th Congress. The comprehensive climate bills analyzed that include economy-wide capand-trade programs are: the Climate Stewardship and Innovation Act of 2007 (S.280);⁵⁹ Low-Carbon Economy Act of 2007 (S.1766);^{60,61} Lieberman-Warner Climate Security Act of 2008 (S.2191);⁶² Clean Energy Jobs and American Power Act of 2009 (S.1733);⁶³ American Clean Energy and Security Act of 2009 (H.R.2454);⁶⁴ and the Senate American Power Act of 2010 (APA),⁶⁵ which was never formally introduced. Of these seriously-considered bills, the only bill which proceeded to a vote was also the only House bill (H.R.2454 ACESA 2009). This analysis will seek to understand differences in political

⁵⁷ "ConcoPhillips Intensifies Climate Focus." ConocoPhillips News Center. 16 February 2010. Site accessed 7 February 2011. http://www.conocophillips.com/EN/newsroom/news-releases/2010news/Pages/02-16-2010.aspx
⁵⁸ McKay, Lamar. "A Roadmap for America's Energy Future." BP. 24 September 2009. Site accessed 7 February

^{2011.} http://www.bp.com/genericarticle.do?categoryId=98&contentId=7056532

⁵⁹ EPA Analysis of the Climate Stewardship and Innovation Act of 2007: S.280 in 110th Congress. Office of Atmospheric Programs. U.S. Environmental Agency. 16 July 2007.

⁶⁰ EPA Analysis of Bingaman-Specter Request on Global CO₂ Concentrations. Office of Atmospheric Programs. U.S. Environmental Agency. 1 October 2007.

⁶¹ EPA Analysis of the Low Carbon Economy Act of 2007: S.1766 in 110th Congress. Office of Atmospheric Programs. U.S. Environmental Agency. 15 January 2008.

⁶² EPA Analysis of the Lieberman-Warner Climate Security Act of 2008: S.2191 in 110th Congress. Office of Atmospheric Programs. U.S. Environmental Agency. 14 March 2008.

⁶³ Economic Impacts of S.1733: The Clean Energy Jobs and American Power Act of 2009. Office of Atmospheric Programs. U.S. Environmental Agency. 23 October 2009.

⁶⁴ EPA Analysis of the American Clean Energy and Security Act of 2009: H.R.2454 in the 111th Congress. Office of Atmospheric Programs. U.S. Environmental Agency. 23 June 2009.

⁶⁵ EPA Analysis of the American Power Act in the 111th Congress. Office of Atmospheric Programs. U.S. Environmental Agency. 14 June 2010.

positioning of various industries based on the economic analyses conducted by the EPA, such as the stronger resistance to proposed climate policies by oil companies, as seen above through actions such as withdrawal from USCAP and skewed campaign contributions surrounding the H.R.2454 vote.

Several energy-economic models were used in the EPA analysis. The S.280, S.2191, S.1733, H.R.2454 and APA analyses used two computable general equilibrium (CGE) models, the Intertemporal General Equilibrium Model (IGEM) and the Applied Dynamic Analysis of the Global Economy (ADAGE) model. The S.1766 analysis used the Mini-Climate Assessment Model (MiniCAM), a highly aggregated integrated assessment model.

Greenhouse Gas Emission Targets

The six climate proposals examined cover a large proportion of GHG emissions, with coverage ranging from 74% to 87% of total U.S. emissions. Figure 9 below shows the emission cap targets in 2020 and 2050 of the various climate bills, compared to 1990 baseline emissions.

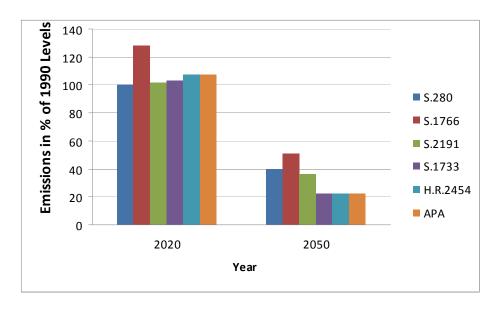


Figure 9: GHG Emission Targets under Proposed Climate Bills

The three bills introduced in the 111th Congress (S.1733, H.R.2454, and APA) generally have slightly higher medium-term 2020 emission targets and lower long-term 2050 targets that the bills introduced in the 110th Congress. This distinction between Congresses could be explained by the later advance notice to industries about near- and medium-term targets in the 111th Congress and thus the need for greater leniency in earlier years, as well as the increasing recognition that long-term emission reductions will need to be more dramatic in order to achieve climate stabilization goals.

