

5-1-2007

Joining The Asia-Pacific Partnership: The Environmentally Sound Decision?

Sarah A. Peay

Follow this and additional works at: <https://scholar.law.colorado.edu/celj>

Recommended Citation

Sarah A. Peay, *Joining The Asia-Pacific Partnership: The Environmentally Sound Decision?*, 18 COLO. ENV'T L. J. 477 (2007).

Available at: <https://scholar.law.colorado.edu/celj/vol18/iss2/7>

This Note is brought to you for free and open access by the Law School Journals at Colorado Law Scholarly Commons. It has been accepted for inclusion in Colorado Environmental Law Journal by an authorized editor of Colorado Law Scholarly Commons. For more information, please contact rebecca.ciota@colorado.edu.

Joining the Asia-Pacific Partnership: The Environmentally Sound Decision?

Sarah A. Peay*

ABSTRACT

The overwhelming evidence and scientific consensus around global warming has forced the world to acknowledge the human-induced nature and extent of the problem. Even among countries previously reluctant to accept responsibility, there has been a recent shift in tone. The Kyoto Protocol grew out of this global consensus, and remains the leading international convention addressing climate change. Nevertheless, it has failed to gain the support of critical countries such as the United States and Australia, and therefore, while necessary, it may not be sufficient to turn back the clock on global warming. Alternatively, the United States and Australia have joined with China, India, South Korea, and Japan to develop the Asia-Pacific Partnership on Clean Development and Climate Change as their primary tool to reduce the human-induced components of global climate change. The mainstream international media has portrayed the Kyoto Protocol and the Asia-Pacific Partnership as opponents of one another, but this is a misguided portrayal. Instead these innovative agreements should be viewed as complementary measures

* Sarah A. Peay received her Juris Doctor degree from the University of Colorado Law School in December of 2006. She received her B.A. in Sociology and Communication from Boston College in 2003. She would like to thank the members of Colorado Journal of International Environmental Law and Policy, especially Katrina Crenshaw and Melissa Boness, for their invaluable help and support on this article. The author would also like to thank her family and friends for all of their unconditional love and continuing support, without which her achievements would not have been possible.

that together can help reverse the potentially devastating results of climate change.

I. INTRODUCTION

In recent years, the sheer volume of seemingly implausible statistics has forced the world to admit the existence of global warming. Moreover, overwhelming evidence has also forced countries to take responsibility for the primary role human activity has played in the degradation of the environment. Such influential statistics include:

- 2005 was documented as the hottest year on record for people living in the Northern Hemisphere;¹
- Nineteen of the world's twenty warmest years have occurred since 1980;²
- The summer of 2003 was the hottest in Europe since the year 1500, with an estimated death rate of up to 35,000 people;³
- The number of category four and five hurricanes has almost doubled in the last thirty years;⁴
- Northern Hemisphere snow cover has declined by approximately five percent over the past thirty years;⁵
- The average annual Arctic ice area has declined by almost five percent;⁶ and
- The loss of ice in Greenland has almost doubled over the past decade.⁷

1. Richard Black, *2005 warmest on record in north*, BBC.COM, Dec. 15, 2005, <http://news.bbc.co.uk/2/hi/science/nature/4532344.stm>.

2. Marcia Baker, *2005 Vies for Hottest Year on Record*, UNION OF CONCERNED SCIENTISTS, http://www.ucsusa.org/global_warming/science/recordtemp2005.html (last visited Oct 25, 2006).

3. *A Man-Made Heat Wave*, SPIEGEL ONLINE INTERNATIONAL, Dec. 6, 2004, <http://www.spiegel.de/international/0,1518,331139,00.html>.

4. Chesapeake Climate Action Network (CCAN), *Hurricanes Are Getting Stronger, Study Says*, Sept. 15, 2005, http://chesapeakeclimate.org/news/news_detail.cfm?id=96.

5. Baker, *supra* note 2.

6. *Id.*

7. Alan Buis et al., NASA, *Greenland Ice Loss Doubles in Past Decade, Raising*

With these statistics, countries have been confronted with the reality that human behavior is a root cause behind the degradation of the environment. With this grave realization, countries throughout the world have begun taking action to amend human behavior in order to prevent further deterioration, thereby creating an international forum for discussion and cooperation. As with any international debate there are a variety of opinions on the appropriate action to take to reverse the effects of global warming. Within this debate, the United States and Australia have taken an unpopular position by refusing to ratify the Kyoto Protocol. Instead, the two countries have decided to use the Asia-Pacific Partnership on Clean Development and Climate Change as their primary tool to reduce the human-induced components of global climate change. The mainstream international media has portrayed the Kyoto Protocol and the Asia-Pacific Partnership as opponents of one another, but this is a misguided portrayal. Instead these innovative agreements should be viewed as complementary to one another.

Global warming is the term used to describe the gradual increase of the Earth's surface temperature that has been observed over recent decades.⁸ This temperature rise is the result of a strengthening greenhouse effect in the world's atmosphere.⁹ Experts suggest that this is caused primarily by man-made increases in the production of carbon dioxide and other greenhouse gases released through fossil fuel combustion, land clearing, and agriculture.¹⁰ Human activity since the Industrial Revolution has sped up the rate of global warming, increasing the Earth's surface temperature by about one degree Fahrenheit.¹¹ If countries continue to emit the same level of greenhouse gases into the atmosphere as they have over the last century and a half, the Earth's temperature will continue to rise causing detrimental effects worldwide, including: melting polar ice caps, rising sea levels, increasing storm intensity and frequency, changing precipitation quantities and cycles, and altering ocean currents.¹² This warming is also predicted to cause an

Sea Level Faster, Feb. 16, 2006, <http://www.nasa.gov/centers/jpl/news/greenland-20060216.html>.

8. Encyclopædia Britannica, *Global Warming*, <http://www.britannica.com/eb/article-9037044> (last visited Oct. 25, 2006) [hereinafter *Global Warming*].

9. *Id.*

10. *Id.*

11. U.S. Environmental Protection Agency (EPA), *Global Warming-Climate*, <http://yosemite.epa.gov/oar/globalwarming.nsf/content/climate.html> (last visited Oct 25, 2006) [hereinafter *Warming-Climate*].

12. Clare Breidenich et al., *Current Development: The Kyoto Protocol to the United Nations Framework Convention on Climate Change*, 92 Am. J. Int'l. L. 315, 316 (1998).

increased transmission rate of malaria and dengue fever, heat-related deaths (particularly in temperate-zone cities and among the elderly and urban poor who lack adequate air conditioning), malnutrition risks (and diseases that accompany malnutrition), frequent toxic algal blooms (and increased risk of diarrhoeal diseases), population displacement (forced by rising sea levels, extreme weather, or agricultural collapse), and emerging infectious diseases (both known and unknown).¹³

Although over the last decade scientists and policy-makers have engaged in heated controversy over the existence of global warming, in 1997 scientific consensus and economic incentives were enough to persuade approximately eighty-four countries to develop a treaty to reduce greenhouse gas emissions in an attempt to stabilize the climate.¹⁴ Commonly referred to as the Kyoto Protocol, this treaty requires all Annex I Parties (primarily industrialized countries) to "individually or jointly, ensure that their aggregate anthropogenic carbon dioxide equivalent emissions" of specified greenhouse gases "do not exceed their assigned amounts."¹⁵ The "assigned amounts" are the quantified emission limitations and reduction commitments assigned to each Annex I Party, which are 5.2% below their 1990 levels, in the commitment period of 2008 to 2012.¹⁶ The Kyoto Protocol was the first international environmental treaty to require binding emissions reductions for industrialized nations.¹⁷

Although the Kyoto Protocol was innovative in what it sought to achieve, many countries, including the United States and Australia, have refused to ratify the treaty for three primary reasons:¹⁸ first, the Kyoto Protocol set unrealistic targets for developed countries;¹⁹ second, it did

13. Bruce Agnew, *Planet Earth, getting too hot for health?*, BULLETIN OF THE WORLD HEALTH ORGANIZATION 1090, 1092 (2001), http://www.who.int/docstore/bulletin/pdf/2001/issue11/News_Features.pdf.

14. See generally Kyoto Protocol to the United Nations Framework Convention on Climate Change, Dec. 10, 1997, 37 I.L.M. 32, available at <http://unfccc.int/resource/docs/convkp/kpeng.pdf> [hereinafter *The Kyoto Protocol*].

15. See *id.* art. 3 ¶ 1.

16. Reményi Károly, *Greenhouse Gas Reduction Under the Kyoto Protocol in Hungary in Electric Power Industry*, 18th Congress of the World Energy Council, Buenos Aires, Arg., Oct. 2001, http://www.worldenergy.org/wec-geis/publications/default/tech_papers/18th_Congress/downloads/ds/ds4/ds4_2.pdf.

17. Roger A. Pielke, Jr., *The Kyoto Protocol: What Next?*, ENCYCLOPEDIA BRITANNICA ONLINE (2005), <http://www.britannica.com/eb/article-9403603>.

18. *US Won't Follow Climate Treaty Provisions*, N.Y. TIMES, Mar. 28, 2001, at A19.

19. Charli E. Coon, *Why President Bush is Right to Abandon the Kyoto Protocol*, THE HERITAGE FOUNDATION, May 11, 2001, <http://www.heritage.org/Research/EnergyandEnvironment/BG1437.cfm>.

not require developing countries to commit to binding obligations in emissions reductions; and third, the emissions reductions required under the Kyoto Protocol commitments were insufficient to meet the sixty-to-eighty percent reduction in human emissions that scientists believe are necessary to reverse the impacts of global warming.²⁰ As a result, to date, the Kyoto Protocol has been ratified by one hundred and sixty-six countries and regional economic integration organizations, which together produce only 61.6% of the world's greenhouse gas emissions.²¹

In response to the increased awareness of the effects of global warming and the United States' refusal to ratify the Kyoto Protocol, six countries—the People's Republic of China, India, South Korea, Japan, Australia, and the United States—announced on July 28, 2005, the new Asia-Pacific Partnership on Clean Development and Climate Change (Asia-Pacific Partnership).²² The purpose of the Asia-Pacific Partnership, much like the Kyoto Protocol, is to reduce emissions of greenhouse gases that are believed to be the primary cause of global warming.²³ However, unlike the Kyoto Protocol, the Asia-Pacific Partnership focuses on the development of new technology.²⁴ Its members have agreed to “cooperate on the development, diffusion, deployment and transfer of longer-term transformational energy technologies that will promote economic growth while enabling significant reductions in greenhouse gas intensities.”²⁵ At the inaugural meeting of the Asia-Pacific Partnership on January 11–12, 2006, the members agreed on a ground-breaking new model for international climate change and energy collaboration.²⁶ This meeting created what the members are calling a “new balance” in the way climate change, energy, and air pollution would be addressed while

20. *Id.* See also *Global Warming Now a Reality*, THE YOMIURI SHIMBUN (Jap), June 18, 2002, translation available at <http://www.ieneearth.org/wssd-5.html>.

