

**Achieving a Domestic Consensus on Global Climate Change in the United States:  
*Sine Qua Non* to an Effective Global Response?**

A Thesis

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  - *Crafted a global approach as lead U.S. technology negotiator in Copenhagen, December 2009*
- **Protecting the stratospheric ozone layer/addressing climate change**
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  - *Developed new approaches to destroying CFCs in banks (refrigerators/air-conditioners)*
- **Orchestrating the Major Economies Forum on Energy and Climate**
  - *Advised Special Envoy for Climate Change and Deputy National Security Adviser*
  - *Chaired ministerial sessions of the Forum and led drafting efforts for Leaders' Statement*
- **Launching the Climate and Clean Air Coalition**
  - *Developed a strategy to forge a new coalition around methane, HFCs and black carbon*
  - *Negotiated details among six partner countries through Secretary Clinton's launch in February 2012*
- **Negotiating a new treaty on mercury**
  - *Won new administration's support for negotiations within three weeks of Inauguration in 2009*
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  - *Led U.S. Delegation at successful final negotiating session in Geneva in January 2013*

*Director, Office of Global Change (2001 – 2006)*

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  - *International Partnership for the Hydrogen Economy*
  - *Group on Earth Observations and Global Earth Observation System of Systems*
  - *Carbon Sequestration Leadership Forum*
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**Deputy Director, Office of Cooperative Science & Technology Programs (1987-1989)**

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**Atlantic Desk Officer, Office of Fisheries Affairs (1984-1987)**

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- Helped bring U.S. fisheries under coastal state management in wake of extended jurisdiction

**Assistant to Executive Secretary, U.S.-U.S.S.R Fisheries Claims Board (1974-1977)**

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Virginia State Bar, 1981

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## Abstract

Many believe that solving global climate change has become mired in discord and controversy, and that the U.N. negotiations are hopelessly stuck. This study asks why that is and what can be done about it? It argues that the United States is an indispensable party but that the absence of a domestic consensus makes the United States reluctant to lead – and that this is a key reason for the impasse. The study then asks what does agenda setting theory tell us about the current debate over climate policy in the United States and what are the prospects for a major shift toward ‘*whole of country*’ engagement? Finally, it asks what impact such a shift by the United States would have on the international negotiations and how quickly it might occur.

To assess the current stalemate in the climate negotiations, this study surveys multiple suggestions in the literature about what is blocking progress, and how to move forward. Despite the merits of these ideas, it contends that there is a *sine qua non* without which little else matters but with which everything is possible. Interviews with senior climate negotiators from a broad cross section of developed and developing countries buttress this argument. The study explores the reasons for U.S. ambivalence through the lens of three theorists – John Kingdon, Frank Baumgartner and Bryan Jones, and Thomas Rochon – and considers how and when significant policy change may occur. Assuming it does, the study asks, “what then?” Returning to the interviews and the “impasse” literature, the dissertation considers the effect of U.S. domestic action on the negotiations.

The study reaches six key findings: (1) the United States today can significantly shape the global response to climate change; (2) to play a lead role, significant and far-reaching U.S. domestic action is vital; (3) the United States has broad scope to decide what kind of action makes sense for it, but the impact will need to be viewed by others as significant, in line with the science and perceptions of the U.S. “fair share;” (4) a shift in American attitudes toward climate change is necessary and possible if leadership takes advantage of the next *policy window*, and creates an effective narrative that convinces the public and the Congress that action is essential; (5) U.S. domestic action is necessary but not sufficient to craft an effective global response that addresses some of the factors that have blocked an agreement thus far; and (6) even with U.S. action and engagement, the issue will be exceedingly difficult to resolve because of the widely varying circumstances and aspirations of the parties and the complexities of the current process.

## **Dedication**

***To Dr. Kathryn G. Clay***

*Who agreed to follow my dream, and without whose love, brilliant ideas and unflagging support it would have remained forever ethereal.*

## Acknowledgments

Many people helped me enormously in the course of this journey – my mother, Sally Ann Evans, a teacher now deceased, who began her own, never-ending quest for knowledge, a journey in which I participated and that inspired me; my father, C. Frank Reifsnyder, a jurist also now deceased, who was proud of the accomplishments of his sons but somehow especially proud of those academic; my spouse, Dr. Kathryn G. Clay, whose contributions have been vast and unending; my daughter, Claire E. Reifsnyder, and my son, Benjamin S. Reifsnyder, who lived through my time away and, while sometimes mystified, were always supportive; Dr. Amy F. Richardson, with whom I worked and who introduced me to Professor Daniel Kammen, who in turn arranged for me to teach for a year; Professors Denise Mauzerall and David Bradford, who taught me the ropes; Professor Jennifer Hochschild, whose outstanding course in the American Political System got me to thinking; Granville Sewell, who steered me to Fletcher and Bill Moomaw; Dr. Robert T. Watson, an extraordinary mentor, who missed no opportunity to push; Dr. Tracy Bushkoff, who served for a time as my dissertation coach and helped me sort out so many things; Dr. Susan Gardner, who made me see that it was possible; my colleagues at the State Department, in particular Dr. Kerri Ann Jones, Assistant Secretary of State for Oceans and International Environmental and Scientific Affairs, and Ambassador Judith G. Garber, OES Principal Deputy Assistant Secretary, who “believed,” who supported me and helped me find needed time; former OES Assistant Secretary Melinda Kimble and Executive Director Stephanie Kinney who supported my quest; Jeff Miotke, who served as Director of the Office of Global Change at a critical time, freeing me for academe; Teresa Hobgood, a cherished confidant and “librarian” for one of the most extraordinary sets of original documents on U.S. climate change diplomacy anywhere, who helped me find important materials; Christine Dawson, Dr. John E. Thompson, Dr. Nicole Gibson and Dr. Keri Holland who variously helped as sounding boards; Katya Wolsey, who proved herself an excellent teacher; and my many other colleagues and friends who encouraged and sustained me throughout. I am deeply grateful to you all.

Of course, the views expressed and any errors or omissions are strictly my own.

## Preface

This journey began in 1989 when I became Director of the State Department's newly formed Office of Global Change -- set up to deal with the emerging issue of global climate change. In that position, I was privileged to work with Ambassador Jean Ripert of France, who chaired the Task Force on Developing Country Participation under the Intergovernmental Panel on Climate Change (IPCC). Ambassador Ripert later became Chair of the Intergovernmental Negotiating Committee and fathered the United Nations Framework Convention on Climate Change. I served as the deputy head of the U.S. negotiating team in the run-up to the Framework Convention in 1992. I continued on the U.S. team through negotiation of the Kyoto Protocol in 1997, serving as a vice chair of the Ad Hoc Group on the Berlin Mandate with its Chair, Ambassador Raul Estrada Oyuela of Argentina, father of the Kyoto Protocol.

From 1999-2001, I undertook an assignment, first as a visiting lecturer in public policy at Princeton University's Woodrow Wilson School of Public and International Affairs, and then as a senior research fellow at Tufts University's Fletcher School of Law and Diplomacy. While at Princeton, I had to good fortune to take a seminar on the American Political System with Professor Jennifer Hochschild, who introduced me to the literature on public agenda setting and to John Kingdon, Frank Baumgartner and Bryan Jones, and Thomas Rochon in particular. I have long believed that U.S. foreign policy should follow and not lead U.S. domestic policy. Over time I came to understand what was missing in the climate negotiations. These theorists opened new vistas, as did my experience at the Fletcher School under Professor Bill Moomaw, to whom I owe so much. This dissertation is the product of 25 years in the trenches and considerable thought, discussion and reflection along the way.

Writing about events even as they happen all around me, has been breathtaking, especially in recent years. I believe that there is a change underway in America that, while yet unseen, is almost palpable.

## Table of Contents

<b>ABSTRACT</b>	<b>IV</b>
<b>DEDICATION</b>	<b>V</b>
<b>ACKNOWLEDGMENTS</b>	<b>VI</b>
<b>PREFACE</b>	<b>VII</b>
<b>INTRODUCTION</b>	<b>1</b>
<b>CHAPTER ONE: WHAT'S WRONG?</b>	<b>5</b>
IMPOSE RESPONSIBILITY – LEGISLATE COERCION	7
REVISIT THE COMMONS – BE INSPIRED BY LOCAL AND REGIONAL SUCCESSES	9
<b>UNDERSTAND THE PROBLEM</b>	<b>11</b>
ASK THE RIGHT QUESTION	15
REJECT THE POLITICS OF LIMITS – INVEST IN TECHNOLOGICAL INNOVATION	18
REFOCUS ON THE “RIGHT” ISSUES: RETURN TO BASIC PRINCIPLES	20
<b>PUT DEVELOPMENT FIRST</b>	<b>21</b>
PUSH SUSTAINABLE DEVELOPMENT POLICIES AND MEASURES	21
FOCUS ON ENERGY SERVICES, NOT GREENHOUSE GAS EMISSIONS	23
USE NEGOTIATION THEORY TO PROMOTE MUTUAL GAINS AND FOCUS ON PROVIDING UNIVERSAL CLEAN ENERGY SERVICES	25
<b>RETOOL THE PROCESS</b>	<b>27</b>
CONSIDER A SMALLER, LEADERS-LEVEL GROUP TO REACH AGREEMENT	27
PURSUE LAYERED DIPLOMACY	30
ADOPT A PORTFOLIO OF APPROACHES	33
SHARE THE BURDEN/HAVE EACH COUNTRY PLAY ITS PART & TIGHTEN THE SCREWS	36
RETHINK INTERNATIONAL LAW	38
ADOPT A MORE PRAGMATIC, BOTTOM-UP APPROACH	42
PUSH FOR A STRATEGIC RESET	45
<b>CHAPTER TWO – THE INDISPENSABLE PARTY</b>	<b>50</b>
AMERICAN EXCEPTIONALISM	53
A GLOBAL ENVIRONMENTAL PROBLEM	55
WHY IS THE UNITED STATES CRUCIAL TO A SOLUTION?	56
COULD THE “REST OF THE WORLD” ACT WITHOUT THE UNITED STATES?	59
YES, BUT....	60
“HISTORIC RESPONSIBILITY”	61
“COMMON BUT DIFFERENTIATED RESPONSIBILITIES AND RESPECTIVE CAPABILITIES”	63
<b>CHAPTER THREE – HOW DO OTHERS SEE THE UNITED STATES?</b>	<b>68</b>
WHY DOES THE UNITED STATES MATTER?	70
IS THE UNITED STATES A LEADER?	85
HOW COULD THE UNITED STATES LEAD?	94
WOULD U.S. DOMESTIC ACTION CHANGE THE CLIMATE NEGOTIATIONS?	107
COULD ANYONE ELSE DO IT?	112

COULD THE CURRENT U.S. OPPORTUNITY BE LOST?	113
OTHER CANDIDATES WHO MIGHT GALVANIZE GLOBAL ACTION	120
WHO ELSE MIGHT STEP FORWARD IF THE UNITED STATES DOES NOT?	123
<b><u>CHAPTER FOUR - HOW DOES POLICY CHANGE?</u></b>	<b>128</b>
PROCESS STREAMS AND PUBLIC POLICY	129
PROBLEM RECOGNITION	130
POLICY PROPOSALS	136
THE POLITICAL STREAM	140
POLICY WINDOWS AND THE COUPLING OF STREAMS	146
A PLACE ON THE AGENDA	149
<b><u>CHAPTER FIVE: APPLYING KINGDON TO CLIMATE</u></b>	<b>153</b>
PROBLEM RECOGNITION	153
CLIMATE'S POLICY COMMUNITY	166
OPENING OF ANOTHER POLICY WINDOW	172
THE POLITICAL STREAM	175
<b><u>CHAPTER SIX: PUNCTUATED EQUILIBRIUM</u></b>	<b>181</b>
POLICY MONOPOLIES	183
SERIAL V. PARALLEL PROCESSING OF ISSUES BY GOVERNMENT	186
POLICY IMAGES AND INSTITUTIONAL VENUES	188
<b><u>CHAPTER SEVEN: APPLYING BAUMGARTNER AND JONES TO CLIMATE</u></b>	<b>193</b>
POLITICAL TUMULT V. POLICY STABILITY	194
THE NO-REGRETS STRATEGY	196
BAKER ONE	200
BAKER TWO	202
NO TRACTION FOR NO REGRETS	204
RAISING THE PROFILE	207
THE GLOBAL CLIMATE COALITION	209
POLICY IMAGE: THE BYRD-HAGEL RESOLUTION	212
POLICY VENUE: THE EXECUTIVE BRANCH	213
<b><u>CHAPTER EIGHT: MUST VALUES CHANGE BEFORE POLICIES?</u></b>	<b>216</b>
IRRESISTIBLE TIDES AND ONCOMING FREIGHT TRAINS	216
RAPID CHANGE IS NOT GRADUAL CHANGE ACCELERATED	218
LANGUAGE INDICATORS	220
CRITICAL COMMUNITIES	221
MOVEMENTS	221
VALUE CONVERSION, CREATION AND CONNECTION	223
"HERESTHETIC" ARTS	226
<b><u>CHAPTER NINE: APPLYING ROCHON TO CLIMATE</u></b>	<b>230</b>
BROAD DISCUSSION OF NEW VALUES	231
EVIDENCE OF EVOLUTIONARY CHANGE?	232
ASKING THE RIGHT QUESTION	235

HAVING IT BOTH WAYS	238
STILL NO TIDAL FORCE BUT IMPORTANT INDICIA OF CULTURAL CHANGE	239
BILL MCKIBBEN AND 350.ORG	245
<b><u>CHAPTER TEN: TAKEAWAYS FROM THEORETICAL PERSPECTIVES</u></b>	<b>249</b>
LESSONS FROM KINGDON	249
LESSONS FROM BAUMGARTNER AND JONES	256
LESSONS FROM ROCHON	260
REALITY CHECK	265
<b><u>CHAPTER ELEVEN: ASSUME AN EPIPHANY: THEN WHAT?</u></b>	<b>267</b>
IF THE UNITED STATES LEADS WILL OTHERS FOLLOW?	267
SPECIFIC VIEWS	270
SANCTITY OF “THE PROCESS”	271
COPENHAGEN AND THE “UPSTAIRS-DOWNSTAIRS” PROBLEM	273
DELAYS, COMMUNICATION PROBLEMS, PROCEDURAL OBSTACLES, ETC.	277
FORM OF COMMITMENT AND REVERSIBILITY	280
<b><u>CHAPTER TWELVE: CONCLUSIONS</u></b>	<b>283</b>
WHY ARE THE GLOBAL NEGOTIATIONS STUCK?	283
WHERE IS THE UNITED STATES?	289
WHAT INSIGHTS DO THEORY AND THE FINDINGS OF THIS RESEARCH OFFER?	290
WHAT IF?	295
RESPONSES TO QUESTIONS	298
KEY FINDINGS	299
<b><u>BIBLIOGRAPHY</u></b>	<b>300</b>
<b><u>APPENDIX I - LIST OF OFFICIALS INTERVIEWED FOR THIS STUDY</u></b>	<b>320</b>
<b><u>APPENDIX II - INTERVIEW QUESTIONS</u></b>	<b>324</b>

## **Introduction**

This study asks three questions:

- (1) Why are the global negotiations on climate change stuck?
- (2) What do certain theories about public policy change in the United States have to say about climate?
- (3) How would significant, far-reaching climate action in the United States affect the international negotiations?

To address these questions, the study first will explore multiple reasons cited in the literature about why negotiations under the U.N. Framework Convention on Climate Change (UNFCCC) are largely at an impasse. It will also briefly describe the wide range of suggestions put forward for how to break the logjam.

Whatever the merits of the reasons that have been advanced by others, and whatever the potential of the suggestions offered, this study will ask whether the reluctance of the United States to assume a leadership role on this issue is a key factor in determining why, after nearly a quarter century of effort, the world has yet to craft an effective global response. In addressing this question, the U.S. role and U.S. “exceptionalism” in other areas will be considered, as will the U.S. role with respect to environmental issues specifically. The study will explore whether the United States is, with

respect to climate change, what former Secretary of State Hillary Rodham Clinton has described as the “indispensable nation.”<sup>1</sup>

Questions about U.S. leadership internationally on the climate issue will be explored through the eyes of senior climate negotiators from a broad cross-section of developed and developing countries. They will offer a variety of insights into whether the United States today is considered a leader, and if not, what might need to happen for the United States to play a leading role. Also through their eyes this study will consider whether any other country could play such a role, acting individually or jointly, and whether any other country or groups of countries is likely to step forward soon.

Having set the stage, this study will explore the theories of three major U.S. contributors to the literature on agenda setting in political science -- John Kingdon, as well as Frank Baumgartner and Bryan Jones who followed him -- to consider how it is that issues get on the public agenda and how they move once there. Their insights provide an important framework for considering how and why policy change occurs. The study will also explore

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<sup>1</sup> In her address to the Council on Foreign Relations on January 31, 2013, Secretary Clinton said, in part: “You know why we have to do all of this? Because we are the indispensable nation. We are the force for progress, prosperity and peace. And because we have to get it right for ourselves. ... [B]ecause the United States is still the only country that has the reach and resolve to rally disparate nations and peoples together to solve problems on a global scale, we cannot shirk that responsibility. Our ability to convene and connect is unparalleled, and so is our ability to act alone whenever necessary. So when I say we are truly the indispensable nation, it's not meant as a boast or an empty slogan.” Hillary R. Clinton, “Remarks on American Leadership,” Council on Foreign Relations (accessed August 30, 2013); available from <http://www.cfr.org/united-states/remarks-american-leadership/p29911>.

the theories of a key U.S. contributor to the literature on values and cultural change in sociology – Thomas R. Rochon – to consider how values change in society and whether they must change before policies do.

In each case, having “unpacked” the theories of these writers, this study will apply them to the specific issue of climate change and how it has evolved in the United States. Aware that these theories were developed with reference to very different issues and problems, this study will consider what insights they offer and what light they shed on the climate problem. In particular, it will ask whether they provide certain clues as to how and when there may yet be a seismic shift in perceptions, views or attitudes in the United States toward climate change, such that the nation may at last develop a national consensus about the seriousness of the problem and about what to do in response.

Finally, this study will consider, drawing again on the interviews with key climate negotiators, just what an epiphany in the United States might mean for ongoing efforts to craft an effective global response. It is here that the issues identified at the outset – e.g., are these discussions asking the right question, are they following the right model, and are they taking place among the right set of actors -- come back into play.

The study will conclude with a number of key findings, also answering the questions posed at the outset.

So to recap: This study will first consider multiple assessments of why the international process has been relatively ineffective. Second,

interviews with senior climate negotiators will demonstrate the importance of U.S. domestic action on climate change and of entering the discussions in a leadership role. Third the study will consider what might trigger such engagement by examining how American attitudes can shift and how policy can change using a theoretical framing from the agenda setting and value change literature. Finally, the study will return to the multilateral negotiations to examine how the process might shift if the United States were to play a lead role and how this fits with the analysis at the outset of factors blocking progress.

## Chapter One: What's Wrong?

For over a generation, nations have struggled to develop an effective response to the threat of global climate change. While the issue has risen to the top of the public agenda in many countries and regularly features at leaders' meetings from the G8 and G20 to the United Nations General Assembly, few would suggest that the world has yet developed an effective response. The gap between what nations are currently on track to do versus what science indicates needs to be done to keep atmospheric concentrations of greenhouse gases at a "safe" level, is wide and growing.<sup>2</sup> Why is that?

Many reasons have been advanced for the world's inability to develop an effective response to global climate change. The United Nations Framework Convention (UNFCCC) – which opened for signature in 1992 at the Earth Summit in Rio de Janeiro – has managed to attract nearly all countries of the world as parties, and the Kyoto Protocol -- adopted in late 1997 – has managed nearly to do the same (with one significant exception)<sup>3</sup> - but neither instrument alone or even together provides an effective climate change deterrent. The UNFCCC essentially created a process and certain institutions for addressing climate change over time, but did not seek to limit global greenhouse gas emissions. The Kyoto Protocol provided for near-term

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<sup>2</sup> See United Nations Environment Programme (UNEP), *The Emissions Gap Report 2013: A UNEP Synthesis Report, November 2013*, (accessed January 14, 2014); available from <http://www.unep.org/pdf/UNEPemissionsgapreport2013.pdf>.

<sup>3</sup> The United States of America.

greenhouse gas reductions by developed countries, but excluded any specific limitation or reduction commitments for developing countries.

This chapter will review some of the major reasons suggested for why the world has not developed an effective response to global climate change and a range of proposals for how to break the logjam. This survey spans a period of some 45-years – from 1968 to 2013 -- from before climate change emerged on the public agenda to very recent writings. The views expressed vary widely, as do the times in which they were expressed, the issues that were looming then and the viewpoints and experiences that the authors bring to this question.

The views expressed are not easy to categorize and there is no clear trend among them. Still, they seem to fall into three broad categories: (1) the problem, (2) the focus, and (3) the process. Some argue that the problem is not adequately understood and contend that better explanations will move things forward. Others believe that the focus of negotiations has been wrong and urge a different focus on the “right” issues. Still others assert that the process itself is the problem and urge that it be retooled in various ways.

This review will deal with each in turn, but will begin even before the beginning of public attention to climate change, briefly setting the stage by describing an article so critical to all thinking that has followed that its title had become a moniker for “free-rider” problems of every stripe.