Overall Economic Impact

Given that covered industries will either have to reduce emissions and/or hold and purchase allowances to cover their emissions, predicted allowance prices are an important indicator of the burden of

proposed climate bills on the economy as a whole. Figure 10 below shows the predicted allowance prices from 2015 through 2050 for the five cap-and-trade bills examined here. Notably, four of the five bills have very similar allowance prices throughout this 35-year time period, including H.R.2454 which passed the House in 2009. The only exception to this consistency is S.2191, which has significantly higher allowance prices.

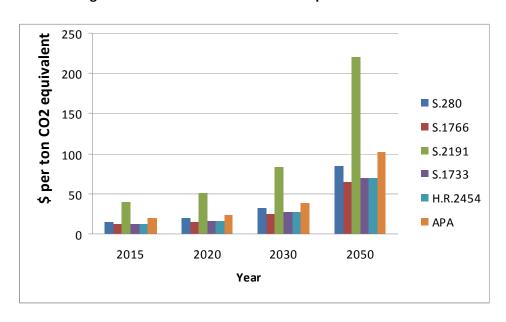


Figure 10: Allowances Prices under Proposed Climate Bills

For all bills examined, the greatest share of emission abatement is expected to occur in the electricity sector. Transportation sector reductions are expected to be more modest due to the weak price signal on transportation fuel prices provided by the upstream carbon cap. Table 5 below displays the projected increase in gas prices due to cap-and-trade programs under different climate proposals.

 Climate Bill
 2030
 2050

 \$0.26
 \$0.68

 \$1766
 \$0.22
 \$0.57

 \$2191
 \$0.53
 \$1.40

Table 2: Projected Gasoline Price Increase under Cap-and-Trade Programs

Special Incentives

In addition to the cap-and-trade framework which is similar throughout the five bills, some proposals also include special provisions to encourage the development and deployment of certain emission-

reducing energy technologies. Carbon capture and storage technology for fossil fuel plants received the most attention across all bills. Significant provisions supporting nuclear power appeared in the APA, the most recent Senate bill. Focus on these two energy technologies would appeal to the major utilities and coal companies whose political activities are examined above, and which have significant resources already invested in coal and nuclear power.

Carbon Capture and Storage (CCS)

S.1733 and H.R.2454 both provide \$1 billion of early deployment funding per year for 10 years for carbon capture and storage (CCS) projects.

S.2191, S.1733, H.R.2454, and the APA all reserve a certain percentage of allowances to incentivize CCS projects, as well as subsidies equal to the bonus allowance amount based on allowance price and sequestered emissions. The bonus allowances are distributed to facilities that undertake CCS projects, and are valued at the emission allowance price plus an additional CCS bonus value. The bonus allowances are aimed at promoting greater and earlier CCS investment and market penetration. The percentages vary somewhat per bill, as seen in Table 6, below.

Table 3: Percentage of Allowances Reserved for CCS Projects

Climate Bill	Initial Reserve	2050 Reserve
S.2191	4%	4%
H.R.2454	1.75%	5%
APA	0.8%	10%

Special Incentives - Nuclear Power

The APA provides special incentives for nuclear power, including reducing the accelerated depreciation period for nuclear plants from fifteen to five years, allowing the industry to claim larger tax deductions and lower tax payments. The APA also includes a 10% investment tax credit for nuclear plant construction. The depreciation and tax credit measures amount to the equivalent of more than \$5 billion in subsidies for each new nuclear reactor. ⁶⁶ The investment tax credit in particular encourages new nuclear plant construction, while the depreciation measures benefit both new and existing plants.

