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Emerging U.S. Climate Policy: Where we are and how we got here

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Abstract

After eight years of non-engagement, the new administration and the U.S. Congress, led by a majority in the President's party, are rapidly developing climate policy legislation. This paper summarizes past efforts to establish a national climate policy in the United States as well as the major forces influencing the current debate. While this debate is largely shaped by domestic considerations, it takes place as the international community moves to agree on a post-Kyoto policy regime in Copenhagen next December. Whether the United States is willing to take strong action will significantly influence the actions of other nations.

N.B. This paper is being submitted in the midst of a dynamic legislative process. It ends with what the authors know now, but much will happen in the next three months. We will continue to follow these developments closely as to present the workshop with the most up-to-date account of legislative activity in the United States.

Introduction

On 4 November 2008, the American people elected Barak Obama as President of the United States. To a roaring crowd of almost a quarter-million people, Obama promised that "because of what we did on this day, in this election, at this defining moment, change has come to America". All over the world, scientists, offset developers, energy traders, and the multitude of other parties involved in carbon markets rejoiced. Finally, after eight years of an administration that ignored world opinion on this issue, a seeming champion for the cause of climate policy was in power. Together, with a new, ambitious, Democrat Party majority Congress, it seemed like the cards were finally stacked towards the possibility of serious cap and trade legislation being passed. Despite the financial crisis that has devastated US markets, this possibility is looking increasingly likely. Through provisions made in the national budget, as well as mandates to the U.S. Environmental Protection Agency (US EPA), President Obama continues to prove that he is serious about his pre-election climate platform. In Congress, seasoned cap and trade veterans sit in charge of key committees in the House of Representatives and the Senate, and aggressive climate plans are scheduled to be released from committees in both Houses over the next few months. However, it took many years for the United States to come to the place it is in today.

The Kyoto Protocol

In 1998, then Vice-President Al Gore of the Clinton Administration signed the Kyoto Protocol. However, even the climate change champion himself knew that the treaty had little chance of being ratified in the United States. While the treaty was being drafted, the U.S. Senate unanimously passed the Byrd-Hagel resolution. This resolution stated that the Senate would not ratify any protocol that did not include binding targets and timetables for developing nations, or one that "would result in serious harm to the economy of the United States". President Bill Clinton never submitted the Kyoto Treaty to the Senate .

On the 2000 campaign trail, George Bush promised to reduce carbon dioxide emissions. However, shortly after taking office in 2001, Bush withdrew his support from Kyoto and also refused to give the bill to Congress for ratification. He justified this by saying that the treaty had no restrictions on emissions from China, and cited "uncertainties present in the dangers of the climate change issue". Instead, he proposed his own incentives plan for business to voluntarily reduce their greenhouse gas emissions. However, according to a study done by the U.S. Department of Energy, the plan resulted in a 30 percent increase above 1990 emissions levels by 2010 (Holte 2002). In reality, Bush cared little about the issue of climate change. His administration made multiple claims denying a link between human activity and an increase in carbon dioxide emissions, suggesting that climate change was not an issue worth worrying about at all. There were also allegations that Philip Cooney, a White House official who was also a former oil and industry advocate and current Exxon Mobil officer, played down descriptions of climate research that had been conducted by government scientists.

U.S. Congressional Action

With a complete lack of executive support, it was not until 2007, ten years after Kyoto, that any sort of climate legislation was written. Between 2007 and 2008, members of Congress created fifteen pieces of legislation that sought to establish a cap and trade system. The only bill to make it very far was co-written by Senators Joe Lieberman and John Warner. The Lieberman-Warner Climate Security Act was the first time a comprehensive climate change bill was passed by a congressional committee. The bill combined two caps that resulted in a 20 percent reduction from 2005 levels in 2020, and a 70 percent reduction from 2005 levels by 2050, and covered 80 percent of total U.S. green house gas emissions. Fifteen percent of an entities obligation could come from domestic offset programs, and an additional 15 percent could be offset by international emission allowances. A provision was put in place so that eight years after the bills enactment, the President could require importers of greenhouse gas emission intensive products from other countries that had not taken comparable action to submit credits equal to those required by domestic manufacturers (Warner 2007).