## ***Impose Responsibility – Legislate Coercion***

In 1968, Garrett Hardin published an article that influenced thinking about natural resources for more than three generations thereafter.<sup>4</sup> In the “Tragedy of the Commons” he described how users of common resources maximize their self-interest to the point where the resource itself is imperiled. He saw “pollution” as the flip side of exploitation, and had this to say about it long before global climate change had even registered on the public agenda:

Here it is not a question of taking something out of the commons but of putting something in – sewage, or chemical, radioactive, and heat wastes into water; noxious and dangerous fumes into the air; and distracting and unpleasant advertising signs into the line of sight. The calculations of utility are much the same as before. The rational man finds that his share of the cost of the wastes he discharges into the commons is less than the cost of purifying his wastes before releasing them. Since this is true for everyone, we are locked into a system of ‘fouling our own nest,’ so long as we behave only as independent, rational, free-enterprisers.<sup>5</sup>

Unknowingly, Hardin had made a keen observation about the climate problem that only began to take root in the public consciousness 20 years later. In what he described as “a not generally recognized principle of morality,” he said: *“the morality of an act is a function of the state of the system at the time it is performed.”* He also said: “Using the commons as a

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<sup>4</sup> Garrett Hardin, “The Tragedy of the Commons,” *Science*, Vol. 162, No. 3859, December 13, 1968, (accessed January 12, 2014); available from <http://www.sciencemag.org/content/162/3859/1243.full>.

<sup>5</sup> *Ibid.*, 1245

cesspool does not harm the public under frontier conditions, because there is no public; the same behavior in a metropolis is unbearable.”<sup>6</sup>

Hardin noted different remedies for dealing with removing resources from a commons versus putting substances into one. He said:

The tragedy of the commons as a food basket is averted by private property, or something formally like it. But the air and waters surrounding us cannot readily be fenced, and so the tragedy of the commons as a cesspool must be prevented by different means, by coercive laws or taxing devices that make it cheaper for the polluter to treat his pollutants than to discharge them untreated. We have not progressed as far with the solution of this problem as we have with the first. Indeed, our particular concept of private property, which deters us from exhausting the positive resources of the earth, favors pollution.<sup>7</sup>

Responsibility, in his view, is not produced by appeals to conscience.

In fact, Hardin went to some lengths to explain not only why appeals to conscience are ineffective but why they work toward the ultimate “elimination of conscience from the race.” Instead, he asserted that “[t]he social arrangements that produce responsibility are arrangements that create coercion, of some sort,” and he used the societal proscription against bank robbery as an example of one such arrangement:

... [W]e...insist that a bank is not a commons; we seek the definite social arrangements that will keep it from becoming a commons. That we thereby infringe on the freedom of would-be robbers we neither deny nor regret.<sup>8</sup>

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<sup>6</sup> Ibid.

<sup>7</sup> Ibid.

<sup>8</sup> Ibid., 1247

In Hardin's view, "temperance" could also be created by coercion, and he used taxation, parking meters and parking fines all as examples of coercive devices that can be used to temper behavior. Hardin argued:

To many, the word coercion implies arbitrary decisions of distant and irresponsible bureaucrats; but this is not a necessary part of its meaning. The only kind of coercion I recommend is mutual coercion, mutually agreed upon by the majority of the people affected.<sup>9</sup>

### ***Revisit the Commons – Be Inspired by Local and Regional Successes***

Thirty years after Garrett Hardin's article another group of authors reassessed the "generality of the theory" that grew out of his original paper.<sup>10</sup> This illustrious group, which included Elinor Ostrom, the first woman to win a shared Nobel Memorial Prize in economics, and Chris Field, who later became a co-chair of one of the key working groups of the Intergovernmental Panel on Climate Change (IPCC), surveyed a number of changes that had taken place since 1968 that served to advance understanding of common resource problems. They conclude broadly that "tragedies of the commons are real but not inevitable" and they highlight a number of examples at the local and regional level in dealing with common-pool resources (CPRs) that they feel are encouraging, contending that they might be transferable to broader problems of the global commons. At the same time, they identify a number of new challenges, including biodiversity, climate change and the

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<sup>9</sup> Ibid.

<sup>10</sup> Elinor Ostrom, Joanna Burger, Christopher B. Field, Richard B. Norgaard, and David Policansky, "Revisiting the Commons: Local Lessons, Global Challenges," *Science*, Vol. 284, No. 5412, April 9, 1999, (accessed January 12, 2014); available from <http://www.sciencemag.org/content/284/5412/278#aff-3>.

management of other ecosystem services that they concede will be especially difficult to address for a number of reasons. These include: (1) the larger participant group that makes it more difficult to organize and to agree on and enforce rules; (2) concern that cultural diversity makes it more difficult to find shared interests and understanding, “exacerbated by ‘north-south’ conflicts stemming from economic differences between industrialized and less-industrialized countries; (3) inter-linkage among global CPRs (e.g., maintaining biodiversity and ameliorating climate change) that increase the complexity of finding solutions; (4) accelerating rates of change that may mean exceeding environmental thresholds without realizing it, making ‘learning by doing’ more difficult and making learning from the past less relevant; (5) the “collective choice rule” requiring “unanimous agreement” that enables some to hold out for special privileges and influence the kind of resource management policies that can be adopted at this level”; and finally (6) less room for error because at the global level “there is no place to move.”<sup>11</sup>

While Ostrom *et al.* acknowledge that these kinds of difficulties do not inspire confidence that past and current successes in dealing with CPR problems can be used effectively to address such problems in the future, they persist in being optimistic because of the strong foundation they describe. In particular, they suggest: “Broad dissemination of widely believed data could be a major contributor to the trust that is so central to effective CPR

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<sup>11</sup> Ibid., 282

management.”<sup>12</sup> Ostrom and her colleagues, like Hardin before them, had identified key themes that would come to plague climate negotiations in the multilateral process.<sup>13</sup>

## **Understand the Problem**

Among the reasons cited to explain the world’s inability to adopt an effective regime to limit climate change, those that deal with inability or failure adequately to communicate the science of climate change figure prominently. Multiple reasons have been given for this – among them, that “climate skeptics” or “climate deniers” have misused the evidence to sow doubt about what is known and certain and deliberately confuse what is known and certain with what remains uncertain.<sup>14</sup> Proponents of this view contend that, if the truth were able to emerge, people would be compelled to act.

At the same time, there are those who maintain that the issue is misunderstood because activists in the scientific community or elsewhere

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<sup>12</sup> Ibid.

<sup>13</sup> As Paul Hawken said: “When asked if I am pessimistic or optimistic about the future, my answer is always the same: if you look at the science about what is happening on earth and aren’t pessimistic, you don’t understand the data. But if you meet the people who are working to restore this earth and the lives of the poor, and you aren’t optimistic, you haven’t got a pulse.” Paul Hawken, “Commencement Address to the Class of 2009, University of Portland,” in Martin Keogh, ed., *Hope Beneath Our Feet: Restoring Our Place in the Natural World*, (Berkeley, CA: North Atlantic Books, 2010), 4.

<sup>14</sup>See, for example, James Hoggan and Richard Littlemore, *Climate Cover-Up: The Crusade to Deny Global Warming*, (Vancouver: Greystone Books, 2009) and Eric Pooley, *The Climate War: True Believers, Power Brokers and the Fight to Save the Earth*, (New York: Hyperion Books, 2010).

have hyped concern about the science to further their own agendas.

Ironically, they too believe that, if the truth were able to emerge, people would calm down.

A serious effort to debunk this second view is that of James S. Risbey.<sup>15</sup> In 2007, he observed that “climate change discourse has shifted character in a qualitative sense in the last few years, underscored by an increasing sense of urgency.” Noting that the significance of the change had been contested, he says: “Some believe it reflects a real and alarming change in the climate community’s assessment of the problem, and some think it is largely a rhetorical shift promoted by alarmist scientists and communicators.” He sees the distinction as important because “it implies that we are either on the verge of committing ourselves to serious climate change, or else we are in danger of fooling ourselves that we are.”<sup>16</sup>

According to Risbey what prompted him to write was Andrew Revkin’s characterization in the *New York Times* of documentaries like Al Gore’s “An Inconvenient Truth” as “alarmist,” and Revkin’s contention that scientists in the “invisible middle’ who were otherwise normally staid were speaking up against them. In particular, Risbey was troubled by an opinion piece on the BBC website in November 2006 by Professor Mike Hulme of

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<sup>15</sup> James S. Risbey, “The new climate discourse: Alarmist or alarming?” *Global Environmental Change* 18, no. 1 (2008) (accessed January 16, 2014); available from ProQuest Environmental Science Collection.

<sup>16</sup> *Ibid.*, 26

King's College London.<sup>17</sup> Revkin said that Hulme had articulated the view of the “invisible middle,” which Risbey summarizes as follows:

Hulme argues that there is a growing divide between the language of climate scientists describing climate change and that of green groups advocating action on the issue. Hulme alleges that the carefully hedged statements of scientists are being replaced by fear mongering and alarmist language in environmental communiqués. Are the green groups really as out of touch as Hulme asserts? This is an important question because it relates to the necessary urgency in addressing the climate change issue. Hulme notes disapprovingly that green groups are using the term ‘catastrophic’ to describe climate change, along with descriptors such as ‘chaotic,’ ‘irreversible,’ and ‘rapid’ to alter the public discourse. Hulme disparages this discourse and green groups for claiming that ‘climate change is worse than we thought’ and for speaking of ‘irreversible tipping in the Earth’s climate.’ He cites as an example of alarmist language British Prime Minister Tony Blair’s statement that ‘we have a window of only 10-15 years to take the steps we need to avoid crossing a catastrophic tipping point.’<sup>18</sup>

Risbey then asks a series of questions about the criticized terms, namely: “Is it catastrophic? Is it rapid? Is it urgent? Is it irreversible? Is it worse than we thought? Is it chaotic? Is it science? Is it counterproductive?” He maintains that the scientific community’s view of the consequences of climate change matters because “whether it is alarmist hype or an alarming prospect” sends different messages to the broader community -- where the messages are used as cover by politicians and others who favor or oppose

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<sup>17</sup> Mike Hulme, “Chaotic world of climate truth,” *BBC News*, November 4, 2008; (accessed January 19, 2014); available from <http://news.bbc.co.uk/2/hi/science/nature/6115644.st>. Hulme founded the Tyndall Centre for Climate Change Research and at the time was its director.

<sup>18</sup> Risbey, 27.

climate action. Acknowledging that even scientists have different views,

Risbey maintains:

... [T]here are a limited set of views of climate change that are consistent with the science. Personal values will shape one's view within that limited set, but do not allow one to take any arbitrary view outside that set without straining the credibility of the fit with current understandings of the science. The question addressed here is whether the view of climate change described by the terms above is a credible fit to the science or not.<sup>19</sup>

After answering each question in turn on scientific grounds, Risbey concludes that “the terms used to describe the science are at least arguably reasonable and consistent with it. That is, the view of the discourse as ‘alarming’ is not inconsistent with the science.”<sup>20</sup> Still, he acknowledges that a divide exists and notes that it is reflected in the community of climatologists. He explains the reason for this split succinctly:

One of the principal reasons for urgency relates to the possibility that warming will reach the point that the breakdown of the Greenland and West Antarctic ice sheets is inevitable, implying large sea level rise. Opinion is divided over whether this will be a relatively slow process spanning millennia or a relatively quick process spanning centuries. Because much of the relevant dynamics of ice sheet breakdown have not been incorporated into the models yet, the timescales for rapid breakdown are not well known, but can only be faster than the IPCC estimates.<sup>21</sup>

Risbey further explains:

“If the Greenland and West Antarctic ice sheets are subject to significant melt for temperature increases of as little as a couple of degrees, then there is only a relatively

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<sup>19</sup> Ibid.

<sup>20</sup> Ibid., 35

<sup>21</sup> Ibid.

small additional carbon allotment to the atmosphere that would likely keep temperature increases below that level. That allotment is less than the equivalent of another 100 ppm [parts per million] of CO<sub>2</sub> concentration. To put this amount in perspective, Archer notes that we would need to keep total anthropogenic carbon emissions below about 570 Gton [gigatons], and have already released about 300 Gton. Because of the inertia in the energy system, carbon reductions, efficiency improvements, and shifts away from the coal-intensive energy infrastructure need to commence in the near term if the remaining carbon allotment is not to be exceeded. Thus, present actions are key determinants of long term impacts.<sup>22</sup>

As one group of authors concedes, “Communicating climate change science is difficult at the best of times,”<sup>23</sup> but authors like Risbey seem to believe that if the science can be communicated clearly rational people will demand more far-reaching action to address the problem.<sup>24</sup>

### ***Ask the Right Question***

A question that arises almost daily among people everywhere is whether a particular extreme weather event was caused by climate change. And as William Moomaw points out, “Climate scientists usually answer, ‘No single event can be attributed to climate change.’ Most meteorologists will say, ‘No, it was due to blocking high pressure ridges,’ or provide some other

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<sup>22</sup> Ibid., 33-34

<sup>23</sup> Hans Verolme, Farhana Yamin, Victor Menotti, Lili Fuhr, “What Future for International Climate Politics: A Call for a Strategic Reset,” *Ecology* (Heinrich Boll Stiftung), October 22, 2013, 15; (accessed January 15, 2014); available from <http://www.in.boell.org/web/113-928.html>.

<sup>24</sup> Cassius’ words from *Julius Caesar* come to mind: “The fault, dear Brutus, is not in our stars but in ourselves that we are underlings.”

immediate atmospheric condition that preceded the event in question.”<sup>25</sup>

Where causality cannot be shown only inference remains and the case for action weakens.

But Moomaw also says: “After struggling with this question myself, I am convinced that this is both the wrong question and that climate scientists *and* meteorologists are providing narrowly crafted answers that are unintentionally misleading and confusing.” In his view, “Each weather event occurs within the climate system that is present at the time of that event” and he notes that climate itself can be defined as a 40-year average of weather. “In other words,” he says, “the climate of a place is defined by the temperature, the rainfall record, humidity, cloud cover, fog, intensity of downpours and the frequency and length of droughts and any other weather component, averaged over 40 years.” Based on climate, he says, people pack differently when traveling to Moscow in January or Las Vegas in July – even though they know that some January days in Moscow and some July days in Las Vegas may be milder than others. Still, he notes, people find the averages that define climate useful to know.

In his view:

A better question is not ‘is climate change causing individual weather events’ but rather, ‘has the climate *changed* from what it was at a previous time?’ Then we can determine if the weather events we are asking about are more or less intense, or frequent, or of a different nature from those observed in the past.<sup>26</sup>

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<sup>25</sup> William Moomaw, “Can Observed Weather Events Be Attributed to Climate Change?” (unpublished paper), July 1, 2013.

<sup>26</sup> *Ibid.*

Looking through this lens Moomaw argues that climate has changed significantly from what it was in the 1950s and 1970s, and of course even more from what it was at the end of the 18<sup>th</sup> century. “The main driver of global weather systems is the temperature difference between the equator and the poles,” he observes, “and this temperature difference... determines the speed and pattern of the jet stream.” “If the rotation of the pattern stagnates, he continues, “it can change the course of winds and storms.” He notes that “meteorologists correctly pointed out in the case of the Moscow heat wave [in the summer of 2010] and the sharp westward turn made by [Hurricane] Sandy [in October 2012], stationary high-pressure areas (“blocking highs”) were responsible for the regional damage that occurred in both of these cases” -- but that these high pressure regions likely occurred because of an alteration of the atmosphere and the climate.<sup>27</sup>

Risbey and Moomaw figure among a significant number of scientists who believe in the importance of communicating the science of climate change accurately and accessibly to policy makers and the public if either are to be persuaded to act. And to some extent, those in this camp believe that the failure or inability of the science community thus far to communicate the science of climate change adequately has impeded global action.

But as will be seen, there are those who argue that understanding and communication are not the problem.

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<sup>27</sup> Ibid.

## ***Reject the Politics of Limits – Invest in Technological Innovation***

In a different take on “the problem” altogether, Ted Nordhaus and Michael Shellenberger contend in their 2007 book *Break Through: From the Death of Environmentalism to the Politics of Possibility* that:

Global warming threatens human civilization so fundamentally that it cannot be understood as a straightforward pollution problem, but instead as an existential one. Its impacts will be so enormous that it is better understood as a problem of *evolution*, not pollution.<sup>28</sup>

In their view, affluence not “atavism” accounts for modern appreciation of the natural world and explains why the birth of environmentalism in the United States occurred in the 1960s and not in the 1930s.<sup>29</sup>

To move forward they advocate:

There is simply no way we can achieve an 80 percent reduction in greenhouse gas emissions without creating breakthrough technologies that do not pollute. This is not just our opinion but also that of the United Nations International (*sic*) Panel on Climate Change, of Nicholas Stern, the former chief economist of the World Bank, and of top energy experts worldwide. Unfortunately, as a result of twenty years of cuts in funding research and development in energy, we are still a long way from even beginning to create these breakthroughs.<sup>30</sup>

Nordhaus and Shellenberger recall that in 2003 they urged adoption of a “new Apollo project” on clean energy:

The project would invest \$300 billion over ten years in the fastest-growing markets in the world: energy. Initial econometric analyses show that a portfolio of investments in wind, solar, biofuels, carbon

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<sup>28</sup> Ted Nordhaus and Michael Shellenberger, *Break Through: From the Death of Environmentalism to the Politics of Possibility*, (New York: Houghton Mifflin Company, 2007), 8.

<sup>29</sup> *Ibid.*, 29

<sup>30</sup> *Ibid.*, 15

sequestration, mass transit, hydrogen, and other energy sources would attract an additional \$200 billion in private capital and create roughly three million new jobs. These investments would position the United States to take the lead in several fast-growing clean-energy markets that are currently dominated by Europe and Japan. As a result, the investments also have the potential to dramatically reduce the trade deficit; just as important, the initiative would more than pay for itself by capturing the revenues from the energy savings accrued from investments in efficiency.

Theirs is not a formula for reframing the climate negotiations to overcome gridlock in that forum. Instead, they reject – at least philosophically -- the entire effort embodied by the international approach: “Kyoto epitomizes the environmentalist obsession with limits.” They observed that, “Ever since Henry David Thoreau spent twenty-six months at Walden Pond, environmental virtue has been equated with a kind of self-denial” – a message they see as failing to inspire because people are not willing significantly to sacrifice their standard of living, whether in the United States or in China.<sup>31</sup> Still, Nordhaus and Shellenberger acknowledge that cap and trade legislation “if done right” could generate billions for investment in clean energy, but they caution that for it to succeed in the long run it must be understood more as part of the national development agenda “than as a regulatory framework to limit carbon emissions.”<sup>32</sup>

Despite the seemingly revolutionary new thinking in Break Through, one reviewer notes:

Nordhaus and Shellenberger are really arguing against a state of mind, a *zeitgeist* even, rather than anything very

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<sup>31</sup> Ibid., 124-25

<sup>32</sup> Ibid., 122

specific. Which is fine -- especially if you attack the right *zeitgeist* (which they do). The approach, however, allows them simultaneously to rebuke greens and yet also outline a clean energy policy agenda that most environmentalists—at least as I understand the term--would probably agree with.<sup>33</sup>

### ***Refocus on the “Right” Issues: Return to Basic Principles***

Writing in 2003, before it was yet certain that the Kyoto Protocol would enter into force, a trio of writers from the developing world argued that too much time and energy had been spent merely on getting developed countries to implement the commitments they made under the Kyoto Protocol.<sup>34</sup> The result, in their view, was that developing country views and interests had become marginalized – interests in issues of equity and historic responsibility, in the vulnerabilities of those at greatest risk and disadvantage, and in the pursuit of sustainable development. They argue that the political horse trading that led to Kyoto targets gave developing countries no clear sense of what might be asked of them in the future and urged a new architecture based on clear and objective principles derived from the UNFCCC “which is seen to be fair and equitable by all countries, north and south.”<sup>35</sup> Among other things, they advocate a move toward per capita emission targets and “a ‘contraction and convergence’ policy scenario

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<sup>33</sup> Chris Mooney, “Nordhaus and Shellenberger: Overselling the Right Message,” *Desmolog.com*, September 27, 2007, (accessed January 5, 2014); available from <http://www.desmolog.com/nordhaus-and-shellenberger-overselling-the-right-message>.

<sup>34</sup> Adil Najam, Saleemul Huq and Youba Kokona, “Climate negotiations beyond Kyoto: developing countries concerns and interests,” *Climate Policy* 3 (2003), 222.

<sup>35</sup> *Ibid.*, 227

aimed at atmospheric stabilization in the post-Kyoto phase” in which developed countries’ per capita emissions would contract, while those of developing countries would expand, ultimately to converge at the same level.<sup>36</sup> They also advocate a renewed focus on adaptation to climate change and putting sustainable development at the center of efforts to address climate change.

In terms of how to get the climate negotiations moving, they urge developing country governments to seize the initiative “by reopening the questions of regime architecture, of investments in adaptation, of historical responsibility, of equity-in-climate policy, and of meaningfully linking sustainable development to climate policy.” Developing country negotiators clearly bear the responsibility for putting forward proposals in these areas, according to the trio, and they urge them to change tack – to become less reactive and more assertive.