⁶⁶ "Billions of Dollars in Subsidies for the Nuclear Power Industry Will Shift Financial Risks to Taxpayers. Union of Concerned Scientists. Site accessed 29 July 2011.

Energy Use and Fuel Source Projections

This section examines the projected electricity generation from fuel sources under the various EPA climate proposal analyses. In the context of examining industry positions on climate bills, the comparison here is limited to fossil fuel and nuclear generation projections, based on the current fuel mix of the five major utilities whose political activities are examined above. Figure 11, below, shows the dominance of coal, natural gas and nuclear fuel sources in the electricity generation mix of these utilities.

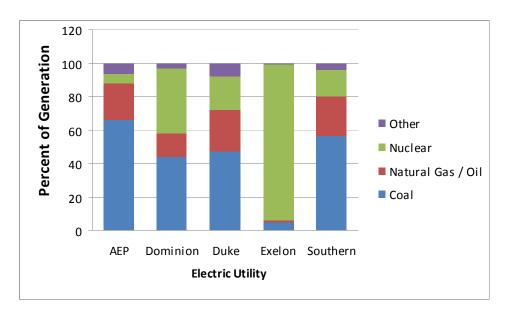


Figure 11: Percent of Electricity Generation from Fuel Sources of Major Utility Companies

Coal and Natural Gas Electricity

Despite provisions in most of the proposals encouraging deployment of CCS technology, the price signal provided by the GHG cap still results in a shift away from fossil fuel use.

The analyses for S.280 and S.1766 predict that most existing coal plants would continue to operate, but would be less profitable in the near term due to the additional cost burden of emission allowance purchases. Under S.280, some less efficient plants would retire, accounting for 2.2% of existing coal capacity. The analyses for S.280 and S.1766 project a rebound in coal usage with the deployment of CCS technology by 2030 and 2020, respectively.

Under H.R.2454, the electricity sector is expected to retire an additional 22 GW of existing coal capacity and 70 GW of oil and gas capacity by 2015, as compared to the reference scenario without a GHG cap. The analysis for S.1733 projects impacts similar to under H.R.2454.

S.2191 would result in greater retirements of coal, oil and natural gas generation and greater reductions in coal production than other climate proposals. The bill would also have resulted in significant repowering of coal to natural gas generation.

Nuclear

The analyses of the three climate bills from the 110th Congress (S.280, S. 1766 and S.2191) all predict a 150% increase in nuclear power generation from 2005 levels, compared to far more modest increases in reference scenarios. Investment in nuclear power under the climate proposals is more attractive due to the carbon price signal added to competing fossil fuel sources.

In the first ten years, H.R.2454 and APA see relatively little change in nuclear power generation compared to the reference scenario. By 2030 however, the price signal and time for new nuclear power plants to be approved and built result in significant increases in nuclear power generation over both initial levels, as well as the reference scenario, as seen in Figure 12 below. S.1733 impacts on electricity generation are expected to be similar to those of H.R.2454.

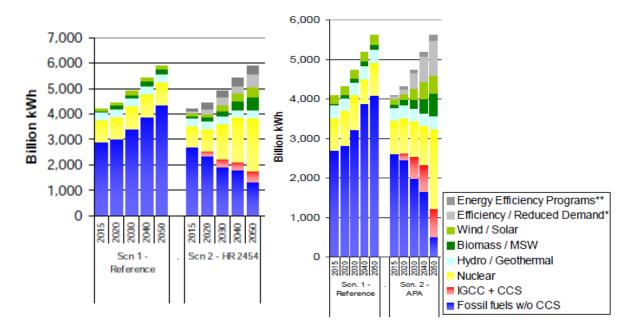
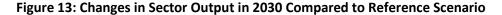


Figure 12: Electricity Generation Mix under H.R.2454 and APA

Economic Impacts on Major Energy Industries

The EPA analyses for the three bills from the 110th Congress included projections to 2030 and 2050 (for S.280 and S.2191) for change in from various economic sectors relative to the reference scenario. The industries under examination in this analysis (oil, electric utility, auto, and coal mining) all experience projected losses compared to the reference scenario without a cap-and-trade policy. Figures 13 and 14 display the percent of output losses from these economic sectors under S.280, S.1766 and S.2191 in 2030 and 2050, respectively.



