

**Waxman-Markey and Failed Senate Legislation: Climate Change Policy Case Study**

Research Paper

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## **Abstract**

2009 could have been the most important year for climate change policy. Instead it was merely the sixth hottest year on record.<sup>1</sup> The Waxman-Markey bill, considered by many to be the best chance for holistic and significant climate change legislation, passed the House of Representatives on June 26<sup>th</sup>, 2009. Senator John Kerry introduced its counterpart, S. 1733, or the Kerry-Boxer bill, on September 30<sup>th</sup> and then saw it gradually slip off the agenda. During this period the Democrats, the party whose majority believes not only in climate change but also in the need to mitigate the factors contributing to it, controlled both the White House and Congress. This failure to create policy addressing quite possibly the most important issue of our time, at a most advantageous political moment, therefore, creates an opportunity for a case study into the limitations of the American political process. In brief, this paper argues that our present political system is not equipped to handle the type of problem that climate change poses. The first part of the paper summarizes the climate change issue, presents a brief history of past environmental policy, and identifies the limited current efforts to address climate change at the federal level. The second part presents the Waxman-Markey bill and its Senate counterpart and discusses the legislative failure in terms of various policy models.

## **I. The Past, Present and Future of Climate Change**

### **Early Environmental Policy**

While certain provisions to preserve land and natural resources were made in the early 1900s, especially under the leadership of Teddy Roosevelt, most of the significant pieces of legislation were written over the last four or five decades. Examples include the National Environmental Policy Act of 1969, which requires environmental assessments for federal projects, the

empowering amendment to the Clean Air Act (CAA) in 1970, which established the National Air Quality Standards, the analogous Clean Water Act (CWA) of 1972, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), which devoted funding to cleaning up toxic sites, and, more recently, the American Recovery and Reinvestment Act (ARRA), which provided funding to renewable energy technology development and energy efficiency projects. The rise of the environmental movement in the United States played a significant role in pushing these policies onto the public agenda. Most of the environmental legislation was retroactive, however, addressing problems that had accumulated over decades of ignorance. While the environment is better off with these policies in place their success in terms of achieving their goals is dubious.<sup>2</sup> As an example, forty years since the implementation of the CAA, millions of people live in counties with monitor data showing unhealthy air for one or more of the six common air pollutants.<sup>3</sup>

### **Global Warming**

The most complete and most commonly referenced source of information on climate change is the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report. “Warming of the climate system is unequivocal, as is now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice and rising global average sea level,”<sup>4</sup> concludes this report. In fact, in the scientific community, there has been very little disagreement on this issue.

Furthermore, no disagreement exists on the physics behind the “greenhouse effect” which causes the actual warming of the regional climates on our planet. Photons of solar energy easily pass

through Earth's atmosphere initially, but after bouncing off the surface of the Earth, they carry less energy and are trapped inside the atmosphere. By emitting greenhouse gasses (GHGs) to our atmosphere we are increasing its ability to retain heat, which causes our air and water to heat up. This heating causes climate changes on the regional level. The degree to which humans are contributing to this process, as well as the effects of this contribution, is under dispute. The strongest evidence comes from CO<sub>2</sub> concentration in the air, which has increased exponentially since the Industrial Revolution with the mass production of technologies that emit CO<sub>2</sub> as a byproduct of combustion.<sup>5</sup>

Climate change is a different type of environmental problem from the ones we have faced in the past. Due to its global nature, its consequences for humans are much more extensive. The latest reports conclude that water availability and precipitation in the tropics will decrease, heat wave frequency and intensity as well as cyclone intensity will increase, and numerous disease currently limited to the tropical regions will spread toward the poles. In addition, sea level rise, due primarily to the thermal expansion of the oceans, is expected to inundate many islands and coastal areas, displacing hundreds of millions of people.<sup>6</sup>