## **Put Development First**

### ***Push Sustainable Development Policies and Measures***

Also urging a kind of reframing of the issue to capture the interest of developing countries in sustainable development was the World Resources Institute publication in 2005 “Growing in the Greenhouse – Protecting the

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<sup>36</sup> Ibid.

Climate by Putting Development First.”<sup>37</sup> In his forward, former President of Brazil and a director of the World Resources Institute Fernando Henrique Cardoso quoted the artist Willem de Kooning who said, “The trouble with being poor is that it takes up all of your time.” He contends:

This book presents a way of talking to developing countries about climate change in our language: the language of those that see human need and poverty as vast and vital challenges that we must overcome. A language that does not merely talk of sustainable development as an adjunct to fighting climate change, but of climate change as one challenge in our fight against poverty.”<sup>38</sup>

Its editors see in the UNFCCC the concept of combining “domestic” and “climate” priorities, and they argue that “existing climate agreements have not attempted to systematically foster the integration of climate change and development at the policy level.”<sup>39</sup> Their report, which examines four case studies (biofuels for transport in Brazil, policy options for transport in China, rural electrification in India and carbon capture and storage in South Africa) explores how “Sustainable Development Policies and Measures” (SD-PAMS) in developing countries might be used to achieve sustainable development goals while also providing benefits for climate change mitigation. Helpfully, the report offers a number of practical ideas for how to bring such measures into the climate negotiations (as single country pledges to action, as mutual pledges between a developing and a developed country, and as harmonized pledges by a group of countries with respect to a particular sector of the

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<sup>37</sup> Rob Bradley and Kevin A. Baumert, eds., “Growing in the Greenhouse: Protecting the Climate by Putting Development First,” *World Resources Institute* (2005), vi

<sup>38</sup> *Ibid.*

<sup>39</sup> *Ibid.*, vii

economy) but it does not argue that the existing negotiating process needs to be radically retooled. It notes, “The chief advantage of SD-PAMS is that they align the interests of climate protection with those of policy goals that have a higher priority for developing country policy makers.”<sup>40</sup>

### ***Focus on Energy Services, not Greenhouse Gas Emissions***

In the run-up to the Copenhagen Conference of the Parties under the UNFCCC in December 2009, Nancy Birdsall and Arvind Subramanian argued that the framing of the climate issue was wrong. They concede that scientific concern about global warming leads naturally to concern about emissions of greenhouse gases because increased atmospheric concentrations of these gases are what “trap” heat and warm the planet. But they maintain that the focus should be on equitable or comparable access to energy-based services, not emissions. In their view, access to energy-based services (“meal preparation at home, pleasant ambient temperatures indoors, access to transportation to ensure personal mobility – at reasonable cost”<sup>41</sup>) is both a more ethical metric (“...what is primary is not the ‘right’ to pollute, but access of people as consumers, independent of where they live, to basic energy-based amenities”<sup>42</sup>) and it better comports with fundamental development needs (“Making energy rather than emissions the touchstone brings the

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<sup>40</sup> Ibid., xi

<sup>41</sup> Nancy Birdsall and Arvind Subramanian, “Energy Needs and Efficiency, Not Emissions: Re-framing the Climate Change Narrative,” *Center for Global Development*, Working Paper 187 (November 2009), 2.

<sup>42</sup> Ibid.

development dimension back into the climate change conversation in a way that was envisaged in the 1992 Rio declaration”).<sup>43</sup>

The authors freely admit that their approach would need to operate within certain bounds – for example, “pollution” of the atmosphere would need to be constrained so as not to heat the planet beyond critical tipping points – but to their mind this is a “constraint,” not the “primary objective.”<sup>44</sup> They also acknowledge that developing countries should meet their energy needs with the most efficient technology actually available, not necessarily with the same technology used in the past by developed countries – also to guard against “blowing up the planet.”<sup>45</sup>

Birdsall and Subramanian contend that the misguided focus of nations on emissions rather than access to energy services has led to an impasse between developed and developing countries, such that developed countries are insensitive to the unmet energy needs of developing countries and the “vast current inequities in energy access.”<sup>46</sup> By the same token, the same focus on emissions by developing countries has also contributed to the current gridlock. “They [developing countries] have succumbed to the rhetoric of recrimination. You the rich have created the global ‘bad’ of polluting the atmosphere and you should therefore pay reparations going forward they say.”<sup>47</sup>

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<sup>43</sup> Ibid., 3

<sup>44</sup> Ibid., 2

<sup>45</sup> Ibid.

<sup>46</sup> Ibid., 3

<sup>47</sup> Ibid., 13

## ***Use Negotiation Theory to Promote Mutual Gains and Focus on Providing Universal Clean Energy Services***

Writing three years after Copenhagen, William Moomaw and Mihaela Papa contend that arguments seeking to explain why “a comprehensive treaty regime: has not materialized fall into four categories:

- 1) *Development constraints*: emissions reductions will harm economic development.
- 2) *Lack of trust*: other countries will gain an economic advantage or find a way to use mitigation to their advantage.
- 3) *Weakness of international agreements*: treaties are inherently incapable of meeting climate goals; they cannot assure compliance or create and protect carbon property rights;
- 4) *Negative psychology*: pollution control is all about burden sharing and limits, and there is a preference for blaming others rather than accepting responsibility.<sup>48</sup>

They urge using “established negotiation theory to determine why these factors have prevented a successful climate agreement,” and conclude that “basing negotiations on a pollution model fails to address the underlying cause, and works against each national interest by emphasizing ‘burden sharing.’” In their view, the model that nations have followed “misdiagnoses climate change as a pollution rather than as a development problem” and “it

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<sup>48</sup> William Moomaw and Mihaela Papa, “Creating a mutual gains climate regime through universal clean energy services,” *Climate Policy*, (2012), 2; (accessed January 14, 2014); available from <http://search.proquest.com.ezproxy.library.tufts.edu/environmentalscience/docview/1321407756/fulltextPDF/142FE5D3D686F295BD7/1?accountid=14434>.

promotes the negative message of ‘burden sharing’ rather than ‘opportunity’ sharing.”<sup>49</sup>

Acknowledging that the current climate negotiations have become hopelessly adversarial and largely deadlocked, they urge instead the use of “mutual gains” approaches from the field of negotiations analysis. In particular, they call for refocusing the climate negotiations on the choices among clean development pathways. They say:

The parties to the UNFCCC need to explicitly acknowledge that *it is the right of every person and the goal of the treaty to provide all persons with access to low-carbon clean energy services in a manner that does not jeopardize the climate system or decrease the ability of the environment to continue supplying ecosystem services* [italics in the original].<sup>50</sup>

In their view “[t]he choice of clean, low-carbon energy services is a more effective metric than emissions because it addresses what countries want and promotes their universal interest in development.”<sup>51</sup> Still, they note the need for “an explicit link between the provision of energy services as a primary development strategy and the climate implications of the particular energy source that is selected to provide it” lest environmental gains be vitiating.

While Moomaw and Papa acknowledge that it might simply be easier to start over with a “completely new treaty,” they recognize that the 20-year global investment in the current process likely makes this unrealistic. But they point out that a focus on low carbon development could begin alongside

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<sup>49</sup> Ibid., 11-12

<sup>50</sup> Ibid., 11

<sup>51</sup> Ibid., 8

ongoing negotiations over “the contentious issues of specific targets, timetables and emissions reduction obligations.”<sup>52</sup> Particularly interesting is their call for a disaggregated approach. They suggest separate protocols (for example on energy efficiency and clean energy services, on methane and nitrous oxide, on black carbon, on synergies between mitigation and adaptation, on geo-engineering and on climate refugees), arguing that “once the climate response is disaggregated through separate protocols, it is easier to both make and measure progress.”<sup>53</sup>

## **Retool the Process**

### ***Consider a Smaller, Leaders-Level Group to Reach Agreement***

In 2003, the Centre for Global Studies (of the University of Victoria) and the Centre for International Governance Innovation (established by Research in Motion (Blackberry) executives Jim Balsillie and Mike Lazaridis, with the Government of Canada) launched the L20 Project to consider whether leaders might be able to come to pragmatic solutions to key global problems in an informal setting. As its *raison d’etre*, the project held that:

A forum at the Leaders' level is the only means by which cross-cutting package deals can be crafted as Leaders can transcend the traditional silos of government ministries and international institutions. Leaders have the ability to mobilize their governments through top-down political direction, ensuring their global promises translate into

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<sup>52</sup> Ibid., 12

<sup>53</sup> Ibid., 10

national action. Leaders can also rise above domestic politics and adopt policies that provide global collective benefits. Through this "capacity building," Leaders can apply peer pressure and clarify enlightened self-interest in coordinating actions on deadlocked global crises. In addition, inter-personal trust among Leaders allows for candid discussion of sensitive issues without political posturing.<sup>54</sup>

The L20 Project held multiple expert meetings to explore whether specific topics would be appropriate for attention in a summit of L20 leaders from key industrialized and developing nations. The Council on Foreign Relations hosted one of the first such meetings on climate policy from September 20-21, 2004, in New York City. A paper prepared for the meeting asked whether a smaller, leaders-level forum offered better opportunities to engage key countries than the broad multilateral process under the UNFCCC and the Kyoto Protocol.<sup>55</sup> It suggested three alternative roles for an L20: (1) recraft Kyoto to have it focus on long-term goals and "a clear plan for involving developing countries;" (2) "completely transform the approach" and have an L20 focus on developing mechanisms to implement a global carbon tax, or measure and compare alternative policies and measures, or develop rules and review institutions akin to those of the WTO to implement a "climate and development strategy"; or (3) "establish multiple tracks for cooperation" that would involve recrafting Kyoto as described" and

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<sup>54</sup> The Leaders-20 Project, *About the Leaders-20* (accessed January 5, 2014); available from <http://www.l20.org/about.php>.

<sup>55</sup> David G. Victor, Barry Carin and Margaret Winterkorn-Meikle, "Climate Change at the L20? Overview of the Issues," *Commissioned Briefing Notes for the CIGI/CFGS L20 Project*, September 2004 (accessed January 5, 2014); available from [http://www.l20.org/publications/6\\_UB\\_Climate\\_backgrounder.pdf](http://www.l20.org/publications/6_UB_Climate_backgrounder.pdf).

“pursuing the most attractive elements of the second option.” Aware that such an approach might appear duplicative, the authors contend that it may be necessary if countries’ interests do not align around a single strategy, to take a “multiple track approach” that would resemble WTO negotiation rounds “during which different line ministries are engaged in parallel negotiations and periodic summits are needed to forge compromises across issues.”<sup>56</sup>

The summary from the L20 meeting on climate policy concluded, “To move toward a solution, there is a need for smaller numbers and higher levels of negotiators to mobilize support.” On the issue of numbers, the summary observed:

If climate change were part of the launch agenda for the L20 it may make more sense to begin the discussions with a smaller group (say, a dozen) and then expand as needed – not least because key countries for other L20 issues may not be big players in the climate problem. If the L20 were capped at 20 then it may not be wise to fill that quota just with the top 20 climate players. Similar[ly], some participants felt that the United States may be wary of a large multilateral institution – preferring instead, to begin with bilateral agreements and then to stitch together a larger solution on that experience. (Indeed, most current U.S. international efforts are focused on small numbers of countries – often through bilateral partnerships, such as the U.S.-India partnership.) The discussion gave particular attention to whether the EU would be able to speak with one voice (and thus occupy one seat at the L20); many were skeptical.<sup>57</sup>

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<sup>56</sup> Ibid., 11

<sup>57</sup> The Leaders-20 Project, “Leaders’ Summit on Post-Kyoto Architecture: Toward an L20,” *Brief Summary of Meeting Notes, September 20-21, 2004*, October 6, 2004 (accessed January 5, 2014); available from [http://www.l20.org/publications/6\\_hk\\_Climate\\_meetingreport.pdf](http://www.l20.org/publications/6_hk_Climate_meetingreport.pdf).

On the one hand, the multilateral process under the UNFCCC and the Kyoto Protocol is widely recognized as the most “legitimate” forum in which to address climate change because, with nearly universal membership, all countries are represented. On the other hand, it is difficult to compare the results achieved in these processes over the past two decades with mounting scientific concern about the gravity of the problem and have confidence that they will be able to solve it. This concern about effectiveness, coupled with the fact that eight countries account for some 70 percent of global greenhouse gas emissions has led to a variety of calls such as those described for a smaller, more efficient forum. Yet the smaller the forum the fewer the decision makers and the less legitimacy it has to make decisions affecting people everywhere.

### ***Pursue Layered Diplomacy***

In late 2007, Todd Stern, who has since become the Obama Administration’s Special Envoy for Climate Change, and William Antholis, Managing Director of the Brookings Institution, called for “layered diplomacy” in approaching the climate problem, that is diplomacy “centered on a core group of major emitters, active engagement with key bilateral partners, especially China, and the multilateral UN Framework Convention on Climate Change (UNFCCC).”<sup>58</sup> In making their proposal, they note that the process

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<sup>58</sup> Todd Stern and William Antholis, “A Changing Climate: The Road Ahead for the United States,” *Washington Quarterly*, 31.1 (2007), 176.

under the UNFCCC “is often maddeningly cumbersome, riven by competing blocs of countries and slowed by unconstructive demands. The negotiating is typically done by technical-level bureaucrats not empowered to make the necessary compromises, with high-level officials often contributing too little too late.”<sup>59</sup> They see the value in a small forum modeled on the G-8 to be in its ability “to force high-level engagement and create a kind of global board of directors able to operate in a streamlined manner outside the bureaucracy and politics of the UN.” They urge that it be small enough to encourage productive interaction but large enough in its “environmental footprint” that the agreements it might reach would have a global impact. They see two roles for such a group: (1) to agree on ideas for the post-Kyoto regime, and (2) to adopt specific actions within the group. Such a group “would not obviate the need for broader targets and timetables” but “real, cooperative action” within this group could “make broader targets more achievable.” Stern and Antholis acknowledge that the Major Economies Meeting (MEM) initiated by the Bush Administration in 2007 could have served this function -- had it been accompanied by “robust commitments backed up by a mandatory U.S. program” -- but it was not, and they opined that the MEM was “destined not to accomplish much.”

An interesting aspect of the Stern-Antholis proposal is that they do not call for abandoning negotiations under the UNFCCC but instead for using those negotiations to set “relatively long-term targets that decline over time,

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<sup>59</sup> Ibid., 180

both so that they provide a useful basis for planning by governments as well as businesses and so that they can be more vividly understood as part of a long-range plan to contain global warming.” They cite as a defect the fact that Kyoto’s targets were for short, five-year periods that did not “link up to a longer-range, scientifically based understanding of how to solve the problem.” They also urge a concerted bilateral strategy to engage China.<sup>60</sup>

But why do these authors call for the United States to “anchor its climate change diplomacy in a core group of key countries”? They say:

The half-true cliché about climate change is that it is a global problem that requires a global solution. Climate change is certainly a global challenge; one ton of CO<sub>2</sub> emitted in India has the same affect on the atmosphere as the ton emitted in Indiana. Yet a core group of countries accounts for the lion’s share of global emissions.<sup>61</sup>

The core group they propose – an “E-8” – consists of Brazil, China, the European Union, India, Japan, Russia, South Africa and the United States, accounting for 70 percent (by their estimate) of global emissions.<sup>62</sup>

With over 20 years invested in the UNFCCC process, and because decisions taken in that process enjoy the broadest legitimacy, it is doubtful, as Moomaw and Papa acknowledge, that nations will throw it out and start

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<sup>60</sup> Ibid., 183

<sup>61</sup> Ibid., 180

<sup>62</sup> The Stern/Antholis call to create an “E8” came in an open memorandum to the 44<sup>th</sup> President of the United States entitled “Climate Change: Creating an E8,” *The American Interest*, January 1, 2007 (accessed January 19, 2014); available from <http://www.the-american-interest.com/articles/2007/01/01/toolbox-creating-an-e-8/>. Their subsequent *Washington Quarterly* article that year is more broadly addressed at the climate problem.

over. But, as authors like Victor, Carin and Winterkorn-Meikle and Stern and Antholis suggest, a more focused, “layered” approach may prove to be more fruitful.

### ***Adopt a Portfolio of Approaches***

Writing in October 2007 on the eve the 13<sup>th</sup> UNFCCC Conference of the Parties in Bali, that adopted the Bali Action Plan (that in turn led to agreement in Copenhagen in 2009 on a new regime for the post-2013 period), Gwyn Prins and Steve Rayner called for “silver buckshot” – a portfolio of approaches to move in the right direction, while acknowledging that no one could predict which of them might lead ultimately to the fundamental change needed to address the climate threat effectively.<sup>63</sup> They point out that development of the “failed” Kyoto Protocol has been influenced principally by three policy initiatives of the 1980s that worked well for the problems they sought to address but did not accommodate the complexity of the climate issue: ozone depletion, acid rain and nuclear arms reduction. In their view:

Climate change is not amenable to an elegant solution because it is not a discrete problem. It is better understood as a symptom of a particular development path and its globally interlaced supply-system of fossil energy. Together they form a complex nexus of mutually reinforcing, intertwined patterns of human behavior, physical materials and the resulting

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<sup>63</sup> Gwyn Prins and Steve Rayner, “Time to ditch Kyoto,” *Nature*, Vol. 449/25, October 24, 2007; (accessed on January 11, 2014); available from <http://www.nature.com/nature/journal/v449/n7165/full/449973a.html>.

technology. It is impossible to change such complex systems in desired ways by focusing on just one thing.”<sup>64</sup>

Their prescription includes five central elements: (1) “focus mitigation efforts on the big emitters,” (2) “allow genuine emissions markets to evolve from the bottom up;” (3) put public investment in energy R&D on a wartime footing,” (4) “increase spending on adaptation”; and (5) “work the problem at appropriate scales.”

Prins and Rayner argue that it was an error to involve too many parties (as did the UNFCCC) and they hail the G8+5 Climate Change Dialogue in 2006 <sup>65</sup>and the U.S. effort in 2007 to bring together the 16 largest emitters in the Major Economies Meeting. Like others they point out that fewer than 20 countries account for nearly 80 percent of global emissions and they say flatly, “In the early stages of emissions mitigation policy, the other 150 countries only get in the way.” They point out the problems of enacting a carbon tax and seem to favor its alternative – cap and trade – but they maintain that such systems must be built from the bottom up to be successful. They argue that, “in trying to introduce, from the top down, a global market in all greenhouse gases and all sources and sinks, the Kyoto approach tries to

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<sup>64</sup> Ibid., 947

<sup>65</sup> Prime Minister Tony Blair, as host of the 31<sup>st</sup> G-8 Summit at Gleneagles, Scotland, in July 2005, invited the G-8 plus Brazil, China, India, Mexico and South Africa to take part in a discussion of climate change. In his statement to Parliament about the Summit on July 11, 2005, Blair said: “Fourth, we put in place a new dialogue involving the G8, the emerging economies and the key international institutions to create a pathway to a post Kyoto agreement, so that when Kyoto expires after 2012, the world can act with unity.” (accessed January 19, 2014); available from <http://www.g8.utoronto.ca/summit/2005gleneagles/blair-parliament.html>.

do too much, too soon, especially in the absence of binding legal frameworks to enforce contracts among parties....” Recalling Vice President Al Gore’s vision for a ‘global Marshall Plan’ to fight climate change, Pryns and Rayner call for putting investment in energy R&D on a “wartime footing” with the world’s leading economies and major emitters spending at least as much on this as on military research – some \$80 billion annually for the United States alone. They advocate for greater spending on adaptation: “Faced with imminent warming, adaptation has a faster response time, a closer coupling with innovation and incentive structures, and thereby confers more protection more quickly to more people.” Noting that “climate change is a multi-level governance problem” they also argue that “Global responses to climate policy can learn from the U.S. system of federalism that encourages small-scale policy experiments at the state or local-government levels as well as with the philanthropic and private sectors.”<sup>66</sup>

Pryns and Rayner justify their call for a portfolio approach by saying:

Because no one can know beforehand the exact consequences of any portfolio of policy measures, with a bottom-up approach, governments would focus on navigation, on maintaining course and momentum towards the goal of fundamental technological change, rather than on compliance with precise targets for emissions reductions. The flexibility of this inelegant approach would allow early mitigation efforts to serve as policy experiments from which lessons could be learned about what works, when and where. Thus, cooperation, competition and control could all be brought to bear on the problem.”<sup>67</sup>

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<sup>66</sup> Ibid., 974-75

<sup>67</sup> Ibid., 975

### ***Share the Burden/Have Each Country Play Its Part & Tighten the Screws***

About a year and a half before the Copenhagen COP, New Zealand Climate Change and Energy Minister David Parker took part in the “Post 2012 Burden Sharing Symposium” in Wellington, jointly hosted with the European Union Centre Network and the Institute for Policy Studies. An abridged version of his opening address appeared in *Policy Quarterly*.<sup>68</sup> In that address, Minister Parker urged that countries agree on the overall level of emissions reductions required before they began negotiating what actions were fair for each one. To this end, he notes the IPCC’s finding that developed countries would need to reduce their emissions by 25 to 40 percent below 1990 levels by 2020, and that developing countries would need significantly to reduce their projected emissions. He recalls that at the G-8 summit in July 2008 key political leaders had called for at least a 50 percent reduction of global emissions by 2050 and recognized that meeting it would require a global response.<sup>69</sup> In his view, “a key issue for the negotiations over the coming years is deciding exactly how much should be done and by whom.”<sup>70</sup> He prefers the phrase “playing our part” to “sharing the burden,” feeling that the latter is “loaded to the negative.” But his

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<sup>68</sup> David Parker, “Sharing the Burden of Climate Change,” *Policy Quarterly*, 4, no. 4 (November 2008) (accessed January 11, 2014); available from [http://www.preventionweb.net/files/7584\\_0a035c1f432.pdf](http://www.preventionweb.net/files/7584_0a035c1f432.pdf).