21. Coon, *supra* note 19. See also UNFCCC, Status of Ratification, http://unfccc.int/essential_background/kyoto_protocol/status_of_ratification/items/2613.php (last visited Oct. 10, 2006) [hereinafter *Status of Ratification*].

22. Gino Grassia, Australian Department of Industry, Tourism and Resources, *Climate Change and Industry*, <http://www.industry.gov.au/content/itrinternet/cmscontent.cfm?objectID=63119F15-3413-4A0F-817FA10E38AE0103> (last visited Nov. 14, 2006).

23. *Id.*

24. Asia-Pacific Partnership on Clean Development & Climate, About, <http://www.asiapacificpartnership.org/About.htm> (last visited Oct. 10, 2006) [hereinafter *About the Asia-Pacific Partnership*].

25. *Id.*

26. Press Release, Prime Minister of Australia, *Asia-Pacific Partnership Sets New Path, to Address Climate Change* (Jan. 12, 2006), www.pm.gov.au/news/media_releases/media_Release1743.html.

simultaneously encouraging economic growth and development.²⁷ At this meeting, the members agreed that the Asia-Pacific Partnership would serve as a forum where the countries could “collaborate to promote and create an enabling environment for the development, diffusion, deployment and transfer of existing and emerging cost-effective, cleaner technologies and practices, through concrete and substantial cooperation so as to achieve practical results.”²⁸

Because of the limitations of the Kyoto Protocol as expressed by the United States and the lack of binding obligations on emissions reductions required of the six Asia-Pacific Partnership members, these two international agreements would best serve the environment if the Asia-Pacific Partnership was viewed as a supplement to the Kyoto Protocol rather than an either/or proposition. In order to stop the effects of global warming, it is necessary that the six members of the Asia-Pacific Partnership play an active role in reducing greenhouse gas emissions because they collectively represent forty-five percent of the world's population, forty-nine percent of the world's gross domestic product, forty-eight percent of the world's energy consumption, and are responsible for forty-eight percent of the world's greenhouse gas emissions.²⁹ Without these six countries actively involved in reducing their own contributions to greenhouse gas emissions, any independent efforts to stabilize the atmosphere would likely be ineffective. Therefore, it is critical for the world to have an international agreement where these six members are taking action to reduce their greenhouse gas emissions. These countries' participation in an alternate agreement, however, does not (or at least should not) limit the potential positive impact the Kyoto Protocol can have on bettering the global environment. The Kyoto Protocol has the ability to make a monumental difference in how countries behave; therefore, it is crucial that the Kyoto Protocol is viewed as the primary agreement on climate change—as it was originally designed to be—and the Asia-Pacific Partnership as a supplement. If the Asia-Pacific Partnership and the Kyoto Protocol work in conjunction with one another, there is a greater chance that one day the world's atmospheric concentrations of greenhouse gases could be stabilized.

This note focuses on both the Kyoto Protocol and the Asia-Pacific Partnership on Clean Development and Climate Change. Part II begins with an overview of the science behind global warming and an

27. *Id.*

28. *About the Asia-Pacific Partnership*, *supra* note 25.

29. *US and Australia in New Climate Deal*, THE CLIMATE GROUP, <http://www.theclimategroup.org/index.php?pid=711> (last visited Oct. 25, 2006) [hereinafter *New Climate Deal*].

introductory discussion on the international activity on climate change prior to the Kyoto Protocol. Part III outlines the basic features of the Kyoto Protocol and Part IV presents a critique of the Kyoto Protocol. Part V addresses the Asia-Pacific Partnership by detailing the basic structure behind it and the expected goals the six countries hope to achieve. Part VI conducts an in-depth comparison of both treaties. In Part VII there is a discussion about why, under the Kyoto Protocol alone, countries will not achieve the necessary emissions reductions, and why the Asia-Pacific Partnership, working in collaboration with the Kyoto Protocol, would be successful in reducing global warming. Finally, Part VIII concludes with a glimpse into a future where the Kyoto Protocol and the Asia-Pacific Partnership are implemented in conjunction with one another, and where a reduction in greenhouse gas emissions ensure that our fragile atmosphere heals.

II. ENVIRONMENTAL CONCERNS

About 15 years ago in an Alaskan oceanfront hunting village that is located five miles off the coast of the Seward Peninsula, the people began to see a transformation in their natural habitat.³⁰ They noticed that the sea ice was rapidly changing.³¹ The ice started to form later in the fall and to break up earlier in the spring.³² With this depletion in the sea ice, the village became increasingly vulnerable to storm surges coming from the ocean.³³ In 1997, an ocean storm eliminated a one-hundred-and-twenty-five-foot-wide strip from the town's northern edge; several houses were destroyed, and more than a dozen had to be relocated.³⁴ In 2001, an ocean storm with twelve-foot waves pummeled the village, destroying dozens of homes.³⁵ Then, in the summer of 2002, with the storms intensifying, the ice melting, and the land shrinking around them, the residents voted to move their entire village miles inland.³⁶ This devastating story is by no means isolated. Rather, stories like these may

30. Elizabeth Kolbert, *The Climate of Man*, THE NEW YORKER, April 25, 2005, available at <http://www.wesjones.com/climate1.htm>. See also Senator Barack Obama, Speech on Energy Independence (Apr. 3, 2006) (transcript available at http://obama.senate.gov/speech/060403-energy_independence_and_the_safety_of_our_planet/).

31. Kolbert, *supra* note 30.

32. *Id.*

33. *Id.*

34. *Id.*

35. *Id.*

36. *Id.*

become an increasing and unpleasant reality as the Earth's surface warms around us.³⁷

Global warming is the result of what scientists call the greenhouse effect.³⁸ The greenhouse effect refers to the trapping of the Sun's heat within the Earth's atmosphere.³⁹ The Earth absorbs and traps the radiation (heat) from the Sun, causing the Earth's surface to warm.⁴⁰ The heat energy, in turn, is either retained by certain "heat trapping" gases, or is redistributed out of the Earth's lower atmosphere through atmospheric and oceanic circulations.⁴¹ This redistribution—and the related concentration of heat-trapping gases—determines the warmth of the Earth's surface.⁴² The process of trapping and redistribution of heat within the atmosphere is necessary in order to sustain life on Earth, as the process keeps the Earth's average temperature around sixty degrees Fahrenheit.⁴³ "Any factor that alters the radiation received from the Sun, or that alters the redistribution of energy within the atmosphere and between the atmosphere, land, and ocean, can affect climate."⁴⁴ Positive radiative gases, including water vapor, carbon dioxide, ozone, methane, and nitrous oxide, cause the Earth's surface temperature to increase, whereas negative radiative gases tend to cool them.⁴⁵ Any increase in the concentrations of greenhouse gases will reduce the efficiency with which the Earth redistributes this energy to space; because less heat is emitted into the Earth's atmosphere, the greenhouse effect occurs, causing Earth's average surface temperature to increase.⁴⁶

37. *Id.* See also Pew Center, Global Warming Basics, <http://www.pewclimate.org/global-warming-basics/> (last visited Oct. 25, 2006) [hereinafter *Global Warming Basics*].

38. *Warming-Climate*, *supra* note 11.

39. *Id.*

40. *Id.* See also INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC), CLIMATE CHANGE 2001: THE SCIENTIFIC BASIS 24-25 (J.T. Houghton et al. eds., 2001), available at http://www.grida.no/climate/ipcc_tar/wg1/pdf/WG1_TAR-FRONT.PDF [hereinafter *IPCC*].

41. *IPCC*, *supra* note 40, at 24.

42. *Id.*

43. *Id.* See also *Warming-Climate*, *supra* note 11.

44. *IPCC*, *supra* note 40, at 24.

45. *Id.* Carbon dioxide is released into the atmosphere when solid waste, fossil fuels, and wood products are burned. Methane is emitted during the production and transportation of coal, natural gas, and oil, and nitrous oxide is emitted during agricultural and industrial production. *Warming-Climate*, *supra* note 11. See also Breidenich, *supra* note 12, at 316.

46. *IPCC*, *supra* note 40, at 24.

As a result of human activity, unnatural quantities of five greenhouse gases have been released since the Industrial Revolution.⁴⁷ This augmentation in greenhouse gases has resulted in the measured rise of the Earth's surface temperature by about one degree Fahrenheit.⁴⁸ Although climate change can be a natural occurrence, the changes in the Earth's climate documented since the Industrial Revolution are a direct result of human activity—through population growth, fossil fuel burning, and deforestation.⁴⁹ Ninety-eight percent of the United States' carbon dioxide emissions, twenty-four percent of methane emissions, and eighteen percent of nitrous oxide emissions are from fossil fuels burned to run vehicles and to heat homes and businesses.⁵⁰ The production of these fossil fuels has resulted in the twentieth century's ten warmest years, all occurring within the last fifteen years of the century.⁵¹ The United States Environmental Protection Agency (EPA) has uncovered new evidence that the majority of warming that has occurred over the last fifty years is attributable to human activities.⁵² "[A]tmospheric concentrations of carbon dioxide have increased nearly 30%, methane concentrations have more than doubled, and nitrous oxide concentration[s] [have] risen about 15%."⁵³ When these atmospheric concentrations increase, they enhance the Earth's heat-trapping capability, causing a uniform temperature increase.⁵⁴ The majority of scientists believe an increase in temperature will have a negative effect on the world.⁵⁵ Currently, there is no indication that human behavior will change enough to prevent future continued warming, painting a disturbing picture of what our future holds.

In 1988, the United Nations Intergovernmental Panel on Climate Change (IPCC) was established to improve the world's understanding of the effects and the extent of these atmospheric concentrations.⁵⁶ The IPCC endorsed the National Academy of Sciences' conclusion that the average global temperature has increased 0.6 ± 0.2 °C (33.08 ± 32.36 °F) since the nineteenth century.⁵⁷ The IPCC also endorsed the judgment that

47. *Warming-Climate*, *supra* note 11.

48. *Id.*

49. *Id.* See also Breidenich, *supra* note 12.

50. *Warming-Climate*, *supra* note 11.

