

Compromising Emissions

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INTRODUCTION

Climate change has become an inevitable source of worry for the international community as a whole. As the idea of sustaining the environment for future generations became a hot topic for world leaders to discuss, the United Nations (UN) has given substantial attention to the detrimental affects of the emission of greenhouse gases (GHGs) on the environment. However, the process of bringing the entire international community to a consensus has been a long and messy road for the UN, which has been threatened to be shot down at every turn.

Among a series of different conventions and conference, the convention held in Kyoto, Japan in 1997, has become the most notorious and most discussed. The Kyoto Protocol was the result of these lengthy discussions. Many different leading countries throughout the world, including the United States, signed this treaty in 1997. In the years since, debates have raged around the world as the United States has backed out, refusing to ratify the treaty. This blatant refusal to cooperate with the international community through the United Nations is nothing new for the U.S. however, what is starkly different in this case, is that the United States is the single largest producer of GHGs.

HISTORY OF THE CLIMATE CHANGE PROCESS

In 1988, the Intergovernmental Panel on Climate Change (IPCC) was created by the World Meteorological Organization (WMO) and the United Nations Environment Program (UNEP). The IPCC's was developed as a response to the need of accurate scientific information for policy and decision makers in world affairs. By 1990, the IPCC

had issued its First Assessment Report claiming that climate change was a real threat and recommended an international treaty to address the problem.¹ In December of the same year, the General Assembly of the United Nations formally launched negotiations on a framework convention addressing the issues of climate change. Almost two years later, the United Nations Framework Convention on Climate Change was opened for signature at the UN Conference on Environment and Development (UNCED) or the “Earth Summit” in Rio de Janeiro. The Convention came into force on March 21, 1994.

Ten years after the adoption 186 governments are parties to the Convention, including the United States. Every year parties have met in the Conference of the Parties (COP) to evaluate the Convention’s implementation and to discuss tactics on how to combat global climate change. In a decision known as the *Berlin Mandate*, a new round of negotiations were launched to create stronger and more defined commitments for industrialized countries to follow. In 1997, two and half years later, the Kyoto Protocol was adopted at COP3.

As a result of the complex negotiations, the entire Protocol is riddled with complexities and political compromises. The Kyoto Protocol sketches out the basics of a compliance system and the basic features of the mechanisms created by the Protocol, however the specific rules and regulations were not defined on how these things would operate in the real world.² 84 countries signed the Protocol indicating that they intended to ratify, there was extensive hesitation to actually implement it due to the ambiguous nature of the Protocol.³ Therefore there have been additional rounds of negotiations at following COP meetings. However, it is still the Kyoto Protocol that illustrates the intended goals of curbing global warming.

¹ *A Guide to the Climate Change Convention and Its Kyoto Protocol*. UNFCCC, Bonn: 2002. pg. 11.

² *Kyoto Protocol to the United Nations Framework Convention on Climate Change*. <www.un.org> Accessed Feb. 8, 2004.

³ The United States was one of the countries who signed the Protocol, implicated that they planned on ratifying it, however this has yet to occur. Which will be later discussed in this paper.

THE KYOTO PROTOCOL

The Kyoto Protocol strengthened and defined the Convention on Climate Change in hopes that countries would begin to implement policies that would start to reduce Greenhouse Gases. Only countries that are Parties to the Convention can ratify the Protocol and likewise only countries that ratify the Protocol are bound by the commitments laid out in it.

The Protocol, in the same manner as the Convention, divides countries into different groups, Annex I, Annex II and non-Annex I Parties. (see fig. 1) Essentially, the Kyoto Protocol, is a part of the Convention, using all of the bureaucracy created by the Convention as well as working towards the Convention's objectives and goals. The Protocol has five main elements:⁴

- **Commitments:** there are a set of *legally-binding* emissions targets for all Annex I countries.
- **Implementation:** Annex I parties must incorporate domestic policies and measures in order to meet their reduction in emission targets. There are other means of offsetting their emissions levels by using, carbon sinks, joint implementation, clean development mechanisms and emissions trading.
- **Minimizing impacts on developing countries:** The Protocol recognized the fact that developing countries are the ones that would most likely be the ones most affected by global climate change and are also the least equipped to implement policies to lower emission levels. Therefore a series of programs and funding opportunities were created to ensure that the burden was not placed on developing countries.