<sup>69</sup> Minister Parker also noted the G-8’s lack of clarity as to what baseline the 50 percent reduction would be measured against.

<sup>70</sup> *Ibid.*, 4

prescription is essentially one of self-determined commitments by each country.<sup>71</sup>

At the same time, Minister Parker calls for a number of changes on the road ahead that all fit within the category of “tightening the screws” under a Kyoto approach. First among these involves capital flows, particularly those to developing countries from the Kyoto mechanisms (i.e., the Clean Development Mechanism). He says: “We need to ensure that these precious capital flows are focused on ensuring the widespread adoption of the most crucial low-carbon technologies,” and to this end he suggests, “...we may need to consider linking generous capital flows with agreements with recipient country governments to introduce and enforce regulated minimums.” He also advocates protecting the integrity of carbon markets by stamping out corrupt or negligent practices including questionable audits of savings or additionality. “We should not undermine or pay for regulatory standards that ought to be applied anyway. We should not pay for what already makes economic sense without any subsidy.”<sup>72</sup>

Above all, Minister Parker calls for developing “rules before commitments.” In his view, this was a major weakness of the negotiating process that led to the Kyoto Protocol because countries would make commitments before agreeing on the rules that would govern them:

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<sup>71</sup> He said, “...a shared burden does not mean a simple division based on population. Each country’s effort to reduce emissions will need to be determined in respect of their circumstances. These national circumstances include each country’s mitigation potential, their capacity to reduce emissions and their stage of economic development.” Ibid.

<sup>72</sup> Ibid., 5

Early on in the Kyoto international negotiations, countries made commitments and then chose to effectively modify their commitment by modifying the rules. The international agreement around land use, land use change and forestry – or LULUCF for short – is one such example. Throughout the LULUCF negotiations, countries manoeuvred [sic] to claw back the concessions they had made in taking on their emissions reductions targets.”<sup>73</sup>

The approach to the future that Minister Parker seems to advocate thus sounds much like continuing with the prevailing status quo, while focusing on marginal improvements in the functioning of Kyoto’s rules and institutions. What is remarkable is his artful substitution of bottom-up commitments for the top-down approach under Kyoto, and extending them to all countries.

### ***Rethink International Law***

Law professor Deepa Badrinarayana argues that international law is rooted in preserving and extending the material and economic interests of about 20 “core” states that control action on climate change.<sup>74</sup> In her view, international law thus subordinates the sovereign rights to control their domestic affairs of the remaining 170-plus nations of the world. These nations stand to experience the adverse effects of climate change -- effects that may imperil the lives and property of some 80 percent of the world’s

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<sup>73</sup> Ibid.

<sup>74</sup> Deepa Badrinarayana, “Global Warming: A Second Coming for International Law?” *Washington Law Review*, 85 (January 2010), 255-294, (accessed January 12, 2014); available from [http://works.bepress.com/cgi/viewcontent.cgi?article=1010&context=deepa\\_badrinarayana](http://works.bepress.com/cgi/viewcontent.cgi?article=1010&context=deepa_badrinarayana).

population that lives within them -- but they are powerless to prevent these adverse effects. She notes that international legal mechanisms to address this threat to sovereignty largely do not exist, pointing out that nations must accept the jurisdiction of the International Court of Justice for it to have any authority, and even if they were to do so, reaching an appropriate decision could take considerable time. She also notes that the UNFCCC and the Kyoto Protocol contain no such “redress” mechanisms.

Badrinarayana contrasts this state of affairs at the global level with the very different regime that exists in the United States between individual states and the federal government. Citing *Massachusetts v. EPA*<sup>75</sup> -- in which the Supreme Court ruled *inter alia* in 2007 that carbon dioxide is a pollutant, that EPA has authority to address it and that EPA has the responsibility to determine whether carbon dioxide represents a threat to human health -- she notes that the U.S. legal system enables states to seek redress against threats to their sovereignty. She says “...the threshold issue was whether a state had standing to sue the EPA for failing to implement federal regulations to control climate change” and that:

The Court held that Massachusetts had standing to bring the action because it had shown a particularized injury, causation, and redressability. The Supreme Court opined that Massachusetts suffered injury because a rise in global sea levels would affect Massachusetts as a landowner through the loss of coastal property and cost it billions of

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<sup>75</sup> *Massachusetts v. EPA*, 549 U.S. 497 (2007) (accessed January 12, 2014); available from [http://scholar.google.com/scholar\\_case?case=16923241216495494762&hl=en&as\\_sdt=6&as\\_vis=1&oi=scholar](http://scholar.google.com/scholar_case?case=16923241216495494762&hl=en&as_sdt=6&as_vis=1&oi=scholar).

dollars in remediation. The Court rejected the EPA's argument that carbon emissions outside the United States made it impossible to prove a strong causal relationship between a failure to regulate carbon emissions within the United States and climate-change-related rise in sea levels in Massachusetts. Similarly, the Court found that measures taken by the EPA would incrementally remedy climate change. In effect, the Supreme Court made a determination based on the applicable rule of law and the legal rights of the state of Massachusetts, rather than considering whether climate action would be in the economic interest of the federal government.<sup>76</sup>

Why the different result at the national level in the United States and in the international arena? Badrinarayana opines that the United States is both an economic union and a union "bound by a common set of rights enshrined in the Constitution – a legal union with guarantees against rights violations and checks on the exercise of power."<sup>77</sup> She acknowledges that nothing comparable exists at the international level but suggests that "meaningful exercise and preservation of territorial sovereignty requires a legal union, preferably under a constitutional document that explicitly articulates and provides safeguards against violations of rights within a sovereign territory and places checks on the exercise of power." While acknowledging that there have been calls in the past for "an international constitutional order or even a global parliament," she concedes that it is inconceivable at present that any nation would agree or sign on to such a proposal.<sup>78</sup>

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<sup>76</sup> Badrinarayana, 277.

<sup>77</sup> Ibid.

<sup>78</sup> Ibid., 281

Still, Badrinarayana is undeterred, pointing out that climate change is unlike any other problem and arguing that states whose existence is threatened by climate change “present an urgent need for rethinking international law.” Again, however, she thinks it unlikely that core states will agree to redefine the foundations of international law to shift from prioritizing their economic interests. She says:

As matters now stand, it is unlikely that states will establish a balanced approach to reconcile these competing interests, or treat threats to the sovereign rights of affected states as the starting point in negotiating future treaty obligations.<sup>79</sup>

Instead, she presents several lesser options. First among them she urges that “a meaningful international climate change law must acknowledge the possibility of a massive displacement of people and consider adequate responses.” In her view, it is not out of the question that an international framework for responding to climate would link core nations’ obligations to reduce emissions with “corresponding commitments to accommodate displaced people or fund their resettlement.”<sup>80</sup> She sees this as “fair compensation for the violation of sovereign rights.” Second, she urges a focus not only “on requiring states to regulate emissions, but also on the movement of capital that triggers high emissions.” Although vague on this point, she seems to advocate a focus on the “embedded carbon” issue that has

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<sup>79</sup> Ibid., 287

<sup>80</sup> Hers was a bold proposal, if only because she was willing to write about the issue of displaced people (climate refugees) and what should be done about it. For years in the UNFCCC process, this issue was considered taboo because it meant essentially giving up on mitigation, or siphoning off funds from mitigation.

been discussed for many years (but on which action has not yet been taken, largely because of the complexities involved).<sup>81</sup> A third proposal she makes is to consider the constraints on states with “poor regulatory structures and oversight” when crafting international climate policies. The suggestion here is also vague – she notes that “policies to transfer technology or support alternative energy systems might fail due to inadequate legal and administrative mechanisms” but advances no specific remedy. A fourth and final proposal involves changing the focus of “scholars, policy-makers and law-makers” from compliance with international obligations and expanding the scope of the decision-making process to considering “international law’s ability to attain normative goals such as preserving the equal sovereign rights of threatened states.” To achieve this, she says, “states must take innovative approaches to international climate action and address the consequences of inaction.”<sup>82</sup>

### ***Adopt a More Pragmatic, Bottom-up Approach***

Another veteran of the UNFCCC/Kyoto Protocol process, Daniel Bodansky, notes that the Kyoto Protocol climate regime reflects a “top-down” approach consisting of “a single type of international commitment (fixed emissions targets, which countries must achieve regardless of changing economic conditions and other national priorities), the scope of those targets

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<sup>81</sup> This issue involves who should be responsible for carbon emissions associated with producing a good – the country that produces it or the country that consumes it; not surprisingly, views vary between producers and consumers.

<sup>82</sup> Badrinarayana, 288-91.

(economy-wide), the gases covered (a basket of six greenhouse gases), and the international offsets that can count toward meeting those targets (certified emission reductions created through the collective decision-making procedures of the Clean Development Mechanism).”<sup>83</sup>

He contrasts this Kyoto “model” with that of the Copenhagen Accord,<sup>84</sup> the non-binding agreement reached among 114 of the parties that took part in the 15<sup>th</sup> Conference of the Parties to the UNFCCC in Copenhagen in December 2009, including key heads of state. He says:

The Copenhagen Accord embraces a fundamentally different architecture than the Kyoto Protocol. Rather than defining emissions targets from the top down through international negotiations, the Copenhagen Accord establishes a bottom-up process that allows each party to define its own commitments and actions unilaterally. The Accord specifies that developed countries will put forward national emissions targets in the 2020 timeframe, but allows each party to determine its own target level, base year, and accounting rules. Meanwhile, developing countries have even greater latitude in formulating nationally appropriate mitigation actions (NAMAs).<sup>85</sup>

Bodansky sketches the history of the climate negotiations in terms of these top-down versus bottom-up approaches, pointing out that adoption of the Kyoto Protocol in 1997 marked the “ascendance” of the top-down approach, but also that Kyoto suffered from two key limitations: (1)

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<sup>83</sup> Daniel Bodansky, “A Tale of Two Architectures: The Once and Future U.N. Climate Change Regime,” (March 1, 2011), 8 (accessed January 11, 2014); available from [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1773865](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1773865).

<sup>84</sup> United Nations Framework Convention on Climate Change, “Copenhagen Accord, December 19, 2009,” contained as an annex to Decision 2/CP.15 of the *Report of the Conference of the Parties to the U.N. Framework Convention on Climate Change (FCCC/CP/2009/11/Add.1)*, (accessed January 11, 2014); available from <http://unfccc.int/resource/docs/2009/cop15/eng/11a01.pdf>.

<sup>85</sup> Bodansky, 11.

countries willing to take on Kyoto-type commitments represented only about one-quarter of global emissions, and (2) Kyoto provided only for a single, five-year commitment period (2008-12) with no clear provision for what would happen thereafter. In contrast, he notes that the “Copenhagen Accord” attracted more than 80 countries, including all of the major economies, to make specific, national mitigation pledges. Still, he also observes that “The comparatively weak provisions of the Copenhagen Accord... are unlikely, in themselves, to produce the necessary level of emissions cuts to prevent dangerous climate change,”<sup>86</sup> and that “they do not, in fact, put the world on a realistic pathway toward limiting climate change to 2° C, the professed goal of the Accord.”<sup>87</sup>

Nevertheless, he observes, tellingly:

...[D]eveloping countries seem unwilling to accept emissions targets defined through international negotiations, even as part of a global deal involving reciprocal actions by all of the world’s major emitters. They seem to prefer no deal at all to a deal that would involve their accepting internationally-defined limits on their emissions. And although the Obama Administration professes to support a legally-binding agreement on climate change, it is doubtful that the U.S. Senate would consent to any new climate change treaty, much less one with internationally-defined emissions targets, even if it had comparable targets for developing countries.<sup>88</sup>

Although Bodansky acknowledges that “solving the climate change problem may well require a collective agreement among the key contributors” he notes that “the Kyoto experience suggests that many states are not yet ready

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<sup>86</sup> Ibid., 18

<sup>87</sup> Ibid., 17

<sup>88</sup> Ibid., 15-16

for this solution.”<sup>89</sup> Despite the weaknesses of a bottom-up approach, he advocates a “more evolutionary approach to the development of the climate change regime.”<sup>90</sup> He says:

Most international regimes do not emerge all at once; they develop gradually. In some cases, regimes start with a relatively small group of countries and, over time, become broader; in others, they start relatively weak and become stronger. And in some cases, they do both – witness the European human rights system and the international trade regime.<sup>91</sup>

### ***Push for a Strategic Reset***

Four recent authors call for a “strategic reset” in the world’s approach to the climate problem because, in their view, “international responses to the climate challenge have failed to address growing inequities and have lacked ambition and urgency” and “generally ignored wider ecological and financial crises.”<sup>92</sup> “By focusing narrowly on carbon metrics and climate policy instruments,” they say, “mainstream climate activists have failed to address the fact that powerful other forces are keeping the world locked into a fossil fuel economy.”<sup>93</sup> They argue that:

The Copenhagen climate summit marked a turning point for the global climate community. Governments’ lack of vision and multiple procedural shortcomings combined to cause widespread disillusionment especially among civil

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<sup>89</sup> Ibid., 17-18

<sup>90</sup> Ibid., 17

<sup>91</sup> Ibid.

<sup>92</sup> Hans Verolme, Farhana Yamin, Victor Menotti, Lili Fuhr, “What Future for International Climate Politics: A Call for a Strategic Reset,” *Heinrich Boll Stiftung Publication Series Ecology*, 32, September 5, 2013 (accessed January 14, 2014); available from [http://www.boell.de/sites/default/files/climate\\_politics\\_1.pdf](http://www.boell.de/sites/default/files/climate_politics_1.pdf).

<sup>93</sup> Ibid., 11

society organizations. Many bemoaned their own lack of effectiveness as well as the inability of this process to deliver fair and equitable solutions, and thus began to withdraw from the International state.<sup>94</sup>

The authors present a sharp critique of the current impasse in the climate negotiations as well as contend that “too many decision-makers still perceive of it as a long-term problem, one which can be put aside while urgent near-term crises are dealt with” and that “too few decision-makers are reacting with the appropriate urgency.” They divide the issues into three categories: (1) “A new narrative to confront the challenge of a rapidly warming world put in the context of other real-life challenges; (2) new insights to break the hold of vested interests on politics; and (3) a reexamination of the suite of policies and instruments capable of delivering a rapid transformation.”<sup>95</sup>

At the end of their paper, the authors present a series of “deliberately provocative” recommendations for what they believe needs to happen. They propose:

- (1) agreeing on “a full phase-out for fossil fuel use and on a binding end date to the construction of fossil fuel power plants;”
- (2) identifying, targeting and stopping “polluting power plants” and “the exploration of marginal or risky fossil fuels;”
- (3) exposing and scandalizing fossil fuel interests in UN bodies and processes”;
- (4) Pricing carbon according to “its true, high cost” which

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<sup>94</sup> Ibid.

<sup>95</sup> Ibid., 9

“can be achieved through taxes, charges or levies, penalties, and other regulatory instruments” and pursue a “global shift to full cost internalization;

- (5) demystifying carbon markets as the “only available mitigation policy” through a “needed discussion” on “the structural problems, power politics, and impacts of the European market, exploring both options for reform, as well as alternatives to the EU ETS [Emissions Trading System] beyond 2020”;
- (6) using the technology bodies of the UNFCCC to assess new technological options against a set of green criteria to determine whether certain technologies are eligible for international funding and whether they may be appropriately used as part of the policy mix;
- (7) developing an alternative gigatonne gap report that goes beyond measuring the ambition gap quantified by the UNEP [United Nations Environment Program] to score a select number of important technologies “according to their social and environmental co-benefits and risks” and “point out the best-available options at scale, including outside the multilateral arena”;
- (8) urging civil society to undertake a more thorough debate on the risks of a further commodification or financialization of nature while developing an agreement in 2015 that “should move beyond the current mitigation provisions by setting out a clear pathway to decarbonization by 2050 with shorter-term targets, including a differentiated phase-out date for the construction of fossil-based power plants”; and
- (9) exploring the idea of a “truth-and-reconciliation process” that allows victims of climate change to be recognized as such and gain some form of redress,” which the authors believe “might also help to overcome the issue of historical responsibilities, broken promises, and changing geopolitics”.<sup>96</sup>

While these recommendations may seem radical to some outside the current climate debate, they are not so far-fetched within that arena. In recent years, for example, there has come to be a focus on fossil fuel

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<sup>96</sup> Ibid., 31-32

subsidies and repeated calls, including by the G-20, to eliminate them.<sup>97</sup> And in June 2013 President Obama called for ending public funding of coal based power plants.<sup>98</sup> The World Bank announced a similar halt to financing coal plants, except in rare circumstances where there are no “feasible alternatives to coal.”<sup>99</sup> Even more recently, 18 environmental organizations wrote to President Obama “arguing that the White House needs to apply a strict climate test of all of its energy decisions or risk undermining one of the president’s top second-term priorities.”<sup>100</sup>

Still, it is hard to imagine that a proposal for a full phase-out of fossil fuel use or a binding end date for the construction of fossil fuel power plants will be taken up under the UNFCCC any time soon. A “reset” along the lines proposed by these authors does not seem calculated to produce a new

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<sup>97</sup> Jeff Mason and Darren Ennis, “G20 agrees on phase-out of fossil fuel subsidies,” *Reuters*, September 25, 2009 (accessed January 14, 2014); available from <http://www.reuters.com/article/2009/09/26/us-g20-energy-idUSTRE58018U20090926>.

<sup>98</sup> He said: “Today, I’m calling for an end of public financing for new coal plants overseas -- unless they deploy carbon-capture technologies, or there’s no other viable way for the poorest countries to generate electricity. And I urge other countries to join this effort. “Barack Obama, “Remarks by the President, Georgetown University, June 25, 2013” (accessed January 14, 2014); available from <http://www.whitehouse.gov/the-press-office/2013/06/25/remarks-president-climate-change>.

<sup>99</sup> Anna Yukhananov and Valerie Volcovici, “World Bank to Limit Financing of Coal-Fired Plants,” *Reuters U.S. Edition*, July 16, 2013 (accessed March 1, 2014); available from <http://www.reuters.com/article/2013/07/16/us-worldbank-climate-coal-idUSBRE96F19U20130716>

<sup>100</sup> See Juliet Eilperin and Lenny Bernstein, “Green groups assail Obama on climate,” *Washington Post*, January 17, 2014, A-3. See also Juliet Eilperin, “Podesta questions why environmentalists would question Obama’s energy strategy,” *Washington Post*, January 17, 2014 (accessed January 19, 2014); available from [http://www.washingtonpost.com/blogs/post-politics/wp/2014/01/17/podesta-questions-why-environmentalists-would-challenge-obamas-energy-strategy/?tid=auto\\_complete](http://www.washingtonpost.com/blogs/post-politics/wp/2014/01/17/podesta-questions-why-environmentalists-would-challenge-obamas-energy-strategy/?tid=auto_complete).

consensus among the 195 parties to the UNFCCC, and likely this was not their objective in tabling it.

Whatever the merits of the arguments that have been advanced in the literature for why the climate issue is stuck, and notwithstanding the many constructive and valuable suggestions that various authors have made for how to break the logjam and move forward, there would seem to be another, critical factor that is not much discussed – where is the United States?

## Chapter Two – The Indispensable Party

Attitudes in the United States toward global climate change differ widely. They can be characterized in multiple ways but for purposes of this discussion they will be divided into five categories<sup>101</sup>. First are those who do not understand the science of the issue. Second are those who understand the science but do not accept it or disagree with it. Third are those who understand the science and accept it but believe that climate change is one of many challenges we face and do not rate it highly. Fourth are those who understand the science and accept it, and rate global climate change highly as a challenge, but do not accept the approaches taken so far or disagree with

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<sup>101</sup> One of the most interesting, current statistical analyses of public opinions in the United States is *Global Warming's Six Americas, March 2012 and November 2011*, (hereafter the *Six Americas Report*), a study conducted by the Yale Project on Climate Change Communication and the George Mason University Center for Climate Change Communication. The *Six Americas Report* first began in 2008 and divided views into six categories; in the most recent update in March 2012, these categories and the percentage of the adult U.S. population in each were: (1) alarmed – 13%; (2) concerned – 26%; (3) cautious – 29%; (4) disengaged – 6%; (5) doubtful – 15%; and (6) dismissive – 10%. See Leiserowitz, A., Maibach, E., Roser-Renouf, C. & Hmielowski, J. (2012) *Global Warming's Six Americas, March 2012 & Nov. 2011*. Yale University and George Mason University. New Haven, CT: Yale Project on Climate Change Communication (accessed September 2, 2012) available from <http://environment.yale.edu/climate/files/Six-Americas-March-2012.pdf>. What is surprising about the Six Americas Report is the small percentage of the U.S. adult population that it finds in the “disengaged” category.

