

#### Available online at www.elixirpublishers.com (Elixir International Journal)

## **Social Science**

Elixir Soc. Sci. 49 (2012) 9836-9841



## U.S. climate change policy: historical background, issues and current debates

Anu Unny

Jawaharlal Nehru University, Delhi, India.

#### ARTICLE INFO

## Article history:

Received: 6 June 2012; Received in revised form: 23 July 2012;

Accepted: 2 August 2012;

### Keywords

U.S., Environmental Era, Climate Change, Greenhouse gases, Developing countries, Kyoto Protocol.

### ABSTRACT

U.S climate change policy has evolved under various administrations. It has passed through two environmental eras. In the first environmental era which started in 1960's and ended in 1990's main focus was on addressing environmental issues domestically by passing a number of environmental legislations. However by the end of 1990's U.S. realized that climate change issues are beyond the control of sovereign states and only through international cooperation it can be tackled. However U.S was not willing to ratify the Kyoto Protocol, the only existing international emission reduction treaty, pointing out that it excludes developing countries from committing to binding emission reduction targets. Though Clinton administration had signed Kyoto Protocol in 1997, in 2001 George W Bush administration rejected the treaty completely. In the context of framing a new climate change treaty replacing Kyoto Protocol by world nations, if it has to be successful, at first it should ensure the participation of United States, the second largest greenhouse gas emitter. Apart from that, participation of key developing countries is also important; however their emission targets must be set up after considering their population size and per capita income.

© 2012 Elixir All rights reserved.

#### Introduction

Global environmental issues are becoming increasingly salient in international relations today. Among these, the biggest long- term threat to the global environment is climate change. It results in dramatic changes in sea level, and weather patterns, with consequences ranging from more frequent and severe floods and droughts to the submergence of some island countries. Despite the growing concern over climate change issues, there is no consensus over what measures to be taken, who takes the responsibility, and how to implement it. Moreover, the division between developed and developing countries on a wide range of issues like binding emission reduction target, technology transfer and financial assistance complicate the process of international climate change negotiations. In this scenario, as a principal actor in global affairs and the second largest emitter of greenhouse gases, U.S.A is expected to offer leadership in the international efforts to address global warming. This study tries to explore how climate change emerged as a major issue area within U.S.; how domestic politics shape U.S. climate change policy; while doing so, it also traces the emergence of climate change issues in U.S.

#### **Emergence of Climate Change Issues in U.S**

In the first half of the twentieth century United States was undergoing through a period of growth and depression. During this period focus was more on the agenda of industrial development than on the efforts to protect the environment. The First World War, the Great Depression of 1930s, World War II, and the Korean War turned the attention of political leaders to the issues of economic prosperity and national security. The postwar prosperity of the 1950s created a mindset of unrestricted growth and development. Consequently environmental issues were neglected completely and economic development was preferred over environmental quality. This gradually led to a number of environmental problems-namely, the first generation

problem of air and water pollution; second—tier issues including toxic and hazardous wastes; then new ,third-tier issues involving stratospheric ozone depletion, global warming and bio-diversity (Vig & Kraft 1996, p.14). Among these, climate change, sometimes labeled as global warming moved to the front burner of United States foreign policy by the end of 1960s. Walter A Rosenbaum, in his book 'Environmental Politics and Policy', divides US environmental politics into two eras. The first "environmental era" began in the 1960's and extended upto the late 1980s, encompassing the Environmental Decade of the 1970s and the second era started from 1990s (Rosenbaum, 1998, p.11).

## Environmental Era I (1960s to 1990's): Combating Climate Change at the Domestic Level

The US government's scientific interest in climate change can be traced to as far as the Eisenhower administration in the 1950's. By that time American scientists started to study the impacts of carbon dioxide and other greenhouse gases on the global environment. But it was with the publication of Rachel Carlson's book 'Silent Spring', in 1962 the issue of climate change started to gain attention among the common people. Carlson brought into light through her book how chemicals introduced into the environment were harming the song birds. Though Eisenhower administration had recognized pollution as an important issue for U.S., his major concerns were on national security and communist threat than on the environment. James Sundquist argues that the Eisenhower years were a time when "the federal government undertook few major new departures to conserve or improve the outdoor environment" (Sundquist 1968, p.323).