Compounding the problem is the fact that the symptoms of this potentially catastrophic process are difficult to perceive with the naked eye. The IPCC reports that 11 of the past 12 years rank among the 12 warmest on record since 1850. Nevertheless, the average deviation from the mean for these years is less than 1 degree Celsius. Global average sea level has risen since 1961 at an average rate of 1.8 mm/year.<sup>7</sup> To a scientist these are significant figures, but they are much less

so to a layman or even a politician. Thomas Friedman quotes Harvard professor, John Holden, in his recent book *Hot, Flat and Crowded*:

“Your body temperature is normally 98.6 degrees Fahrenheit, and when it goes up just a few degrees to 102 Fahrenheit, it is a big deal – it tells you something is wrong. The same is true with the changes in the global average surface temperature.”<sup>8</sup>

Unfortunately, most people have not learned yet to make this diagnosis of the external environment.

### **Climate Change Policy**

World governments took the first step in addressing the anthropogenic effects on climate change in 1988 when they established the Intergovernmental Panel on Climate Change (IPCC). IPCC’s first report, published in 1990, confirmed that regional climates were warming and provided probability estimates for various effects of the changing climates, including rising sea levels, droughts, and shifting precipitation patterns. To date IPCC has produced four reports, each showing the rise in global temperatures with more certainty, supported by more data, and causing a greater degree of environmental disruption. The latest report, published in 2007, concludes that an increase in frequency of hot extremes, heat waves and heavy precipitation is very likely during 21<sup>st</sup> century, among many other trends that are certain to cause disruptions to human economic and social systems.<sup>9</sup>

To address the findings of the IPCC reports, the United Nations (UN) members signed the UN Framework Convention on Climate Change (UNFCCC) in 1992. This non-binding target

agreement led to the more binding Kyoto Protocol, which set the goal of reducing global GHGs by 5% on average from 1990 levels between 2008 and 2012.<sup>10</sup> Notably, the US and China, were the only major nation-states not to sign the agreement.

The Kyoto protocol also facilitated the establishment of the carbon market by creating the Clean Development Mechanism, which allows industrialized countries to invest in emission reduction projects in developing countries as an alternative to reducing emissions at home. Reduction credits can then be traded on domestic or regional markets and can be integrated into the International Emissions Trading System. The European Union (EU) took the lead on this initiative in creating the EU Emissions Trading Scheme, which is being implemented in two phases starting in 2005.<sup>11</sup> Even though numerous organizations and prominent individuals, such as Al Gore, have been in favor of creating a similar scheme in the US, policy is yet to pass the tipping point against the forces fighting for the status quo.

One way to measure the nation's dedication to resolving climate change is to analyze the amount of funding appropriated to this issue. According to a 2010 Congressional Budget Office report, from 1998 to 2009 federal resources devoted to addressing and researching climate change grew slowly and unevenly, from \$4 billion in 1998 to \$7.5 billion in 2009. Furthermore, much of the recorded growth in funding is due to some existing federal programs being relabeled as addressing climate change without significant change in operation or funding level.<sup>12</sup> The recently passed American Recovery and Reinvestment Act was the most significant increase in climate change funding, but a great deal of concern exists about the ability of regional and local

public sector institutions to meet deadlines and reporting requirements of this Act in order to implement projects aimed at mitigating climate change.

In summary, environmental policy in the US has had some success in addressing the deteriorating relationship between humans and nature, albeit much remains to be done. In addition, past advances required strong leaders like Teddy Roosevelt and popular support. Policies have been largely retroactive, addressing rather than preventing problems such as toxic dumping (CERCLA), burning rivers (CWA) and smog filled air (CAA). Climate change presents an even greater challenge than past environmental concerns. Due to its potential catastrophic consequences, it needs to be resolved proactively in an environment of considerable uncertainty. No clear champion of this issue has emerged, and the public remains ignorant to its progression. With these complications it seems illogical to expect expedient policy driving extensive climate change mitigation and adaptation measures.