Another study that suggests this category may be significantly larger is *The Generation X Report* by Jon D. Miller of the University of Michigan, which found that 89% of its sample (about three times larger than the Six Americas Study) in 2011 considered itself moderately well-informed to less well informed, and 84% followed the issue not closely to occasionally, recognizing however that the median age of each population studied differed significantly. See Jon D. Miller, “Climate Change: Generation X Attitudes, Interest and Understanding,” *The Generation X Report: A Quarterly Research Report from the Longitudinal Study of American Youth* 1, no. 3 (Summer 2012), (accessed February 15, 2014); available from [http://www.annarbor.com/GenerationX\\_Report.pdf](http://www.annarbor.com/GenerationX_Report.pdf).

them. And fifth, are those who understand the science and accept it, rate global climate change highly as a challenge, largely endorse the approaches taken to date and continue to press for more urgent action and for others to join them.

What kind of people fall into each category? A very large number of Americans likely fall into the first category – they have heard of global climate change and may claim to see evidence of it in hotter summers, milder winters, recurring droughts, wildfires, floods or hurricanes. But for the most part they have not studied the issue and likely carry a number of misconceptions about it. In the second category are some of the issue’s more outspoken skeptics, for example Professor Richard S. Lindzen of the Massachusetts Institute of Technology or Senator James Inhofe of Oklahoma. They believe that the science is overstated, inconclusive, or leads to completely different conclusions, and Inhofe calls global climate change the greatest “hoax” ever perpetrated on the American people<sup>102</sup>. In the third category are people like Bjorn Lomborg, founder of the “Copenhagen Consensus”<sup>103</sup> – they believe that global climate change is real and gives cause for concern, but they put it far down on the list of pressing challenges – well behind various problems of malnutrition, disease and education. In the fourth category are those like former President George W. Bush, who

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<sup>102</sup> Senator James Inhofe, *The Greatest Hoax: How the Global Warming Conspiracy Threatens Your Future*, (Washington, D.C.: WND Books, 2012).

<sup>103</sup> See the Copenhagen Consensus 2012 Outcome Document (accessed September 2, 2012); available from <http://www.copenhagenconsensus.com/projects/copenhagen-consensus-2012/outcome>.

understand and accept the science, rate global climate change very high as a challenge facing humanity but do not accept or flatly disagree with policy approaches taken to date, for example the Kyoto Protocol. And in the fifth category are those like Dr. James Hansen of NASA's Goddard Institute for Space Studies and former Vice President Al Gore who believe that the science of global climate change is alarming and urge that far-reaching action must be taken now.<sup>104</sup> This fifth group also seems to embrace most of America's partners in the negotiations under the United Nations Framework Convention on Climate Change (UNFCCC).

That Americans are divided over global climate change should not be surprising. They are divided over many issues – among them abortion, gun control, healthcare, gay marriage and the appropriate role and size of government. But unlike these other issues, global climate change has a scientific basis – there has been a measurable and significant increase in greenhouse gas concentrations in the atmosphere since the beginning of the Industrial Revolution; there is agreement that increased atmospheric concentrations will cause an increase in global mean surface temperature; and there has already been a measurable and significant increase in such temperature. The existence of a scientific basis underlying global climate change would seem to make it possible to come to decisions about the issue that are rooted in quantitative data and empirical analysis – not in faith,

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<sup>104</sup> See Dr. James Hansen, *Storms of My Grandchildren: The Truth about the Coming Climate Catastrophe and Our Last Chance to Save Humanity*, (New York: Bloomsbury USA, 2009).

ethics or politics. Alas, it does not. As one observer put it, “A theory about the role of carbon dioxide in climate patterns has joined abortion and gay marriage as a culture war controversy.”<sup>105</sup>

### ***American Exceptionalism***

The inability of Americans to reach a domestic consensus on whether global climate change is a serious problem and, if so, on what to do about it makes it difficult for the United States to develop a coherent policy. But why should indecision on the part of the United States create an impasse for the rest of the world? After all, there are many cases of American “exceptionalism” in the nation’s history – instances in which much of the rest of the world decided on a collective effort of one kind or another but the United States took issue with it and refused to participate. The most notable example in the 20<sup>th</sup> century is the failure of the United States to join the League of Nations. But it is hardly the only one. More recent examples of American unwillingness to participate in important international agreements are the 1982 United Nations Convention on the Law of the Sea, the 1989 Convention on the Rights of the Child, the 1997 “Land Mines” Convention

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<sup>105</sup> Michael Gerson, “Climate and the culture war,” *Washington Post*, January 16, 2012 (accessed September 2, 2012); available from [http://www.washingtonpost.com/opinions/climate-and-the-culture-war/2012/01/16/gIQA6qH63P\\_story.html](http://www.washingtonpost.com/opinions/climate-and-the-culture-war/2012/01/16/gIQA6qH63P_story.html). See also, Andrew J. Hoffman, “Climate Science as Culture War,” *Stanford Social Innovation Review*, (Fall 2012) (accessed February 15, 2014); available from [http://www.ssireview.org/articles/entry/climate\\_science\\_as\\_culture\\_war](http://www.ssireview.org/articles/entry/climate_science_as_culture_war).

(formally, the 1997 Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction) and the International Criminal Court (formally, the Rome Statute of the International Criminal Court of 1998). In these cases, the rest of the world elected to proceed without the United States, hoping perhaps for an eventual epiphany in Washington, but not cowed or slowed by the absence of one.

It could be argued that these examples are from spheres far removed from the environment – that there is something unique to the environmental sphere that makes U.S. participation – or the lack of it – in global efforts more crucial. But in the specific context of the environment, there are numerous examples as well of American “exceptionalism.” To name a few: The 1989 Convention on the Control of Transboundary Movement of Hazardous Wastes and their Disposal (the “Basel Convention”), the 1992 Convention on Biological Diversity (the “Bio-Diversity Convention”), the 1998 Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (the “Rotterdam Convention”) and the 2001 “Stockholm Convention” on Persistent Organic Pollutants.

The United States is a Party to none of these agreements. But while U.S. non-participation in these regimes may have weakened them to some extent or prevented them from reaching their full potential, it has not prevented these agreements from attracting large numbers of adherents,

from entering into force or kept the Parties from taking extensive and effective action under them.<sup>106</sup>

Is the situation with global climate change really any different? After all, U.S. non-participation in the 1997 Kyoto Protocol did not extinguish that effort either – 191 Parties moved forward with it, ratifying and successfully implementing that accord. Can it seriously be argued that U.S. non-participation with regard to global climate change represents an insurmountable impasse for the rest of the world? Can it seriously be argued that decisive action by the United States alone would produce an effective, global response? What is it about the climate problem that makes it unique and what is it about the United States that makes it uniquely crucial?

### ***A Global Environmental Problem***

Climate change represents a global problem because countries everywhere contribute to it and countries everywhere are affected by it. In this sense, it is unlike other environmental problems such as smog, acid rain, or mercury deposition. These problems are caused by the emissions of a country or a subset of countries and their impacts are largely national or regional. All countries emit greenhouse gases, which are well-mixed in the

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<sup>106</sup> An interesting recent “exception” is the Minamata Convention on Mercury, to which the United States became a party (the first party) on November 6, 2013. But this agreement did not require Senate advice and consent or new implementing legislation. See: U.S. Department of State, Office of the Spokesperson, “United States Joins Minamata Convention on Mercury, Media Note, November 6, 2013 (accessed February 15, 2014); available from <http://www.state.gov/r/pa/prs/ps/2013/11/217295.htm>.

atmosphere, and all countries thus contribute to the atmospheric concentrations of greenhouse gases. Similarly, all countries experience the impacts of an increase in global mean surface temperature brought about by increased atmospheric concentrations of greenhouse gases.

There are only a handful of environmental problems that fit within the same category of “global environmental problem” – the clearest other example being depletion of the ozone layer, where emissions of ozone depleting substances anywhere deplete the stratospheric ozone layer. Environmental problems such as oceanic pollution, the loss of biodiversity or desertification are neither caused by the actions of all nations nor do they directly affect all nations<sup>107</sup>

### ***Why Is the United States Crucial to a Solution?***

If climate change can be seen to number among a very limited set of environmental problems in being truly global in its origins and its impacts, what about the United States makes it uniquely crucial to solving this problem? The United States is not only a major actor on the world stage but its physical attributes make it a key player in seeking to craft an effective solution. To begin with, the territorial extent of the country is enormous – its land area is 9.827 million square kilometers. Only Russia (with 17.098 million square kilometers) and Canada (with 9,984 square kilometers) are

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<sup>107</sup> It could be argued that biodiversity and some aspects of desertification are exacerbated by a warmer world, however.

bigger. For comparison, China is 9.597, Brazil is 8.515 and Australia is 7.741 million square kilometers.<sup>108</sup>

The United States is the third most populous country (approximately 316 million people) after China (with 1.350 billion) and India (with 1.220 billion). (Note: The European Union collectively has a population of about 509 million.) The United States is significantly more populous than the next two biggest countries in size -- Indonesia (with 251 million) and Brazil (with 201 million).<sup>109</sup>

The U.S. population is also highly educated. In 2008-12, nearly 86 percent of the population over the age of 25 consisted of high school graduates<sup>110</sup> while 30.4 percent held bachelor's degrees and 10.9 percent held graduate degrees.<sup>111</sup>

In addition, the United States is the world's largest economy, with GDP (Purchasing Power Parity) in 2012 estimated at \$16.2 trillion, compared with China at \$12.2 trillion, India at \$4.7, Japan at \$4.5 trillion, Germany at \$3.1, Russia at \$2.4, Brazil at \$2.3, the United Kingdom at \$2.3, and France at \$2.2

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<sup>108</sup> Central Intelligence Agency, World Fact Book, Country Comparison: Area (accessed February 15, 2014); available from <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2147rank.html>.

<sup>109</sup> CIA World Fact Book.

<sup>110</sup> U.S. Census Quick Facts (accessed February 15, 2014); available from <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2147rank.html>.

<sup>111</sup> Richard Perez-Pena, "U.S. Bachelor Degree Rate Passes Milestone," New York Times, February 23, 2012 (accessed February 15, 2014); available from <http://www.nytimes.com/2012/02/24/education/census-finds-bachelors-degrees-at-record-level.html>.

trillion.<sup>112</sup> Of 1,979 million patent applications in 2010, 24.8 percent were filed in the United States, 19.8 percent in China, 17.4 percent in Japan and 8.6 percent in the Republic of Korea.<sup>113</sup>

Thus, considered from the standpoint of physical size, population, wealth, education and creativity, the United States occupies a very key position in the world. The United States is well endowed to make a major contribution to solving this global problem.

Then there is the U.S. role with respect to the problem itself. Partly owing to its physical attributes and the dynamism of its economy, the United States was the largest global emitter of greenhouse gases until 2007. U.S. emissions have now been overtaken by China's (in 2011, China emitted 8.715 million metric tons (MMT) of carbon dioxide (the largest anthropogenic greenhouse gas) from the consumption of energy, versus U.S. emissions of 5.490 MMT),<sup>114</sup> but the United States remains the largest historical emitter in the world.<sup>115</sup> U.S. per capita emissions also rank high (at 17.6 tons of carbon dioxide in 2010 versus China's 6.2 tons and India's 1.7 tons – or 0.1 tons each

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<sup>112</sup> CIA World Fact Book.

<sup>113</sup> World Intellectual Property Organization, "2012 WIPO Facts and Figures," Table B.1 – Patent Applications for the Top15 Offices, 17 (accessed February 15, 2014); available from [http://www.wipo.int/export/sites/www/freepublications/en/statistics/943/wipo\\_pub\\_943\\_2012.pdf](http://www.wipo.int/export/sites/www/freepublications/en/statistics/943/wipo_pub_943_2012.pdf).

<sup>114</sup> U.S. Energy Information Administration, International Energy Statistics, All Countries by Region, Total Carbon Dioxide Emissions from the Consumption of Energy (accessed February 15, 2014); available from <http://www.eia.gov/cfapps/ipdbproject/iedindex3.cfm?tid=90&pid=44&aid=8>.

<sup>115</sup> But see W.J.W. Botzen, J.M. Gowdy, and J.C.J.M. Van Den Bergh, "Cumulative CO<sub>2</sub> emissions: shifting international responsibilities for climate debt," *Climate Policy*, Vol. 8, No. 6, 2008. They observe: "The analysis shows that if current trends continue, by the middle of this century China will overtake the USA as the major cumulative contributor to atmospheric concentrations of CO<sub>2</sub>."

for Burkina Faso, the Central African Republic, Eritrea, Ethiopia, Guinea, Madagascar, Malawi, Mozambique, Nepal, Niger, Rwanda, Sierra Leone, Somalia, and Uganda.<sup>116</sup> Altogether, U.S. CO<sub>2</sub> emissions amount to about 19 percent of the global total on an annual basis.<sup>117</sup>

### ***Could the “Rest of The World” Act without the United States?***

Yet even though the United States is well endowed to contribute strongly to solving the problem, and even though U.S. emissions still constitute a significant percentage of the global total, does crafting an effective global solution to the problem of climate change really hinge on the United States alone? Can the United States prevent the rest of the world from moving forward? Is it really impossible for the rest of the world to solve the problem without the United States? After all, the rest of the world is responsible for about 80 percent of global emissions and commands some 75 to 80 percent of the world’s economy<sup>118</sup>. Could the rest of the world simply craft a solution without the United States, as it has done in other instances of American “exceptionalism” – whether generally or with specific reference to

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<sup>116</sup> The World Bank, “CO<sub>2</sub> Emissions (metric tons per capita,” (accessed February 15, 2014); available from <http://data.worldbank.org/indicator/EN.ATM.CO2E.PC>.

<sup>117</sup> U.S. Environmental Protection Agency, “2008 Global CO<sub>2</sub> Emissions from Fossil Fuel Combustion and Some Industrial Processes (million metric tons of CO<sub>2</sub>), *Global Greenhouse Gas Emissions Data* (accessed February 15, 2014); available from <http://www.epa.gov/climatechange/ghgemissions/global.html>. Most such figures are only available with a significant lag, and they can vary significantly depending on the year, the gases and sectors covered and whether they include emissions from land use and forestry.

<sup>118</sup> Percentages are based on 2011 statistics with 75 percent reflecting nominal GDP and 80 percent with GDP at purchasing power parity.

environmental problems? Could it subsequently develop a series of disincentives or incentives to encourage the United States and any other “free riders” to join, as the European Union has sought to do with respect to greenhouse gas emissions from aviation<sup>119</sup>, or as Palau and the Marshall Islands have sought to do by asking the International Court of Justice for an advisory opinion on whether countries have a legal responsibility to ensure that activities on their territory that emit greenhouse gases do not harm other states<sup>120</sup>?

***Yes, But....***

The simplest answer is, “Yes, of course.” But the difference between the ability of the rest of the world to proceed on its own and the likelihood that it will do so without the United States is vast. There are many reasons for this “gap” between ability on the one hand and willingness on the other and these reasons themselves frame the difficulty the world continues to have with moving forward. First, mitigating climate change is thought to require reducing greenhouse gas emissions – absolutely in the case of developed countries, and at least relatively (in relation to what might

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<sup>119</sup> See “Reducing emissions from the aviation sector,” European Commission, Climate Action, Policies, Transport, Aviation, updated 4 September 2012 (accessed October 14, 2013); available from <http://ec.europa.eu/clima/policies/transport/aviation/ind>.

<sup>120</sup> See “Palau seeks UN World Court opinion on damage caused by greenhouse gases,” UN News Center, September 22, 2011 (accessed October 14, 2013); available from <http://www.un.org/apps/news/story.asp?NewsID=39710&Cr=pacific+island&Cr1#.UHsHgWl247U>.

otherwise occur under “business-as-usual” projections) in the case of developing countries.

While many efforts have been made to convince decision-makers that economic growth and greenhouse gas emissions are not linked -- that growth may continue even as emissions decline -- for the most part they have not succeeded. These efforts have not won the day because historically economic growth has been tied to energy use, and energy production has been tied to fossil fuel combustion, which in turn is tied to greenhouse gas emissions. Thus, reducing emissions is thought to discourage fossil fuel combustion, which reduces energy use, which slows economic growth. As well, these efforts have not succeeded because the instances in which the link between economic growth and greenhouse gas emissions has been altered, such that growth increased while emissions declined, are either not well-known or thought to be anecdotal. Thus, addressing climate change is widely thought to require slowing economic growth. Calling for slowing economic growth, even indirectly, is hardly a platform on which politicians can hope to be elected or those in power can hope to remain there.

### ***“Historic Responsibility”***

Second, if addressing climate change is thought to equate with sharing a global burden, there is a very real issue of how that burden should be shared in a normative sense. From the standpoint of fairness and equity, people everywhere ask: *Who is responsible for creating the burden?* They also

hold that: *Those who have contributed most to the problem are the ones who should contribute most to solving it.* This notion is known as *historic responsibility*. The term itself does not appear in the UNFCCC, but the concept is embedded within the Convention in places like the Preamble (“Noting that the largest share of historical and current global emissions of greenhouse gases has originated in developed countries....”) and in the Principles contained in Article 3 (“Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof”) and it has remained at the forefront of multilateral negotiations on the issue that have taken place since the late 1980s. It is a concept that is fundamental to many in developing countries, most of whom believe that they have contributed little toward causing the problem yet fear that they are the ones likely to experience its adverse effects most severely because of their comparative inability to adapt.

The concept of “historic responsibility” is also relevant for many in developed countries who fear that human civilization is rapidly depleting the Earth’s natural capital and causing runaway environmental damage, as observed in countless areas including depletion of the ozone layer, pollution from chemicals and pesticides, species loss, deforestation, desertification, the destruction of coral reefs, etc. From their standpoint, developed countries have a moral responsibility to act first in addressing a problem of their creation, and if they are unable to solve the problem themselves (and most readily admit that emissions from developing countries will eventually dwarf

their own), they must at least set an example through their actions for others.<sup>121</sup>

For many, “historic responsibility” in the international negotiations over climate change is related to the “polluter pays principle” under which governments have sought domestically to hold those responsible for damaging the environment to pay for its remediation. In the United States, the “polluter pays principle” is best exemplified by the “Super Fund” legislation, enacted 1980 to address legacy hazardous waste.<sup>122</sup> Whatever the ethical merits of the principle, it is also a vehicle for shifting the costs of environmental remediation from government to those in the private sector responsible for creating environmental problems, where those actors can be specifically identified.

### ***“Common But Differentiated Responsibilities and Respective Capabilities”***

Added to “historical responsibility” is the concept known in the climate change negotiations simply by its acronym – CBDR/RC – “common

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<sup>121</sup> In fact, emissions from developing countries surpassed those of the developed world four years ago. See William R. Moomaw and Kelly Sims Gallagher, “Climate Change: The Clock Keeps Ticking,” *CAIJING Annual Edition: Forecasts and Strategies*, 2012 (accessed February 28, 2014); available from [http://belfercenter.ksg.harvard.edu/publication/22211/climate\\_change.html?breadcrumb=%2Fexperts%2F2660%2Fwilliam\\_r\\_moomaw](http://belfercenter.ksg.harvard.edu/publication/22211/climate_change.html?breadcrumb=%2Fexperts%2F2660%2Fwilliam_r_moomaw). They say:

In 2010, 54 percent of emissions came from developing countries and 43 percent came from developed countries. Total global emissions increased from 22.7 billion tons in 1990 to 33 billion tons in 2010, an increase of 45 percent. In other words, developing countries today emit more than developed countries did in 1990.

<sup>122</sup> Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), 42 USC §9601 et. seq.

but differentiated responsibilities and respective capabilities.” This term appears in both the UNFCCC’s Preamble (“Acknowledging that the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response, in accordance with their common but differentiated responsibilities and respective capabilities and their social and economic conditions”) in the Principles in Article 3 (“The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities”) and in the Commitments in Article 4 (All Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, shall....”).<sup>123</sup> Under this concept, while addressing climate change is a common responsibility of all nations, there are differentiated responsibilities among and between nations based on their historical shares of global greenhouse gas emissions<sup>124</sup>.

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<sup>123</sup> United Nations Framework Convention on Climate Change (accessed February 15, 2014); available from [http://unfccc.int/key\\_documents/the\\_convention/items/2853.php](http://unfccc.int/key_documents/the_convention/items/2853.php).

<sup>124</sup> One student of this “principle” concluded:

CBDR could also be more useful in fostering treaty effectiveness if negotiators drafted agreements that inserted greater precision and clarity into the responsibilities to be differentiated and the factors that determine such differentiation. More mechanisms could also be developed for introducing amendments to differentiated parties and responsibilities as treaty needs and circumstances change.

But beyond the concept of historical responsibility and the term “common but differentiated responsibilities and respective capabilities” the UNFCCC further embeds these notions by creating two classes of countries -- those Parties specifically listed in its Annex I (developed countries, including the so-called “economies in transition” such as Russia, Belarus, and Ukraine) and those countries not listed in Annex I (developing countries including countries such as Chad, Chile and China). Under the Convention, Annex I Parties have the obligations of all Parties but have additional responsibilities under Article 4.2 to mitigate climate change by limiting their greenhouse gas emissions. In addition, Annex II Parties (all in Annex I save the “economies in transition”) have further obligations to assist developing countries in addressing climate change by providing financial resources and by promoting technology transfer to developing countries.