51. *Id.*

52. *Id.*

53. *Id.*

54. *Id.*

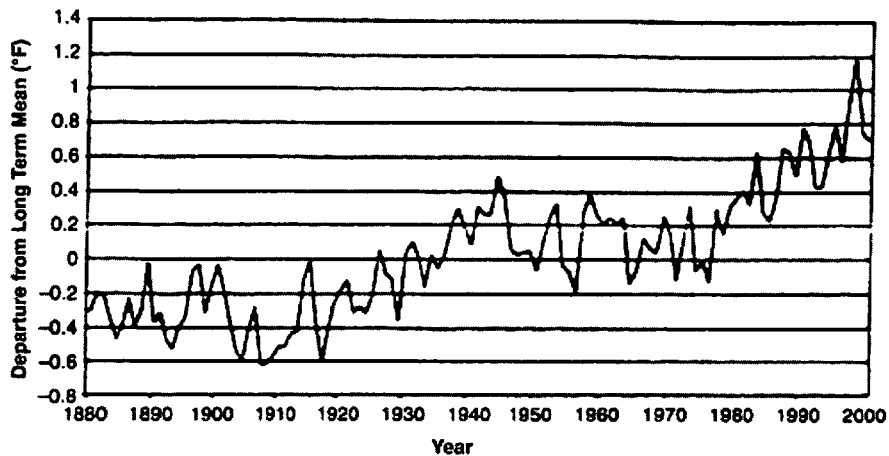
55. See *Global Warming Basics*, *supra* note 37.

56. Breidenich, *supra* note 12.

57. NOAA Research, Observing Climate Variability and Change, http://www.oar.noaa.gov/climate/t_observing.html (last visited Nov. 2, 2006).

the average global surface temperatures are likely to increase by 1.4 to 5.8 °C (34.52 to 42.44 °F) between 1990 and 2100.⁵⁸

Global Temperature Changes (1880-2000)⁵⁹



This drastic increase in temperature has had numerous environmental effects.⁶⁰ Icebergs in Antarctica have partially melted due to the warming climate, resulting in a 3.3 inch rise in sea level over the past century.⁶¹ If humans continue to emit greenhouse gases at the same rate, sea level could rise as much as fifty centimeters in the next century, affecting the coastal zones of countries like Bangladesh which has thirty-seven percent of its land lying less than three meters above current sea level.⁶² In addition, worldwide precipitation over land has increased by about one percent and the frequency of extreme rainfall has increased drastically, especially in the United States.⁶³ If the climate continues to warm, evaporation will increase, resulting in further global precipitation

58. *Warming-Climate*, *supra* note 11.

59. Making Transportation Sustainable: A Case Study of the Quebec City-Windsor Corridor, <http://www.ec.gc.ca/cleanair-airpur/CAOL/transport/publications/tos406/makingsustrans2.htm> (last visited October 10, 2006).

60. See *Warming-Climate*, *supra* note 11.

61. See El-Mohamady Eid & Cornelis H. Hulsbergen, *Sea Level Rise and Coastal Zone Management*, in *CLIMATE CHANGE: SCIENCE IMPACTS, AND POLICY* 301 (J. Jäger & H.L. Ferguson eds., 1991).

62. Helen Willetts, *Global Warming- an Overview*, BBC.COM, http://www.bbc.co.uk/weather/features/global_warming1.shtml.

63. IPCC Working Group I, *Summary for Policymakers: The Science of Climate Change*, available at <http://www.ipcc.ch/pub/sarsum1.htm> (last visited Oct. 31, 2006) [hereinafter *Summary for Policymakers*]. See also *Global Warming – Climate*, GLOBAL WARMING TRENDS, <http://globalwarmingtrends.com/> (last visited May 7, 2007).

and the likelihood of more intense rainstorms.⁶⁴ Moreover, snow cover in the Northern Hemisphere and floating ice in the Arctic Ocean has decreased at an unprecedented rate.⁶⁵ For example, the Ilulissat glacier in Greenland has been noticeably impacted by global warming:⁶⁶ the lower portion of the glacier has receded by more than six miles in a three year period, after having been relatively stable since the 1960s.⁶⁷ As Robert Corell, the chairman of the Arctic Climate Impact Assessment and senior fellow of the American Meteorological Society, stated, “When a glacier recedes, it means that it is diminishing, which is an obvious sign of global warming.”⁶⁸ These and other impacts seen throughout the global environment have been the direct result of the recent increase in global temperature. If countries continue to emit greenhouse gases at the same rate as they have in the past two centuries, the catastrophic environmental effects will continue to be prevalent worldwide.

It is predicted that if this warming continues, it will cause further “melting of polar ice caps, rising sea levels, increased intensity, and frequency of storms, changes in amount. . .and timing of precipitation, changes in ocean currents, and an enlarged range. . .for tropical diseases such as malaria, cholera, and dengue fever.”⁶⁹ These catastrophic events would directly affect human health and welfare, which would in turn cause “large-scale political and economic disruption and the migration of “climate change refugees.”⁷⁰ “Climate-sensitive diseases are among the largest global killers. Diarrhoea, malaria, and protein-energy malnutrition alone cause more than 3.3 million deaths globally in 2002, with twenty-nine percent of these deaths occurring in the Region in Africa.”⁷¹ Continued warming may also have an effect on agriculture, potentially

64. Patricia Glick, *Global Warming: The High Costs of Inaction*, SIERRA CLUB, http://www.sierraclub.org/globalwarming/get_involved/inaction.asp (last visited Nov. 14, 2006).

65. Baker, *supra* note 2. See also Richard Black, *Arctic ice ‘disappearing quickly,’* BBC.COM, Sept. 28, 2005, available at <http://news.bbc.co.uk/2/hi/science/nature/4290340.stm>.

66. Caren Bohan, *The Ilulissat Glacier, a Wonder of the World Melting Away*, COMMON DREAMS NEWS CENTER, Aug. 22, 2005, available at <http://www.commondreams.org/headlines05/0822-06.htm>.

67. *Id.*

68. *Id.*

69. Breidenich, *supra* note 12.

70. *Id.*

71. World Health Organization, *Climate and Health: Fact Sheet July 2005*, <http://www.who.int/globalchange/news/fsclimandhealth/en/print.html> (last visited Oct. 31, 2006).

impacting the growth of certain species of crops.⁷² Wildlife and wildlife habitats could also be affected as critical areas such as coastal wetlands are destroyed and species are forced to adapt rapidly to a changed environment or become extinct.⁷³ Scientists believe that global warming will continue to have "relatively" little impact on the day-to-day climate conditions.⁷⁴ Instead, they believe that the effects will be evident on a large scale, with wetter storms, or through more destructive weather patterns, such as hurricanes and typhoons.⁷⁵

Although the IPCC expresses the general consensus among scientists and environmentalists that the increased greenhouse gases present in the atmosphere have been caused by human activity since the Industrial Revolution,⁷⁶ there still remains a small minority of qualified scientists who contest the commonly held view that human action is the primary cause of this temperature rise.⁷⁷ These skeptics have three basic arguments against the general consensus.⁷⁸ First, they take issue with the scientific data which suggests that the Earth's temperature has increased over the last decade.⁷⁹ The skeptics claim that because of imperfect data collection systems of the past, there is no accurate way to prove that an increase in average global temperature has actually occurred.⁸⁰ Their second point of contention is that it has never been proven outside of a laboratory whether carbon dioxide is causing this increase in temperature.⁸¹ Assuming there actually has been an increase in greenhouse gas emissions over the last one hundred and fifty years, the skeptics argue that because the carbon dioxide in the atmosphere is primarily volcanic in origin (volcanoes accounting for roughly ninety-seven percent of the carbon dioxide found in the atmosphere), the "net" greenhouse effect of man-made carbon dioxide emissions is less than one percent.⁸² Finally, they argue that because of inconsistencies in data

72. Breidenich, *supra* note 12.

73. See James G. Titus et al., *Greenhouse Effect and Sea Level Rise: The Cost of Holding Back the Sea*, 19 Coastal Mgmt. 171, 177 (1991), available at [http://yosemite.epa.gov/OAR/globalwarming.nsf/UniqueKeyLookup/SHSU5BPPAL/\\$File/cost_of_holding.pdf](http://yosemite.epa.gov/OAR/globalwarming.nsf/UniqueKeyLookup/SHSU5BPPAL/$File/cost_of_holding.pdf).

74. John Weier, *Global Warming*, EARTH OBSERVATORY, Apr. 8, 2002, <http://earthobservatory.nasa.gov/Library/GlobalWarming/printall.php>.

75. *Id.*

76. *Id.*

77. *Id.*

78. *Id.*

79. *Id.*

80. *Id.*

81. *Id.*

82. *Id.*

collection, it is impossible to predict the effect human behavior will have on the atmosphere.⁸³

Despite this skeptical minority, environmental groups, the non-United States media, the IPCC, the National Academy of Sciences, the American Meteorological Society, the American Geophysical Union, and the American Association for the Advancement of Sciences, virtually all support global warming theory.⁸⁴ This consensus, combined with the recent temperature increase and the unexplainable rise in natural disasters, would appear to be evidence that global warming does exist and is threatening our otherwise stable environment.⁸⁵

International efforts to curb the effects of global warming began over a decade ago when the United Nations Environment Programme and the World Meteorological Organization created the IPCC to assess the scientific data relevant to (1) human-induced climate change, (2) the impacts of human-induced climate change, and (3) options for adaptation and mitigation.⁸⁶ The IPCC is led by government scientists, but also involves several hundred academic scientists and researchers.⁸⁷ The IPCC has played a significant role in educating the international community on the effects of global warming.⁸⁸ The IPCC's Second Assessment Report (SAR) has had the biggest effect on the international community on the issue of climate change.⁸⁹ The SAR was completed in 1996 and, as evidenced by its section headers, concluded that humans have contributed significantly to the changes seen in our environment:

- (1) Greenhouse gas concentrations have continued to increase;
- (2) Anthropogenic aerosols tend to produce negative radiative forcings;
- (3) Climate has changed over the past century;
- (4) The balance of evidence suggests a discernible human influence on global climate;

83. *Last chance for Kyoto? Alex Kirby quizzed*, BBC.COM, July 20, 2001, http://news.bbc.co.uk/1/hi/talking_point/forum/1447318.stm.

84. Ross Gelbspan, *Snowed: US (Corporate) Media Ignore Climate Change*, MOTHER JONES, June 11, 2005, available at <http://dc.indymedia.org/newswire/display/124231/index.php> (last visited Oct. 30, 2006).

