CLIMATE POLICY & U.S.-CHINA RELATIONS

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INTRODUCTION

United States climate policy is paralyzed by domestic politics and a culture of over-consumption. China, despite scientific evidence that its emissions alone could lead to catastrophic climate events, employs a climate policy arguably based on a cold (though perhaps correct) reality in which the climate crisis is inevitable and only the economically strong will survive. Thus, this Essay has a simple thesis: to date, both the United States and Chinese governments have failed to show leadership in responding to the climate crisis, and without such leadership the countries' continued paths will make the potential crisis a reality.

During the 2009-2010 academic year, I was a J. William Fulbright Scholar, teaching at Sun Yat-sen University (also known as Zhongshan University) in Guangzhou, China. Guangzhou sits as the capital of Guangdong province in south China, a global manufacturing power in the Pearl River Delta, near the boomtown of Shenzhen, and two hours north of Hong Kong by train. While there, I taught courses on the U.S. legal system

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and environmental law to Chinese undergraduate and graduate students. I was fortunate enough to give numerous lectures, participate in roundtables with Chinese faculty and officials, have discussions with American academics in China, and build relationships with U.S. government officials. Nearly all these experiences involved, some exclusively, discussion of climate change and the political roles and responsibilities of the United States and China, the two largest emitters of greenhouses gases in the world.

While I was in China, this quote appeared in the *China Daily*, China's English language newspaper: "China 'could not and should not' set an upper limit on greenhouse gas emissions at the current phase, said Su Wei, the chief negotiator of China for climate change talks . . . ."[1] Similar views were expressed by Chinese academics and policy-makers participating in a "China-U.S. Relations Roundtable" held by the Center for Asia-Pacific Studies at Sun Yat-sen University in May 2010. The question is whether China's policy is irresponsible given the scope and pace of Chinese development and energy consumption (a view held by the Europeans at the Copenhagen Climate Conference in 2009).

The reasons behind China's public stance, and unwillingness to curb overall emissions, are well-known: China deserves its turn to develop; China is only a developing country; China wants to be seen as the leader of the developing world (i.e., the king of the BASIC countries, Brazil, South Africa, India, and China), not a member of the fully developed world; China's per capita carbon emissions pale in comparison to the United States'; China remains a poor country; China's foreign policy is non-interventionist and does not tell other countries what to do, and China expects the same autonomy in return; economic stability is key to social stability and nationalism; absent a strong economy there will be civil unrest and Communist Party leaders may lose power; and the list goes on.

The Chinese stance, that no cap on carbon emissions will ever exist no matter how high, may be a product of China's belief in a cold and hard, and potentially true, reality—that global economic power is paramount and will provide the only avenue to adapt to an inevitable climate crisis, as well as achieve the milestones of superpower status, many of which they have already achieved (e.g., Olympic Games, World Expo, United Nations Security Council). While China's policy remains problematic, as is United States' failure to lead in the international community on the issue of climate change, China's actions, while globally irresponsible, may be very

1. Lan Lan, *'No Intention' of Capping Emissions*, CHINADAILY (Feb. 25, 2010, 6:58AM), http://www.chinadaily.com.cn/china/2010-02/25/content_9499066.htm.

reasonable if solely defined by Chinese domestic interests. The question is whether China's dramatic economic rise comes with more responsibility, and what is the responsibility of the United States in light of its existing and historical economic prowess and level of energy consumption.

I. THE RISE OF CHINA

The United States and China emit more greenhouse gases than any other countries in the world.[2] Further, China recently surpassed the United States to become the largest emitter of carbon dioxide in the world.[3] The two nations will likely remain the top two emitters for some time, given the strength of their economies and accompanying energy demands, due to the existence of large coal reserves in both countries that are used to generate the majority of each nation's energy, and because they are home to the world's largest auto and oil markets, each country importing more than half of the oil they consume.[4]

In addition, the current consumption patterns of the United States, and the emerging consumption patterns in China, will allow retention of their two top statuses. While in China, I grew increasingly concerned about both American and Chinese consumption patterns. The Chinese are adopting the American model of consumerism and consumption. The American economy is in large part defined by over-consumption, consumerism, and commoditization, where social status is defined by material wealth and goods are meant to be accumulated and thrown out.[5] China, pursuing similar levels of economic prosperity and standards of living, is following the same path towards larger cars, bigger homes, processed foods, and disposable goods. The two countries have, in one sense, a reciprocal arrangement—an economic dependency whereby China pollutes heavily to manufacture and export relatively inexpensive goods desired by Americans and other developed nations. Yet, Americans and members of the global community often criticize Chinese development, pollution, and greenhouse gas emissions, all factors necessary to increase standards of living in China.