## **II. The Attempt and Failure to Find a Solution**

### **Waxman-Markey**

The Waxman-Markey bill (H.R. 2454) passed the House of Representatives on June 26, 2009. Its goals included the creation of clean energy jobs, energy independence, reduction of global warming pollution, and transition to a clean energy economy. With regard to global warming, the bill aimed to reduce US GHG emissions to 20% below 2005 levels to approximately 5,746.1 million metric tons of carbon dioxide equivalent (MMTCO<sub>2</sub>e) by 2020, and to 83% below 2005 levels by 2050. One of the primary mechanisms for achieving these targets was a cap and trade system through which total annual emissions from the covered industries would be limited,

covered entities would have to possess permits for all of their GHG emissions, and trade in emission permits would be permitted.<sup>13</sup> Ambitious as these goals may seem, they are eight years behind the timeline proposed by the Kyoto protocol, which intended to reduce US emissions by 7% below 1990 levels, to 5754.3 MMTCO<sub>2</sub>e, by 2012.<sup>14</sup> The Cap and Trade system is known as a market-based approach to environmental regulation. It is considered to be more flexible for the covered industries when compared to traditional, command and control, forms of policy, such as taxation or standards-based mechanisms.

The bill covered the seven major GHGs identified by the Intergovernmental Panel on Climate Change (IPCC) and would have come into effect in 2012, with the emissions cap gradually ratcheting downward until 2050. This legislation would have covered approximately 8,000 entities, accounting for 85% of US GHG emissions. H.R. 2454 also provided the framework for integrating the US carbon market into the international system. American entities would receive offset credits for investments in emission reducing projects abroad, and in many ways the system was based on the EU example.<sup>15</sup>

The Waxman-Markey bill was the first strong attempt by US policy makers to institute a cap and trade program on greenhouse gasses. It was similar to past legislation in its compromise on affecting major industries. It set aside about 15 percent of emission allowances for industries considered most vulnerable to international competition, including iron and steel, aluminum, cement, glass, ceramics, chemicals and paper. Additional provisions were made for existing coal-fired electricity plants, which are some of the heaviest emitters. Criticisms also arose over the excessive use of offsets (paying for projects that sequester greenhouse gasses) to meet targets.<sup>16</sup>

Nevertheless, the targets were ambitious yet achievable, the infrastructure was in place, and the bill was a big step forward and was lauded by most environmental groups.

### **Efforts in the Senate**

On September 30<sup>th</sup>, 2009 Senator Kerry introduced a similar measure in the Senate intended to set the stage for President Obama's approval of the legislation. The Kerry-Boxer bill was placed on the Senate's legislative calendar on February 2, 2010, but has not progressed further.<sup>17</sup> During 2010 Kerry attempted to unite various interest groups to gain bi-partisan support for similar policy measures. Working with Senators Lieberman and Graham, Kerry succeeded in getting the support of actors as diverse as T. Boone Pickens, the American Truckers Association, and all the major environmental groups. Nevertheless, he was able to secure less than the filibuster-proof 60 votes in backroom negotiations and none of the various iterations of the legislation ever reached the Senate floor.<sup>18</sup>

### **Policy Model Analysis**

In understanding why climate legislation failed to become law in 2010, when the Democrats controlled both the White House and Congress, it is useful to analyze the events in terms of various policy creation models. The most commonly used of these is the policy cycle model, which identifies several sequential steps that an issue has to pass through in order to become a policy. In *Environmental Policy*, authors Norman Vig and Michael Kraft propose that first an issue must appear on the public agenda, generally through a variety of factors that include an event that concentrates public opinion on that issue. The popularity of Al Gore's *An Inconvenient Truth*, was arguably the greatest factor in the ascent of climate change to the public agenda. Then

the issue must pass through three more stages of the policy cycle: 1) policy formulation 2) legitimation, and 3) implementation.<sup>19</sup> Due to the existence of various international agreements and the precedent set by the EU, the policy formulation stage was relatively straight-forward for US politicians. The issue seemed to stall, however, in the policy legitimation stage, where it did not garner enough political support to continue through the process.