85. Weier, *supra* note 74.

86. About IPCC, <http://www.ipcc.ch/about/about.htm> (last visited Oct. 25, 2006).

87. The IPCC Controversy: Overview, Science and Environmental Policy Project, www.sepp.org/Archive/contro/ipcccont/ipcccont.html (last visited Nov. 14, 2006).

88. About IPCC, *supra* note 86.

89. *Id.*

(5) Climate is expected to continue to change in the future; and

(6) There are still many uncertainties.⁹⁰

After the completion of SAR, the IPCC finally had a report that could be used in the international arena as a basis for the December of 1997 meeting in Kyoto, Japan.⁹¹

III. THE KYOTO PROTOCOL

In 1992, five years before the meeting in Kyoto, Japan, the United Nations Convention on Environment and Development held a meeting in Rio de Janeiro, Brazil, (Earth Summit) which produced a series of international environmental agreements.⁹² Included among them was the United Nations Framework Convention on Climate Change (UNFCCC).⁹³ This treaty was aimed at reducing emissions of greenhouse gases to combat global warming.⁹⁴ The UNFCCC's main objective was to achieve "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system."⁹⁵ It did not, however, set any mandatory limits on greenhouse gas emissions for individual nations in order to achieve this stabilization, nor did it contain any enforcement provisions.⁹⁶ The UNFCCC, however, did include a provision for updates, known as protocols, which would be used to establish mandatory emission limits in the future.⁹⁷

On June 12, 1992, one hundred and fifty-four nations signed the UNFCCC.⁹⁸ Upon ratification, the treaty committed signatory governments to a voluntary "non-binding aim" to reduce atmospheric

90. *Summary for Policymakers*, *supra* note 63.

91. Union of Concerned Scientists, Sound Science Initiative, Findings from the IPCC's Third Assessment Report, <http://www.ucsusa.org/ssi/archive/interpret-the-tar.html> (last visited Nov 14, 2006).

92. Gary Feuerberg, *Major Climate Conference Planned in Montreal*, EPOCH TIMES, Nov. 21, 2005, <http://www.theepochtimes.com/news/5-11-21/34831.html>.

93. *Id.*

94. *Id.*

95. *Greenhouse Gas Abatement and Climate Change*, POLLUTION PREVENTION AND ABATEMENT HANDBOOK (World Bank ed., 1997), available at <http://www.environmental-expert.com/articles/article92/article92.htm> (last visited Oct. 10, 2006) [hereinafter *Greenhouse Gas Abatement*].

96. Feuerberg, *supra* note 92.

97. *Id.*

98. *Id.*

concentrations of greenhouse gases with “the goal of preventing dangerous anthropogenic interference with Earth’s climate system.”⁹⁹ The UNFCCC was primarily aimed at the industrialized nations, although developing countries were actively involved in the creation of the treaty.¹⁰⁰ The UNFCCC’s goal was to have industrialized nations stabilize their anthropogenic emissions, individually and jointly, at their 1990 levels by the year 2000.¹⁰¹ All parties agreed to recognize “common but differentiated responsibilities,”¹⁰² thus assigning greater responsibility for reducing greenhouse gas emissions, in the near future, to developed countries.¹⁰³

Since the creation of the UNFCCC, member countries have been conducting annual Conferences of the Parties (COP) to assess progress in dealing with climate change.¹⁰⁴ At the second COP, countries began negotiating the establishment of “legally binding” obligations for developed countries to reduce their greenhouse gas emissions.¹⁰⁵ In December 1997, at the third COP in Kyoto, Japan, the delegates from over one hundred and fifty nations engaged in ten days of intense negotiations concerning binding commitments under the treaty.¹⁰⁶ The result was the adoption of the Kyoto Protocol, which established legally binding obligations on developed countries.¹⁰⁷ In order to prompt all present UNFCCC Parties to ratify the treaty, countries strived for an agreement that would mandate emissions reductions of greenhouse gases, while remaining realistic about the degree and speed of a possible change.¹⁰⁸ It was initially thought that only fifty-five countries would agree to the Kyoto Protocol, which would have represented less than the requisite percentage required for implementation, and, therefore, would have prevented the Kyoto Protocol from being activated.¹⁰⁹ However, as

99. John R. Justus & Susan R. Fletcher, Nat’l Council for Sci. & the Env’t, *IB89005: Global Climate Change*, Aug. 13, 2001, available at <http://www.ncseonline.org/NLE/CRSreports/Climate/clim-2.cfm?&CFID=19032422&CFTOKEN=33375269>.

100. Feuerberg, *supra* note 92.

101. Justus & Fletcher, *supra* note 99.

102. *Greenhouse Gas Abatement*, *supra* note 95.

103. *Id.*

104. Justus & Fletcher, *supra* note 99.

105. *Id.*

106. Susan R. Fletcher, *RL30692: Global Climate Change: The Kyoto Protocol*, NATIONAL COUNCIL FOR SCIENCE AND THE ENVIRONMENT, April 11, 2001, available at <http://www.ncseonline.org/NLE/CRSreports/Climate/clim-25.cfm>.

107. *Id.*

108. *Id.*

109. *See Russia disappoints with delay on Kyoto*, EDIE NEWSROOM, Oct. 3, 2003,

of October of 2006, a total of 161 countries have ratified the treaty (representing over 61.6% of global emissions).¹¹⁰

The Kyoto Protocol is organized into twenty-eight Articles.¹¹¹ Article 1 simply contains the definitions of terms used in the Kyoto Protocol.¹¹² Articles 2, 3, 5, and 7 lay out the obligations of the Annex I countries.¹¹³ Article 10 elaborates on the commitments for all parties.¹¹⁴ Article 11 provides guidance on financing by Annex I countries to assist developing countries in implementing commitments.¹¹⁵ Articles 9, 13, 14, 15, and 16 express the institutional roles of the COP and other internal parties.¹¹⁶ Articles 4, 6, 12, and 17 authorize the use of various market-based mechanisms to reduce greenhouse gas emissions.¹¹⁷ Article 19 establishes a dispute settlement procedure, and lastly Articles 20-28 are the final summarizing provisions of the Kyoto Protocol.¹¹⁸ Annex A lists the greenhouse gases and source categories covered by the Kyoto Protocol,¹¹⁹ and, lastly, Annex B lists the emissions reduction targets for all Annex I Parties.¹²⁰

The foundation of the Kyoto Protocol is set out in Article 3 which states that Annex I Parties,¹²¹ "shall, individually or jointly, ensure that their aggregate anthropogenic carbon dioxide equivalent emissions" of specified greenhouse gases¹²² do not exceed their "assigned amounts."¹²³ Assigned amounts are the quantified emission limitations and reduction commitments inscribed for each Annex I Party.¹²⁴ For the majority of

http://www.edie.net/news/news_story.asp?id=7569&channel=0. More than fifty-five percent of the world's greenhouse gas emissions are required for the Kyoto Protocol to be put into effect. *Id.*

110. Fletcher, *supra* note 106. See also *Status of Ratification*, *supra* note 21.

111. See generally *The Kyoto Protocol*, *supra* note 14, art. 3.

112. *Id.* art. 1.

113. *Id.* arts. 2, 3, 5, 7.

114. *Id.* art. 10.

115. *Id.* art. 11.

116. *Id.* arts. 9, 13-15.

117. *Id.* arts. 4, 6, 12, 17.

118. *Id.* arts. 19, 20-28.

119. *Id.* ann. A.

120. *Id.* ann. B.

121. Annex I Parties are the thirty-six industrialized countries and economies in transition listed in Annex I of the UNFCCC. CO2E.com, *International Policy*, <http://www.co2e.com/common/faq.asp?intPageElementID=30120&intCategoryID=93> (last visited Oct. 25, 2006) [hereinafter *International Policy*].

122. The specified greenhouse gases are carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, HFCs, and PFCs. *The Kyoto Protocol*, *supra* note 14, ann. B.

123. Fletcher, *supra* note 106.

124. *The Kyoto Protocol*, *supra* note 14, art. 3.

countries, the assigned amounts reduce overall emissions of Annex I Parties “by at least five percent below 1990 levels in the commitment period,” from 2008 to 2012.¹²⁵ The commitment period does provide flexibility by assessing a party’s compliance based on its average annual emissions over the five-year period.¹²⁶ The assigned amount for each Annex I Party is listed in Annex B and is equal to its aggregate anthropogenic carbon dioxide equivalent emissions of the 1990 listed greenhouse gas emissions, multiplied by five.¹²⁷

Because of the dissimilarity in Parties’ greenhouse gas emissions, the Kyoto Protocol uses a balancing system that requires some Parties to lower their emissions by at least five percent, while allowing others to increase their emissions.¹²⁸ For example, the United States would have to reduce emissions by seven percent, the European Union would have to reduce emissions by eight percent, and Japan and Canada each would have to reduce emissions by six percent.¹²⁹ Australia and Iceland, on the other hand, are permitted to increase their emissions by eight and ten percent, respectively.¹³⁰ In addition to the reductions, Annex I Parties are required to pay and supply technology to developing countries which fail to meet the emissions standards.¹³¹ Developing countries are permitted to set their own voluntary limits;¹³² however, the majority of these countries believe that reducing emissions is incompatible with their economic and sociopolitical needs and aspirations.¹³³

As laid out in Articles 4, 6, and 12, there are a number of mechanisms that provide flexibility in the implementation of the emissions reduction obligations of Article 3.¹³⁴ One of these mechanisms

125. *Id.*

126. *Id.*

127. *Id.*

128. *CBC News In Depth: Kyoto and beyond, Kyoto Protocol FAQs*, CBC NEWS, <http://www.cbc.ca/news/background/kyoto/> (last updated Oct. 19, 2006) [hereinafter *Kyoto Protocol FAQs*].

129. *Id.* Michael Allaby, *Kyoto Protocol on Climate Change*, Encyclopædia Britannica Online (2006), <http://www.britannica.com/eb/article-92599/The-Environment> [hereinafter *Kyoto Protocol on Climate Change*].

130. *Kyoto Protocol FAQs*, *supra* note 128. See also *Proposal Would Cut Greenhouse Gases by 5 Percent*, CNN.COM, Dec. 9, 1997, <http://www.cnn.com/EARTH/9712/09/climate.change.targets>.

131. Fletcher, *supra* note 106. This was an agreement carried over from the UNFCCC. *Id.*

132. *Id.*

133. *Developing Countries should stick to their Guns: Committing to “Voluntary” Emission Reduction will Threaten Future Prosperity*, COMPETITIVE ENTERPRISE INSTITUTE, Nov. 10, 1998, <http://www.cei.org/gencon/003,02693.cfm>.