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2. *Global Greenhouse Gas Data*, U.S. ENVTL. PROTECTION AGENCY, http://www.epa.gov/climatechange/emissions/globalghg.html (last updated Mar. 3, 2010).

3. *Graphic Detail Gas Exchange: CO2 Emissions 1990-2006*, 447 NATURE 1038, 1038 (2007).

4. Peter Fairley, *China's Coal Future*, 110 TECH. REV. 56, 56–57 (2007).

5. JULIET B. SCHOR, WHY DO WE CONSUME SO MUCH? 3–6 (2001), *available at* http://www.csbsju.edu/Documents/Clemens%20Lecture/lecture/Book01.pdf. *See also* Jason J. Czarnezki, *Everyday Environmentalism: Concerning Consumption*, [2011] 41 Envtl. L. Rep. (Envtl. Law Inst.) 10,374, 10,378-79 (2011).

But with rising standards of living in China, domestic energy consumption has risen at a far faster than anticipated rate. Wrote the *New York Times*:

> Even as China has set ambitious goals for itself in clean-energy production and reduction of global warming gases, the country's surging demand for power from oil and coal has led to the largest six-month increase in the tonnage of human generated greenhouse gases ever by a single country. China's leaders are so concerned about rising energy use and declining energy efficiency that the cabinet held a special meeting . . . to discuss the problem . . . . Coal-fired electricity and oil sales each climbed 24 percent in the first quarter from a year earlier, on the heels of similar increases in the fourth quarter.[6]

Like greenhouse gases, the *Wall Street Journal* has reported that China has become the world's top energy user, surpassing the United States.[7] At the same time, China is reluctant to accept its status as an economic and polluting powerhouse, for there remains a fear that global power translates to more global responsibility.[8]

This leads us to "The China Problem," as described by Professor Michael Vandenbergh.[9] Vandenbergh writes "China's projected emissions are so large that, when added to the greenhouse gases already in the atmosphere, Chinese emissions alone may be sufficient to trigger catastrophic climate change even if all other countries approach near-zero emissions levels."[10] In other words, China has adopted a policy that foresees no need to have an emissions cap, even though their current path to development will lead to potentially catastrophic climate change events even if all other countries emissions capped emission at zero immediately. What is especially humbling is that China accepts this, even if it means, for example, that the economically prosperous Chinese megadeltas, particularly Guangzhou's Zhujiang delta, Shanghai's Changjiang delta and Tianjin's

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6. Keith Bradsher, *China's Energy Use Threatens Goals on Warming*, N.Y. TIMES, May 6, 2010, http://www.nytimes.com/2010/05/07/business/energy-environment/07energy.html.

7. Spencer Swartz & Shai Oster, *China Tops U.S. in Energy Use*, WALL ST. J., July 18, 2010, http://online.wsj.com/article/SB10001424052748703720504575376712353150310.html.

8. Shai Oster, *We're Not No. 1 (In Energy)!*, WALL ST. J., July 20, 2010, http://blogs.wsj.com/chinarealtime/2010/07/20/were-not-no-1-in-energy/.

9. Michael P. Vandenbergh, *Climate Change: The China Problem*, 81 S. CAL. L. REV. 905 (2008).

10. *Id.* at 908.

Huanghe delta, face storm surges and flooding, putting communities, biodiversity, and infrastructure at risk of being damaged.[11] China also faces the possibility of major food shortages, serious drought, and mass migration.[12]

II. U.S.-CHINA RELATIONS

Despite the grave picture that I have just drawn, the United States and China have developed many bilateral cooperative agreements to help mitigate the climate change problem. In November 2009, in advance of the Copenhagen Climate Conference to be held later that year and while I was living in China, U.S. President Barack Obama traveled to China. Obama's trip received mixed reviews at best. Many Americans felt that Obama's vision for international meetings without requiring any quid pro quo to be a successful fresh perspective, and the Chinese were honored to have America's new leader within China, where he enjoys relative popularity.[13] However, some felt the Chinese had micromanaged the visit, which included a university town hall meeting in Shanghai, and that the United States received little in exchange for the high-profile visit.[14] Despite these critiques, President Obama and Chinese President Hu Jintao released an optimistic joint statement about the United States-China relationship in response to the climate crisis.[15]

Obama and Hu agreed that each country would take "significant mitigation actions" and would strive for a positive outcome at the

11. Cruz et al., *Asia*, *in* CLIMATE CHANGE 2007: IMPACTS, ADAPTATION AND VULNERABILITY 493 (Parry et al. eds., 2007), *available at* http://www.ipcc.ch/pdf/assessment-report/ar4/wg2/ar4-wg2-chapter10.pdf; *see also Sea Level Rising Near Shanghai*, PEOPLE'S DAILY, July 5, 2000, http://english.peopledaily.com.cn/english/200007/05/eng20000705_44671.html ("A side effect of its breakneck pace of development, Shanghai is slowly sinking into the sea."); Maren A. Lau, *Adaptation to Sea-level Rise in the People's Republic of China: Assessing the Institutional Dimension of Alternative Organisational Frameworks* (Hamburg Univ., Working Paper) (on file with author) (discussing the impact of climate change on coastal China).