Finally, the UNFCCC’s Article 4.7 notes that “The extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed country Parties of their commitments under the Convention related to financial resources and transfer of technology and will take fully

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See Jimena Arenas, “Testing the Role of the Principle of Common But Differentiated Responsibility In International Environmental Agreements,” (Ph.D. diss., The Fletcher School of Law and Diplomacy, Tufts University, 2008); available from ProQuest.

into account that economic and social development and poverty eradication are the first and overriding priorities of the developing country Parties.”<sup>125</sup>

The purpose of the foregoing is simply to indicate the extent to which perceptions of the ethical responsibility of developed countries to take the lead pervade every attempt to craft a global response. While it is perfectly possible for the rest of the world to move forward on the climate issue without the United States, doing so would run counter to the existing international regime that has been in place for the past 20+ years, a regime that the United States has itself embraced – the United States was the first industrialized country and the fourth country overall to ratify the United Nations Framework Convention on Climate Change in October 1992, barely four months after it was opened for signature at the Earth Summit in Rio de Janeiro in June of that year.

Even without reference to the existing climate regime, it is doubtful that the rest of the world would move forward without the United States for all of the reasons that have long dogged efforts to address the “tragedy of the commons” – if a key player is allowed not to participate – to be a “free rider” on the backs of others – how can those who fervently believe that they have played historically and play even now a far lesser role in this drama be motivated to act? Even among those who play a greater role today and have played a greater role historically as well – members of the European Union, for example – how can they take action that may impose costs on their

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<sup>125</sup> Ibid.

economies if their competitors will not do the same? To some extent Europeans have done so notwithstanding concerns they may have for competitive advantage, but Europe's pledges of action are increasingly bifurcated – 'we will do this much on our own, but we will do this much more if others will join us. 'For them, "others" may be broader than the United States, but the term certainly includes the United States almost first and foremost.

Because the United States has led the world in so many other areas, particularly since the end of the Second World War, an assumption also prevails that if a problem is serious, the United States will act. Perversely, the reverse assumption also prevails – if the United States does not act, the problem must not be all that serious.

Thus, for most of the rest of the world, what the United States does with respect to climate change is crucial. Unless and until the United States comes to a domestic consensus about the seriousness of the environmental problem posed by climate change and about how to respond meaningfully to that problem, it is highly unlikely that the rest of the world will progress very far on its own.

*And make no mistake – the world still looks to America to lead. When I spoke to young people in Turkey a few years ago, the first question I got wasn't about the challenges that part of the world faces. It was about the climate challenge that we all face, and America's role in addressing it. And it was a fair question, because as the world's largest economy and second-largest emitter, as a country with unsurpassed ability to drive innovation and scientific breakthroughs, as the country that people around the world continue to look to in times of crisis, we've got a vital role to play. We can't sit on the sidelines. We've got a unique responsibility. And the steps that I've outlined today prove that we're willing to meet that responsibility.<sup>126</sup>*

President Barack Obama  
Georgetown University  
June 25, 2013

### **Chapter Three – How Do Others See the United States?**

How do U.S. negotiating partners perceive the United States and the importance of meaningful U.S. action to crafting an effective global response to climate change?

To address this question, a series of 16 interviews was undertaken with key climate negotiators on the margins of the meetings of UNFCCC Subsidiary Bodies in May 2012 in Bonn, Germany. One additional interview was undertaken on the margins of the Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer in November 2012 in Geneva. Virtually all of those interviewed were (or had been) senior climate

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<sup>126</sup> Remarks by the President on Climate Change, Georgetown University, Washington, D.C., June 25, 2013; (accessed July 9, 2013); available from <http://www.whitehouse.gov/the-press-office/2013/06/25/remarks-president-climate-change>.

change negotiators. Many had held important positions in the negotiations over the years, and most had long experience in the negotiating process. They represented (or had represented) the following countries: Bangladesh, Barbados, Brazil, the People’s Republic of China, the Democratic Republic of the Congo, the European Commission, Finland, Germany, Iceland, India, Japan, the Philippines, the Russian Federation, South Africa, Ukraine, and Zimbabwe.<sup>127</sup>

Each person interviewed was asked to respond to a series of 10 identical questions<sup>128</sup> that addressed the following broad themes: (1) Why does the United States matter? (2) Is the United States a leader in the climate change arena? (2) What would the United States need to do to be a leader?

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<sup>127</sup> Senior negotiators interviewed for this study are listed in Appendix I, (arranged alphabetically by the surname that each uses professionally, bolded and underlined). Each was promised anonymity at the outset to encourage frank exchange. For this reason, while interviewees are quoted extensively in the text, their identities have been generalized so that no particular quote can be attributed to a specific individual.

At the time, the author was on six-month leave of absence from the Department of State, where he serves as Deputy Assistant Secretary for Environment, and where he worked on the climate issue for over 25 years and established a wide network of contacts with negotiators from multiple countries. However, he made clear that he was undertaking this research in a personal capacity. Still, it would be reasonable to assume that some of those interviewed may have been less than fully candid or may have altered some of their responses in light of the capacity in which most of them knew the interviewer. Mitigating this concern, perhaps, is the candor exhibited in the quoted responses themselves.

These interviews by no means offer a statistically reliable summary of the views of countries involved in the climate negotiations. There are, after all, 195 parties to the U.N. Framework Convention on Climate Change, and interviews with representatives of only 16 countries were undertaken. Nevertheless, the very senior level of those interviewed and the key role that each has played in the negotiations makes the insights and opinions of this group particularly compelling.

<sup>128</sup>The specific interview questions are included in Appendix II.

(4) Could anyone else do it? And (5) if the United States were to lead, would others follow?

The results of these interviews were illuminating and completely substantiate the hypothesis that the United States is a critical actor in the climate drama, without whom nothing significant is likely to happen. At the same time, the views expressed took unanticipated turns and raised unexpected issues as well. The different views expressed will be discussed here under the five broad themes mentioned above.

### ***Why Does the United States Matter?***

To gauge how important U.S. actions are to those who face us in the international negotiations over climate change, senior representatives from a range of partners were asked two questions: (1) How important to the negotiating process is what the United States does or doesn't do at home to address its emissions of greenhouse gases -- (on a scale of 1-10, with 1 being "unimportant" and 10 being "critically important"), and (2) why does this matter?

All of those interviewed considered what the United States does or does not do at home to address its emissions of greenhouse gases to be important. Degrees of importance varied among those interviewed, ranging from "5 to 6" as the lowest response (one representative) and an unqualified "10" as the highest (perhaps six representatives, although one of these did not give a number). The representative who ranked what the United States

does lowest on the scale did not suggest what might be more important and offered no explanation of this ranking. Still, she acknowledged that people everywhere are aware of the actions that the State of California is taking, for example, as well as those of the Regional Greenhouse Gas Initiative (RGGI) in New England. She characterized the United States and the European Union as the “policy makers of the world” and said “people pay attention to what you do.”

One of those placed among the “unqualified 10s” did not give a number but his response about the importance of what the United States does was so strong – and it was so free of caveat -- that it fit nowhere else but in that group. He said, for example, that “if the United States showed more ambition, it would send a shock wave” into the negotiations. Because the United States is the largest emitter, he said, if people saw something significant from the United States it could create a dynamic where things in the negotiations would “unlock.”

As for the others among the “unqualified 10s,” two simply said that what the United States does is “critically important” without explanation. Significantly, however, one represented a key developing country in the multilateral negotiations, while the other represented a developed European country. From the standpoint of how wide this view of the importance of U.S. domestic action extends, it is interesting that representatives of major players “South” and “North” each offered unqualified “10s” and they bookend this discussion.

**Asia Developing:** Others in this category -- the “unqualified 10s” – explained a bit more. One considered what the United States does or does not do to be critically important – a “10” on a 10-point scale – and thought that it ranks between “8” and “10” for everyone else as well. This representative came from a large developing country in Asia and has been involved in the climate negotiations for many years.

**Asia Developing:** Another, also from a large developing country in Asia cautioned that the negotiations are simply a means to an end – not an end in themselves. He argued that there is a need to understand the issues, and he said that “there is no one fixed god – we need faith, spirituality and honesty.” “How do you look at truth,” he asked. As the largest economy and the largest economic power, he said, what the United States does has a demonstration and a multiplier effect.” While it is important for the global commons, he said, what the United States does at home is critical on another level because “it inspires, it sets an example, it builds confidence.” He said that the United States plays a leadership role “in technology, in science, in showing how things can be done.” He affirmed that the United States has a role domestically in showing the way forward but also, globally in catalyzing action, finance, technology and capacity building.” He said that, with regard to the scientific phenomenon of climate change, the actions of countries must be judged in a scientific context and in terms of responsibilities. Freedom must be tempered with a certain sense of responsibility, he said, and while a

country may do things to help its own economy, it can also help the global commons.

**Africa Developing:** Another “unqualified 10” from Africa pointed to the influence that the United States wields for the “emerging powers.” She said, “You are a yardstick for them.” She also noted that U.S. actions at home are critical for the Alliance of Small Island States<sup>129</sup> (AoSIS) and for the Least Developed Countries (LDCs)<sup>130</sup> in their efforts to “raise the level of ambition” among countries globally so as to “mitigate” enough to prevent the most severe impacts of climate change. What matters for the Africa Group, she continued, is what the United States does at home – which “might allow some wiggle room” – an oblique reference to a belief widely expressed among those interviewed that countries should have flexibility nationally in determining the specifics of what they will do. The United States matters in a big way in terms of leadership, she said. She observed that U.S. non-ratification of the Kyoto Protocol had a major impact on confidence in [such] instruments globally. More is expected of the United States than the European Union, she said, because of its established position of leadership.

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<sup>129</sup> A negotiating bloc of 39 small island nations that also includes American Samoa, Guam and Puerto Rico as observers. See AoSIS website (accessed February 7, 2014); available from <http://aosis.org/members/>.

<sup>130</sup> These countries are so classified by the United Nations based on their low Gross National Income (GNI) per capita (below \$750 annually for inclusion, based on a three-year average estimate), their weak human assets and their high degree of economic vulnerability. See current list of 50 countries, which includes one country in the Caribbean, five in the Western Pacific, 10 in Asia and 34 in Africa, at UNOnline (accessed February 7, 2014); available from [http://www.nationsonline.org/oneworld/least\\_developed\\_countries.htm](http://www.nationsonline.org/oneworld/least_developed_countries.htm).

She said that President Obama has spoken of the need for action, as has former Vice President Gore. “You’ve got champions in the United States” she said “who lay out the case well.” The combination of what the United States does domestically and how the United States engages internationally is critically important in her view. In the negotiations, “common but differentiated responsibilities” are raised, but for a global solution there needs to be leadership. She acknowledged that CBDR is an “accusatory approach” and suggested that there needs to be a shifting of the paradigm – it doesn’t serve the United States to dwell in the past – if there is a problem, the issue is what is the United States doing? People want to know ‘how will they [the United States] help us’? She said that this is “part and parcel” of leadership. At the same time, she acknowledged that “the United States has its own national interests and circumstances too.” She said that people should understand how much President Obama wanted to do and all the difficulties he has had. In her view, it is important to separate the negotiations from what the world thinks – and in the world, she said, the United States is a leader and what it does at home is critically important – a 10 on a 10-point scale.

Among the “qualified 10s” – about seven of those interviewed fell into this category – some specifically rated what the United States does or does not do domestically as a “10”, but qualified their rankings. Others said that, but for specific factors, which they detailed, they would have ranked this issue at a “10.”

**Latin America Developing:** A key negotiator from a Latin American developing country who has been involved in the discussions for many years observed that what the United States does or does not do at home with respect to its own emissions is critical, but what is also critical is what the United States can commit to internationally. This observation on the part of this particular representative grew out of a concern about both the world's number one and number two greenhouse gas emitters (China and the United States). Both of those countries share a similar aversion, each likely for different reasons. The United States has long maintained that commitments - which for others might be hortatory or that might represent an aspiration only -- can become binding for the United States, legally or otherwise, either because of its judicial system and its litigious culture, or because of the transparency and participatory nature of its political system in which demands can be placed on government that cannot be overruled.

For other reasons entirely China has similar concerns. China's modern history is marked by instances of foreign powers conspiring to force concessions on a weak central government. Moreover, international institutions have either ignored China's interests (e.g., the League of Nations and Japan's incursions into Manchuria) or excluded it from membership (e.g., the post-war United Nations until 1971<sup>131</sup>). Such examples from China's

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<sup>131</sup> The Learning Network, "October 25, 1971/Peoples' Republic of China In, Taiwan Out, at U.N.," *New York Times*, October 25, 2011 (accessed March 1, 2014); available from [http://learning.blogs.nytimes.com/2011/10/25/oct-25-1971-peoples-republic-of-china-in-taiwan-out-at-un/?\\_php=true&\\_type=blogs&r=0](http://learning.blogs.nytimes.com/2011/10/25/oct-25-1971-peoples-republic-of-china-in-taiwan-out-at-un/?_php=true&_type=blogs&r=0).

modern history coupled with China's acute awareness that it is today the world's largest emitter of greenhouse gases -- and that no other country will become a close second for as far as anyone now can see into the future -- make China, like the United States, leery of international commitments. Thus, in the climate negotiations, many have observed that China is doing much today to address its own greenhouse gas emissions, but it is emphatically unwilling to commit to such actions internationally.<sup>132</sup> For groups like AoSIS and the LDCs, who see themselves on the frontline of the adverse impacts of climate change, leaving the global regime to unilateral promises of individual states, that are free at any time to fulfill or retract them, is less than comforting. Hence they are preoccupied with legally enforceable international commitments.

Notwithstanding his caveat -- that is, that it is not just about what the United States does domestically but also about what it can commit to internationally -- this representative freely acknowledged that the United States is the most important party in the U.N. Framework Convention on Climate Change -- that it is the richest and most powerful. When the United States is moving, he said, "others can't hide behind you." The fact that the

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<sup>132</sup> See William R. Moomaw, "Can the International Treaty System Address Climate Change?" *The Fletcher Forum of World Affairs*, Vol. 37, 1, Winter 2013 (accessed March 1, 2014); available from [http://www.fletcherforum.org/wp-content/uploads/2013/02/Moomaw\\_37-1.pdf](http://www.fletcherforum.org/wp-content/uploads/2013/02/Moomaw_37-1.pdf). He argues that governments willing to take action domestically but unwilling to make binding international commitments might nevertheless be permitted to participate in a treaty "if they passed domestic legislation and demonstrated that they are achieving treaty goals during the specified time frame" in a process he describes as "participation by autonomous action."

United States is not moving, he rued, “puts us in a tough position when we ask China and Canada.”

***Africa Developing:*** The representative of an important developing country in Africa shared the view that the United States and China are much alike in their aversion to international commitments, while willing (each of them) to do far more at home.. “You are a bit like China,” he said, “in that what you are prepared to say and what you’re prepared to do are different. What you’re prepared to say is less than you’re prepared to do.” He also noted that significant U.S. actions do not necessarily “connect” with international commitments. He observed that “you invest a hell of a lot in research and development, but there’s no recognition of that.” In his view, the United States is very constrained in what it is able to do at the federal level, while individual states are much freer to take concrete action. The problem, he said, is determining how to bundle the two.<sup>133</sup>

This African representative wanted to divide his response about the importance of U.S. domestic action into two parts. The first he described as U.S. importance in setting “the mood, the atmosphere” globally, which he rated very high on the scale. The second he described as actual U.S. influence

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<sup>133</sup> In preparing the *U.S. Climate Action Report* – the periodic U.S. “national communication” under the UNFCCC, the question of actions at state and municipal levels has long been a thorny one. On the one hand, finding and quantifying these actions has not been easy (there is no central repository, although EPA has sought in recent years to track them), but omitting them paints an inaccurate picture of what is taking place in the United States. On the other hand, including such information in the U.S. CAR, particularly in the administration of President George W. Bush, came under fire from some in the environmental community who thought it hypocritical for the administration to take credit for actions at the state and municipal levels that it opposed at the federal level. Personal observation.

on the [global] numbers, which he felt was not so much. “People look at what your position is, not what is done on the ground,” he said. He pointed to the actions of California and the New England Regional Climate Coalition as “all mood setting.” “They send messages of hope and direction,” he said. But in terms of the actual negotiating process, he felt that the U.S. position was more important than its actions at home.

As to why United States action at home does matter, he said it matters “because it gives a sense of direction and hope, and even if it’s not coming from the federal level, it is critical in terms of showing that a way forward can be found.” In his view:

The period prior to Copenhagen was a despairing time – no one thought we would get the Bali agreed outcome. But Copenhagen, though many called it a failure, was a turning point. The Danes managed it terribly, but doing it at the highest level, even though it involved only about 30 heads of state was critical. It solved the CBDR issue. We haven’t cracked “equity” yet; this is what is still on the table. But with respect to CBDR, we’ve already agreed. Now the issue is how we’re going to do it. The United States has always conflated the two, but for [us] they are distinct and clear. In Durban we agreed on a level outcome, applicable to all and under the Convention. What is not yet solved is how to share the costs. For developed countries, there will be quantified, economy-wide targets; for developing countries there will be actions – absolute vs. relative – and a tiered approach to transparency and accountability.

By “equity” he said he meant “efforts/costs/burdens/benefits.”

In his view, what the United States does at home matters from the standpoint of “mood setting.” “The fact that you are down the road toward a 17 percent reduction by 2020 is a hell of a signal. All are aware that you’re not able to crack the Congress problem – so it is very important to ‘mood

setting' what the Executive Branch does even if Congress says 'no.' You combine that with what is taking place at the state and local level – even without Congress – and that's up there – about an '8.'"

**Asia Developing:** Another representative from a major Asian developing country only rated what the United States does domestically with respect to its greenhouse gas emissions as a "7" on a 10-point scale. Noting that, the United States is the "biggest developed country and the biggest historical emitter with high per capita emissions," he said, "if the United States doesn't have concrete actions, it is difficult for others to take ambitious actions." Nevertheless, he acknowledged that each country has its own national circumstances and priorities. In his view, if the United States were to do something significant, it would not mean that other countries necessarily would be able to follow. But "if the United States can show an example, it softens political barriers," he said.

The same representative said, in relation to a different question, "What the United States does will have a very important impact on the process in the future. The United States doesn't want a climate regime like the Kyoto Protocol. What the United States does will have an important impact [on shaping] the process because the U.S. impact is huge – if it is against a hard cap, I don't think it will move." The "7" that this individual assigned to U.S. domestic actions was clearly rooted in the Biblical admonition "*Judge not that ye be not judged.*" Aside from this concern for his own position, he clearly rated U.S. actions as, in his own words, "huge."

**Europe Developed:** A representative of a large European country gave the importance of U.S. domestic actions an “8” on a 10 point scale because he feared that to give a “10” would convey that there is no other influence on the multilateral negotiations. What the United States does or doesn’t do domestically matters, he said, because all nations must act jointly, combining the efforts of all major emitters. Without the United States with its considerable share of global emissions, it would be useless. He also pointed to economic competitiveness, saying, “If one is burdened and the other is not, there is a direct implication for competitiveness.”

**Asia Developed:** A representative from a developed country in Asia rated the importance of U.S. domestic action at 8 or 9 in light of the ability of the United States – politically and diplomatically – to influence outcomes. As he continued to ponder the question, he admitted that this ranking might even rise to “10.” He said that the United States is an opinion leader and observed with irony that the United States is not doing emissions trading and has not been involved in the Clean Development Mechanism<sup>134</sup> even though such market mechanisms were a cornerstone of the Kyoto negotiations and were mainly pushed at that time by the United States. Finally, he observed,

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<sup>134</sup> A mechanism pushed by the United States in Kyoto that appears now in Article 12 of the Kyoto Protocol. Under the CDM, entities in developed countries undertake projects in developing countries that reduce emissions below a baseline which would otherwise occur, and use the difference between emissions actually produced and those that might have been produced as credits against their greenhouse gas reduction commitments at home; because the United States has not ratified the Kyoto Protocol, U.S. companies cannot take advantage of the CDM, but neither do they have domestic greenhouse gas reduction commitments.

“The United States doesn’t commit to anything that it hasn’t done at home first. So action at home does matter”

**Asia Developing:** A representative of another developing country in Asia rated what the United States does domestically at “9 or 10” – a reflection of the fact that the United States is the “lone super power, the number one emitter – number two after China but historically number one.” He noted that the United States was the lone holdout on the Kyoto Protocol and that the protocol suffered a lot for that. Why was this important? He pointed again to the fact that the United States is the biggest emitter and the biggest economy but also because it is the “biggest importer of developing country products and because of the USAID relationship – USAID is a big help,” he said. He intimated that many developing countries don’t speak out because of OPEC oil. Specifically what he meant by that was not clear – did he mean, for example, that many developing countries do not support the United States or defend it more often because of their dependence on OPEC oil – or something else? Also not clear was whether in his view OPEC countries are the most problematic in the climate negotiations. Historically they have been and continue to be difficult, fearing, as they do, that developed country actions to combat climate change mean reduced oil revenues for their economies, which are not well diversified.