In 2008, Senator Barbara Boxer amended the Climate Security Act. Her modifications are important to analyze, as she is one of the possible authors of a new national bill. Her amendment set aside $850 billion through 2050 for consumer tax relief in order to assist families with an increase in energy costs, an amount far greater than previously proposed. She also meticulously itemized and prescribed the spending in the bill, as well as setting aside some of the auction revenues to ensure that the bill would be "deficit-neutral". Controversially, she included a price-cap on allowances as a cost containment mechanism. While she said she would have liked to see a greater level of auctioning and more ambitious emissions targets, she felt that all of these compromises were necessary in to pass the bill through Congress. While the Lieberman-Warner bill was the furthest any piece of climate change legislation has reached to date, it did not obtain the 60 votes required to block a filibuster in the Senate. It ultimately lost 48 to 36 (Romm 2008).

Obama's Climate Platform

Despite the disappointing defeat of Lieberman-Warner, advocates of a cap and trade bill were encouraged by the energy platforms of the 2008 presidential candidates. Both John McCain and Barak Obama called for cap and trade programs to be enacted, and while Barak Obama's was more specific and stringent, it was heartening to know that whoever won the election, the tone of the executive branch was going to drastically change.

Obama's plan was particularly impressive to advocates of climate change legislation. He proposed to implement an economy wide cap and trade program that would reduce emissions to 1990 levels by 2020. He called to further make the U.S. a leader on climate change by reducing emissions to eighty percent below 1990 levels by 2050. Under his plan, there would be 100 percent auctioning of permits, and the auction revenue would be used to support development of clean energy, invest in energy efficiency improvements, and help develop the next generation of biofuels and clean energy vehicles. The

remaining funds would be used for rebates and other transitional relief for families and communities. In addition to the cap and trade plan, Obama proposed to invest $150 billion over the next ten years to develop and deploy climate friendly energy supplies, which he claimed could help create millions of new jobs. He would require 25 percent of electricity to come from renewable sources by 2025. Finally, he wanted to create new incentives for energy utilities to improve their energy efficiency (Obama 2008).

Regional Initiatives

While Obama was setting the stage for federal legislation, three other regional cap and trade programs were already in the works. The most advanced of these is called the Regional Greenhouse Gas Initiative, or RGGI. Impatient with the inaction of the Bush Administration, ten states in the progressive Northeast of the United States decided to form their own market-based emissions trading system. The scheme promised to stabilize emissions in the first trading period from 2009 to 2014, and reduce emissions 10 percent below 2005 levels by 2019. RGGI only covered power plants with a 25-megawatt capacity or greater, creating a market about one-ninth the size of the EU ETS (Bugnion 2009).

What makes RGGI unique is its almost one hundred percent auction rate, with the auction revenue going to fund renewable energy projects, improvements in energy efficiency, and public benefit. The first auction took place in September of 2008, and the system has been effectively running since that point. However, it quickly became apparent that more permits were being auctioned off than were actually needed. To date, RGGI is over-allocated by almost 12 percent. This is due to the fuel switching away from oil and toward natural gas that took place when oil prices skyrocketed. Combined with the economic slowdown, these forces put serious downward pressure on prices. However, the price of RGGI permits has stayed steady at around four dollars a ton in the months since then. Trades in 2008 resulted in over $250 million, making RGGI the world's third largest carbon market (Bugnion 2009).