12. Ed Chen, *Climate Induced Migration and Conflict: Historical Evidence, and Likely Future Outlook*, SCI. 2.0 (Sept. 21, 2009, 4:38 PM), http://www.science20.com/alchemist/blog/climate_induced_migration_and_conflict_historical_evidence_and_likely_future_outlook.

13. Juliana Menasce Horowitz, *Obama Popular in Japan, China and South Korea*, PEW RES. CENTER PUBLICATIONS (Nov. 12, 2009), http://pewresearch.org/pubs/1409/obama-asia-trip-popular-japan-china-south-korea.

14. Helene Cooper, *China Holds Firm on Major Issues in Obama's Visit*, N.Y. TIMES, Nov. 17, 2009, http://www.nytimes.com/2009/11/18/world/asia/18prexy.html.

15. Joint Press Release, Statement by President Obama and President Hu of China (Nov. 17, 2009), *available at* http://www.whitehouse.gov/the-press-office/joint-press-statement-president-obama-and-president-hu-china.

Copenhagen conference based on "the principle of common but differentiated responsibilities."[16] Perhaps not surprisingly, with the United States and China as two key international actors on climate issues, these basic principles would provide the basic framework for the non-binding Copenhagen Accord, although the Copenhagen agreement lacked any legal force.

The United States and China have also signed a Memorandum of Understanding "to strengthen and coordinate our respective efforts to combat global climate change, promote clean and efficient energy, protect the environment and natural resources, and support environmentally sustainable and low-carbon economic growth."[17] The goal of the memorandum is for both countries to use their joint expertise, resources, research capacity, and combined market size to accelerate progress towards mutual goals in a whole host of substantive areas: energy conservation and energy efficiency; renewable energy; cleaner uses of coal; carbon capture and storage; sustainable transportation, including electric vehicles; modernization of the electrical grid; joint research and development of clean energy technologies; clean air and water; natural resource conservation; and combating climate change and promoting low-carbon economic growth.[18]

In terms of specific joint projects that support these initiatives, the U.S.-China Clean Energy Research Center is perhaps the furthest along, and actually has significant financial backing of a hundred million dollars.[19] The two key efforts of the center are, first, to create advances in clean vehicle technology, and, second, to develop advances in "clean coal" technology, including carbon capture and storage.[20] Both of these goals are important efforts as the United States and China are the largest auto markets and petroleum markets, and have abundant coal resources.[21] While this

16. *Id.*

17. Memorandum of Understanding to Enhance Cooperation on Climate Change, Energy and the Environment, U.S.-China, July 28, 2009, *available at* http://www.state.gov/documents/organization/126802.pdf.

18. *Id.*

19. David Sandalow, *The U.S. and China - Advancing Clean Energy Research Through Cooperation*, THE WHITE HOUSE BLOG (Sept. 3, 2010, 10:55 AM), http://www.whitehouse.gov/blog/2010/09/03/us-and-china-advancing-clean-energy-research-through-cooperation.

20. Despite my own admitted skepticism, some have argued that "clean coal" technology is an available solution. *See* James Fallows, *Dirty Coal, Clean Future*, THE ATLANTIC, Dec. 2010, http://www.theatlantic.com/magazine/archive/2010/12/dirty-coal-clean-future/8307/ (discussing that "for now, the only way to meet the world's energy needs . . . is to use coal," but that new technologies are making the use of coal cleaner).

21. *Id.*

cooperation is an important step, "major issues remain, not least of which is how to handle intellectual property issues that might arise."[22]

III. INTERNATIONAL POLITICS

The international community formally recognized the potential dangers of climate change in 1988, when the World Meteorological Organization and the United Nations Environment Programme established the IPCC, whose working groups assess the impacts of climate change.[23] The IPCC's first report proved to be a catalyst for the 1992 adoption of the UN Framework Convention on Climate Change (UNFCCC), providing a loose framework and stating nonbinding goals for stabilizing greenhouse gas concentrations.[24] It soon became apparent that binding targets and timetables were needed to achieve the UNFCCC's goals, especially once the framework's reduction goal to 1990 greenhouse gas levels by 2000 became regarded as inadequate.[25] The Kyoto Protocol, negotiated in 1997 and entered into force in 2005 when ratified by Russia, features binding "quantified emissions limitation and reduction commitments" keyed to 1990 emissions, calling for an average reduction in developed countries of about five percent below 1990 levels in 2008 through 2012.[26] The Protocol permits lesser-developed countries to use a base period other than 1990, and approves additional flexible mechanisms, such as emissions trading and the European Union's "bubble" allowing for emission commitment reallocation among its member states.[27]