134. *The Kyoto Protocol*, *supra* note 14, arts. 4, 6, 12, 17.

is emissions trading, which is detailed in Article 4.¹³⁵ The provision states that Annex 1 Parties¹³⁶ may participate in emissions trading for the purposes of fulfilling their commitments under Article 3.¹³⁷ Emissions trading allows for Parties to purchase part of the emissions budget of another country, where it would be more cost-effective to do so.¹³⁸ Emissions trading can only, however, be used as a supplement to their own domestic achievements.¹³⁹ Many industrial countries, including the United States, insisted upon including trading mechanisms during negotiations because these mechanisms allow for more cost effective ways to meet Article 3 commitments.¹⁴⁰ Emissions trading allows Annex B countries to meet their own commitments, while aiding developing countries in lowering their emissions.¹⁴¹

Another mechanism for Annex I countries to reach their required reduction is through joint implementation, which is mandated under Article 6 of the Kyoto Protocol.¹⁴² Annex I Parties can transfer to, or acquire from, any other Annex I Party "emission reduction units resulting from projects aimed at reducing anthropogenic emissions by sources or enhancing anthropogenic removals by sinks of greenhouse gases in any sector of the economy."¹⁴³ However, joint implementation applies only to nations with quantified emissions caps and whose projects will ultimately generate emission reduction allowances.¹⁴⁴

A third mechanism that Annex I Parties can use to achieve their emissions reductions is through the clean development mechanism, mandated under Article 12.¹⁴⁵ The purpose of the clean development mechanism is to assist Annex I Parties in achieving sustainable development and in achieving compliance with their quantified emission limitations and reduction commitments under Article 3.¹⁴⁶ One manner in

135. *Id.* art. 4.

136. *Id.* art. 3. Annex B Parties are the thirty-nine emissions-capped industrialized countries and economies in transition. *International Policy*, *supra* note 121.

137. *The Kyoto Protocol*, *supra* note 14, art. 3.

138. Fletcher, *supra* note 106.

139. *Id.*

140. *Fact Sheet: The Kyoto Protocol on Climate Change*, 3 USIA ELECTRONIC J. 1, Apr. 1998, <http://usinfo.state.gov/journals/itgic/0498/ijge/gj-10.htm>.

141. *Id.*

142. *The Kyoto Protocol*, *supra* note 14, art. 6.

143. *Id.*

144. *Kyoto Protocol Flexibility Mechanisms*, CO2E.com, <http://www.co2e.com/common/faq.asp?intPageElementID=30151&intCategoryID=93> (last visited Oct. 30, 2006).

145. *The Kyoto Protocol*, *supra* note 14, art. 12.

146. *Id.*

which Annex I Parties can achieve this is through “forest sinks,”¹⁴⁷ which are natural or man-made systems that absorb and store greenhouse gases, by absorbing carbon dioxide from the atmosphere.¹⁴⁸ According to the Ministry of Agriculture and Forestry in New Zealand, “[s]ink credits would then be interchangeable with emissions units and could be purchased by industries and countries needing to account for any excess emissions over their Kyoto targets.”¹⁴⁹ Utilizing these mechanisms, the UNFCCC believes that all Annex I countries will be able to achieve their individual reduction targets.¹⁵⁰

Although the three mechanisms of (1) emissions trading, (2) joint implementation, and (3) clean development provide support to Annex I Parties to achieve their commitments, the effectiveness of the Kyoto Protocol remains to be seen because both the United States and Australia have thus far refused to ratify the treaty.¹⁵¹

IV. CRITICISMS OF THE KYOTO PROTOCOL VOICED BY THE UNITED STATES

A. Introduction

Although the United States was a signatory to the Kyoto Protocol, it has neither ratified nor withdrawn from the Kyoto Protocol.¹⁵² In order for the Kyoto Protocol to be binding on the United States it must be ratified.¹⁵³ On March 27, 2001, the Bush Administration officially rejected the Kyoto Protocol when Christine Whitman, the then current administrator of the EPA said, “we have no interest in implementing that treaty.”¹⁵⁴ Although there was never one specific reason given for the

147. *Id.* art. 3.

148. Ministry of Agriculture and Forestry, *Forestry Sinks and the Kyoto Protocol*, <http://www.maf.govt.nz/mafnet/rural-nz/sustainable-resource-use/climate/sinks/climate-04.htm> (last visited Oct 30, 2006).

149. *Id.*

150. See generally *The Kyoto Protocol*, *supra* note 14.

151. *US Won't Follow Climate Treaty Provisions*, *supra* note 18.

152. Coon, *supra* note 19.

153. See generally Eric Pianin, *U.S. Aims to Pull Out of Warming Treaty*, WASH. POST, Mar. 28, 2001, at A01, available at <http://www.washingtonpost.com/ac2/wp-dyn?pagename=article&node=&contentId=A2354-2001Mar27¬Found=true>.

154. *Id.* President Bush on Climate Change stated, “This is a challenge that requires a 100 percent effort; ours, and the rest of the world’s. The world’s second-largest emitter of greenhouse gases is China. Yet, China was entirely exempted from the requirements of

United States' refusal to ratify the treaty, the Bush Administration has made comments periodically throughout the years, indicating some of the reasons for not ratifying the treaty.¹⁵⁵ Three expressed justifications are: (1) the Kyoto Protocol set unrealistic emissions targets for each country; (2) the emissions targets the Kyoto Protocol does implement are ineffective, even if achieved; and (3) it allowed developing countries to participate in the negotiations and the formation of the treaty, but did not subject them to emissions reduction commitments.¹⁵⁶

B. Unrealistic Emissions Targets Have Been Set

The Kyoto Protocol requires that all Annex I Parties undo any increases that have occurred in the past fifteen years, as well as implement a 5.2% reduction from their 1990 level of emissions.¹⁵⁷ In order to comply with the Kyoto Protocol, the United States would have to reduce its greenhouse gas emissions by seven percent below 1990 levels before 2012.¹⁵⁸ The United States has seen considerable emissions—and economic—growth since 1990, which places it at a disadvantage compared to countries whose emissions have fallen in the same time.¹⁵⁹ To reach its Kyoto targets, the United States would have to reduce emissions by almost thirty percent from current levels.¹⁶⁰ For example, “United States greenhouse gas emissions in 2005 were 17 percent higher than [its] 1990 emissions level.”¹⁶¹ The United States felt this goal would be unachievable due to the fact that carbon production has been increasing at an unprecedented rate since the Industrial

the Kyoto Protocol. India and Germany are among the top emitters. Yet, India was also exempt 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.” *US Won't Follow Climate Treaty Provisions*, *supra* note 18.

155. *Id.* See also Coon, *supra* note 19.

156. Coon, *supra* note 19.

157. Pielke, *supra* note 17.

158. *Id.*

159. Robert O. Mendelsohn, *An Economist's View of the Kyoto Climate Treaty*, NPR.ORG, Feb. 18, 2005, <http://www.npr.org/templates/story/story.php?storyId=4504298>.

160. *Id.* See also Coon, *supra* note 19.

161. Emissions of Greenhouse Gases in the United States, DOE/EIA-0573 (Nov. 2006), at 9, <ftp://ftp.eia.doe.gov/pub/oiaf/1605/cdrom/pdf/ggrpt/057305.pdf>.

Revolution.¹⁶² Complying with the Kyoto Protocol could require the United States to create an abatement program that could cost as much as \$100/ton and would further require a large and immediate change in its capital stock: its buildings, its power plants, and its factories.¹⁶³ Because complying with the Kyoto Protocol could require that the United States implement economically challenging changes to their current behavior—changes that would cost the country millions—the United States refused to ratify the Kyoto Protocol.¹⁶⁴

C. Emissions Targets Cannot be Achieved, But Even If Achieved, Are Ineffective

The United States has also supported its decision to not join the Kyoto Protocol by arguing that it fails to require enough greenhouse gas reductions to reverse the effects of global warming or stabilize the climate.¹⁶⁵ The United States argues that the emissions standards required would be ineffective at curbing or even slowing climate change in the future.¹⁶⁶ Some theorists predict that even if all of the world's leading industrial nations met their Article 3 percentages, it is unlikely there would be a net change in emissions worldwide.¹⁶⁷ Because greenhouse gases have been building up in the atmosphere since the beginning of the Industrial Revolution, scientists have reported that in order to make a dent in reducing greenhouse gas emissions in the atmosphere, an immediate reduction in emissions, in the range of sixty to eighty percent, would be necessary.¹⁶⁸ The Kyoto Protocol, however, only requires a 5.2% reduction from 1990 emissions levels, lending support to the United States' claim that requirements are insufficient to have a notable impact.¹⁶⁹

162. *Id.* "[T]he annual growth rate in carbon dioxide emissions since 1990 (1.2 percent) has closely tracked annual growth in population and energy consumption." *Id.* See also Coon, *supra* note 19.

163. Mendelsohn, *supra* note 159.

164. *Id.*

165. Coon, *supra* note 19.

166. *Id.*

167. *Id.*

168. Michael D. Lemonick, *Turning Down The Heat to Their Surprise, Negotiators In Kyoto Hammer Out a Historic Pact to Curb Global Warming*, TIME, Dec. 22, 1997, at 23, 24.

169. *Id.*

Another point of contention is the reduction mechanisms.¹⁷⁰ There has been a scientific challenge to the mechanisms found in Articles 4, 6, 12, and 17 for lowering emissions.¹⁷¹ The main objection relates to the carbon credits and the planting of "Kyoto forests."¹⁷² Studies have shown that these forests may, in fact, increase carbon dioxide emissions for the first ten years due to the growth pattern of young forests and the effect it has on soil-trapped carbon dioxide,¹⁷³ thereby increasing carbon emissions and causing countries to fail in their attempt to reduce greenhouse gases by 5.2%. Because several industrial countries have made carbon credits an important part of their strategies for reducing their net greenhouse gas outputs, the effectiveness of the Kyoto Protocol is further put into question.¹⁷⁴

In sum, the two limitations of the Kyoto Protocol are: (1) that the world would fall short of stabilizing the atmosphere even if countries were able to meet their assigned amounts, and (2) that the mechanisms implemented to reduce global warming may actually increase carbon dioxide emissions. For these two reasons, the United States believes that the goals of the Kyoto Protocol are unattainable and has refused, therefore, to ratify the treaty.