One cap and trade system that is still in the planning stages is the West Coast Initiative, or WCI. Combining eight states and four Canadian provinces, the WCI would be half the size of the EU ETS. Its goal is to reduce emissions 20 percent below 2005 levels by 2020. The initial phase would cover only power plants, but in 2015 the scope would double to include transportation and residential fuel. As a cost containing measure, the scheme would allow 50 percent offset use. While this scheme could be the largest regional program in the United States, it is unclear if the governments of the states involved will ratify it. It is also unclear if it will be completely preempted by a national program (Fages, Py, and Tatrallyay 2009, pp. 15–16).

The last regional carbon market on the horizon is the Midwestern Greenhouse Gas Reduction Accord, or MGGRA. While this scheme is still fairly early in the planning stages, with many details still to be worked out, it is likely to look similar to the WCI. This program is particularly interesting, as many of the states in the accord are large

producers of agriculture, and 70 percent of the electricity generated from these states is from coal. The MGGRA has set targets of fifteen to twenty-five percent below 2005 levels by 2020, and 60 to 80 percent reduction below 2005 levels by 2050. Although the market is set to start in January of 2011, this program is the least likely to be grandfathered into a national scheme, as it is the least developed of the three, and lacks a key climate change player like California (Fages, Py, and Tatrallyay 2009, pp. 6–7).

Obama in the White House

President Obama has shown good faith in keeping the promises he made on the campaign trail in 2008. In a controversial move, he included auction revenue from a cap and trade scheme in his draft of the federal budget. In his economic stimulus plan, the American Recovery and Reinvestment Act, Obama allocated to "green" energy programs more than ten times the amount in the federal budget for the previous year. During a March 24th National Address, Obama stated that he would refuse to sign any federal budget that did not provide for a cap and trade program. Furthermore, he has appointed advocates of climate change and veterans of market based emission trading schemes to key positions.

Obama also created a new "climate czar" position, officially titled Assistant to the President for Energy and Climate Change, and gave the spot to Carol Browner. Browner, former US EPA Administrator under President Clinton, helped establish the NO_x and SO_2 emissions trading programs. Obama also appointed Lisa Jackson as the administrator of the EPA. Jackson has stated that "the EPA will stand ready to help Congress craft strong, science-based climate legislation that fulfills the vision the President". The EPA could play a critical role in this debate by making an endangerment finding on greenhouse gasses, essentially allowing the gasses to be regulated by the EPA under the Clean Air Act. While it is unlikely that the EPA would actually regulate the gasses, it could put serious pressure on Congress to come up with their own scheme. One other key player in this debate is Steven Chu, Obama's pick for Energy Chief. Chu is the author of many esteemed international studies on climate change. He has a history of promoting clean energy and quoted as stating that, "coal is my worst nightmare" (Bugnion 2009).

The Current Debate: What Environmentalists Want

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What the American environmental community wants is simple. They want a climate bill, signed by President Obama, this summer, in time for their country to have a legitimate negotiating position going into the Copenhagen COP.

From their perspective this bill must contain: (1) strict targets that are binding and legally enforceable; (2) a commitment for the U.S. to make a strong financial commitment to non-Annex I countries for renewable energy, mitigation and adaptation programs. There are clearly many other important issues involved in the climate bill - from the scope of coverage and allowance allocation to the role of offsets and cost containment. However, there is a general believe that if U.S. commitment to these two primary objectives is strong, the United States, the European Union and other OECD countries will be in a

credible position to ask the non-Annex I countries to undertake the *necessary* commitments to GHG reduction to ensure that global average temperature does not increase more than 2°C above pre-industrial levels (World Wildlife Fund 2009). Moreover, given the scientific evidence coming out of such meetings as the recent International Scientific Congress on Climate Change (University of Copenhagen 2009), there is greater urgency to involve such countries as China, India, Brazil, Mexico and Indonesia in sectoral commitments to GHG reduction.