Though Eisenhower and John F Kennedy administrations didn't pay much attention to environmental policies, U.S. witnessed the passage of a number of environmental legislations under Lyndon B Johnson's presidency in 1960s. Johnson said:

Tele:

E-mail addresses: anuunny@yahoo.com

"The air we breathe, our water, our soil and wildlife, are being blighted by poisons and chemicals which are the by-products of technology and industry. The society that receives the rewards of technology, must, as a cooperating whole, take responsibility for their control. To deal with these new problems will require a new conservation. We must not only protect the countryside and save it from destruction; we must restore what has been destroyed and salvage the beauty and charm of our cities." (Johnson, 8 February 1965).

He passed a number of legislations such as Endangered Species Preservation Act of 1966, Land and Water Conservation Act of 1965, Motor Vehicle Air Pollution Act of 1965 and National Environmental Policy Act of 1969. Rosenbaum identifies these years (1960s) as the beginning of the first environmental era in US politics.

Environmental Decade (1970s): The period from 1970 to 1980 regarded as the environmental decade in US. 1970s witnessed the passing of a number of landmark legislations in United States. Legislations were passed in the areas of air and water pollution, pesticides, endangered species, hazardous and toxic chemicals, ocean pollution, land degradation, wilderness protection, and energy use. Rosenbaum argues:

The Environmental Decade of 1970s

"....created the legal, political and institutional foundations of the nation's environmental policies. It promoted an enduring public consciousness of environmental degradation and fashioned a broad public agreement on the need for governmental restoration and protection of environmental quality that has become part of the American public policy consensus. It mobilized, organized, and educated a generation of environmental activists" (Rosenbaum 1998, P.11)

The signing of National Environmental Policy Act (NEPA)in 1970 by President Nixon was the beginning of the environmental decade in the country. Later in the year, Nixon created the US Environmental Protection Agency (EPA), which consolidated environmental programs from other agencies into a single entity. However Stanly I. Kutler (1990) argues persuasively that early in Nixon's first term, he had never really been interested in environmental issues. In a recorded conversation, Nixon indicated to John Ehrlichman, one of his closest aides, how he thought environmentalists were overrated, and that they served only the privileged (Kutler 1990). Nevertheless the US government under Richard Nixon was active in pushing the agenda at Stockholm conference in 1972. Governments agreed that their environmental fortunes are interconnected and that they shared in a single global commons. The Stockholm conference also led to the establishment of UNEP (United Nations Environmental Programme). It was with this conference environmental issues truly emerged on the international political agenda.

The years of Carter presidency marked a period of heightened interest in the impacts of human activities on climate. Climate research funding to study the impacts of human activities on climate was expanded, and coordination of climate research efforts among various federal agencies was improved during this period. This led to the adoption of the National Climate Program Act in 1978, which raised the level of climate research funding and established the National Climate Program Office (NCPO) to organize all federally funded climate research. However, we can see a shift in the US domestic environmental policies with the advent of Ronald Reagan (Republican) in 1981, when he sought to reduce federal regulations, particularly the

environmental ones. He was of the view that environmental regulations are burden on the economy and therefore they have to be lifted up (Cannon, 2000). A remarkable bipartisan environmental legislative record from the 1970s (including the Clean Air and Clean Water Acts, the Endangered Species Act, and the Toxic Substances Control Act) ended abruptly within a few years since Reagan took charge. He urged Congress to change its orientation on environmental issues and cut back on federal funding for the environment, in an effort to shift more responsibility to the states. But in the mid 1980s even the Regan administration could not ignore the crucial change that was taking place in terms of the way scientists and policy makers were viewing the consumption of fossil fuels and its climatic impact. When the Second World Climate Conference was held in Villach, Austria in 1985, there was a growing scientific consensus on the potential seriousness of global warming. Despite President Regan's efforts to abolish the Council on Environmental Quality and to curtail the regulatory mandate of the EPA and other environment related agencies, Congress initiated a national program to combat global warming. Led first by the then Representative Al Gore in the House of Representatives (Democrat, Tennessee), and Senator Timothy Wirth(Democrat, Colorado) in the Senate, in the 1980s, Congress passed a number of bills that increased funding for climate research.