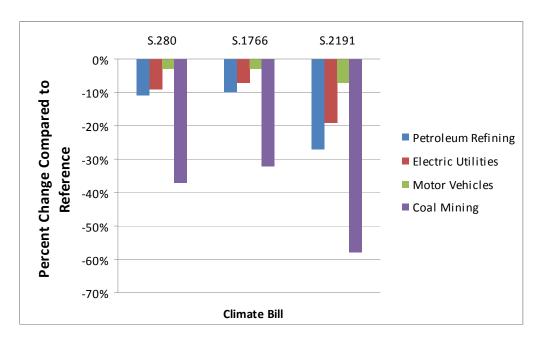
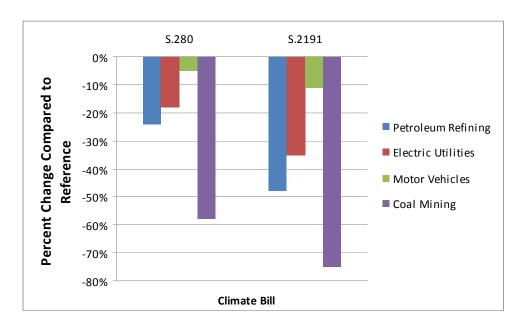


Figure 14: Changes in Sector Output in 2050 Compared to Reference Scenario



Sectoral economic impacts deepen from 2030 to 2050 as the shrinking allowance pool causes prices to increase. The relative impact to the four sectors is consistent over time, with the coal mining sector experiencing by far the greatest losses under these three bills. However, the EPA did not provide sectoral analyses for the climate bills of the 111th Congress, which had significant incentives for CCS programs, as described above, that would have buffered the coal industry from some losses.

<u>Summary Analysis of Motivations for Industry Political Activities on Climate</u> Legislation

The output losses across all the energy industries examined in this analysis is consistent with the bias in campaign contribution in favor of representatives who did not sponsor climate bills in the 109th through 111th Congresses. When compared against public relations statements made by business coalitions and individual companies within these industries as examined in first and second sections, the climate-conscious claims of individual companies are thrown into question. These findings cast significant doubt especially on those industries and companies that expressed a vague commitment to climate goals without making explicit statements supporting specific targets, policies or approaches.

The closer examination of campaign contributions surrounding the vote on H.R.2454 provides further insight into industry positions. The vote provides a unique opportunity to observe contribution behavior to more "moderate" climate bill supporters who voted in favor of a cap-and-trade policy without necessarily taking the potentially more politically risky and prominent step to sponsor one. As seen above and unlike the broader three-Congress analysis, contributions around H.R.2454 from three of the four industries examined are split fairly evenly between the yea and nay voters. In fact, the auto and coal industries contributed more to yea voters.

The relative inactivity of coal companies in opposing climate legislation, especially compared to oil companies, is likely due in part to the significant subsidies to the coal industry through CCS incentives in several climate bills, including H.R.2454. It appears that rather than opposing climate legislation altogether, coal companies lobbied to include favorable provisions for their industry within the bills. In addition to CCS, coal and utility companies also have some opportunities to diversify their energy portfolios, providing a further buffer in dealing with climate policy impacts. CONSOL has already begun making significant natural gas investments, with Alpha following suit.⁶⁷ Likewise, utility companies with large shares of gas and nuclear generation can use these energy sources to meet GHG standards and stay in business.

Auto industry support can be attributed to the minor impact of cap-and-trade policies on the motor vehicle industry in addition to past auto manufacturer claims of bearing an unfair share of the emission reduction burden due to federal vehicle fuel efficiency standards already in place and GHG standards soon to come. An economy-wide policy could be seen as a more equitable burden-sharing plan to hold other energy industries accountable for emissions.