**Europe Developed:** Some of the most complex responses came from two Europeans. The first of the two ranked the importance of U.S. domestic action at 8.5 on a 10-point scale but admitted that “you could even say ‘10’

because the United States is the biggest emitter – it will have a tremendous impact on China.” He preferred an “8.5” to “10” because, in 2001 when the United States decided against ratifying the Kyoto Protocol, “a decision was taken to do it without you -- so you can’t block.” He said that in 10 years’ time, however, he would likely rate the importance of U.S. domestic action at “6” because the problems are getting bigger. He noted that the United States has burned much diplomatic capital and observed that, “if China moves, you’d lose.” He noted that more than 90 percent of solar panels now come from China and that, even if China were not able to produce them – which it can -- its sheer size would make it still a big market. He asked with a touch of irony whether “our feed-in tariff [in Europe] [for renewable energy] is subsidizing China?” He observed that “we create production lines – lots of small and medium-size enterprises install [solar panels] – as prices drop, we are partly winners – but we are hurt with production costs.” In his view, what the United States does at home matters not only because the United States is a big emitter but even more importantly because climate change policies call into question U.S. life-styles, and if the United States were to change its policy, “it would move the whole world.” The United States is a model, he said, “look at the internet, look at many U.S. companies, look at California – others are competing with you but you attract many people. The United States is still one of the best places to live, he said, even though U.S. internal governance is seriously threatened, and the current debate in the United States is not an example of political strength. He said that if he were

to judge the United States by its policy process, “I’d be desperate – but U.S. strength is its people.”

**Europe Developed:** The second of these Europeans said, “It’s too simplistic to say that the lack of domestic action in the United States is the only thing that is blocking [global action.] “If I were to say ‘10’, it would suggest that U.S. action would unblock [the negotiations] but I don’t believe it. Nations only will move if doing so aligns with their strategic interests. The United States needs to find its path to low emissions development – lack of action in the United States harms the United States more than the global community. Why? Because it makes the United States less competitive – you ignore carbon constraints at your own peril.”

In his view, it is not possible to motivate people by saying “this is good for the planet” – it is only possible if what is urged aligns with their own interests. He said “the United States has led the way in a lot of things – it is part of U.S. history to chart the way. Once barriers to action are overcome, the United States could, in a short span of time, become a real leader. “He cited U.S. research capacity and innovation as two of the nation’s strengths, but added that the United States is “now in a bad place.” At the same time, he did not want to assign all responsibility to the United States because “many hide behind the United States – Canada, Russia, Japan.” His outlook for the future was more positive – he felt that, while the United States cannot be seen as a leader today, it can become a leader -- “there is a willingness,” he said, “to work with the United States.” For these reasons, he chose “8” on a

10-point scale as the value he assigned to the importance of U.S. domestic action.

“We don’t know yet what is the right path beyond 2020. I don’t want to be in the trap of saying that Europe has it right and it’s just up to the United States to come around.” He noted that a variety of approaches are now being considered in the negotiations, both top-down and bottom-up. At the same time, he noted another phenomenon. Because the climate issue is so polarized domestically [in the United States], the United States [administration] has to “hide its good works.” He identified in particular the “Climate and Clean Air Coalition (CCAC)” launched by Secretary of State Hillary Rodham Clinton and EPA Administrator Lisa Jackson in February 2012, which seeks to promote action now among like-minded countries to reduce emissions of methane, black carbon and hydrofluorocarbons (HFCs). He said that that U.S. Special Envoy for Climate Change Todd Stern had been asked to brief UNFCCC negotiators on the CCAC initiative but he refused because the United States could not be seen reporting to a U.N. process. “Even the constructive things you do get hidden,” he said.

The same European was equally provocative when it came to the question of why the United States matters in the negotiations. What the United States does or doesn’t do matters, he said, because of the “concept of comparability of effort in addressing a common action problem. People are looking over their shoulders at each other. If the United States is not acting, others brake their own domestic implementation. When asked why the

United States plays such a role in determining the behavior of others, he said "the United States is seen as a force of good in the world – but not just that – the United States is hard-nosed – it is able to compare what it does with what others do everywhere. Because the U.S. system is open, there is broad knowledge of what is regulated and what isn't in the United States. I don't know if U.S. importance [in the negotiations] rates more highly than its one-fourth of global emissions, but what the United States does matters in a globalized economy. Your private sector can force governments to the bottom line."

### ***Is the United States A Leader?***

Every U.S. administration since the late 1980s has claimed publicly that the United States is a "leader" in dealing with the challenge of global climate change. Such claims could be parsed in a number of ways, asking various questions such as "what is meant by leadership"? Does "leadership" mean leadership within the relatively narrow confines of the negotiations under the U.N. Framework Convention on Climate Change? Or does "leadership" mean leadership more broadly in the court of public opinion? Did each U.S. administration mean the same thing in asserting that it was a "leader"? Exploring each question might shed some light on the credibility of the assertion.

Another means of getting at the credibility of this assertion would be to ask a range of knowledgeable, experienced people from various other

countries what they think. In their minds, is the United States a leader on the issue? This study followed that approach, asking 17 senior foreign climate negotiators their views on this matter. Their responses invariably proved richer and more nuanced than might have been expected.

A fairly common view among respondents was that expressed by a representative from a small, developed country. He said, "Leadership comes not from speeches but from doing things," and in his view the United States has been slow to act on climate change. Others were less diplomatic. Their responses ranged from "No, certainly not," to "Let me vomit!"

***Asia Developed:*** By and large, few of those interviewed saw the United States as a leader on the global climate issue, despite the claims of multiple administrations from the late 1980s to the present. One significant exception was the representative from a developed country in Asia who differentiated between leadership "inside" the UNCCC process and leadership outside of it. He acknowledged that the United States has not been a leader within the process but affirmed that the United States has been a leader outside of it. By way of substantiation, he pointed to U.S. "leadership" in such initiatives as the Major Economies Forum (MEF), the Global Methane Initiative (GMI) and the Climate and Clean Air Coalition (CCAC). All of these, he said, are shaping the global agenda in a positive way. At the same time, he said, it is not clear within the UNFCCC whether the United States really accepts the process there – he suggested that "maybe you don't know yourself."

**Africa Developing:** The representative of a significant developing country in Africa seemed to share this view. He acknowledged that the United States is a leader in technology, observing that the United States takes the lead in many technology-driven solutions. On “policy” approaches, however, he was more critical. Here, he said, the United States doesn’t take the lead, and he cited U.S. contributions to “market” discussions as “relatively weak.” He also felt that the United States has not taken much action on regulatory approaches either. On the other hand, he said that the United States has been a “big leader” in the “support” [to developing countries] debate. “At the end of the day,” he said, “there can be no solution without the United States. If the U.S isn’t in, then China won’t be in – and that’s 45 percent. And if the U.S. and China aren’t in, Russia won’t be in, Japan won’t be in – it’s a pack of cards.”

**Europe Developed:** Even those who emphatically rejected U.S. claims to “leadership” acknowledged that the United States has done some things well. One such representative from an important European country said, “You have done some small but beautiful things – like the adaptation strategy.” He also cited U.S. contributions to the science of global climate change, U.S. efforts to structure and work within the IPCC, emissions trading, innovation and modern technology. But he said that this was “too little” for a country like the United States, and he lamented that there is no reasoned debate in the United States anymore – that things have become “polarized” and “theological.”

**Asia Developing:** Another representative from an Asian developing country was even more pronounced. He said, “No, you’re not a leader. You should have done and should be doing much more. You invented emissions trading, but then you disowned it. You are playing a negative role. You’ve held the regime back, and you’re still holding it back.”

**Europe Developed:** A representative of a large European country, when asked whether the United States has been a leader, said, “I wouldn’t say that -- maybe you’re doing a lot but not enough to be leader in the global arena. You need to combine your actions at home with your international profile.” At the same time, perhaps by way of softening his response, he acknowledged that developing countries are parties to the Kyoto Protocol, but have no commitments under it.

**Africa Developing:** An experienced representative of an African developing country also responded negatively on the question of U.S. leadership. She said, “No, you’ve not ratified the Kyoto Protocol, nor have you taken pledges under the Convention. You haven’t done much at home and don’t seem convinced about the whole issue anyway.”

**Europe Developed:** One of the most outspoken of those interviewed, from a northern European country, said “All know that our actions are totally inadequate – they make a mockery of the promise of your President on signing the Kyoto Protocol in 1998. You’re trying to convince people with things like turning maize into fuel, which is totally inadequate when you have

no policies in place. It's unbelievable that you couldn't rule with a majority. Now we're all held captive to this kind of horse-trading [in Congress].

***Asia Developing:*** Another representative from an Asian developing country felt that the situation was even worse. She said, "You're using your resources to pressure us. What's lacking is an expression of political will – your constraints are more political than financial." But interestingly she said, "There's a whole part of the United States that we don't know – the 'climate deniers.'"

The question posed about U.S. leadership also asked about what is lacking if the United States is not a leader. Here, she was unequivocal: "Legislation for mitigation and adaptation." She said that the United States needs to lead with domestic emissions reductions, but she emphasized, "I'm not saying that there should be a carbon dioxide tax or a cap and trade system. " In fact, this was a surprising finding across all of the interviews undertaken: While all wish to see the United States do more and take serious action to address global climate change, no one said that the "litmus" test was either a carbon tax or a cap and trade system – the two methods most often discussed of attaching value to carbon economy-wide. All respondents felt that what the United States does specifically is a matter for national decision.

***Asia Developing:*** A representative of another large developing country in Asia supported this view. On whether the United States has been a leader, he said "Yes and no. No one says you've done nothing – you've moved far. But more is required. You are a global leader – you need to be an

environmental leader too. How you do it is debatable – it needn't necessarily be a legally-binding agreement, but 'engagement' is important. It's about using the right technologies and the right resources. If you do, it will inspire global confidence and help the world move forward. Each of us must use the fuels he has – this is the fate of countries – but we can certainly use technologies and do this in a way that all can easily use them. This is where the role of the United States is critical.”

**Asia Developing:** The representative of another large Asian developing country was similarly critical (“Your actions to date don't make you a leader”) but he was similarly nuanced. He felt that the 17 percent reduction commitment that the United States made in Copenhagen was paltry compared to U.S. capacity. He said that what the United States does will have an important impact on the process in the future. If the United States is “hard” against a cap, he said, it won't move. But while the United States is not a leader, he was loath to make it a target of blame. “What you're doing is not enough, but each country has a sovereign right to decide. Each country has its own circumstances and problems – each should be encouraged to do its best. What the United States is doing is not positive, but I won't say it is negative.” He felt that the United States could do better, particularly in the area of providing financial support to developing countries and technology transfer. He said that the total need not be a big number – even if others say it, he confided, they do not mean it. But even if not significant, “we want to see something.”

**Europe Developed:** A European representative felt that the question of whether the United States is leader posed a difficult question, the answer to which differed depending on the time period. In 1997 with the Kyoto Protocol, he said, the United States had been progressive in helping to shape the rules of that instrument, but then he noted that, “Bush walked away.” In his mind, U.S. rejection of Kyoto posed a “huge setback” for the process, and also for getting developing countries on board because then they could hide behind the United States.<sup>135</sup> At the same time, he celebrated U.S. initiatives linking energy to security. He observed, “In Europe, the renewables debate is about energy security.” But he also rued that the United States had “launched carbon capture and storage” and then cooled to it. He mentioned that the United States had also been progressive on “F-gases” [hydrofluorocarbons or HFCs] and the Montreal Protocol, but said that here too more could be done.<sup>136</sup> With regard to emissions trading, he complained, “First you jump in,

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<sup>135</sup> In the run-up to the Fourth Conference of the Parties under the UNFCCC (Buenos Aires, November 2-13, 1998), Argentine Environment Minister Maria Julia Alsogaray defended Argentina against criticism from its G-77/China partners for its efforts to develop a greenhouse gas emissions target (working closely with the Clinton Administration). She said that a key reason Argentina intended to adopt a target, even though, as a developing country, it had no obligation to do so under either the UNFCCC or the Kyoto Protocol, was in order to hold developed countries to their own commitments. If Argentina and others did not do this, she said, developed countries would use developing country inaction as an excuse not to implement their own commitments. Personal recall.

<sup>136</sup> After the parties to the Montreal Protocol agreed in 2007 to accelerate the phaseout of hydrochlorofluorocarbons (HCFCs), concern grew quickly that countries would move from HCFCs to HFCs. HFCs have no ozone depletion potential, but many are significant greenhouse gases. The fear has been that the world will solve one global environmental problem (depletion of the stratospheric ozone layer) while exacerbating another one (global climate change). For this reason, the United States worked with Canada and Mexico to develop a “North American Proposal” that would amend the Montreal Protocol to phase down the consumption

then you jump out.” “The world runs after the United States, and then the goal posts change.”

***Latin America Developing:*** A representative of a Latin American country felt that U.S. engagement has been lacking, that more could be done. He said that there had been a period when the United States was caught in discussion of national versus multilateral action -- all of which led to a situation in which not enough was done. Others were affected, he said, because they concluded they needn't do much either.

***Latin America Developing:*** The representative of another Latin American developing country took a different tack. In his view, the United States was a leader “whether you want to be or not.” He felt that the United States has not been ambitious in trying to influence others. He recalled the energy and excitement after the election of President Obama in 2008 and the administration's work in securing passage of the Waxman-Markey bill in the House of Representatives. But he said that the process got stuck and had a negative impact on the whole [international negotiation] process. He lamented the absence of a longer-term vision and that the ‘politics of the day’ seem to control the U.S. approach. He felt that things in the United States are uneven. He noted the work that California has done, as well as numerous U.S. cities and the New England Region. But because certain others will not engage – like Texas – he said that federal government efforts are needed. He

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and production of HFCs, which they have tabled annually for the past five years. Over 110 countries have agreed to address this issue under the Montreal Protocol, but several have not, including most importantly, India and Saudi Arabia. Thus no amendment has yet been adopted, while the use of HFCs continues to grow.

acknowledged that many governors are not climate deniers. He noted that if the United States did begin to move seriously to address global climate change, “we’d all know because you are so transparent.”

**Africa Developing:** The representative of an African developing country seemed to sum up the views of many on this question. He said “You send contradictory signals – look at the vigor of your Environmental Protection Agency, at state legislation and the strong requirements you impose for safeguards on oil drilling in Alaska; look at your car inspections – they are vigorous and you have strong standards; but there’s not much at the national, aggregate level.” He felt this lack was attributable to competitiveness concerns or more particularly special interests such as coal, steel and aluminum. He said, “We see both. You can’t say that the U.S. is good or bad because there’s a whole spectrum. The other problem he cited was “complacency.” “If the United States hadn’t stepped back after Kyoto,” he said, “maybe we’d still be using a 1990 baseline [for global greenhouse gas emissions] instead of 2005.” He felt that the United States could do more but was choosing not to do so, a pernicious choice in his view because others have chosen to emulate it. Like others, he acknowledged the different actions of different U.S. states; in his view, “some get it, others don’t.” He felt that special interests in the United States help produce this lack of homogeneity, citing oil companies who fund studies that claim that climate change doesn’t exist. “They have the resources to deny what is evident,” he said. Congress has the power to change this situation, he said, but Congress is heavily

lobbied. Elected officials must always get through the next election. He specifically cited U.S. agricultural subsidies as money poured into an effort to maintain an artificial system, money that then cannot be spent on climate change. “And I won’t even mention your defense budget.”

### ***How Could the United States Lead?***

Not surprisingly, perhaps, those who were less critical of U.S. claims to leadership on global climate change and who were more willing to acknowledge existing and ongoing U.S. contributions were less prescriptive in their responses to questions about what the United States would need to do to be a leader. They tended to see “leadership” in broader terms – beyond the halls of negotiations under the UNFCCC.

***Africa Developing:*** One representative of an African developing country said, “To be honest, I think you’re already taking ‘far-reaching’ action – you’ve had a lucky break with fracking, but you’re still the largest investor in technology. And you’re willing to get into partnerships as long as you don’t touch IP [intellectual property]. You are framing the international support system – you’re taking important action that is ‘far-reaching.’ On the ground [in the negotiations], [I’d give you] maybe a ‘4’, in other [areas] a ‘7’, but for big policies I’d give you a ‘10.’ If, for example, you made a pledge to a trajectory, it would be a massive policy step with major implications for global market-based approaches – it would have a major impact on carbon markets because you’re 20 percent of demand.” He differentiated between

committing to a “trajectory” and committing to a “cap” because he felt that a “cap” would be highly unlikely politically, but a commitment to a “trajectory” or a “budget” for U.S. greenhouse gas emissions he felt would be enormous and immediately influential.

**Asia Developed:** The representative of a developed country in Asia felt that an emissions trading scheme or a carbon market in the United States would, if successful, provide a means of convincing others, but he acknowledged the political difficulty of introducing such measures. In the alternative, he suggested that technology options that have been tested domestically could be applied elsewhere. He was a bit skeptical, however that energy efficiency measures or a renewable energy portfolio would be considered enough to produce a major change in the UNFCCC negotiations. He believed that actions to bring down greenhouse gas emissions would show that the United States is serious and would lead to change – but they would need to go beyond rhetoric. “A federal cap and trade system would go beyond rhetoric for sure,” he said. Still, both felt that there was no single path – that the United States has multiple options.

**Africa Developing:** Another representative of an African developing country had a somewhat different take. He felt that there needs to be linkage between what the United States does domestically and what it does internationally. “If you engage significantly in the Ad Hoc Group on the Durban Platform of Action [the negotiations for post 2020 commitments under the UNFCCC], it would matter.” In his view, carbon taxes are difficult

to manage – the concept is still very new. He said that other countries need a clear sense of what the United States is doing in terms of a target, and he felt that the current U.S. goal of a 17 percent reduction by 2020 is low. He suggested that the United States might consider going to the “upper band – 27 to 37 percent” and noted that his own country had pledged to a high level of commitments.

The representative observed that in his country, the Treasury wants to impose a carbon tax, but the trade unions won't have it – that his country is dealing with this in the context still of poverty eradication. In the United States, he noted that the climate issue cannot be divorced from the health issue that President Obama is also dealing with. He urged that the United States, “move out of negativity” and away from “the denialists.” He also urged that the administration not open an unnecessary debate, but that it get the issue out in the open and find a means to create progress. In his view, the administration could state a target but would need to engage in “fancy footwork” in determining how to meet it because there are so many different political constituencies. “Reversibility” [for example, the possibility that the United States might change its commitment with a change of administrations] also concerned him. But regardless of changes in the United States, he said, his country would continue to work with the United States. “Exposing the United States to pressure may be counterproductive. We need to manage the United States in a very strategic way,” he said. The representative said that a target would be an important signal and would

help consolidate progress in the process. But specifically how the United States manages at home “is up to you. The issue is how to make it sustainable – but yes, there are multiple ways to do this,” he said.

**Latin America Developing:** The representative of a developing country in Latin America had a similar take on the question. He said that a quantified, economy-wide target comparable in how it is structured to those of other developed countries with included compliance commitments would send a strong signal. While he knew it was a political impossibility, he couldn’t resist adding, “If the United States joined the second commitment period [under the Kyoto Protocol] it would also send a strong signal. He also believed that introducing a cap-and-trade regime would have the same effect, and noted that there is a multiplicity of cap-and-trade arrangements -- that neither the United States nor anyone else is tied to a unified system. At the same time, he cautioned that even such a move by the United States might not be viewed positively, particularly if it were seen to undermine the system under the Kyoto Protocol, for example, by setting up a system that would not be compatible with Kyoto’s Clean Development Mechanism. If a U.S cap-and-trade regime were seen as potentially undermining the existing Kyoto regime, it could create a problem, he said. At the same time, he felt that there isn’t one special action that determines what is “significant” or “far-reaching.” What was critical in his view is that the United States does more – a mitigation number that is higher. And if the United States were to do this, he said, people would start looking at the instruments being used to

achieve it – if they were not up to par, it would undermine the action. In his view, the IPCC identifies what needs to be done from a scientific standpoint, and the United States would always need to be within range or pulling others. He observed that such is the kind of demand on the United States. But he also agreed that there is no one special action that determines what is “significant” or “far-reaching.”

***Europe Developed:*** A representative from a developed European country maintained that actions to decouple economic growth from greenhouse gas emissions would show that climate action would not compromise economic growth [and thus would send a powerful signal]. While he did not advocate choosing a particular instrument to achieve this goal, he noted that a tax or an emissions trading scheme are the two principle ones. What matters, he said, is that the United States shows it can turn its greenhouse gas emissions around. The specific choice of instrument in his view would depend on the political context domestically in the United States.

***Europe Developed:*** A representative from a small, developed country in Europe felt that the issue is the “depth of commitment” and the “level of ambition.” He explained that, if the United States said it could do better than a 17 percent reduction from business-as-usual by 2020 it would be significant, but he acknowledged that this would be more a political statement of intent than delivery on a commitment. He observed that it is also possible to embrace the idea of a cap-and-trade system, but noted that if the United States were to enact legislation comparable to what Australia did

in 2012, this would be a “game changer.” Like others, he expressed concern for “reversibility” given the volatile political situation in the United States. For this reason, he was inclined to put more emphasis on the specific institutional arrangements adopted and on whether they would be difficult to reverse rather than on the level. He said, “It’s not the ‘announceables’ but the ‘consequences’ that matter.” In his view, the United States could put a price on carbon or institute a tax, or it could mix a cap in some sectors with a tax in others. Key would be recognizing that greenhouse gas emissions in the United States are too high – this would be “significant” and “far-reaching” to him.