Following the discovery of ozone hole in 1985 and the hot summer of 1988, climate change issue became prominent in the agendas of federal government. In response, Global Climate Protection Act was enacted in 1987. It mandated the development of a coordinated national policy on climate change. That year itself, understanding the necessity to combat climate change at the international level, Regan signed Montreal Protocol on ozone depletion. This accord was an important expression of the multilateral effort to address new global climate environmental issues. The heightened interest in climate change issues during this period, led to the establishment in 1989 of the U.S. Global Change Research Program (USGCRP). The Global Protection Act states that 'industrial, agricultural and other human activities coupled with an expanding world population are contributing to the process of global change that may significantly alter the earth habitat within a few human generations" (USGCRP Act 2931, 1990 section 3).By 1990's environmentalists realized that domestic and international environmental issues cannot be viewed in separate frames, but they are interlinked. This conviction led to the beginning of a new climate change policy era in United States.

# **Environmental Era II (1990 onwards): Combating Climate Change Globally**

The year 1990 saw the emergence of a second environmental era in US politics. The U.S. drought of 1988 and the concurrent heat waves that killed 4,800 to 17,000 people in United States were the major reasons behind this. Many of the issues which dominated the domestic politics came to the forefront of international politics during this period. By this time Americans started to realize that many of the environmental issues are beyond the sovereign control of United States. The three most important issues which emerged in Environmental Era II were global climate warming, acid precipitation and bio diversity.

When H.W Bush came to presidency in 1989, he was labeled himself as America's "environmental President" (Bonnefille, 2008, p.27). Supporting the passage of

comprehensive amendments to the Clean Air Act in 1990, George H W Bush ensured that he is willing to protect America's environment even in the midst of strong opposition from both the parties inside and outside Congress. One of those opponents, John Dingell of Michigan (he was also the Chair of the House Commerce Committee) was particularly concerned that the Act didn't exert penalty against Detroits automobile industry. Supporting the stand of Dingell, a number of congresspersons also came up opposing the Act; because they saw that the utility companies and the coal industry in their constituencies would end up paying excessive costs for clean up. In addition, John Sununu, Bush's Chief of Staff, attempted to weaken the act in October 1990, advocating that fewer restrictions should be levied against the Midwest utility companies (Campbell 1991, p.212). Though, finally President Bush came out firmly against the concerns of the Midwest utility companies, he refused to pressure the automobile industry in like manner. This uneven advocacy against air pollution by the President, tended to weaken his position among environmentalists. Though George H W Bush used his Presidential power to ensure the passage of Clean Air Act Amendments in 1990, that same year itself Bush failed to sign the carbon dioxide emissions reduction agreement, along with most of the other industrialized countries at the United Nations World Climate Conference, succumbing to political and business pressures.

In 1992 at an Earth Summit in Rio, environmentalists were again disappointed with President Bush because he signed the global warming treaty only after it had been significantly weakened. The treaty required those countries which have signed the treaty, to share the technologies and costs of maintaining the environment. His plan to exclude all binding timetables for reducing emissions or specific levels of emissions clearly was a reversal in his commitment to environmental priorities. Moreover, Bush stood alone in the international forum by his refusal to sign the Biodiversity Treaty. His refusal to sign it left United States isolated among the host of international delegates.

When Bill Clinton came to presidency in United States, he was seen by environmentalists with much hope. In June 1993, Vice President Al Gore stated in the United Nations Commission on Sustainable Development that:

"The United States and other developed countries have a disproportionate impact on the global environment. We have less than a quarter of the world's raw materials and create three quarters of all solid waste. One way to put it is this: A child born in United States will have 30 times more impact on the earth's climate during his or her life time than a child born in India. The affluent of the world have a responsibility to deal with their disproportionate impact" (Gore, 14 June1993).

Due to Al Gore's influence, the U.S. government accepted the idea that consumption patterns in the North were excessive and ought to be changed. President Bill Clinton in his 1993 Inaugural Address, stated: "There is no longer a clear division between what is foreign and what is domestic. The world economy, the world environment, the world AIDS crisis, the world arms race: they affect us all" (Clinton, 20 January 1993). He was referring to the point that these issues are no more domestic issues which affect only a few nations, but global issues which have to be tackled through multilateral cooperation.