D. Developing Countries Are allowed to Participate, But Are Not Subject to Binding Commitments

President George W. Bush outlined his views on the Kyoto Protocol and other environmental policies in his letter to four senators in 2001:

As you know I oppose the Kyoto Protocol because it exempts 80 percent of the world, including major population centers, such as China and India, from compliance, and would cause serious harm to the U.S. economy. The Senate's vote, 95-0, shows that there is a clear consensus that the Kyoto Protocol is an unfair and ineffective means of addressing global climate change concerns.¹⁷⁵

170. *Id.*

171. *Id.*

172. *Id.*

173. Chad Carpenter, *Climate News*, CLIMATEARK.ORG, Aug. 2, 2000, <http://www.climateark.org/articles/2000/3rd/cn8200.htm>.

174. *Id.*

175. Letter to Members of the Senate on the Kyoto Protocol on Climate Change, 37 Weekly Comp. Pres. Doc. 444 (Mar. 13, 2001). "On June 25, 1997, before the Kyoto Protocol was to be negotiated, the U.S. Senate unanimously passed by a 95-0 vote the Byrd-Hagel Resolution, which insinuated that the United States would not "signatory to any protocol that did not include binding targets and timetables for developing as well as

In the beginning, President Bush argued that it was economically unfair to have an agreement without India and China, two of the world's largest emitters of greenhouse gases, being bound by the same terms as the United States.¹⁷⁶ Currently China, India, and other developing countries are increasing their consumption of fossil fuels, and in turn, their greenhouse gas emissions, at an unprecedented rate.¹⁷⁷ Their emissions "are projected to exceed those of industrialized countries by the mid-21st century."¹⁷⁸ Specifically, the larger developing countries, such as Brazil, India, and China, are expected to overtake the United States in the total production of greenhouse gas emissions in the next twenty-five years.¹⁷⁹ As it is now written, the Kyoto Protocol allows these nations to continue emitting greenhouse gases through the usage of coal and other fossil fuels, which ultimately counters any successful emissions reductions by industrialized nations.¹⁸⁰ Because developing countries are allowed to participate in the formation of the Kyoto Protocol, but are not subjected to any form of commitments, there is no incentive for them to reduce their own greenhouse gas emissions and without the developing countries playing an active role, no progress will be made towards stabilization.

E. Conclusion

Due in large part to the view that (1) the Kyoto Protocol set unrealistic emissions targets for each country; (2) the emissions targets the Kyoto Protocol does require are ineffective, even if achieved; and (3) it allowed developing countries to participate in the negotiations and the formation of the treaty, but did not subject them to emissions reduction commitments, the United States has not, as of May 1, 2007, ratified the

industrialized nations or would result in serious harm to the economy of the United States." *Id.*

176. *Letter to Senators Reiterates Opposition to Kyoto Protocol*, EMBASSY OF THE UNITED STATES OF AMERICA, Mar. 13, 2001, <http://www.usemb.se/Environment/letter.html>.

177. Press Release, U.K. Parliament, *The Science, Impacts and Vulnerability* (July 23, 2002), <http://www.publications.parliament.uk/pa/cm200102/cmselect/cmintdev/519/51906.htm> [hereinafter *Science, Impacts, and Vulnerability*].

178. Marvin S. Soroos, *Preserving the Atmosphere as a Global Commons*, ENVIRONMENT, Mar. 1, 1998, at 6.

179. *Id.* See also Coon, *supra* note 19.

180. *Science, Impacts, and Vulnerability*, *supra* note 177. See also Coon, *supra* note 19.

Kyoto Protocol.¹⁸¹ However in 2001, the White House Working Group on Climate Change published a statement saying that the United States would be in favor of an international agreement where the focus would be centered on curtailing climate change by using voluntary corporate standards, research, and tax incentives, rather than implementing strict emissions controls.¹⁸² In 2004, the United States' commitment to the environment was further emphasized when Former Secretary of State Colin Powell stated in a press conference that the United States would continue to work to develop a solution to the problem of climate change.¹⁸³ Thus, the world had a clear indication that it would hear an announcement from the United States on rectifying global warming and climate change; an announcement which was made on July 28, 2005, in the form of the Asia-Pacific Partnership on Clean Development and Climate Change.

V. ASIA-PACIFIC PARTNERSHIP ON CLEAN DEVELOPMENT AND CLIMATE CHANGE

A. Introduction

On July 28, 2005, the People's Republic of China, India, South Korea, Japan, Australia, and the United States announced at the Association of South East Asian Nations (ASEAN) regional forum in Laos, the Asia-Pacific Partnership on Clean Development and Climate Change.¹⁸⁴ The Asia-Pacific Partnership, which President Bush has dubbed an innovative results-oriented partnership, "will allow [these] nations to develop and accelerate deployment of cleaner, more efficient energy technologies to meet national pollution reduction, energy security and climate change concerns in ways that reduce poverty and promote economic development."¹⁸⁵ Having these six countries joined together in

181. Coon, *supra* note 19.

182. *Id.*

183. *Powell Tells Dutch Youth that World Belongs to Democracy*, U.S. Dept' of State Int'l Info. Programs, Dec. 11, 2004, <http://usinfo.state.gov/mena/Archive/2004/Dec/13-121552.html>.

184. *US Agrees Climate Deal with Asia*, BBC NEWS, July 28, 2005, <http://news.bbc.co.uk/2/hi/science/nature/4723305.stm> [hereinafter *Climate Deal with Asia*]. See also Media Release, Hon. Alexander Downer, Minister for Foreign Affairs, Australia, Asia-Pacific Partnership on Clean Development and Climate (Aug. 11, 2005), http://www.foreignminister.gov.au/releases/2005/js_cdc.html.

185. Office of the Press Secretary, *Pacific Partnership Aims for Cleaner Energy*,

an international agreement is a regional grouping of great significance, given that these countries taken together constitute forty-five percent of the world's population, forty-nine percent of world gross domestic product, forty-eight percent of the world's energy consumption, and are responsible for forty-eight percent of global greenhouse gas emissions.¹⁸⁶ Additionally, several other ASEAN members have since expressed interest in joining the Asia-Pacific Partnership in the future.¹⁸⁷

B. Background of the Asia-Pacific Partnership

Because the People's Republic of China, India, Japan, South Korea, Australia, and the United States combined emit such high levels of greenhouse gases, they agreed to work together to create a new method of development and transfer of technology, in order to reverse the effects of global warming.¹⁸⁸ These six countries undertook this Asia-Pacific Partnership to cooperatively promote the deployment of promising technologies that offer greater energy efficiency, lower air pollution, and reduce greenhouse gas emissions.¹⁸⁹ The four main purposes behind the creation the Asia-Pacific Partnership were to:

- (1) create a voluntary, non-legally binding framework for international cooperation to facilitate the development, diffusion, deployment, and transfer of existing, emerging and longer term cost-effective, cleaner, more efficient technologies and practices among the Partners through concrete and substantial cooperation so as to achieve practical results;
- (2) promote and create enabling environments to assist in such efforts;

Less Pollution, Jan. 11, 2006, <http://usinfo.state.gov/xarchives/display.html?p=washfile-english&y=2006&m=January&x=20060111165941cmretrop3.665668e-02&t=livefeeds/wf-latest.html>.

186. *New Climate Deal*, *supra* note 29.

187. *ASEAN nations consider greenhouse pact*, THE SYDNEY MORN. HEARLD, July 31, 2005, available at <http://www.smh.com.au/news/National/ASEAN-nations-consider-greenhouse-pact/2005/07/31/1122748514441.html?oneclick=true>.

188. See Office of the Press Secretary, *Fact Sheet: President Bush and the Asia-Pacific Partnership on Clean Development*, July 27, 2005, <http://whitehouse.gov/news/releases/2005/07/print/20005027-11.html> [hereinafter *Fact Sheet: Clean Development*].

189. *Asia-Pacific Partnership on Clean Development and Climate Communiqué*, ASIA-PACIFIC PARTNERSHIP ON CLEAN DEVELOPMENT AND CLIMATE CHANGE, Jan. 11-12, 2006, <http://www.asiapacificpartnership.org/Communique.pdf>.

(3) facilitate attainment of our respective national pollution reduction, energy security and climate change objectives; and

(4) provide a forum for exploring the Partners' respective policy approaches relevant to addressing interlinked development, energy, environment, and climate change issues within the context of clean development goals, and for sharing experiences in developing and implementing respective national development and energy strategies.¹⁹⁰

The Asia-Pacific Partnership will also allow members to remain economically stable, while addressing climate change.¹⁹¹ This way, developing countries are able to play an active role in preventing global warming, while at the same time not being restricted from developing economically.¹⁹²

Supporters of the Asia-Pacific Partnership articulate that "[s]tagnant economies are one of the world's greatest environmental threats, because people who lack food, shelter, and sanitation cannot be expected to preserve the environment at the expense of their own survival—and poor societies cannot afford to invest in cleaner, more efficient technologies."¹⁹³ However, "by building on the foundation of existing bilateral and multilateral initiatives, [the Asia-Pacific Partnership] will enhance cooperation to meet both [its] increased energy needs and associated challenges, including those related to air pollution, energy security, and greenhouse gas intensities."¹⁹⁴ The Asia-Pacific Partnership will also allow all six countries (developed and developing) to work together, "in accordance with respective national circumstances, to create a new partnership to develop, deploy and transfer cleaner, more efficient technologies and to meet national pollution reduction, energy security

190. See *About the Asia-Pacific Partnership on Clean Development & Climate*, ASIA-PACIFIC PARTNERSHIP ON CLEAN DEVELOPMENT AND CLIMATE CHANGE, Jan. 11-12, 2006, <http://www.asiapacificpartnership.org/About.htm>.

191. Uspolicy.be, *U.S. Joins Asia-Pacific Partnership on Clean Energy Technologies*, July 28, 2005, <http://www.uspolicy.be/Article.asp?ID=C0440E43-EC30-451A-9917-4E09E2E67E99> [hereinafter *US Policy*].