⁴ *Guide to the Climate Change Convention and Its Kyoto Protocol.* pg. 6.

- **Accounting, reporting and review:** rigorous monitoring and reporting systems were created in order to ensure that the Protocol was being implemented correctly.
- **Compliance:** developed a committee to assess and deal with non-compliance.

The basic principle of the Protocol is that countries need to reduce their current GHGs emission levels to the levels they were at in 1990. In some cases this base line is different for countries that are currently undergoing development, they have a little more leeway in their targets, and usually the base line for such instances is 1995, although still there are exceptions. The ways in which to cut GHGs emissions is up for each participating country to decide. For some, developing new energy sources is more lucrative, for others adjusting the processing of emissions in already existing industries is more productive. This flexibility is part what makes the Kyoto Protocol so unique. And yet still, the United States, in particular, has found issue with the international community's response to global climate change.

Opposition to the Kyoto Protocol

In July 2001, President Bush met with other world leaders in Bonn, Sweden with hopes of agreeing on the specifics of the treaty and thus gaining the support of their respective national governments. Many of these nations were angry with President Bush and the United States with their refusal to cooperate, when he literally walked out of the meetings halfway through. He declared that his refusal to cooperate on the Kyoto Protocol was not a sign that the United States was not committed to cutting emissions. According to him, the Kyoto Protocol would send the American economy into ruins. Yet, by the nature in which systemically the Kyoto Protocol was developed the economic risk to any one country would theoretically be minimum.

In a speech in February of 2002, President Bush said, "The approach taken under the Kyoto protocol would have required the United States to make deep and immediate cuts in our economy to meet an arbitrary target. It would have cost our economy up to \$400 billion and we would have lost 4.9 million jobs."⁵ They also complain about the unfairness of the emission targets, citing that the while the U.S. needs to reduce their emissions by 7% other countries would actually be able to increase emissions and third-world countries are not held responsible for their emissions.⁶ The President said that this gave an unfair advantage to developing nations in industry. He later states in the speech in 2002 that, "It would be unfair -- indeed, counterproductive - to condemn developing nations to slow growth or no growth by insisting that they take on impractical and unrealistic greenhouse gas targets. Yet, developing nations such as China and India already account for a majority of the world's greenhouse gas emissions, and it would be irresponsible to absolve them from shouldering some of the shared obligations."⁷

However, these claims are not only inaccurate they fail to accept responsibility leaving the United States open for countless attacks from the international community. This criticism is unifying the rest of the world together against the U.S.⁸ This criticism illustrates the need for the United States to take an active role in reducing their greenhouse gas emissions while at the same time cooperating with the rest of the world. This statement is not only recognized by proponents of the Kyoto Protocol but also its critics.

⁵ "President Announces Clear Skies & Global Climate Change Initiatives." <www.whitehouse.gov/news/releases/2002/02/print/200020214-5.html> Feb. 14, 2002. Accessed Feb. 8, 2004. pg. 4.

⁶ This is in part because several countries had already lowered their emission levels from the preset 1990 levels.

⁷ "President Announces Clear Skies & Global Climate Change Initiatives." pg.4

⁸ Vrolijk, Christiaan. "A New Interpretation of the Kyoto Protocol: Outcomes from The Hauge, Bonn and Marrakesh." The Royal Institute of International Affairs pg. 3.