Clinton administrations' first major initiative was the 1996 Environmental Policy Initiative. Clinton administration's decision to agree to binding GHG emission targets at the plenary meeting of the second Conference of the Parties (COP-2) in 1996(Geneva, Switzerland) increased the visibility of global warming as a national political issue in United States. Timothy Wirth, the head of U.S. diplomatic delegation to COP-2, proposed that 'future negotiations would focus on an agreement that would set a realistic, verifiable and binding medium term emissions target' (Wirth, 22 July 1996). The Geneva Declaration, which was agreed at that conference reminded parties to the UNFCCC, of the convention's principles of equity, common but differentiated responsibility, respective capabilities of parties, the precautionary principle, and development priorities. Although the U.S. proposal didn't include any specific references to emissions targets, it caused a seismic shift in the politics of climate change because it marked for the first time United States' agreement to binding emission targets.

In 1997, during a conference on climate change in White House, President Bill Clinton outlined four principles that he said would guide U.S. policy on climate change:

First, the "potential for serious climate disruption is real." Second, countries should commit to "realistic and binding goals" to limit their emissions of green house gases. Third, the United States would "honor its global responsibilities", but would do so using flexible market based approaches and improvements in technology. Fourth, developing countries would have to join the developed countries in this process in a way that is fair to all", because emissions from the developing world would eclipse those of the developed world in coming decades. "The developing countries, ought to join meaningful, but equitable commitments that didn't sacrifice their economic growth" (Warrick 1997).

Clinton's final principle was a response to the Senate Resolution 98,the so called Byrd-Hagel Resolution, which was passed in July 1997. The resolution demanded the President to reject any protocol of the UNFCCC that would require the United States to reduce its GHG emissions unless it also mandated "new specific scheduled commitments to limit or reduce greenhouse gas emissions for Developing country parties within the same compliance period" or would result in serious harm to the economy of the United States" (Byrd-Hagel Resolution, S. Res.98)). The Clinton administration tried hard to work around this resolution, while recognizing that it couldn't be ignored because the Senate would have to ratify the Protocol.

When the Kyoto Protocol negotiations started in 1997, U.S. administration called for "meaningful participation" by key developing countries, such as China and South Korea as a criterion for active U.S. participation in the Protocol. Clinton Administration maintained the position that these countries (developing countries) would not be expected to do as much as the developed countries and there would be national differentiation based on individual circumstances. However, majority of the nation states including some developed countries rejected this proposal and persuaded U.S. to accept the deal which exempts developing country parties from binding emission reduction targets. The Developing world argued that the developed countries are more responsible for polluting the

<sup>&</sup>lt;sup>1</sup> However the conditions for 'meaningful participation' remains undefined.

atmosphere (since the time of industrial revolution) and so that they have to accept the burden. In short, the disparity between US led Annex 1 countries and China led Non-Annex1 countries were on three items: 1) the amount of binding reductions in greenhouse gases to be required, and the gases to be included in these requirements.2) Whether developing countries should be part of the requirements for greenhouse gas limitations and 3) whether to include emissions trading and joint implementation. Finally, the Byrd- Hagel Resolution which was passed in the Senate a few months before the beginning of Kyoto Conference prevented the administration from ratifying the legally binding emission reduction treaty which cause burden to the economy of United States. After a series of discussions and dialogues. however, United States signed the Kyoto Protocol in 1998 in an effort to give boost to international negotiations. However, even today non-ratification of Kyoto Protocol by US remains a disputed issue among developed and developing countries.

Climate change issues took a new turn, both in domestic politics as well as in international politics when President George W Bush (2001-2009) remarked that the United States would not continue participating in negotiations on the Kyoto protocol, and would develop an alternative approach .Bush said of the treaty:

"This is a challenge that requires a 100% effort; ours and rest of the worlds. The world's second largest emitter of greenhouse gases is the Peoples Republic of China (In 2008, China overtook US to become the largest emitter of greenhouse gases); yet China was entirely exempted from the requirements of the Kyoto protocol. India and Germany are among the top emitters; yet India was also given exemption from Kyoto. America's unwillingness to embrace a flawed treaty should not be read by our friends and allies as any abdication of responsibility. To the contrary, my administration is committed to a leadership role on the issue of climate change. Our approach must be consistent with the long term goal of stabilizing greenhouse gas concentrations in the atmosphere". (Bush, 6 November 2001).