The United States participated in the Kyoto conference, sending an envoy, led by then-Vice President Al Gore. The United States failed to ratify the treaty after President George W. Bush repudiated the Protocol.[28] In fact, even *prior* to the completion of the Kyoto Protocol, a near unanimous

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22. Adam Moser, *US-China Clean Energy Cooperation, Or Not?*, CHINA ENVTL. GOVERNANCE (Oct. 23, 2010), http://chinaenvironmentalgovernance.com/2010/10/23/us-china-clean-energy-cooperation-or-not.

23. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, http://www.ipcc.ch/organization/organization_history.shtml (last visited Apr. 6, 2011).

24. United Nations Framework Convention on Climate Change, May 9, 1992, 31 I.L.M. 849 (1992), *entered into force* 21 Mar. 1994.

25. *Kyoto Protocol*, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/kyoto_protocol/items/2830.php (last visited Apr. 11, 2011).

26. Kyoto Protocol to the United Nations Framework Convention on Climate Change art. 3, Dec. 11, 1997, 37 I.L.M. 22 (1998).

27. *Id.*

28. Greg Kahn, *The Fate of the Kyoto Protocol Under the Bush Administration*, 21 BERKELEY J. INT'L L. 548, 551 (2003).

Senate passed a resolution objecting to the United States becoming a signatory.[29] The Senate objected to the Kyoto plan due to differing standards for developing countries and concerns about harm to the U.S. economy, including job loss, trade disadvantages, and increased energy and consumer costs.[30] China, along with 187 other nation states, has signed the Kyoto Protocol, but has different obligations under the treaty than would the United States. For example, China, like other developing countries, only agreed to mitigation measures, not quantitative emission reductions.[31]

The IPPC's 2007 report provided the scientific basis for the Copenhagen Climate Conference in December 2009.[32] The Copenhagen Accord would emerge out of the conference, and is a non-binding document that sets no legally enforceable emissions limits on countries.[33] The Accord does recognize decision-making "according to science," and creates a U.S. hundred billion dollar monetary fund to help the transition away from fossil fuels in developing countries.[34] The document seeks to formally list the climate change mitigation measures that developing countries commit to, and the emission reductions commitments by developed countries, by ensuring that these measures and reductions can be "measured, reported and verified."[35]

The non-binding Accord, its creation arguably preferable to no agreement at all, was the product of a political soap opera in Copenhagen. Amazingly, it involved heads of state rather than career diplomats, and was complete with snubs, secret meetings, accusations, and new centers of power. For example, at a meeting between the U.S. President and European presidents and prime ministers, China sent a high level bureaucrat rather than Premier Wen Jiabao, offending Western countries.[36] In addition, apparently the BASIC countries held a secret meeting which, upon learning of its taking place, caused President Obama (perhaps with Secretary of

29. *U.S. Senate Roll Call Votes 105th Congress – 1st Session*, UNITED STATES SENATE, http://www.senate.gov/legislative/LIS/roll_call_lists/roll_call_vote_cfm.cfm?congress=105&session=1&vote=00205 (last visited Apr. 6, 2011) (stating that S. Res. 98 received 95 YEA votes, 0 NAY votes, with 5 Not Voting).

30. S. Res. 98, 105th Cong. (1997) (enacted).

31. John C. Dernbach, *Achieving Early and Substantial Greenhouse Gas Reductions Under a Post-Kyoto Agreement*, 20 GEO. INT'L ENVTL. L. REV. 573, 580 (2007-2008).

32. U.N. Framework Convention on Climate Change, Report of the Conference of the Parties on its fifteenth session, held in Copenhagen from 7 to 19 December 2009: Addendum, Copenhagen Accord, U.N. Doc. FCCC/CP/2009/11/Add.1 (Mar. 30, 2010) [hereinafter Copenhagen Accord].

33. *Id.* at 5.

34. *Id.*

35. *Id.* at 6.

36. Tobias Rapp et al., *How China and India Sabotaged the UN Climate Summit*, SPIEGEL ONLINE INT'L, May 5, 2010, http://www.spiegel.de/international/world/0,1518,692861,00.html.

State Hillary Clinton) to barge into the meeting unannounced. Ironically, this meeting led to the drafting of the Copenhagen Accord.