192. *Id.*

193. *Id.*

194. Australian Government Department of Foreign Affairs and Trade, *Vision Statement of Australia, China, India, Japan, the Republic of Korea, and the United States of America for a New-Pacific Partnership on Clean Development and Climate*, <http://www.dfat.gov.au/environment/climate/50728> final vision statement.html (last visited Mar. 31, 2006) [hereinafter *Vision Statement of Australia*].

and climate change concerns, consistent with the principles of the UNFCCC.”¹⁹⁵

On January 12, 2006, the Asia-Pacific Partnership was launched at the inaugural Ministerial Meeting in Sydney, Australia.¹⁹⁶ In Sydney, Foreign, Environment, and Energy Ministers from the member countries agreed upon and released a Charter that provides the framework and structure of the Asia-Pacific Partnership, a Communiqué that highlights key outcomes from this meeting, and a Work Plan that maps out an intensive agenda of work for the taskforces in the near-term.¹⁹⁷ Additionally, this meeting “outline[d] a ground-breaking new model of private-public taskforces to address climate change, energy security and air pollution.”¹⁹⁸

Members also committed to an action-oriented Work Plan promoting the use of proven and emerging cost-effective clean technologies and practices by:

- (1) Accelerating the deployment of coal gasification and other clean coal technologies, particularly in those Partner countries with plentiful coal resources and rapidly increasing energy demand;
- (2) Expanding the use of renewables to provide lower-cost, clean power in areas without access to modern energy services;
- (3) Encouraging the power sectors in each Partner country to improve the efficiency and reliability of their electric power systems;
- (4) Developing and deploying advanced manufacturing processes for cleaner aluminum, cement, and steel production;
- (5) Strengthening adoption and use of building and appliance efficiency standards, using proven market approaches; and
- (6) Capturing and using coal-bed methane as a clean energy source, and adopting new techniques and technologies safety and reduce emissions in the mining sector.¹⁹⁹

195. *Id.*

196. Grassia, *supra* note 22.

197. *Id.*

198. *Id.*

199. See Office of the Press Secretary, *Fact Sheet: The Asia-Pacific Partnership on Clean Development and Climate*, Jan. 11, 2006, <http://www.whitehouse.gov/news/releases/2006/01/20060111-8.html> [hereinafter *Fact Sheet: The Asia-Pacific Partnership*].

This Work Plan laid out the innovative approach of using both government and industry Task Forces to develop sustainable solutions to our shared challenges through bottom-up practical actions.²⁰⁰ The bottom-up approach illustrates the countries' recognition of the importance of getting the private sector involved in driving sustainable development across all the countries' economies.²⁰¹ Using this Work Plan, member countries hope to redefine how to approach climate change and reverse the effects of global warming.²⁰² The next Ministerial Meeting is scheduled for early 2007.²⁰³

C. Goals of the Asia-Pacific Partnership

The purpose of the Asia-Pacific Partnership is to allow each nation to develop and accelerate deployment of cleaner, more efficient energy technologies that will meet national pollution reduction, energy security, and climate change concerns.²⁰⁴ The Asia-Pacific Partnership approach allows "signed-up countries to set their [own] goals for reducing greenhouse gas emissions individually, with no enforcement mechanism."²⁰⁵ The Asia-Pacific Partnership is expected to allow these six countries to develop an efficient manner in which to achieve (1) a balanced approach to overcome poverty with policies that promote clean development, and (2) an approach to climate change that is broad and pro-growth.²⁰⁶ The members felt that in order to develop a balanced approach to overcome poverty with policies that promote clean development, it was necessary to create new technology for generating energy that is clean, affordable, and secure, while limiting pollution and improving public health.²⁰⁷ By allowing developing countries to achieve rapid economic progress, the Asia-Pacific Partnership could lead to significant environmental improvements.²⁰⁸ Because climate change is a serious long-term issue, sustained action spanning generations and

200. See *Work Plan*, ASIA-PACIFIC PARTNERSHIP ON CLEAN DEVELOPMENT AND CLIMATE CHANGE, Jan. 11-12, 2006, <http://www.asiapacificpartnership.org/workplan.pdf>.

201. *Id.*

202. See *Fact Sheet: The Asia-Pacific Partnership*, *supra* note 199.

203. Richard Black, *Pact 'will not reduce emissions'*, BBC.COM, Jan. 12, 2006, <http://news.bbc.co.uk/2/hi/asia-pacific/4604558.stm>. The Second Policy and Implementation and Taskforce Meeting was held on April 18-20, 2006 in Berkeley, California. *Fact Sheet: The Asia-Pacific Partnership*, *supra* note 199.

204. *Fact Sheet: Clean Development*, *supra* note 188.

205. *Climate Deal with Asia*, *supra* note 184.

206. *US Policy*, *supra* note 191.

207. *Id.*

208. *Id.*

involving both developed and developing countries are necessary to achieve effective results.²⁰⁹ Although the six member countries differ in their perspectives about the best approach to address global warming, the Asia-Pacific Partnership can help developing countries adopt new energy sources to help solve domestic issues of emissions reductions.²¹⁰ The Asia-Pacific Partnership will result in progress if a cooperative effort combines the United States' strategies with the strategies of the other nations to improve economic and energy security, reduce harmful air pollution, and reduce greenhouse gas emissions.²¹¹

Accordingly, the Asia-Pacific Partnership will help members build human and institutional capacity to strengthen cooperative efforts, and will seek opportunities to engage the private sector.²¹² The member countries "will [also] work with multilateral development banks on financing for initiatives and programs identified by the task forces that will expand the use of technologies and practices designed to promote objectives of the Asia-Pacific Partnership."²¹³ This financing will aid the Asia-Pacific Partnership in making progress in areas such as energy efficiency, clean coal, liquefied natural gas, methane capture and use, civilian nuclear power, geothermal building and home construction and operation, rural/village energy systems, advanced transportation, building and home construction and operation, bio-energy, agriculture and forestry, hydropower, wind power, solar power, and other renewable sources.²¹⁴

VI. ANALYSIS OF THE CRITIQUES AGAINST AND DEFENSES FOR THE ASIA-PACIFIC PARTNERSHIP

The announcement of the Asia-Pacific Partnership sparked a heated debate about the driving force behind the agreement. Questions were raised about whether it was created solely as a tool for the United States to block the Kyoto Protocol negotiations in Montreal in 2005 or whether the Asia-Pacific Partnership was actually created as a supplement to the Kyoto Protocol. Regardless of these speculations, there is a possibility that the Kyoto Protocol and the Asia-Pacific Partnership can coexist and that the two working congruently will be more effective than either one

209. *Id.*

210. *Id.*

211. *Id.*

212. *Id.*

213. *Fact Sheet: The Asia-Pacific Partnership*, *supra* note 199.

214. *US Policy*, *supra* note 191.

would be alone. In order to achieve the sixty to eighty percent emissions reductions that scientists recommend to avert permanent climate change, every country needs to be involved. The Asia-Pacific Partnership can bring countries to the table that have, thus far, refused to be bound by the Kyoto Protocol. Despite the voluntary nature of its measures, implementing the Asia-Pacific Partnership as a supplement to the Kyoto Protocol can ensure that all countries play an active role in reducing global emissions.

A. Critiques Against the Asia-Pacific Partnership

Critics of the Asia-Pacific Partnership immediately flooded the news media upon its announcement. The two main arguments against the Asia-Pacific Partnership are (1) that it was established to hinder Kyoto Protocol negotiations and to deflect attention from the United States and the Bush Administration for not joining the Kyoto Protocol, and (2) that it is likely to be ineffective because there is no binding emissions reduction requirement.²¹⁵

The most prominent critique of the Asia-Pacific Partnership was that it was an attempt by the Bush administration to weaken the United Nations talks in Montreal, which occurred in November of 2005.²¹⁶ The United Nations meeting in Montreal focused on expanding the Kyoto Protocol to include developing nations after 2012.²¹⁷ By creating an agreement with non-binding obligations only a few months before the Montreal talks commenced, critics argued that it was intended to decrease the chances of adding new parties to the Kyoto Protocol.²¹⁸ According to one critic, the Asia-Pacific Partnership is an attempt "to organize a bloc of developing countries, including China and India, around what's officially a complementary approach, but which could be converted into an opposing bloc."²¹⁹ Additionally, because the announcement of the Asia-Pacific Partnership did not lay-out specific

215. *Climate Deal with Asia*, *supra* note 184.

216. Richard Black, *Climate Pact: For Good or Bad?*, BBC News, July 27, 2005, <http://news.bbc.co.uk/2/hi/science/nature/4725681.stm> [hereinafter *Climate Pact*].

217. *Bush Administration Unveils Alternative Climate Pact*, N.Y. TIMES, July 28, 2005, at A3 [hereinafter *Bush Administration*]. See also Ian Johnson, *Doubts on US-Led Alternative to Kyoto*, SCOTSMAN, July 29, 2005, at 17; *US Joins 5 Nations in Global Warming Pact*, MEGAWATT DAILY, July 29, 2005, at 10/145/8 [hereinafter *5 Nations*].

218. *Id.*

219. *Climate Deal with Asia*, *supra* note 184. A statement by Phillip Clapp, president of the political lobby group the National Environmental Trust in Washington, DC. *Id.*

targets or give any specific indication about how these six countries planned to reduce their emissions, other than through the usage of new technology prior to the November meeting of the Kyoto Protocol, critics believe that the Asia-Pacific Partnership was created by the United States “to deflect attention away from their own profligate emissions,” by making the world look at the technology for tomorrow, rather than emissions reductions for today.²²⁰ Although the Montreal meeting was one of the most successful meetings in environmental history and appeared to be unaffected by the Asia-Pacific Partnership, it was inevitably complicated and the impact of the Montreal meeting was lessened.²²¹

Another argument critics have made is that regardless of the purpose of the Asia-Pacific Partnership, it will ultimately fail because there are no binding emissions reductions.²²² As the Geneva-based Worldwide Fund for Nature said, “[a] deal on climate change that doesn’t limit pollution is the same as a peace plan that allows guns to be fired.”²²³ Not only does the Asia-Pacific Partnership not require binding emissions, but it also fails to set “targets” to reduce harmful emissions.²²⁴ Philip Clapp, president of the National Environmental Trust, said, “The Pact has no agreements, actions, or timetables for accomplishing anything.”²²⁵ Without binding requirements, targets, or timetables, all six members can engage and participate in this agreement in any manner and with any amount of effort they desire, potentially making their stated objective of assisting the development and transfer of climate-friendly technology just hot air. Because the Asia-Pacific Partnership fails to require binding reductions or set targets for its members, the Asia-Pacific Partnership has been seen by many as nothing more than an agreement to deflect negative attention from the United States.²²⁶

220. *Climate Pact*, *supra* note 216.

221. *Id.*

222. *Climate Deal with Asia*, *supra* note 184.

223. *Id.*

224. *Id.*

225. *5 Nations*, *supra* note 217.

226. *Bush Administration*, *supra* note 215, at A3. “As far as I can tell, there’s really nothing new here,” said Jeff Fielder, an analyst at the Natural Resources Defense Council in New York. *Id.* He said that, “the bilateral agreements already served the purpose of technology sharing but that companies would not have an incentive to deploy it without a strong signal sent by mandatory limits.” *Id.*

B. *Defenses for the Asia-Pacific Partnership*

Supporters of the Asia-Pacific Partnership, however, state that because the United States and Australia are not parties to the Kyoto Protocol and developing countries are not subject to binding obligations, the Kyoto Protocol will fail to reduce greenhouse gas emissions, regardless of the effects of the Asia-Pacific Partnership. Therefore, if the Asia-Pacific Partnership is implemented in conjunction with the Kyoto Protocol, the shortcomings of both can be avoided.