What targets are likely to emerge from U.S. legislation? At this point, no one is certain. Representative Henry Waxman of California, Chairman of the Energy and Commerce Committee of the U.S. House of Representatives (the House) will submit a bill to his committee on March 31. He has announced that his goal is to move this legislation through the House by May 31. Waxman's goal is politically feasible. The Democratic Party holds a majority in the House - 257 to 178. House votes are determined on majority rule so that as long as Democrats maintain sufficient party discipline, the bill will pass.

Perhaps the best insight into targets likely to emerge in the Waxman legislation are those proposed in the United States Climate Action Partnership's, "A Blueprint for Legislative Action – Consensus Recommendations for U.S. Climate Protection Legislation," issued in January of this year. The members of USCAP, compose a group of 30 major American and multi-national companies including, General Electric, DuPont, Duke Power, Rio Tinto and major environmental organizations – the Natural Resource Defense Council, the Nature Conservancy, the Pew Center for Global Change, the Environmental Defense Fund, who came together in 2007 to develop a common agenda for climate action. Importantly, USCAP includes major energy producers, industrial and mining companies, many of whom will be compliance buyers in a cap and trade scheme. All will face increased energy costs. What motivates these industries' to participate in USCAP? First, all of them see climate legislation as inevitable. And, all would prefer a cap and trade system to a carbon tax. Second, as the CEO of Duke Energy puts it, "If you are not at the table, you are on the menu." In accepting that legislation is inevitable, these companies want input into its design.

USCAP proposes the following (Pew Center 2009):

- 97-102% of 2005 levels by 2012
- 80-86% of 2005 levels by 2020
- 58% of 2005 levels by 2030
- 20% of 2005 levels by 2050
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These targets make the USCAP plan less aggressive than the EU-ETS at the beginning and more aggressive in the future. Current commitments under the Kyoto Protocol will bring the E.U. to 6.5% below 2005 levels by 2012. Proposed commitments for Phase III of the EU-ETS (2012-2020) would bring the EU to between 20 and 30% below 2005 levels depending upon actions taken by the U.S and other major emitters (European Commission 2009). Whether the E.U. sees these as equivalent actions remains to be seen.

USCAP's "Blueprint," is much less specific about financial help to non-Annex I countries. Given the strong representation of probable compliance buyers and energy intensive industries in the group, USCAP recommends that a significant portion of allowances be initially distributed for free with a transition to full auction over time. The Waxman bill is likely to diverge from this view. President Obama's speech of February 24th anticipates auction revenues to the U.S. Treasury. However, given that the President's budget also proposes significant deficit spending, it is unlikely that either he or the Congress anticipate significant increase in foreign assistance coming from these revenues. What is more likely is that a U.S. cap and trade program will engage non-Annex I countries through the market for offsets.

The USCAP proposal directs the U.S. Environmental Protection Agency (US EPA) to establish a standards-based approach for offsets within 18 months on enactment of climate legislation. Such offsets must be real, additional, permanent, enforceable, and verifiable. Offset programs as conceived by this and other groups in the U.S. differ from the Phase II (2008-12) and Phase III (2013-20) of the EU-ETS in three important ways. First, they anticipate a top-down, standards-based approach rather than the bottom-up, projects-based approach of the United Nations' Clean Development Mechanism (CDM) and Joint Implementation (JI) programs. Second, they allow for domestic offsets whereas none are currently allowed or proposed within the European Union. Third, they include forest sequestration both domestically and internationally. Offsets are currently allowed for CDM and JI projects for reforestation and afforestation projects and only one has been so far approved.

Any U.S. legislation is likely to include a limit on the use of international offsets. The USCAP proposal sets this at 1.5 billion metric tons CO 2e, about 20 percent of current U.S. emissions (USCAP 2009). It is unlikely that the non-Annex I countries will see the revenues generated by these offsets as significant assistance for mitigation and adaptation to climate change.

The Current Debate: What Industry Wants.