> On the evening of December 18, 2009, following a full day of meetings with various heads of state, President Obama prepared to leave Copenhagen having made no discernible inroads into the impasse. Prior to his departure, President Obama was reportedly scheduled to meet with the Chinese Premier, Wen Jiabao, only to learn that the Premier was in a meeting with the Indian Prime Minister, Manmohan Singh, the Brazilian President, Luiz Inacio Lula da Silva, and South African President Jacob Zuma. Unfazed, President Obama entered the meeting. Less than an hour later, President Obama and his counter-parts emerged with a non-binding political accord that eventually became the centerpiece document of the Copenhagen Conference.[37]

While events at Copenhagen furthered distrust between the parties on a number of issues, these issues—sovereignty concerns by China, desired transparency by United States, and financial resources for the developing world—ultimately found comprise within the Accord.[38]

In terms of international politics, Copenhagen illustrated the rise to power of the world's developing countries, especially China and India, and the marginalization of Europe. To some, Obama was a leader who salvaged something out of the conference, and, to others, he was an enabler of Chinese foot-dragging and a backstabber of European goals.[39] In any event, China can simply be perceived as effectively pursuing its domestic economic agenda or, alternatively, as sabotaging any hopes for a legal agreement by not agreeing to emissions limitations under any circumstance, including reductions of eighty percent in the West. To illustrate these views,

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37. Cinnamon Carlarne, *The Glue that Binds or the Straw that Broke the Camel's Back? Exploring the Implications of U.S. Reengagement in Global Climate Change Negotiations*, 19 TUL. J. INT'L & COMP. L. 113, 142–43 (2010) (citing Philip Sherwell, *Barack Obama Denies Accusations that He 'Crashed' Secret Chinese Climate Change Talks*, THE TELEGRAPH (Dec. 19, 2009, 7:22PM, GMT), http://www.telegraph.co.uk/earth/copenhagen-climate-change-confe/6845952/Barack-Obama-denies-accusations-that-he-crashed-secret-Chinese-climate-change-talks.html). *But see* Jake Tapper, *High Drama in Copenhagen (per Administration Officials)*, ABC NEWS, Dec. 18, 2009, http://blogs.abcnews.com/politicalpunch/2009/12/high-drama-in-copenhagen-per-administration-officials.html (offering a different account of the incident).

38. Carlarne, *supra* note 37, at 144–46.

39. *Id.* at 142 (citing Rapp et al., *supra* note 36) ("President Obama, in turn, is reported to have taken umbrage at Wen Jiabao's absence and also to have alienated his European colleagues by accepting the possibility of temporarily abandoning concrete emissions reduction targets and suggesting that progress could be reached in multilateral settings outside of the UNFCCC.").

the German news source, *Speigel*, published an article entitled "How China and India Sabotaged the UN Climate Summit," with a third part subtitled "Obama Stabs the Europeans in the Back."[40]

Copenhagen also showed that, while the United States is willing to return to international politics on climate change and to take symbolic responsibility as one of the largest greenhouse gas emitters in the world, from a policy standpoint, the United States is unwilling or unable to make difficult concessions that will ultimately produce an international agreement.[41] The Accord was not formally adopted by the UNFCCC Conference of Parties.[42]

The experience in 2009 at Copenhagen illustrates the continued lack of support from the United States, as well as China and India, for legally binding emissions limits. This lack of support has hindered international efforts to mitigate greenhouse gases. Reporting of an October 2010 meeting in Tiajin, China, Agence France-Presse reported:

> The world's two biggest greenhouse-gas polluters sparred throughout the six-day United Nations talks in China, triggering anger from environmentalists who said countries were acting in self-interest and not to save the planet . . . . [U.S. climate envoy Jonathan] Pershing said the biggest problem remained the refusal by China and other developing nations to commit through the U.N. process to curbing their emissions, and to have those efforts monitored and verified. "These elements are at the heart of the deal. And the lack of progress on these gives us concern about the prospects for Cancun," he said, insisting this was an element agreed to in Copenhagen. China, on the other hand, insisted all week that the United States and other rich nations should do much more to curb their emissions, highlighting their historic responsibility for the problem. China's chief climate negotiator, Su Wei, said the United

40. Rapp et al., *supra* note 36. This is a fascinating article describing why the Copenhagen Climate Conference failed to produce a binding legal international agreement to reduce greenhouse gas emissions. The reasons include Chinese obstructionism, U.S. domestic politics and its own desire for economic prosperity, the rise of power of developing nations, and the fall of Europe.

41. Carlarne, *supra* note 37, at 141 ("The President's decision to address the Conference and, in so doing, to confirm the United States' responsibility as one of the biggest polluters was an important symbolic gesture. Beyond its symbolic value, however, the speech offered no new advances to the negotiations. The President's speech marked the return of the United States to the center of high level climate politics but it failed to break the stalemate. At the start of the last formal day of the Conference, the delegates remained firmly dead-locked.").