The Clear Skies and Global Climate Change Initiatives

In 2002, a few months after President George W. Bush walked out of negotiations in Bonn, the White House released their proposed Clear Skies and Global Change Initiatives, as an alternative policy to the Kyoto Protocol. His plan “cuts power plant emissions of the four worst air pollutants – nitrogen, oxides, sulfur dioxide, and mercury – by 70 percent”. It also, “commits America to an aggressive strategy to cut greenhouse gas intensity by 18% over the next 10 years”.⁹ The Initiatives are a series of tax incentives, funding programs for industries, and governmental organizations to monitor the effects of the programs designed by the initiatives. As opposed to the Kyoto Protocol, where there are set emission targets that industries have to meet, the Clear Skies Initiatives allows industries to determine the best level in reductions of GHGs for themselves, with only governmental guidelines. President Bush claims that this flexibility for industries will ensure that reducing emissions will not hurt the economy, while environmentalists claim that the lack of strict regulations will allow industries to continue their upward trend in emission levels.¹⁰

In order to do this, Bush’s plan uses a market-based mechanism of a cap-and-trade program to lower emissions at the lowest costs possible. This plan allows industries to decide when it would be the most economically sound to lower their emissions.¹¹ This is part of the cap-and-trade system that sets emission caps, which are the highest level of emissions allowed by law, and also allows trading to occur. If a company can lower their emissions level below the cap level set, then that company has two choices. First, they can bank that extra emission amount until the next round of lowering the permit able emissions level. So that if they are unable to meet the lower standard due to the economic costs they can then pull out their banked emissions

⁹ “Global Climate Change Policy Book.”

<www.whitehouse.gov/news/releases/2002/02/climatechange.html> Accessed Feb. 8, 2004. pg. 5.

¹⁰ *Global Climate Change Policy Book*. pg.11.

¹¹ *Global Climate Change Policy Book*. pg. 13.

allowances. Second, the company can sell their allowances to other companies, who cannot meet the lower emissions required by the cap. This creates a market for emission allowances.

The Clear Skies and Global Climate Change Initiatives plan calls for specific cap declines in intervals, in 2010 and then again in 2018. According to President Bush, the cap-and-trade system will prompt companies to lower their emissions levels below the set cap. He claims that this system will work identically to the Acid Rain Cap and Trade Program that began in 1995, which set up a similar market.¹²

This market-based approach does seem to work according to how it is supposed to. However, it has been only nine years since this method of controlling emissions was implemented with the Acid Rain Program, so it is still too early to determine what the long-term pattern of this program will be. Specifically looking at if this method would be economically beneficial, it is. It allows companies to have control over when they can afford to lower their emissions while the government ensures that emissions will be lowered. Therefore making it economically sound by giving the whole plan leeway to make allowances for economic slowdowns. However, when looking at the plan suggested by Bush environmentally, it is not as sound for one main reason. The percentage of emissions to be cut under Bush's plan is substantially lower than what the Kyoto Protocol calls for. Consequently his plan is not as environmentally sound as it is economically.

The Clear Skies and Global Climate Change Initiatives, also focuses heavily on ensuring that cutting emissions is not costly for business. To achieve this, the initiatives give tax incentives totaling \$4.2 billion from 2004 to 2008 to encourage the purchase of renewable energy sources, such as solar panels and hybrid/ fuel-cell vehicles.¹³ This

¹² *Global Climate Change Policy Book*. pg. 14.

¹³ *Climate Change Fact Sheet*. <www.whitehouse.gov/news/releases/2003/09/pring/20030930-4.html> Accessed Feb. 8, 2004. pg. 1.

is in hope that with tax incentives more people would begin to purchase technology that would by default lower the nation's emission levels. The initiatives also call for increased funding of \$1.7 billion over the next five years, to develop hydrogen fuel cells and a fueling infrastructure.¹⁴ There is also increased funding for the development of fusion energy, and coal-fired, zero-emissions electricity. In addition to the tax incentives for hybrid vehicles there are new regulations to increase the fuel economy in light trucks for model years 2005-2007, from 20.7 miles per gallon to 22.2 miles per gallon.¹⁵

The Clear Skies Initiatives have countries around the world, along with environmentalists domestically, up in arms over the inadequacy of the President's plan. International critics of the Initiatives claim that they are only looking out for American interests, and that by the United States' refusal to participate in the global effort to lower GHGs emission levels together, it places environmental responsibility on everyone else's shoulder except the U.S'. They also claim that, by not participating in the Protocol, the U.S. is not internationally obligated to actually lower emissions by any meaningful amount, or to contribute funding to help developing nations lower their own levels of emissions.