In a representative democracy, the politicians are only willing to support the views of their constituents. A Pew Center poll in January, 2010 asked Americans to rank the importance of twenty-one issues. Global warming came in last, with only 28% of the respondents ranking it as a “top priority.” By comparison the economy was ranked first by 83% of the respondents.<sup>20</sup> The Waxman-Markey bill would have provided around \$750 billion in direct and indirect subsidies to consumers to offset higher energy costs.<sup>21</sup> It had the support of the US Climate Action Partnership, a broad coalition corporations and environmental groups that includes General Motors and General Electric. The policy was promoted as contributing to energy independence, because reducing emissions means burning fewer fossil fuels, including oil, most of which is imported to the US. Nevertheless, it could not pass the legitimation phase because it did not gain the political support it needed.

A series of political blunders contributed to this failure. According to an article published in the *New Yorker* on October 11, 2010, President Obama committed several such blunders. Perhaps the biggest was his decision not to pursue climate change as his first priority after taking office. He instead focused on healthcare, pushing climate to the periphery of his agenda. He was also less forceful with Congress in his negotiations on climate legislation than on healthcare, which

may explain the different outcomes of the two policy issues. Lastly, Obama simply *gave* Republicans many of the trading chips that the Senate Democrats were hoping to *trade* in return for bi-partisan support. These included lifting offshore drilling prohibitions, limiting the EPA's ability to regulate GHGs if a cap and trade system were adopted, and providing federal loan guarantees for nuclear plant construction.<sup>22</sup> Passing each stage of the policy cycle requires significant effort and the convergence of a variety of political, social, and economic factors. It seems that no amount of effort would have been enough to overcome the lack of popular and industry support for a measure that pitted the US economy against the global environment.

The policy stream model concerns itself with the primary actors or champions of political issues. The three Senators who pushed climate change legislation after the passage of Waxman-Markey in the House of Representatives were good politicians. They were all, however, motivated by distinct, perhaps selfish, goals. Senator Kerry wanted to escape the shadow of the late Ted Kennedy, who was for years known as the legislative Senator from Massachusetts, while Kerry was the investigator. Kerry was also too willing to negotiate with the Republicans to pass a climate bill and ended up with legislation that lost the support of his own party. Lieberman, an independent, wanted to reestablish his credibility with the Democrats, which he lost by greatly weakening Obama's healthcare bill. He ultimately backed out after the BP oil spill in the Gulf of Mexico drew extensive criticism to his and Kerry's bill which expanded offshore drilling. Graham had a reputation of a "maverick," and often worked across the aisle, but was not known for being able to "get things done." He joined the group as a deal maker, attempting to take advantage of climate legislation to attain provisions for the nuclear, coal and electric utility industries. He backed out when a story leaked to Fox News tagged him as the visionary behind

the cap and trade system, which it called a “gas tax.” Even before this final straw, he was called a “traitor” by his constituents at a town hall meeting.<sup>23</sup> These men believed in the need to address climate change, but could not overcome diverging motivations and political pressures. None was eager to champion the issue if it did not meet his goals, or worse, hurt his political reputation.

The punctuated equilibrium model presents the idea of a system in balance which needs a significant, perhaps catastrophic event, to destabilize the forces of the status quo enough to adopt new policy. In the recent past, the events of September 11, 2001 are a strong example of rapid change in American foreign policy. The connection between climate change and any of its adverse effects is much harder to make. As such, the status quo of *inaction* persists in addressing climate change. Even Hurricane Katrina, which at \$81 billion and almost 2,000 lost lives was the costliest and one of the deadliest hurricanes to ever hit the US, was never tied to climate change in the media. This was in spite of the IPCC reports stating that global warming will likely lead to more intense tropical cyclones.<sup>24</sup> The effects of climate change are gradual. *New York Times* columnist and economist, Paul Krugman, refers to this problem as that of a “boiling frog”, which sits in a pot that warms slowly enough for the frog not to realize the danger until it is too late:

The full dimensions of the catastrophe won't be apparent for decades, perhaps generations. In fact, it will probably be many years before the upward trend in temperatures is so obvious to casual observers that it silences the skeptics. Unfortunately, if we wait to act until the climate crisis is that obvious, catastrophe will already have become inevitable.<sup>25</sup>