42. *Id.* at 144.

> States was throwing up smokescreens to hide its own inaction. "It's not fair to criticize if you are not doing anything," he said.[43]

Both the United States and China are hindered by the reality of domestic politics and their ability to blame the other for lack of progress. Professor Cinnamon Carlarne, increasing future political pressure, described the 2010 Cancun Climate Change Conference as "a determinative point for both a 2 degree world and the continuing validity of the UNFCCC process,"[44] but COP-16 in Cancun has come and gone with little fanfare. The Cancun process avoided the high-stakes drama of Copenhagen, successfully set up a fund for adaptation measures in poor countries, created a mechanism for technology transfer, approved a deal to protect tropical forests, and ensured adherence to the goals put forward in the Copenhagen Accord.[45]

IV. DOMESTIC POLITICS

The United States and Chinese governments have significant domestic political pressures that limit their ability and desire to come to a progressive international agreement on climate change, and these pressures create the type of chaos and self-interested behavior seen at Copenhagen.

China does not want to limit its amazing and historic economic growth and development. The domestic justifications are sound and understandable. Economic prosperity defines global power, many Chinese still need to be brought out of poverty, and economic success provides the necessary stability for the ruling Communist party to stay in power. As a result, China is happy to become far more energy efficient, but will make no emissions limitations promises that have the potential to limit overall economic growth.

To this end, China has developed "carbon intensity" targets in an effort to slow its greenhouse gas emissions and become more energy efficient. China proposes to reduce carbon intensity—the amount of CO_2 emitted per unit of economic output—by forty to forty-five percent, compared with

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43. Agence France-Presse, *China and U.S. Blame Each Other as Climate Talks Conclude*, PORTFOLI (Oct. 9, 2010, 7:39PM), http://portfo.li/o/255346-china-and-u-s-blame-each-other-as-climate-talks-conclude.

44. Carlarne, *supra* note 37, at 149.

45. John M. Broder, *Climate Talks End with Modest Deal on Emissions*, N.Y. TIMES, Dec. 11, 2010, http://www.nytimes.com/2010/12/12/science/earth/12climate.html.

2005.[46] Unfortunately, under this plan, even though the rate of emissions will slow, overall emissions will continue to rise. This will eventually rub up against "The China Problem"—that even if other countries reduce emissions to zero, China's growth and emissions alone, despite improving energy intensity, have the potential to push global temperature above the two degree Celsius threshold goal, and potentially further.[47]

Similar to China, the United States has domestic political and economic considerations that have created roadblocks for international climate agreements and domestic initiatives. These roadblocks include concerns about limiting economic growth, a culture and infrastructure that support high levels of driving and energy consumption, strong lobbying by energy and automobile industries against greenhouse gas regulation, dismissal of climate science, and anti-internationalism among both politicians and citizens. As a result, the U.S. government has not enacted a single law explicitly requiring any public or private entity to mitigate its greenhouse gas impact on the global climate.

The Clean Air Act, originally passed in 1963,[48] with major amendments in 1970,[49] 1977,[50] and 1990,[51] states that EPA must regulate air pollutants that "may reasonably be anticipated to endanger public health or welfare,"[52] where air pollutants include "substance or matter which is emitted into or otherwise enters the ambient air."[53] Despite the statute's plain language, EPA historically waffled on whether the agency had the jurisdiction to regulate greenhouse gases and, even if it did, whether it was sensible to do so.[54] Finally, litigation forced the U.S. Supreme Court in 2007 to lament the dangers of climate change, to find with "little trouble" that EPA is

46. Edward Wong & Keith Bradsher, *China Joins U.S. in Pledge of Hard Targets on Emissions*, N.Y. TIMES, Nov. 26, 2009, *available at* http://www.nytimes.com/2009/11/27/science/earth/27climate.html.

47. Vandenbergh, *supra* note 9, at 908 n.16 ("Estimates suggest that carbon dioxide emissions should be reduced to only 20%-40% of current levels to avoid doubling of atmospheric concentrations in order to reduce the risk of catastrophic climate change. . . . China, however, currently comprises more than 20% of global carbon dioxide emissions and is on course to approach 40%. . . . In the absence of major reductions between now and 2050, China alone may cause global carbon dioxide emissions to exceed the target 20%-40% of current emissions.").

48. *History of the Clean Air Act*, U.S. ENVTL. PROTECTION AGENCY, http://www.epa.gov/air/caa/caa_history.html (last updated Nov. 16, 2010).