Bush expressed skepticism about the science of climate change, calling for additional research to determine its reality. But the two powerful hurricanes that battered the United States' southern states in mid-2005, the destructive power of which atmospheric scientists believed was caused by global warming. Despite the Environmental Protection Agency declaring the dangers of global warming, Bush actively sought to prevent domestic regulation of carbon dioxide. His policy proposals involved voluntary measures and research on technologies. Bush said at the July 2005 G8 group Summit that, human activities are "to some extent" to blame for global warming (Bush,4 July 2005). Bush's unwillingness to agree that human activities contribute to global warming was widely criticized. Compared to his predecessor Clinton, Bush's policies were regarded as anti-environmental in nature and many Democrats believe that his policies have tampered the image of U.S. in the international politics.

A positive shift in US policy on climate change has evolved with the advent of Obama administration in January 2009. Under Obama Administration, the climate bill has been passed in the House and is waiting for ratification from the Senate. The bill which calls for substantial cuts in greenhouse gas emissions

over the coming decades, and the implementation of a cap and trade scheme implies that U.S. is approaching the issue with utmost seriousness. Though, Obama has completely rejected the possibilities for U.S. ratification of Kyoto Protocol, developing world realize that any binding agreement without US (the 2<sup>nd</sup> largest emitter of CO2) on board is in vain. In his study of U.S. foreign policy and global environmentalism, Paul Harris argues that "the world's governments and other important actors cannot deal effectively with environmental changes if the United States does not play an active role"(Harris 2001, p.34).

#### Widening North-South Debate-

Today, climate change issues have turned out to be a huge battleground for developed and developing world. Mathew Paterson and Michael Grubb in their article 'International politics of climate change' bring an insight into this issue pointing out the split among developing and developed countries in terms of their climate change positions (Paterson & Grub, 1992,). The developing countries can be split into at least three main groups in terms of their negotiating positions. One extreme are the oil producing countries, led by Saudi Arabia and Kuwait, these states have been opposed to all controls on CO2 emissions. They fear that any control on CO2 emissions would reduce dependence on oil globally and it would adversely affect their oil industry. At the opposite extreme are the countries organized into the Alliance of Small Island States (AOSIS). These are states from the Pacific, Indian and Atlantic Oceans, some of which are only two meters above the sea level at their highest point. They are thus extremely vulnerable to the impacts of climate change. The rest of the developing countries form the third group. Their emphasis is on equity and development concerns. They point out that, basic economic development is their primary need, and developing countries commitments should be purely dependent upon the provision of financial resources and technology transfer by the North. Furthermore the Conventions should not include sophisticated monitoring and compliance procedures which would infringe developing countries sovereignty over their use of natural resources (Beijing Declaration, 2008). This group emerged as an important subgroup of the G-77 at the December 1991 session of the climate change negotiations.

In the recently concluded Durban Summit (2011), BASIC and G-77 countries were arguing that, industrialized countries haven't fulfilled their pledge to provide financial and technological assistance to the developing world, in limiting greenhouse gas emissions.<sup>3</sup> Their argument is that industrialized, developed countries of the North attained their expected economic growth rate by massively exploiting the natural resources and largely emitting tons of greenhouse gases into the atmosphere. But now the developing countries are suffering for this and bearing the brunt of climate change impacts such as lower farm production, more frequent and more severe droughts, floods and storms and rising sea level. Moreover at this crucial time, when developing countries undergo a process of industrialization, demanding them to reduce emissions is unjustifiable. So, they see the North's ,especially U.S.'s concern to put climate change issues on the international political agenda as an attempt to hold back developing countries' economic growth by limiting their energy use. The developing world led

<sup>&</sup>lt;sup>2</sup> G8 is a group of developed countries including Japan, Italy, France, U.S., U.K, Canada, Germany and Russia.

<sup>&</sup>lt;sup>3</sup>BASIC is a group of developing countries including Brazil, India, China and South Africa. G-77 is also a caucus organization of developing countries.

by BASIC countries has raised strong protest against the U.S.'s proposal to bring developing countries under binding emission targets. They also argue that if industrialized countries are sincere in their efforts to combat global warming ,they should extend financial and technological help for developing countries to deploy clean technologies, reduce deforestation and thus to adjust with the impacts of climatic change.