As examined above, the oil industry maintains the strongest contribution bias against climate bill supporters. The EPA's sectoral economic analysis of comparable bills from the 110th Congress shows that aside from coal mining, petroleum refining will see the greatest losses of the four industries of interest. However, the slightly higher percent of output losses does not seem significant enough to explain the

⁶⁷ Nichols, Bruce. "Consol deal shows coal sector eyeing natgas." *Reuters*. 18 March 2010. http://www.reuters.com/article/2010/03/18/us-coal-gas-analysis-idUSTRE62H3GG20100318

great disparity in campaign contribution activity with the other three industries. One speculative explanation for this strong bias is that oil corporations faced with dwindling conventional reserves are increasingly turning to unconventional sources such as tar sands. These oil resources are extremely energy-intensive and contribute significantly more GHGs than conventional fuel oil, which means that oil companies could actually face increasing GHG burdens due to fuel source diversification.

Remaining Questions and the Need for Lobbying Disclosure Reform

While the analysis above attempts to draw conclusions about corporate political activities with regard to climate legislation, the lack of detailed lobbying records combined with compounding factors involved in campaign contribution decisions creates difficulties in identifying the specific nature of their influence. In particular, members of Congress who oppose climate legislation could tend toward other policies that energy companies would favor, complicating the link between campaign contributions and sponsorship and voting patterns. For example, Republican legislators could be more likely to support tax breaks for corporations as well as oppose climate legislation. It is impossible to determine the exact motive for energy company campaign contributions to verify that the contribution patterns observed which served as a proxy for climate lobbying activities were indeed due to positions on climate change rather than other issues that fall along the same partisan or ideological divide.

The lack of detailed disclosure documentation is a fundamental obstacle in determining to what degree corporate lobbying activities align or diverge with public statements. Academic and legislative circles alike have called for lobby reform, including disclosure requirements, to increase transparency and reduce the opportunity for corruption.

Successful Disclosure Reform Efforts

The Lobby Disclosure Act of 1995 was passed in part to address this need for "public awareness of the efforts of paid lobbyists to influence the public decision-making process." The Senate Committee on Governmental Affairs reported on an earlier version of the bill prior to its passage that its goals included:

[...] increasing public awareness of and confidence in the functioning of government; ensuring that public officials are fully accountable to the public for their actions; discouraging lobbyists and their clients from engaging in improper activities; and affording interested parties an opportunity to respond to lobbying campaigns.⁶⁹

The law requires disclosure of the specific issues that are lobbied, which Houses of Congress and federal agencies are lobbied, names of active lobbyists, any foreign interests, and lobbying income or expenditures.⁷⁰ The following paragraphs will examine legislative efforts and academic analyses that

⁶⁸ Lobbying Disclosure Act. Public Law 104-65. 104th Congress. 19 December 1995. http://lobbyingdisclosure.house.gov/lda.html

⁶⁹ Luneburg, William V. and Thomas M. Susman. "Lobbying Disclosure: A Recipe for Reform." *Journal of Legislation*. 2006. Vol. 32.

⁷⁰ Ibid

have found the current requirements lacking in terms of requirements for lobbying transparency and disclosure compliance, thus hindering a complete understanding of corporate influence.

Following the 2006 lobbying corruption scandals involving Jack Abramoff and former House Majority Leader Tom DeLay, a renewed lobbying reform effort emerged in the 109th Congress. In addition to procedural regulations for lobbying, The Honest Leadership and Open Government Act of 2007 made further progress by requiring quarterly rather than biannual disclosure filings, semi-annual reports on lobbyist campaign contributions, and publicly available electronic filings of lobbyist reports. ⁷¹

Remaining Areas for Reform

Additional legislative proposals for reform measures in the 109th Congress that did not pass included disclosure of which individual legislators are contacted for particular efforts and closer identification of lobbyist linkages to those lawmakers and the specific issues being lobbied.⁷² This information would be particularly useful in examining the influence of corporate climate lobbying to directly examine the voting behavior of Members of Congress that had been contacted by various energy companies, as compared to those who had received less lobbying attention. Such an analysis would be able to identify patterns more conclusively than using campaign contributions as a proxy for lobbying behavior, despite the parallels between the two. In addition, requirements for more thorough disclosure of lobbying positions and details of discussions with legislators would encourage energy companies to match their political activities with their public relations statements.