The advocacy coalition model helps to analyze the actions of agencies or groups during the policy adoption process. Senators Kerry, Lieberman and Graham were able to gain the support of

environmentalists and industries that greatly surpassed that of any previous climate legislation. At the same time, the Tea Party Movement, acted as a strong counter-force. According to an October 20, 2010 New York Times article, the Tea Party adopted climate change denial as its “article of faith.” In fact, Michael Castle, one of the few House Republicans that voted for the Waxman-Markey bill, blamed his vote for his loss in the following primary elections to a Tea Party supported candidate. The same article presents the views of several Corydon Indiana Tea Party supporters speaking about climate change:

“It’s a flat-out lie” Mr. [Norman] Dennison, [founder of the Corydon Tea Party,] said in an interview after the debate, adding that he had based his view on the preaching of Rush Limbaugh and the teaching of Scripture. “I read my Bible,” Mr. Dennison said. “He made this earth for us to utilize.”

“They’re trying to use global warming against the people,” Ms. [Lisa] Deaton said. “It takes away our liberty.” “Being a strong Christian,” she added, “I cannot help but believe the Lord placed a lot of minerals in our country and it’s not there to destroy us.”<sup>26</sup>

Arguing against religious views has proven to be an uphill battle for climate change policy makers.

The policy diffusion model explains the process of issues spreading between countries or sectors within countries. It is interesting to question why the rally behind addressing climate change has not spread from Europe to the US, where in 2009 only 57% of the population believed there to be solid evidence that the earth is warming,<sup>27</sup> in spite of the nearly unanimous opinion of the scientific community. The barriers to diffusion may be cultural. Americans have become accustomed to a lifestyle of exuberant energy use and do not *want* to believe in anything that

may cause them to change their behavior. Another barrier may be intellectual. The US has fallen behind other industrialized nations in science and mathematics. In a 2006 survey by Raytheon, 84% of 1,000 11-to-13-year-olds said they would "rather clean their room, eat their vegetables, go to the dentist or take out the garbage than learn math or science."<sup>28</sup> The adults are not much different. If the general population has a disdain for science how can one expect scientific evidence to guide their thinking?

The issue attention model focuses on the media coverage of an issue as it progresses toward policy adoption. Considering the one-sidedness of the scientific evidence, summarized in the four IPCC reports, it is hard to understand why climate change deniers are as common in the media as the believers. The situation is analogous to a balanced coverage of the danger and the safety of drunk driving. Not all drunk drivers cause accidents, but one would be hard pressed to find support for drunk driving in the media. Unfortunately, the consequences of climate change are as grave for humanity as a whole as for the drunk motorist. Furthermore, a relative lack of coverage characterized the progression of climate change legislation through Congress.

According to an October, 2009 survey by the Pew Center, 55% of Americans have not heard of "cap and trade" at all, and just 14% of respondents said they heard "a lot" about it.<sup>29</sup> The issue attention model presupposes that the role of the media is essential in adopting policy. Climate change, however, is not as entertaining and, therefore, pervasive, as many of the topics our news media focuses on.

In the end it is perhaps the non-decision model that best describes the state of climate change policy in the United States. This model focuses on the inaction on an issue to the overpowering

forces of the status quo. All efforts to push legislation through Congress died in July of 2010 with oil gushing deep in the Gulf of Mexico. “We know we don’t have the votes,” Senate Majority Leader Harry Reid is quoted saying in a *New York Times* article on July 22, 2010.<sup>30</sup> Democrats who voted for Waxman-Markey in the House of Representatives faced strong backlash from utilities and energy firms.<sup>31</sup> Industry proved too strong for a holistic approach to mitigating climate change.

## **Conclusion**

Studying climate change legislation (or the lack there of) through various policy adoption models, reveals a host of problems with the capacity of the US political system to deal with the issue of climate change. The representative democracy is too slow and requires too much negotiation. It also requires political maneuvering and championed efforts that at times seem herculean. It requires a catastrophe before significant steps are taken retroactively to address the cause of the disaster. It necessitates the unified support of diverse stakeholders and a populace informed and receptive to the issue. Finally, it requires extensive and unbiased media coverage of the issue. Most likely all of these requirements would have to be met for a climate bill to become law.

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