Much of American industry would like climate change legislation simply to go away. In a recent speech, Senator John Kerry noted that some three thousand lobbyists have been registered to oppose climate legislation in the pending congressional debate. It may surprise Europeans that it is still possible to have a debate on the reality of global climate change in the halls of the U.S. Congress, but such is the case. A recent congressional hearing intended to provide background, scientific information on climate change degenerated into a debate on climate change itself when members of the Republican minority invited a well known "climate skeptic" to testify (Phillips 2009).

The idea of a carbon tax also continues to be debated in the U.S.. Some support a carbon tax because they believe it is a superior policy. Others support it because they prefer the certainty of a tax versus the uncertainty of an allowance price. Others appear to support a tax simply as a delaying tactic. Many who support aggressive legislation see anyone supporting a carbon tax as, at best, the unwitting accomplice of climate skeptics.

Nevertheless, the industrial sectors that are paying attention to the climate policy debate understand that cap and trade is the most likely policy. So, if it cannot be avoided altogether, it should be designed to be as un-burdensome as possible and the incidence of the burden should fall on my competitors rather than me.[1]

Towards this end, American industry has four primary objectives in crafting U.S. climate policy: (1) less stringent reduction targets and compliance timetables; (2) free distribution of allowances and a gradual timetable moving toward allowance auctions; (3) compensation or protection for energy intensive and trade sensitive industries; and (4) a cost containment mechanism on allowance prices.

It is worth noting that there are several policy objectives in which there is no overlap between industry and environmentalists. This situation provides opportunity for compromise between the two groups. Compromise will be especially important when legislation moves from the House to the U.S. Senate. The Democrats lack the necessary majority by 2 votes. Moreover, the Democratic leadership cannot be confident that all its members will line up behind aggressive climate legislation. A number of Democrat Party senators come from coal producing states. Others rely on organized labor for their election to office. With respect to climate legislation, the interests of American labor closely coincide with that of industry – for labor it is a jobs and trade issue (Drake 2009).

Concluding Observations

Most analysts see a climate bill being passed in 2010, with an actual cap and trade system started by 2013. California, a key member of the WCI, is likely to play an important role in the design of the bill and implementation of the program. However, the most likely regional program to be grandfathered in is RGGI, as it will very possibly be the only market functioning when a national program is put in place. According to Societe Generale, the U.S. federal carbon market could represent over $100 billion in transactions from the start, and this number could reach one trillion by 2020 (Fages, Py, and Tatrallyay 2009, pp. 3).

While offsets are likely to play a central role in cost containment, the clean development mechanism (CDM), one of the key offset standards in the EU ETS, has received poor press in the United States, and is unlikely to be used in any sort of U.S scheme. The California Climate Action Registry, and its subsidiary the Climate Action Reserve, will likely play a large role, as it is well established in the states and generally seen to be of high quality. A high percentage of the offsets are likely to be required to come from domestic sources, as there is a lot of rhetoric being spoken in the U.S. about how we do

[1] It is not possible to attribute this sentiment to anyone person or company. In March 2008, the U.S. financial newspaper, the *Wall Street Journal* held a conference on ECOnomics: Creating Environmental Capital that one of the authors attended. This sentiment was articulated by a number of speakers as well as reporters for the paper.

not want to "subsidize Chinese energy". Overall, there is a huge opportunity for profit in U.S. domestic offset programs, as the current level of offset projects represents a small fraction of the possible demand (Bugnion 2009).

Obama has pledged to reengage with the United Nations Framework on Climate Change, and all eyes are focused on Copenhagen, where, for the first time since Kyoto, the world's nations will gather to discuss climate change policy. It is widely believed that in order to have any negotiating power, the United States will need to have some sort of legislation on the table at home. Despite this urgency, many climate change proponents feel that it may be harmful to rush the legislation, as this could result in less aggressive emissions targets. The United States has come a long way since Al Gore traveled to Kyoto twelve years ago. In the upcoming months the world will watch and see if it has come far enough to take a place as leader in the cause to fight global climate change.

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