49. *Id.*

50. *Id.*

51. *Id.*

52. Clean Air Act § 108(a)(1)(A), 42 U.S.C. § 7408(a)(1)(A) (2006).

53. Clean Air Act § 302(g), 42 U.S.C. § 7602(g).

54. Brief for Respondent at III-IV, Massachusetts v. EPA, 549 U.S. 497 (2007) (No. 05-1120) (stating that the EPA didn't think it had jurisdiction to regulate greenhouse gases under the Clean Air Act, and even if it did, it would choose not to "at the present time").

authorized to regulate greenhouse gases, and to conclude that EPA had "refused to comply with this clear statutory command" by not regulating greenhouse gases if these gases cause or contribute to climate change.[55]

Consequently, in the absence of congressional action on federal climate change legislation,[56] EPA moved to assess options to regulate greenhouse gases under the Clean Air Act, and, in December 2009, made an "endangerment finding" concluding that carbon dioxide is a criteria air pollutant subject to regulation under the Clean Air Act.[57] This determination paved the way for the development of regulatory greenhouse gas emission standards in the United States. EPA regulation under the Clean Air Act may actually prove to be more rigorous than new congressional climate legislation, and EPA has now put in place a regulatory program for greenhouse gas controls on both mobile and stationary sources (though these rules are being challenged in the courts).[58] An article by my colleague, Professor Teresa Clemmer, suggests that "direct EPA regulation on a sector-by-sector basis under the Clean Air Act's mobile source and new source performance standard (NSPS) programs offers hope for achieving substantial reductions in a timely manner."[59]

Given the domestic economic concerns that have thwarted both federal climate legislation and the ratification of the Kyoto Protocol, new domestic action seems unlikely. This will have the consequence of stopping the United States from joining legally binding international climate agreements. Under the Treaty Power of the U.S. Constitution, the President can only make treaties with the approval of two-thirds of the Senate.[60] Thus, international goals must be consistent with domestic legislation, continually limited by the U.S. Senate (and the House following the midterm elections of 2010). On the one hand, U.S. domestic politics impinge international progress on climate change. On the other, it illustrates that a change in U.S.

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55. Massachusetts v. EPA, 549 U.S. 497, 533 (2007).

56. *See Climate Action Congress*, THE PEW CENTER ON GLOBAL CLIMATE CHANGE, http://www.pewclimate.org/federal/congress (last visited Apr. 4, 2011) (tracking congressional legislation); *see also* Victor B. Flatt, *Taking the Legislative Temperature: Which Federal Climate Change Legislative Proposal is "Best"?*, 102 NW. U. L. REV. COLLOQUY 123, 126-29 (2007) (evaluating federal legislative proposals as of late 2007).

57. U.S. ENVTL. PROT. AGENCY, ENDANGERMENT AND CAUSE OR CONTRIBUTE FINDINGS FOR GREENHOUSE GASES UNDER SECTION 202(A) OF THE CLEAN AIR ACT; FINAL RULE (2009), *available at* http://www.epa.gov/climatechange/endangerment/downloads/Federal_Register-EPA-HQ-OAR-2009-0171-Dec.15-09.pdf.

58. *Clean Air Act Permitting for Greenhouse Gasses*, U.S. ENVTL. PROTECTION AGENCY, http://www.epa.gov/nsr/ghgpermitting.html (last updated Mar. 30, 2011).

59. Teresa Clemmer, *Staving Off the Climate Crisis: The Sectoral Approach Under the Clean Air Ac*t, 40 ENVTL. L. 1125, 1127 (2010).

60. U.S. CONST. art. II, § 2.

domestic politics and new U.S. leadership on climate change could help lead to international agreement, and influence China's willingness to consider a cap on emissions.

CONCLUSION

The politics of climate change continue to be a challenge. Since Copenhagen, both India and China have sent mixed messages about whether they support the Accord, with at least one Chinese government official insisting that future international talks should not be guided by the Copenhagen Accord.[61] International climate politics must deal with the rising power of the developing countries, the underdetermined future role of the United States, and the undetermined responsibility of China.

There is no predicting what will happen. A trade war could emerge, starting in Europe and the United States, putting a tariff on Chinese goods manufactured through high emissions production (though the political means for tariffs will likely be under the guise of domestic economic protectionism). International trade is a key factor in international climate negotiations. The United States imports more Chinese exports than any other country, and China's exports account for nearly a quarter of their total carbon emissions.[62] Thus, any such trade efforts in the United States will face the political and social challenge of competing American consumer demands for cheap imports.