Compliance and Enforcement Shortfalls

In addition to the potential for strengthening lobbying disclosure requirements, there is a lack of enforcement of existing regulations. Review of the disclosure reports since 2005 for all eighteen energy and auto companies and their hired lobbying firms in the above analysis revealed wide variation in the degree of detail provided. Some limited disclosure on issues lobbied to as little as the broad standard categories, particularly "Energy/Nuclear" and "Environment/Superfund." This level of detail provides almost no insight into actual lobbying activities. Most reports ranged from identifying legislative issues such as "climate change" and "global warming legislation" to providing comprehensive lists of all climate and energy bills on which the company lobbied. However even this level of detail fails to fully illuminate the position and influence of the corporation on each of these issues and bills. Only a few reports out of hundreds mentioned company positions on the particular climate issues and bills lobbied, and such specificity ceased entirely after the 109th Congress.

The variation in compliance and disclosure detail observed in this analysis can be attributed at least in part to the weak enforcement structure for lobbying disclosure regulations. Under the Lobbying Disclosure Act of 1995, there are no criminal penalties for disclosure violations, and the maximum civil

⁷¹ Honest Leadership and Open Government Act of 2007. 110th Congress. 31 July 2007. http://www.govtrack.us/congress/bill.xpd?bill=s110-1&tab=summary

⁷² Luneburg, William V. and Thomas M. Susman. "Lobbying Disclosure: A Recipe for Reform." *Journal of Legislation*. 2006. Vol. 32.

penalty is \$50,000 per "knowing" violation.⁷³ The minor penalties are already a weak deterrent, and the limitation to willful violations provides an additional loophole for noncompliance.

The Secretary of the Senate and Clerk of the House report disclosure violations to the United States Attorney for the District of Columbia within the Department of Justice (DOJ), which alone has the authority to prosecute. Of the more than 2,000 unresolved violations reported by the Secretary between 2003 and 2006, DOJ reported receiving only 200. Over this entire period, only three of these cases were settled with fines and a three-year lobbying ban on one individual.⁷⁴ Given the prevalence of disclosure irregularities, supported by observations of shortcomings in many lobbying reports examined for this analysis, DOJ's level of prosecution falls short of the level of enforcement required to ensure compliance with existing regulations.

Conclusion

While a few energy companies made public statements in favor of binding climate legislation, most committed themselves only to vague statements of environmental stewardship without advocating for specific policy solutions. Statements of overt opposition to climate legislation by industry officials in the press and testimony further reveal internal contradictions within these corporations. The examination of lobbying behavior, using campaign contributions as a proxy for lobbying goals, demonstrates corporate reluctance to back stated concern for climate change with support for legislation, especially bills with more significant targets. Oil companies in particular exhibited the greatest bias, most notably surrounding the only Congressional vote on a stand-alone climate bill. This could be due to the likelihood that, unlike the other industries examined, oil industry GHG emissions are likely to increase rather than decrease with fuel source diversification.

These findings could be greatly supplemented and illuminated through more thorough lobbying disclosure requirements. While there are significant parallels in campaign contribution and lobbying patterns, as examined in the literature scoping, the proxy use has limitations. Disclosure of lobbying positions and contacted representatives would eliminate the need for this intermediate step, and encourage more transparent corporate positioning regarding climate change and other legislative issues.

⁷³ Ibid

⁷⁴ Ibid

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Appendix I: Campaign Contribution Summary Tables

Summary of Industry Campaign Contributions during the 109th Congress (2005-2006)

Industry		ll Industry ibutions	U	Industry ibution	Numl	rage ber of bients	Percent of Representatives Receiving Contribution		
Sponsor?	Yes	No	Yes	No	Yes	No	Yes	No	
Oil	\$104,800	\$1,577,800	\$96	\$753	8	105	4%	30%	
Utilities	\$292,480	\$1,547,318	\$321	\$887	18	101	10%	29%	
Coal	\$7,000	\$490,390	\$10	\$351	1	44	1%	12%	
Auto	\$100,170	\$1,209,525	\$183	\$1155	15	123	8%	35%	