The Asia-Pacific Partnership was able to accomplish something that the Kyoto Protocol failed to do: get developing countries involved and playing an active role.²²⁷ Despite the arguments against it, the Asia-Pacific Partnership can be viewed in a positive light as a mechanism that has brought additional actors to the table and participating in efforts to reverse global warming. The White House Council on Environmental Quality has supported this interpretation, suggesting that the development of the Asia-Pacific Partnership was not an attempt by the United States to undermine the Kyoto Protocol, but was instead created as a supplement to it.²²⁸

The Asia-Pacific Partnership was enacted to rectify the limitations of the Kyoto Protocol by engaging three major developing countries in an effort to ensure they do not follow the same polluting path that the industrialized countries did in their development.²²⁹ In fact, developing countries may see this Asia-Pacific Partnership as "a rather attractive package" because it guarantees economic growth through the usage of new technology.²³⁰ Developing countries need an incentive to join a treaty that requires them to reduce their greenhouse gas emissions because becoming fully industrialized is generally the primary objective of these countries, and reducing greenhouse gas emissions can be antithetical to this goal. In order for developing countries to alter their behavior in a manner that reduces greenhouse gas emissions, they need money and/or new forms of technology, which the Asia-Pacific Partnership provides. Regardless of what attracts developing countries to an agreement, they must take an active role in reducing greenhouse gas emissions, or else the belief that the world can stabilize its atmosphere in the future will become nothing more than a delusion.

227. *Climate Pact*, *supra* note 216.

228. *Bush Administration*, *supra* note 217, at A3.

229. *Climate Pact*, *supra* note 216.

230. *Id.*

The Asia-Pacific Partnership has the potential to make a difference.²³¹ It includes China and India, two developing countries currently not bound by the Kyoto Protocol. Both of these countries are currently experiencing economic growth and booming car ownership, which are two reasons that these countries present such a large greenhouse gas threat.²³² Moreover, the Asia-Pacific Partnership includes Japan and South Korea, who are also large emitters of greenhouse gases, but who bring formidable technology credentials to the Asia-Pacific Partnership's mission.²³³ The Asia-Pacific Partnership's approach to global warming does not force members to reduce emissions by an agreed upon amount or devote a specified amount of money to technology development, but instead allows developing countries to help themselves, by giving them control over how to reduce their greenhouse gas emissions.²³⁴ No matter the original intentions, if the Asia-Pacific Partnership does act as a supplement to the Kyoto Protocol, there is a chance that the weaknesses of both the Kyoto Protocol and the Asia-Pacific Partnership will be alleviated.²³⁵

VII. WHY THE ASIA-PACIFIC PARTNERSHIP SHOULD BE IMPLEMENTED AS A SUPPLEMENT TO THE KYOTO PROTOCOL

As discussed above, the Kyoto Protocol, with all of its accomplishments, fails to get developing countries engaged in domestic efforts to lower their greenhouse gas emissions. Without the presence of binding obligations on developing countries, the Kyoto Protocol will likely fail to ultimately lower greenhouse gas emissions because developing countries are free to behave in any manner they choose.²³⁶ China's main goal, for example, is to become economically developed; however, in order to do this, the most cost effective energy source is coal.²³⁷ Coal, however, is a major contributor of greenhouse gas

231. *Emission Pact Must go Beyond Broad Promises*, S. CHINA MORN. POST, July 29, 2005, at 14.

232. *Id.*

233. *Id.*

234. *Climate Pact*, *supra* note 216.

235. *5 Nations*, *supra* note 217, at 14.

236. Fletcher, *supra* note 106.

237. Keith Bradsher & David Barboza, *China Burning of Coal Casts a Global Cloud*, RED ORBIT, June 12, 2006, http://www.redorbit.com/news/science/535245/chinas_burning_of_coal_casts_a_global_

emissions.²³⁸ Therefore, the Kyoto Protocol prevents the world as a whole from reducing emissions, because it allows China to take a backseat on reducing emissions and allows it to continue to produce emissions at its current rate.²³⁹ In approximately twenty-five years, China will lead the world in greenhouse gas emissions if it continues to produce emissions at its current rate.²⁴⁰ Additionally, Annex I countries only account for thirteen percent of the world's population, thirty-six percent of the world's energy consumption, and thirty-two percent of global greenhouse gas emissions.²⁴¹ Thus, as the Kyoto Protocol stands today, if these countries are actually able to limit their greenhouse gas emissions, it would still not be enough to lower the atmospheric level of greenhouse gases.²⁴² Whereas with the Asia-Pacific Partnership, all members play an active role in reducing greenhouse gas emissions by creating technologies that can be implemented in the future. These members also make up about fifty percent of the world's greenhouse gas emissions, energy consumption, gross domestic production, and population.²⁴³ Therefore, by not having these six countries as active parties of the Kyoto Protocol, it weakens the effectiveness in producing an agreement to reduce greenhouse gas emissions.

Additionally, a significant amount of political attention surrounds the Kyoto Protocol, but the parties thus far have accomplished very little of what they set out to, with no countries currently on track to meet the binding commitments.²⁴⁴ Because of the political issues surrounding the Kyoto Protocol, its purpose has arguably been lost.²⁴⁵ Although media attention has negatively portrayed the agenda behind the Asia-Pacific Partnership, members would be wise to ignore the political fuse surrounding the existence of global warming, accept that drastic changes need to occur, and work together to make a difference. The Australian government, the most vocal member of the Asia-Pacific Partnership, issued a statement after its announcement of the Asia-Pacific Partnership, which affirmed that the Asia-Pacific Partnership would be consistent

cloud/index.html?source=r_science.

238. *Id.*

239. *Id.* See also Fletcher, *supra* note 106.

240. Bradsher & Barboza, *supra* note 237.

241. *Fed: Aust. Plan to Host Global Warming Summit*, AAP Newsfeed, July 28, 2005 [hereinafter *Global Warming Summit*].

242. Mendelsohn, *supra* note 159.

243. *New Climate Deal*, *supra* note 29.

244. Connie Levett et al., *Pact Halves Emissions By the Next Century*, THE SYDNEY MORN. HEARLD, July 29, 2005, available at <http://www.smh.com.au/news/national/pact-halves-emissions-by-the-next-century/2005/07/19.com>.

245. *Id.*

with and contribute to efforts under the UNFCCC and would complement, but not replace, the Kyoto Protocol.²⁴⁶ The Asia-Pacific Partnership is not supposed to detract from the Kyoto Protocol and the commitments that these Parties have made; rather, it was intended to get developing countries to play an active role in the fight against global warming.²⁴⁷ The Asia-Pacific Partnership takes into account the different national circumstances each country has, allowing cooperative success to be achieved.²⁴⁸ "Each country has national strategies and goals to address climate change, energy needs, air pollution and economic development. . . The Partnership provides a framework for international cooperation to support these goals for mutual benefit."²⁴⁹ Additionally, the Australian Government stated that, "[t]he reality is new technology will deliver three times the savings in greenhouse gas [that] the Kyoto Protocol will [because of] things like geosequestration, solar energy, better utilization of the newer technologies that are going to see more efficient electricity production and more efficient electricity consumption."²⁵⁰ Although many critics feel that the Asia-Pacific Partnership was created to lessen the effectiveness of the Kyoto Protocol, if the Asia-Pacific Partnership is implemented as a supplement to the Kyoto Protocol, together they may prevent greenhouse gas emissions from multiplying like they have been since the Industrial Revolution.

Even Sir David King, the United Kingdom's chief scientific adviser, admitted that, although he doubted the Asia-Pacific Partnership will be effective without setting caps on emissions, the "surprise announcement should be seen as a sign of progress on climate change."²⁵¹ What is important for the international community to consider is that these countries, developed and developing, are finally working together in order to achieve the mission statement that the UNFCCC has been requesting for years. When developed countries, such as the United States and Australia, who have economic stability, join with developing countries, success is the likely result. Hopefully, the Asia-Pacific Partnership will be the solution that jump-starts the process of reducing greenhouse gas emissions.²⁵² Because the focus of the Asia-Pacific Partnership differs significantly from the Kyoto Protocol's mission, these

246. *Vision Statement of Australia*, *supra* note 194.

247. *Global Warming Summit*, *supra* note 241.

248. *Id.*

249. *Id.*

250. Fiona Harvey, *Climate Change: Conflict Between Two Sides Blurs Warning*, *FIN. TIMES*, Jan. 24, 2006.

251. *Climate Deal with Asia*, *supra* note 184.

252. *5 Nations*, *supra* note 217, at 14.

two international agreements to reduce global warming should be viewed as complementary.

VIII. CONCLUSION

Although the Asia-Pacific Partnership does not set binding emissions upon the six members, its innovative approach and focus on technology development is a serious step in the right direction of correcting the climate change problem that continues to plague the world. The pressure on the United States and its fellow members to show the world that the Asia-Pacific Partnership is more than just hot air will hopefully prove the critics wrong by creating new technologies that will efficiently lower greenhouse gas emissions that can be implemented globally in the future.²⁵³ The Asia-Pacific Partnership was established in order to reduce emissions of greenhouse gases that are believed to cause global warming, and it has the ability to achieve this goal, and more than anyone expects, but only if it is used as a supplement to the Kyoto Protocol. As of today, the Kyoto Protocol is the leading international agreement on climate change and has the potential to be an astounding agreement to reduce greenhouse gas emissions if all countries are successful in meeting their targets. The Kyoto Protocol was not a treaty that every country wanted to join. For better or for worse, for logical reasons or not, certain countries did not join the Kyoto Protocol. However, a failure to join the Kyoto Protocol should not limit these countries from aiding in the effort to reduce greenhouse gas emissions on a domestic level. Ultimately, the goal should be for each country to achieve an effective plan that works for their country, regardless of how it is done, to get the Earth on track to reduce emissions by sixty percent in the near future.²⁵⁴ If the results of the Asia-Pacific Partnership are anything like those projected, it could potentially be the treaty that the world needs—an important and necessary supplement to the Kyoto Protocol.

253. Ben Crystall, *The Big Clean-Up*, NEW SCIENTIST, Sept. 3, 2005, at 30.

254. *5 Nations*, *supra* note 217.