In a hopeful future, renewed leadership by the United States could prompt China to act and recognize the environmental costs of its historical economic development. Domestically, this would be most effectively done through aggressive greenhouse gas emissions reductions in the United States. While congressional action remains unlikely, EPA's regulatory authority is substantial and would strengthen the United States' hand in international climate negotiations. Internationally, rather than use China as an excuse for inaction, the United States could move forward on climate negotiations without China, in an effort to marginalize them. Will the United States shift course to become a leader of the international climate

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61. *Climate Change After Copenhagen; China's Thing About Numbers*, THE ECONOMIST, Dec. 30, 2009, *available at* http://www.economist.com/node/15179774 (stating that China and India are opposed to international emissions monitoring called for under the Copenhagen Accord).

62. Adam Moser, *Pragmatism Not Dogmatism: The Inconvenient Need for Border Adjustments Tariffs Based on What is Known About Climate Change, Trade, and China*, 12 VT. J. ENVTL. L. 683 (citing Stephen J. Davis & Ken Caldeira, *Consumption-based Accounting of CO_2 Emissions*, 107 PROC. NAT'L ACAD. SCI. 5687, 5687, 5688–89 (2010), *available at* http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2851800/pdf/pnas.200906974.pdf.).

debate, continue to be the largest absent actor like its role in Kyoto, or serve as an ally and shield to China, and roadblock to European preferences? Alternatively, a reciprocal possibility exists whereby Chinese leadership and global action on climate change could embarrass the United States and compel an American response. These two scenarios are clearly less preferable alternatives compared to a cooperative agreement leading to significant emission reductions in both countries.

While predicting the future is not possible, currently the United States has failed in its leadership to develop international climate change policy. The Chinese government and Chinese scholars often point this out (as do I). At the same time, China, in some sense, has not been willing to accept its role as a global leader. At a roundtable discussion in China that I participated in with Chinese and American scholars, as well as government officials, it was clear that, for strategic purposes, China wants to be seen as the leader of the developing world, but, at least on the environmental front, does not want to have the same level of responsibility as the developed world, especially the United States. The problem is that on other accounts, China deeply desires to be a superpower.[63] The question is, does China's dramatic rise come with more responsibility? This concern might be why my Chinese colleagues and students often downplayed, and even denied, that China would overtake Japan as the world's second largest economy.

As an aside, I do not want to be unsympathetic to the poor Chinese citizens who benefit from industrialization. First, the poor in developing countries should benefit from industrialization. However, technology has so progressed that industrialization can occur with less environmental harm. Thus, developed nations have an obligation to provide such countries with resources to industrialize in a more sustainable way. Hence, for example, the hundred billion dollar climate fund for green technology proposed in the Copenhagen Accord, whereby developed countries would provide developing ones with technology and money to support cleaner industrialization.[64] Second, China has significant problems with environmental law enforcement resources, and general problems with rule of law. Many Chinese citizens seek greater environmental protection, but economic interests far outweigh environmental concerns. To the Chinese leadership, it is far more important to bring China out of poverty, than to

63. See, for example, China's efforts in the 2008 Olympic Games in Beijing, 2010 Asian Games in Guangzhou, World Expo in Shanghai, and membership on the United Nations Security Council.

64. Copenhagen Accord, *supra* note 32, at 7.

protect natural resources and the environment. (A similar claim can be levied against the United States' economic interests and its politicians.)

China is an interesting and unique case—developing at a never-before-seen-in-human-history pace, and demanding the status as a national power (as any country would), but also limiting its global responsibilities based on the argument that it remains a poor country, by placing economic interests over enforcement of environmental law, and continually insisting on the bifurcated approach to global carbon emissions. Should China have its cake and eat it too, or is it true that with great power comes great responsibility? For example, the United States will likely be the major player in financing the climate fund, as it is with United Nations administration costs. I'm torn when it comes to China, a nation fundamentally different than other developing countries. Should the resource obligations of the West be less when it comes to China, given its desired and actual status, or is that simply a view of those who do not share China's domestic economy-first agenda and foreign policy preferences?

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Again, when I was in China, my Chinese students and colleagues never wanted to recognize that their country would soon surpass Japan as the second-largest economy in the world. This inevitability is now a reality. Culturally, the Chinese are not ones to take credit, and, from an international relations and foreign policy standpoint, the country is somewhat weary of their economic status. With such economic prowess, it is much harder to limit international obligation and responsibility, especially when those arguments often rest on the lack of economic prosperity for much of the country. While the vast majority of Chinese are most certainly poor, the Chinese recognize their growing status in the world, and the Chinese government will want to continue to be seen as a global power.

Thus, the time is now for either the United States or China to become a real global leader on environmental issues. Both nations are economic superpowers, and the initial failure of one to join the other in a leadership role may lead the other to act. Now is the time for one nation to lead and challenge the other. China and the United States are the two largest emitters of greenhouse emissions, and, ultimately, both must act if the climate crisis is to be averted.