Summary of Industry Campaign Contributions during the 110th Congress (2007-2008)

Industry		ll Industry ibutions	_	e Industry ribution	Numl	rage per of pients	Represe Rece	ent of entatives iving bution
Sponsor?	Yes	No	Yes	No	Yes	No	Yes	No
Oil	\$180,500	\$1,835,164	\$153	\$916	10	104	1%	31%
Utilities	\$403,315	\$1,408,580	\$409	\$843	24	86	2%	26%
Coal	\$44,000	\$463,166	\$56	\$347	5	47	3%	14%
Auto	\$199,858	\$1,069,951	\$338	\$1,068	27	109	14%	33%

Summary of Industry Campaign Contributions during the 111th Congress (2009-2010)

Industry		All Industry ributions	J	Industry bution	Numl	rage ber of pients	Represe Rece	ent of entatives iving bution
Sponsor?	Yes	No	Yes	No	Yes	No	Yes	No
Oil	\$11,000	\$1,824,650	\$65	\$603	1	100	3%	20%
Utilities	\$48,500	\$1,847,602	\$346	\$733	3	109	11%	22%
Coal	\$6,000	\$667,142	\$54	\$331	1	57	2%	11%
Auto	\$32,500	\$773,000	\$387	\$511	5	94	18%	19%

Summary of Industry Campaign Contributions to Sponsors by Bill Stringency during the 109th – 111th Congresses (2005-2010)

	A	verage Iı	ndustry C	ontributi	on			-	sentativ ibutions	
Level	No	1	2	3	4	No	1	2	3	4
Oil	\$735	\$151	\$813	\$145	\$88	26%	7%	23%	7%	3%
Utilities	\$809	\$387	\$1113	\$458	\$301	25%	15%	38%	14%	9%
Coal	\$341	\$5	\$516	\$36	\$23	12%	1%	31%	2%	1%
Auto	\$857	\$369	\$688	\$527	\$206	28%	14%	29%	16%	10%

Summary of USCAP and Non-USCAP Campaign Contributions to Climate Bill Sponsors

	109th Co	ongress	110 th Co	ongress	111 th Congress			
	USCAP	Non-USCAP	USCAP	Non-USCAP	USCAP	Non-USCAP		
Average Contribution	\$144	\$318	\$263	\$437	\$379	\$531		
Average Number of Recipients	14	17	22	26	5	5		
Percent of Recipients	8%	10%	11%	13%	16%	18%		

Summary of Campaign Contributions in the 109th Congress – House vs. Senate and Climate Bill Sponsor vs. Non-Sponsor

	Avera	age Indust	ry Contrib	ution		cent of Re ceiving Co	-	
House/Senate Sponsor/No	House Yes	Senate Yes	House No	Senate No	House Yes	Senate Yes	House No	Senate No
Oil	\$80	\$171	\$717	\$905	4%	8%	32%	23%
Utilities	\$288	\$478	\$843	\$1069	9%	16%	26%	39%
Coal	\$8	\$16	\$265	\$710	1%	2%	10%	21%
Auto	\$157	\$306	\$1024	\$1696	8%	6%	35%	36%

Summary of Campaign Contributions in the 110th Congress – House vs. Senate and Climate Bill Sponsor vs. Non-Sponsor

	Avera	age Indust	ry Contrib	ution		cent of Receiving Co	_ '	
House/Senate Sponsor/No	House Yes	Senate Yes	House No	Senate No	House Yes	Senate Yes	House No	Senate No
Oil	\$72	\$825	\$879	\$1037	4%	17%	34%	21%
Utilities	\$357	\$850	\$805	\$969	10%	27%	25%	30%
Coal	\$43	\$161	\$276	\$580	1%	13%	12%	20%
Auto	\$343	\$295	\$966	\$1401	14%	13%	32%	34%

Summary of Campaign Contributions in the 111th Congress – House vs. Senate and Climate Bill Sponsor vs. Non-Sponsor