However developed countries, especially U.S.'s approach to this issue were very evident throughout the Copenhagen talks. The United States Special Envoy for climate change, Todd Stern, put it this way:

We absolutely recognize our historic role in putting emissions in the atmosphere up there that are there now. But the sense of guilt or culpability or reparations - I just categorically reject that. Developed nations did not always know that they were causing global warming by burning fossil fuels and emitting greenhouse gases into the atmosphere. This knowledge only began to form in the 1980's and 1990's; over a century after the industrial revolution had begun. It is inappropriate therefore, to hold developed nations morally accountable for starting the industrial revolution and causing global warming" (Stern, 9 December 2009).

U.S. argues that China as the largest emitter of greenhouse gases, cannot wash its hands off from the responsibilities by claiming differential treatment. By virtue of their huge populations accounting for more than 30% of the world's inhabitants, China and India, do appear as major offenders spewing toxic gases. In 2006, China overtook US to become the largest emitter of GHGs.

The following table (Table 1:4) shows a list of sovereign states which tops in annual CO2 emissions. The data presented below corresponds to emissions in 2009 and 2010. The data was collected by the Carbon Dioxide Information Analysis Centre for United Nations (CDIAC). The data consider only carbon dioxide emissions from the burning of fossil fuels, but not emissions from deforestation, and fossil fuel exporters.

**Countries by Analysis of Co2 Emissions (Figure 1)** 

Countries by finalysis of Co2 Emissions (Figure 1)				
Rank	Country	Annual CO2 emissions (in thousands of metric tons)	population	Per capita (metric ton)
1	China	8,240,958	1,339,724,852	6.2
2	United States	5,492,170	312,793,000	17.6
3	India	2,069,738	1,210,193,422	1.7
3	Russia	1,688,688	142,946,800	11.8
4	Japan	1,138,432	128,056,026	8.9
5	Germany	762,543	81,799,600	9.3
6	Iran	574,667	75,330,000	7.6
7	South Korea	563,126	48,875,000	11.5
8	Canada	518,475	34,685,000	14.9
9	Saudi Arabia	493,726	27,136,977	18.2
10	United kingdom	493,158	62,262,000	7.9

The above data shows that though China is the largest greenhouse gas emitter, its per capita emission is just 6.2 metric ton compared to 17.6 metric ton of United States. Similarly, though India is the third largest greenhouse gas emitter its per capita emission is just 1.7 metric ton. This raises a larger question regarding whether developing countries with low per capita income should be included in a binding treaty or not.

Throughout the climate change negotiations at Durban in 2011, one thing was clear that this North-South (developed world-developing world) divide would remain at the centre of future climate change negotiations. The Kyoto Protocol which came into force in 2005 hasn't succeeded so far in its effort to address climate change to a great extend, due to the uncompromising positions taken by the North and South. The lack of serious commitment from the part of Annex 1 countries(developed nations), non ratification of the treaty by U.S., increasing GHG emissions from developing world, all have prevented the Kyoto Protocol from achieving its real goal. However In the context of growing emissions from developing countries. India and China will eventually need to be brought under a global cap. However the emission reduction targets for these developing countries should be set up based on their population size and per capita income. It was in this scenario, Parties to the 2011 Durban conference agreed to frame a new legally binding climate treaty replacing the Kyoto Protocol by 2015 which includes not only the developed countries but also the key developing countries like India and China. However this does not necessarily guarantee that China, India, Brazil, South Africa and US would come on the same platform because the equity issues among them still remains unresolved.

As a principal actor in global affairs, USA is expected to offer leadership in these international efforts to address global environmental policy problems. There is no doubt that technologically and economically U.S. can provide strong leadership to the developing world in resolving their climate change issues. For the realization of a binding agreement, U.S. should play a key role as a mediator between the developed and developing world. The United States must step up by agreeing to emissions limitations and then combine forces with the rest of the industrialized world in convincing developing nations on emissions controls; it cannot wait for developing countries like China and India to accept emissions cuts before it will do the same. She has the 'responsibility' (as the 2<sup>nd</sup> largest emitter), capacity (political, financial and technological) and the manpower to cut back emissions significantly. As the former Minister of the Environment of the Czech Republic, Beldrich Moldan, lamented, "the United States is watched much more than Americans realize. You may like the United States and not like it, but you know, it is the future. So when the United States refuses to reform, other countries will refuse as well" (Hertsgaard 1998, P.288).