"When [President Bush] rejected the UN's Kyoto Protocol as, 'fatally flawed' last year, he insisted that he regarded the problem as real, and promised a credible domestic alternative. Unfortunately, his proposal does not include either of the two things that would commend it as a serious effort: taxes on carbon emissions, or mandatory limits on them."¹⁶ A tax on carbon emissions would entail taxation of all industries not just emissions produced by power plants. This would send shock waves throughout the whole economy therefore generating a general consensus to lower emissions immediately. Another attack on Bush's plan address the emissions

¹⁴ *Climate Change Fact Sheet*. pg. 2.

¹⁵ *Climate Change Fact Sheet*. pg. 2.

¹⁶ "Blowing smoke; Climate change," *The Economist*. London: Feb 16, 2002. Vol. 362, Iss. 8260; pg. 50

standards, "Bush is not talking about reducing emissions of GHGs, only emissions intensity - that is, the level of emissions per unit of economic output. That is utterly inadequate as a target, as the 1990s showed, since it is a virtual guarantee of much higher absolute levels of GHG emissions in a decade," as the economy grows.¹⁷

In spite of the fact that the United States has made it apparent, time and again, that it wants no part in the Kyoto Protocol; all efforts must be used in order to keep the U.S. on board with cutting GHGs emissions. This burden will undoubtedly fall on to the United Nations' shoulders. No other international institution has the same amount of weight that the UN does and also, the UN is the institution that legitimized the Kyoto Protocol. But the UN is entirely able to manage the situation as long as all parties involved are aware that compromises will need to be made.

An Alternative Policy

First, the United States needs to be brought back to the negotiating tables. Without the country that has the highest level of GHGs emissions, reducing the emission levels by any significant level is doomed. Therefore it is necessary that the U.S. returns to the negotiating tables and either join an international effort to reduce GHGs emissions, or to create an alternative domestic policy to that of The Clear Skies Initiatives. The international community needs to be aware that the probability of the United States ratifying the Kyoto Protocol is extremely slim, however the opportunity for a new domestic policy is very real. The United States needs to take an active effort in establishing an adequate proposal to significantly cut GHGs emissions that is acceptable to the international community as a whole. There needs to be a constant dialogue between the two sides of this issue, to make sure that the issue of protecting the environment is not lost in the power struggle. In order to achieve this, a new plan on

¹⁷ "Life after Kyoto ; Climate change," *The Economist*. London: Jul 21, 2001. Vol. 360, Iss. 8231; pg. 12

the United State's part needs to be created to improve President Bush's Clear Skies Initiative Program .

In order for a policy to work it must have concrete emission reduction levels established. Without definite reduction goals, optimistic emissions targets will never be achieved. Another aspect that a sound policy must have is an economic support net. It is true that cutting greenhouse gas emissions is potentially an expensive venture. However, with protection against extreme costs the risk of sending the American economy into ruins would be eliminated. A safety valve is a modified version of the cap-and-trade system. It limits the overall cost of compliance by setting a maximum price on emission trading. Once the price hit that maximum level, emission targets would be relaxed. A safety valve would incorporate the best of both worlds, strong emissions targets with an assurance that costs would not become excessive. A safety valve would ensure that as long as the economy was strong there would be an active effort to reduce the level of emissions. But at the same time, allowing the emission targets to be lowered if the economy was unstable. By incorporating these changes into the already existing Clear Skies Initiatives, greenhouse gas emissions can be reduced without excessive economic costs.