	Aver	age Indust	Percent of Representatives Receiving Contributions					
House/Senate Sponsor/No	House Yes	Senate Yes	House No	Senate No	House Yes	Senate Yes	House No	Senate No
Oil	\$76	\$28	\$568	\$762	3%	3%	21%	15%
Utilities	\$300	\$517	\$692	\$920	9%	20%	19%	32%
Coal	0	\$250	\$292	\$508	0%	8%	10%	17%
Auto	\$447	\$167	\$487	\$623	20%	11%	19%	18%

Summary of Industry Campaign Contributions to Sponsors by Bill Stringency during the 109th – 111th Congresses (2005-2010)

	Average Industry Contribution					Percent of Representatives Receiving Contributions				
Level	No	1	2	3	4	No	1	2	3	4
Oil	\$735	\$151	\$813	\$145	\$88	26%	7%	23%	7%	3%
Utilities	\$809	\$387	\$1113	\$458	\$301	25%	15%	38%	14%	9%
Coal	\$341	\$5	\$516	\$36	\$23	12%	1%	31%	2%	1%
Auto	\$857	\$369	\$688	\$527	\$206	28%	14%	29%	16%	10%

Appendix II: Climate Bill Emission Target Calculations Relative to 1990

Emission targets were generally expressed in terms of 1990, 2005 and 2006 baselines. In order to standardize for comparison, this analysis used a 1990 level of 4819 tCO_2e for sectors covered under an economy-wide cap, 7181 tCO_2e for 2005 and 6188 tCO_2e for 2006.⁷⁵ Aggregate reduction levels were calculated on a percentage basis for bills that stated goals only in annual percentage reductions.

⁷⁵ Emissions of Greenhouse Gases in the United States 2006. Office of Integrated Analysis and Forecasting. U.S. Energy Information Administration. November 2007.

Appendix III

Level 1

Does not specify, not economy-wide, does not extend to 2020

109th Congress

H.R.759: 2000 levels by 2010

H.R.2828: 2000 levels by 2010

H.R.1451: 1990 levels by 2010 (from power plants)

H.R.1873: 2001 levels by 2015 (from power plants)

H.R.5049: Does not specify limits – left to Administrator

S.1151: 2000 levels by 2010

S.342: 2000 levels by 2010

S.2724: Does not specify limits – left to Administrator (power plants only)

S.Amdt.826: 2000 levels by 2010

110th Congress

S.317: 6% below 2001 levels by 2020 (from power plants)

111th Congress

None

Level 2

2020 target below 20%

109th Congress

S.4039: 19% below 2005 levels by 2020; 69% below by 2050

110th Congress

S.1766: 14% below 2005 levels by 2020; 33% below by 2030 and after

111th Congress

H.R.2454: 17% below 2005 levels by 2020; 83% below by 2050

Level 3

2020 target between 21% and 30%

109th Congress

None

110th Congress

H.R.620: 27% below 2005 levels by 2020; 71% below by 2050

H.R.6316: 29% below 2005 levels by 2020; 93% below by 2050

H.R.4226: 27% below 2005 levels by 2020; 78% below by 2050

S.280: 27% below 2005 levels by 2020; 60% below by 2050

111th Congress

H.R.1862: 25% below 2005 levels by 2020; 85% below by 2050

H.R.1683: 25% below 2005 levels by 2020; 75% below by 2050

Level 4

2020 target above 30%; tax

109th Congress

H.R.5642: 33% below 2005 levels by 2020; 87% below by 2050

S.3698: 33% below 2005 levels by 2020; 87% below by 2050

110th Congress

H.R.1590: 33% below 2005 levels by 2020; 87% below by 2050

H.R.6186: 31% below 2005 levels by 2020; 81% below by 2050

H.R.2069: tax of \$10 per ton of CO2 in 2008; annual increase of \$10

S.2191: 31% below 2005 levels by 2020; 65% below by 2050

S.309: 33% below 2005 levels by 2020; 87% below by 2050

S.485: 33% below 2005 levels by 2020; 74% below by 2050

S.3036: 31% below 2005 levels by 2020; 76% below by 2050

111th Congress

H.R.1337: tax of \$15 per ton of CO2 in 2009; annual increase of \$10

S.1733: 31% below 2005 levels by 2020; 85% below by 2050