#### References

Bonnefille, M. Stephanie. (2008), "When Green Rhetoric and Cognitive Linguistics Meet: President G W Bush's Environmental Discourse in His State of Union Addresses", *Metaphorik.de* 15, P:27.

Bush, G.W (2005), "Bush Rejects Kyoto Style G8-Deal." BBC News. 4 July 2005. Retrieved From URL: http://news.bbc.co.uk/2/hi/americas/4647383.stm

Bush, George (2001). "President Bush Discusses Global Climate Change." The Whitehouse Press Release: Washington D.C. 6 November 2001. Retrieved From U.S.S Government Website: http://uscode.house.gov/download/pls/15C56A.txt

Byrd-Hagel Resolution (1997), S. Res. 98. Retrieved From U.S. Government Website URL:

http://www.nationalcenter.org/KyotoSenate.html

Campbell, Colin, S. J, (1991) "The White House and Presidency under the 'Let's Deal President," in Colin, Campbell, S.J. and

Rockman, Bert A., *The Bush Presidency: First Appraisals*, Chatham, NJ: Chatham House.

Cannon, Lou. (2000), "President Reagan: The Role of A Life Time.", New York: Public Affairs.

"CDIAC: Record High 2010 Global Carbon Dioxide Emissions from Fossil-Fuel Combustion and Cement Manufacture posted on CDIAC Site".

Cdiac.ornl.gov.

http://cdiac.ornl.gov/trends/emis/perlim\_2009\_2010\_estimates.h tml.

Clinton, Bill. "Inaugural address of the United States President William J Clinton." Yale Law School (Lecture). Yale. 20 January 1993,[Online: Web] URL: http://www.scribd.com/doc/893263/Clintons-Inaugural-Address. Gore, Albert. "U.S. Support For Global Commitment to Sustainable Development." Commission on Sustainable Development, United Nations (Lecture). New York City. 14 June 1993.

Harris, G. Paul (2001), "The Environment, International Relations and U.S. Foreign Policy". Washington D.C: Georgetown University Press.

Hertsgaard, Mark.(1998). Earth odyssey: Around the world in search of our environmental future. New York: Broadway Books.

Johnson, Lyndon B. "Special Message to the Congress on Conservation and Restoration of Natural Beauty." The Whitehouse (Lecture). Washington D.C. 8 February. 1965 Kutler, L.Stanley. W (1990), *The Wars of Watergate: the Last crisis of Richard Nixon*, New York: Alfred A Knopf.

Patterson, Mathew & Grubb, Michael.(1992), "The International Politics of Climate Change", *International Affairs*, Vol. 68, No. 2, pp 293-310.

Rosenbaum, A. Walter.(1998), *Environmental politics and policy*. Washington: Congressional Quarterly Press.

Stern, Todd. "UN Climate Change Negotiations," Copenhagen (Conference). Denmark. 9 Dec 2009. Retrieved from URL http://cop15.state.gov/pressroom/133343.htm.

Sundquist, James. (1968), *Politics and Policy: The Eisenhower, Kennedy, and Johnson years*, Washington DC: The Brookings Institution.

UN Announces Beijing Declaration on Climate Change, Retrieved From UN Website URL: http://www.un.org/womenwatch/daw/beijing/platform/declar200

USGCRP Act 2931, Section 3, 1990.

Vig, J. Norman and Kraft, E. Michael.(1996), *Environmental Policy and Politics: Toward the Twenty-First Century*, New York: Harper Collins College Publishers.

Warrick, Joby (1997, 7 October), "Clinton Urges Global Action on Emissions: Potential for Serious Climate Disruption Is Real." *Washington Post.* 

Wirth, Timothy (1996), "Making the International Climate Project Work- Under Secretary for Global Affairs Timothy Wirth Speaks About Prescriptive for Effective Response to the Problem of Global Climate Change." U.S. Department of State Dispatch, 22 July 1996.