Despite the many flaws with the Clear Skies Initiatives, they do offer some benefits, such as tax incentives to purchase "greener" technologies, and budget increases for the development of even more "green" technology. The cap-and-trade technique used by the initiatives could also be a cost saving method for industries around the country. Through incorporating the good things about the Clear Skies Initiatives with new alternatives, a policy that compromises with both sides of the debate could be enacted, that would still lower GHGs emissions.

Challengers of this policy might argue that it does not give enough flexibility to companies to reduce emissions when it is most economically sound for them. This argument is well founded; however strict regulations on emissions are needed in order

to substantially lower emission levels. It is not likely that cutting emissions will ever become a money saving technique, but by incorporating incentives, like a cap-and-trade system, companies will become more likely to lower their emissions. Another potential argument could come from an international level. Countries may be quick to accuse the U.S. of not setting strict enough reduction levels on emissions. Yet, it is important to note that some action is better than no action. By laying a strong foundation, which the aforementioned policy would, future restrictions on emissions will become tighter.

Conclusion

Global climate change caused by greenhouse gases is a serious threat, yet it is a problem that can be reduced if the proper actions are taken. Over the past decade, many efforts have been made internationally to reduce the amount of GHGs emitted into the atmosphere. However, these efforts have been met with criticism from around the globe. It is imperative that nations work together to solve the issue of global warming, because if the problem is global in nature. Without this cooperation the future of the environment is threatened.

Table 1

Source: *A Guide to the Climate Change Convention and Its Kyoto Protocol*. UNFCCC, Bonn: 2002.

Countries included in Annex I to the Convention

Australia	Austria	Belarus*
Belgium	Bulgaria*	Canada
<u>Croatia*</u>	<u>Czech Republic*</u>	Denmark
Estonia*	European Community	Finland
France	Germany	Greece
Hungary*	Iceland	Ireland
Italy	Japan	Latvia*
<u>Liechtenstein</u>	Lithuania*	Luxembourg
<u>Monaco</u>	Netherlands	New Zealand
Norway	Poland*	Portugal
Romania*	Russian Federation*	<u>Slovakia*</u>
<u>Slovenia*</u>	Spain	Sweden
Switzerland	<i>Turkey</i>	Ukraine*
United Kingdom	United States of America	

* Countries with economies in transition; **Bold** denotes countries also included in Annex II; Underline denotes countries added to Annex I at COP 3 in 1997.

Turkey has not yet ratified the Convention. A decision taken at COP 7 deleted its name from Annex II and invited Parties to recognize its special circumstances, which will place Turkey in a different situation from that of other Annex I Parties when it becomes a Party.

Note: Kazakhstan has announced its intention to be bound by the commitments of Annex I Parties, but is not formally classified as an Annex I Party under the Convention. It will, however, be considered an Annex I Party under the Kyoto Protocol, once it enters into force.

Table 2

Source: *A Guide to the Climate Change Convention and Its Kyoto Protocol*. UNFCCC, Bonn: 2002.

Countries included in Annex B to the Kyoto Protocol and their emissions targets

Country	Target (1990* - 2008/2012)
EU-15, Bulgaria, Czech Republic, Estonia, Latvia, Liechtenstein, Lithuania, Monaco, Romania, Slovakia, Slovenia, Switzerland	-8%
US**	-7%
Canada, Hungary, Japan, Poland	-6%
Croatia	-5%
New Zealand, Russian Federation, Ukraine	0
Norway	+1%
Australia	+8%
Iceland	+10%

* Some economies in transition (EITs) have a baseline other than 1990.

*** The US has indicated its intention not to ratify the Kyoto Protocol.

Note: Although they are listed in the Convention's Annex I, *Belarus* and *Turkey* are not included in the Protocol's Annex B as they were not Parties to the Convention when the Protocol was adopted. Upon entry into force, *Kazakhstan*, which has declared that it wishes to be bound by the commitments of Annex I Parties under the Convention, will become an Annex I Party under the Protocol. As it had not made this declaration when the Protocol was adopted, Kazakhstan does not have an emissions target listed for it in Annex B.

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