**Asia Developing:** The representative of an important developing country in Asia expressed no strong view of what the United States might do but agreed that there are multiple possibilities. In her view, what would be most important would be a show of political will. She acknowledged that life styles are the hardest to change. When asked directly if a carbon tax or a cap-and-trade regime would be ‘significant’ and ‘far-reaching’ she agreed that they would, but she also acknowledged how hard either would be to achieve and noted that it would “be a long-term job.”

**Europe Developed:** The representative of a developed country in Europe said that “significant” or “far-reaching” action would consist of domestic legislation or an emission limit at the federal level. Still, she acknowledged that there are multiple possibilities and that they are not necessarily limited to a cap-and-trade system or a carbon tax. In her view if

the United States were to come up with something innovative, it might be even better.

**Europe Developed:** The representative of a large, developed European country candidly admitted that he lacked the expertise to have a precise view of the question. Still, he said, while the United States might take significant or far-reaching action domestically, and while it might have an impact, he questioned whether it would be a “defining impact.” He also observed that whatever the United States did, there would likely be suspicions that at any point it might quit or change the rules. He said, “You don’t play by the same set of rules as others.”

**Africa Developing:** An experienced, knowledgeable representative from a developing country in Africa said that a 30 percent reduction commitment would be “significant” and “far-reaching” and felt that there were multiple options that could be used to achieve such a goal, including a carbon tax or a cap-and-trade system.

**Africa Developing:** Another experienced representative from a large developing country in Africa said that it was difficult to have a clear view on this matter because he did not know enough about the fabric of the United States to say. He opined that the United States might generate electricity in a cleaner way, a renewable way, or make major investments in public transportation in urban areas. He lamented that there are some U.S. cities where a car is indispensable, where one has no choice. He suggested also more stringent aircraft emissions, or the modernization of fleets and actions

in the agricultural sector. He felt that the options in the United States are multiple because there is such a wealth of resources and there are so many possibilities at various levels including states, the Federal government and the private sector. He cited the U.S. response to the 2011 oil spill in the Gulf of Mexico as indicative of how things work in the United States. He said that fines were paid and people did not pull out. He expressed optimism that when all the elements are pulled together, people can go above and beyond what some think is possible.

**Europe Developed:** The representative of a small, European country said that people of the world would like to see the United States adopt measures that would require it to go beyond business as usual. He said that U.S. actions always remain within its “comfort zone” – “you are always eating other peoples’ bread,” he said. “Because government is in the hands of the people, you are not willing to strain, to accept limits, or limit others,” he said. “We in Europe feel guilty – Americans don’t feel guilty – you have no embarrassment for what happened. One value of America is that you don’t harm others, and if you do, you pay. You’re taking fundamental existence for granted by your outrageous per capita greenhouse gas emissions.” He cited various European actions as examples of more “responsible” actions: the European Emissions Trading System, its efforts to bring emissions from aviation within it, Europe’s 2020 Code, its building codes, its efforts to reuse and recycle. Still, he said, “we have trust in your intelligence – in how you do your overall work. If you could show us your overall number and say ‘we

will stick with this,' the rest of mankind will accept it. You are still technical and innovative geniuses. All children of negotiators [in the UNFCCC process] are queuing for places in your universities. You don't need to explain your methods. You still have that trust in a way."

From his perspective, the problem lies in getting the United States to commit, not in implementing its commitment thereafter. He was bewildered at why the United States had demolished cap-and-trade after starting it in the first place. He felt that much mistrust was generated after the United States made a political commitment [with the Kyoto Protocol], then was not able to ratify it and later came with a voluntary pledge. "What happened between 2001 and 2005 was incredible," he said, "I'm not sure even the UNFCCC would fly today. You are the 'science-based' society, but how do you explain, in the face of clear science from the IPCC, that you have just increased your greenhouse gas emissions in the past 15 years?"

In terms of potential options through which the United States might assert real leadership, he said "It all boils down to whether you can put a price on carbon." This representative said that efforts to control greenhouse gas emissions are really beginning to bite in Europe. In contrast, he said that U.S. infrastructure is particularly weak and particularly wasteful. But in terms of what specific measures the United States might take to address its greenhouse gas emissions, he said, "You know better what policy measures are effective in American society, but we wonder whether you've even looked at them. We're going to zero emissions – in a country where it is five degrees

centigrade most of the time – because we know how society will benefit from this effort. We’re not sure you’ve done anything like this.”

He identified climate change as always among the top three in terms of major threats for mankind among Europeans. He noted that people are informed about the issue and feel guilty about the resources they use and bear a sense of responsibility for what is happening today.

**Asia, Developing:** A representative from a large Asian developing country emphasized technology as an area in which the United States could demonstrate “significant” or “far-reaching” action – for example, if the United States were able to demonstrate how clean technologies could become cheap and available. He noted that there are sources of energy that are cheap – like shale gas – but the technology to exploit them is not cheap. How do you transform them, he asked? In his view, all nations are grappling with energy and how to make it available to people at prices they can afford. Needed are systems or mechanisms to do this, he said. In the United States, with its natural endowments, energy is cheap, he said, but in countries with more limited endowments, these are huge questions.

As to the range of available possibilities regarding action that would be considered “significant or far-reaching,” this representative observed that two things are needed for a carbon-based initiative or for fiscal measures: (1) alternative energy sources, and (2) affordability. He felt that alternative energy sources are needed because it is not a simple demand/supply situation – countries cannot change if they do not have the alternatives to

enable them to change. With regard to affordability, he pointed out that in poor countries people see carbon-based initiatives or fiscal measures as a huge burden – with social and political implications. By “affordable” he meant a price that would be seen as “no more than an irritant” – something that is not present now, particularly in Asia. Asked whether these options might work in the United States, he felt they could – but emphasized that “one size does not fit all.” He felt too that the United States must demonstrate leadership, contending that it cannot rely exclusively on a private sector, incentive-based approach. He felt that the United States has shown political will to move on healthcare, for example.

**Latin America Developing:** A representative from a Latin American developing country said that “an economy-wide target that is sufficiently ambitious” would be “significant or far reaching,” although he would not set a number as to the level. He noted that the framework and architecture of the Waxman/Markey bill, which sought to establish a cap and trade system – was something “most of us could have supported.” He said that the Waxman/Markey bill was viewed as extremely positive – particularly because it could “not [have been] easily unraveled with a change of government.” He saw cap-and-trade legislation as something that would work in the U.S. political situation, given the McCain-Lindsay-Graham legislation previously introduced.

In his view, there could be alternatives to cap-and-trade legislation – for example, if states were to undertake individual actions – but he

questioned how such efforts would add up. He also felt that there were fallbacks – the United States could decide to increase its energy efficiency, for example, but he wondered if such action would be sufficiently ambitious and sustainable across the political time horizon.

**Asia Developing:** A representative of a large Asian developing country suggested that the United States might raise its [current 17 percent reduction (below 2005 greenhouse gas emission levels) by 2020] pledge as an example of domestic action that would be “significant or far-reaching” but he said that it would have to go further than simply having EPA raise its standards for coal-fired power plants. He felt that, if the United States were to change its current pledge, whether through the introduction of a tax or a cap-and-trade system, this could be very significant, even if the effects would not be felt immediately but only in the intermediate and long term.

**Asia Developing:** Another representative of an Asian developing country was more pronounced with respect to the kind of domestic action that would be “significant or far-reaching.” He said simply “a tax or a cap-and-trade system.” He noted that Europe is doing both, but that from an environmental economics perspective a tax is easier. Still, he said, Obama backed a cap-and-trade system, which “fits the United States better because ‘tax’ is a dirty word.” If the United States were to begin down the cap-and-trade path, he saw possibilities for it to join with the European Union’s Emissions Trading System, which in his view would then spread globally – to Australia, Korea, China and India. A global cap-and-trade system would

lower costs and promote efficiency, he said. Once the United States started, demand for the Clean Development Mechanism would increase. It would also promote good investments in energy efficiency and Demand Side Management), he said. He was emphatic as to the choices, however. In his view there are only two: a tax or a cap-and-trade system.

**Europe Developed:** The representative of a major European country had a more detailed notion of what kind of action would be “significant or far-reaching.” In his view there are four areas -- all of which have to do with transformation into a low carbon economy -- in which action could/should be taken: (1) actions regarding the main sources of energy supply -- specifically, efforts to promote renewable energy, with natural gas being used for intermittent power; (2) actions to create a smart grid -- more decentralized than in the past -- and smart connectivity; (3) policies to promote technology innovation, e.g., a feed-in tariff, which he credited with bringing down the cost of solar power to a point where it is nearly competitive; and (4) efforts to promote the transition to new technologies once technical problems have been solved -- something he characterized as “upscaling” new technologies, engaging public/private finance and demonstrating how to make money with them. He felt that the time for such actions is particularly propitious now because people are receptive to them, especially in the wake of California’s power crisis and the Fukushima nuclear disaster. He acknowledged the massive shift to shale gas for electricity generation in the United States in recent years. He felt that how it is

characterized – as positive or negative – would depend on what role it plays ultimately. In the short term it may be positive, in his view, but in the longer term it may be negative.

***Would U.S. Domestic Action Change the Climate negotiations?***

Another area of inquiry about U.S. leadership in the climate change negotiations focused on the results that might obtain if the United States were to take significant or far-reaching domestic action. Those interviewed were asked whether such action would lead to a change in the negotiations, and specifically how they would rate this possibility on a scale of 1 to 10, with 1 being very unlikely and 10 being very likely. Interview subjects were asked the following specific question:

If the United States were to take significant or far-reaching action at home to address climate change, would this lead to a change in the negotiations? How would you rate this possibility on a scale of 1-10, with 1 being “very unlikely” and 10 being “very likely”?

Eight of those interviewed rated the possibility at “8” to “10”; one rated it at “7”; one rated it at “6”; six did not assign a number (although all but one of their responses made clear that they consider the possibility highly likely); only one rated it at “2 to 3” and this respondent was joined by another who clearly rated it as “very unlikely” but did not assign a number.

***Europe Developed:*** Beginning first with the respondent (representing a medium-size developed country in Europe) who rated the possibility toward “very unlikely” on the scale, she acknowledged that such

action by the United States would have an impact, but she said that, for developing countries, money and technology are more important. Joining her in this view was the representative of a large European developed country. He said that, "Actions at home are not enough to change the negotiations – it is not guaranteed that it would be locked under a legally binding regime – no, it won't lead to a change." The issue raised in his response – whether significant or far-reaching domestic action by the United States would be "locked in" – proved to be a concern expressed by others as well.

**Africa Developing:** The representative of a large African developing country expressed skepticism that such action would be pivotal in the negotiations. He rated the possibility as a "6", saying that while it would be likely to cause a change, "the timing would be a bit late. We have seen bad reflexes/behavior extend their roots into the process – coming from other developed and big developing countries. But it would have influence – it would put you in a position where you could ask more of other developing countries, the big ones in particular."

**Asia Developing:** The representative of a large Asian developing country said its impact would depend on how much political responsibility people attach to the United States – if 50 percent then it would influence by 50 percent.

**Asia Developed:** The representative of a developed country in Asia vacillated between a "5" and a "7". He favored the lower number both

because, in his view, Parties would still doubt and because others, his own country included, would not necessarily be able to do what the United States does; he favored the higher number because such action would give a concrete example to the international process – people would see results in terms of the reduction in greenhouse gas emissions, which he felt would “definitely lead to change in the negotiations.”

***Latin America & Africa Developing:*** At the high end of the scale were two developing country representatives, one from the Latin American region and the other from a large country in Africa. The Latin American representative rated it at “a conditional 10” – conditioned, he said, on whether the United States were prepared to reflect its action internationally in a legally-binding agreement. If so, then it would give a “tremendous push” to the negotiations; if not, then it would have little or no impact, he said. He explained that what is necessary is to get all of the major emitters on board, which will not be possible in his view without an international and robust transparency regime. The African representative rated the possibility at “9 to 10” saying, “Absolutely – you and China – there’s no effective solution without you and China.”

***Africa, Developing:*** Another representative from a smaller developing country in Africa rated the possibility at “9”, saying that it would have a significant impact, even if the United States will not ratify the Kyoto Protocol, because it would demonstrate comparability of effort.

**Europe Developed:** Sharing that view was the representative of a large European developed country, who said, “Yes, it would make a huge difference – there’s huge likelihood – “8 to 9.”

**Europe Developed:** The representative of a small European developed country also joined in this view. He said, “Yes, “9” – the USA is by definition the first mover and principle driver in international negotiations, in peoples’ minds and everywhere in the public. Your leverage is so huge. This showed in the chemical conventions – with mercury. That turned in one night. Doing your bit in climate would change the whole nature of the discussion – quite a number of developing countries are working to change, and if the USA would make a big move, they would get tremendous support. But there is still much suspicion that your main objective is to water down action. This was the issue in the Climate and Clean Air Coalition (CCAC) – is this an attempt to take away from forums, from the climate regime? This attitude is deeply rooted in developing countries, but also with our industrialized country partners. We decided to go forward with CCAC, but it took some convincing.”

**Asia Developing:** Those interviewed that rated the possibility a shade less likely included the representative of an Asian developing country. He felt that it would certainly change the negotiations, and he was quick to point out that the United States does not do things internationally that it has not first tested at home. It was for this reason that he felt significant or far-reaching domestic action by the United States would have a major impact –

because the United States would then try to replicate it internationally. U.S. insistence on emissions trading goaded the European Union, he said – “they weren’t much for it. The EU got on the train and now they’re enthusiastic. [Similarly], not signing the Kyoto Protocol had an impact on China and India. And U.S. insistence on meaningful participation has had an impact on them. They never anticipated the exponential growth [that they’ve recently experienced]. Now they are global players who have responsibility.”

**Asia Developing:** The representative of another large Asian country agreed. He said, “If the United States raised the level of ambition, it will have a big impact – others will consider whether they will do the same as the United States. What the future holds is quite uncertain to me – if Obama gets another term, the United States may take actions, but I don’t think it will lead to big change – maybe changes in standards, investment, regulations – but I don’t think that the United States will change its position. The United States doesn’t like an internationally binding cap, and I don’t think this will change. The United States can do more; every country should do its best, but the process won’t get into line.”

**Latin America Developing:** The representative of a developing country in Latin America felt that a stronger U.S. agenda at home would change not only its negotiating positions but also would remove the “constraints” argument of others. He said that it would change the level of comfort of others if the United States took such action domestically. “This is

a tough, collective action problem,” he said, “and if the biggest player changed, it would be a big deal.”

**Africa Developing:** The representative of a large African developing country agreed. He rated the possibility as an “8” and said, “It would influence – it [would] create possibilities, change mentalities. Initiatives at home reducing your own emissions would say to people ‘we need to engage in this – people in the United States are saying so.’”

**Europe Developed:** The representative of a small European developed country also rated the possibility at an “8”, saying that it was “very likely.” The representative of a medium-size developing country in Asia agreed, also giving it an “8.” The representative of a large developed European country joined them. He said, “Yes, actions to decouple economic growth from emissions would show that climate action won’t compromise economic growth. Normally in the regulatory field you would have a cap on emissions – I’m not saying you would need to use one or another instrument – only that you must show that you can turn emissions around. This all depends on the political context at home. A tax or trading are the two principal [means] – you can try with subsidies, but how do you mimic what the market is doing?”

### ***Could Anyone Else Do it?***

Interview subjects were also queried about whether the opportunity now enjoyed by the United States to influence the global negotiations on

climate change by taking significant and far-reaching action at home could be lost if the opportunity were not seized by some date certain in the future.

Views were also elicited on whether any other country now has a comparable ability and a comparable opportunity to influence the global climate negotiations. In addition, this line of inquiry sought to determine whether, in the absence of significant or far-reaching action by the United States, any other country or group of countries is likely to step forward to catalyze global action?

Those interviewed were asked the following specific questions:

(1) If United States today has an opportunity to influence the negotiations in a direct and positive way, could this opportunity be lost if not taken by some date in the future? How might it be lost?

(2) What other countries could produce such positive momentum in the negotiations by taking significant or far-reaching actions at home?

(3) Does any other country or group of countries have the same opportunity today? In the absence of significant or far-reaching action by the United States, is any another country or group of countries able and likely to step forward to catalyze global action? If so, who and why?

### ***Could the Current U.S. Opportunity Be Lost?***

Very few of those interviewed felt that the opportunity that the United States has today to influence the negotiations in a direct and positive way could be lost if not taken by a date certain in the future. The responses of only three differed on this point.

***Africa Developing:*** One representative from a developing country in Africa felt that the opportunity now enjoyed by the United States could disappear if the United States were to back out of the process; she seemed to have in mind the kind of “withdrawal” experienced previously with the election of President George W. Bush and the U.S. decision soon thereafter not to ratify the Kyoto Protocol.

***Africa Developing:*** Another representative of an African developing country was not sanguine that the current U.S. opportunity to influence the process directly and positively would always be present. In his view much will depend on the course of events. He felt that the current U.S. opportunity would not be lost if things remain essentially as they are today, but he felt that it could change if countries like Australia, Canada and Russia were to come back to the Kyoto Protocol. [Since these interviews were conducted, Australia signed up for a second Kyoto commitment period but later renounced its domestic emissions trading regime, while Russia specifically declined to take on a second Kyoto target and Canada formally renounced the Kyoto Protocol shortly after the 17<sup>th</sup> Conference of the Parties in Durban in December 2011.]

***Latin America Developing:*** In a somewhat similar response, one representative from a Latin American developing country noted that the climate negotiations themselves are fragile and are constantly on the verge of unraveling. He observed: “If the system doesn’t deliver with a certain level of consistency, people start looking at alternatives.”

These three thus held that the current opportunity enjoyed by the United States to influence the negotiations could be lost if the United States itself backed out, if others (especially current outliers) were to rally around a common approach or if the negotiations themselves were to unravel from their own inability to deliver. Still, these represented a minority view – most felt that the opportunity enjoyed by the United States today will not diminish over time because of the pre-eminent role now played by the United States and likely to continue to be played well into the future – although several noted that the relative influence of the United States is likely to diminish over time in any event – principally because of the ascendancy of China. In this, they tended to reinterpret the question asked – from one about a specific opportunity that exists today and whether it could be lost if not seized -- to one about the relative role of the United States in the world generally or in the world of climate negotiations in particular.

***Africa Developing:*** For example, the representative of a large developing country in Africa said: “I thought long and hard about this question. Irrespective of what you do, your influence on the direction of the future multilateral system is there – people may not like the choices the U.S. makes, but they influence. And this is not limited or time-defined -- as long as you are 20 percent [of global greenhouse gas emissions] and you have this ‘symbiotic’ relationship with China. The United States and China – for this relationship to break, China would have to divorce itself from the U.S. market; and you would have to divorce yourselves from the Chinese buying

U.S. treasury bonds. I guess it could change if the economic situation changed dramatically – but not in any frame of reference I can imagine.”

***Latin America Developing:*** Similarly, the representative of a developing country in the Latin American region affirmed that the opportunity now enjoyed by the United States is not time limited “because you’ll always be the most important Party – you are the richest, biggest emitter. Our analysis is that China won’t move unless you guys move.” He pointed out that the passionate statement at the Durban Conference of the Parties in December 2011 by China’s lead negotiator – Xie Zhenhua – as the final “deal” materialized was not [solely] directed at the United States and other developed countries but also at the Alliance of Small Island States. *[Note: Xie bristled at the notion that developing countries haven’t taken steps to address climate change and railed at developed countries for their own “inaction.”]* China, he said, felt that all the fire should be directed at developed countries for having failed to do their part. But, he continued, the science is clear. If there is no action taken by China, all the ambitious goals anyone might set will not be achieved. He felt that much hostility had been directed [by China] at AOSIS because [they] are skilled at marshaling the science. He recalled the clash between Grenada and China in Copenhagen over the issue of whether the global goal should be to keep global warming below two degrees Centigrade or below 1.5 degrees Centigrade, noting that both India and China were firmly against the 1.5 degree target. This, he said, is how the concept of the review of the target was introduced – and AOSIS is

upset now with efforts of countries [like China] to redefine the scope of the review.

***Asia Developed:*** Another representative – this one from a major developed country in Asia – also doubted that the United States will lose its current opportunity because, he said, “the United States is THE super power.” But he urged that the United States and China “join the game simultaneously. Without the United States joining the international game, China won’t join.” His preoccupation with the United States and China was widely shared by others – specifically the notion that for things to change dramatically both the United States and China must engage. His conviction in this respect was so strong that he urged that the United States and China should “just do it and let others follow.” If there is a need for “legitimacy”, he said, they could bring [their arrangement] back to the UNFCCC process and let others join it if they choose. Aware of how ‘imperial’ his proposal might seem, he said, “I’m a UN lover, but I see the limitations of the UN. If we select the format correctly, maybe the UN is the place – but [now] this is just sort of chitchat. Maybe we made a mistake to set it up this way. Maybe, if we were to change the structure, the UN [might] still work.” He candidly admitted that if the United States and China were to join forces, his own country would be anxious – but he said this would be “good.” And he affirmed that his country would want to be a part of the deal.

***Europe Developed:*** A representative of a small European country focused less on whether the United States would lose the opportunity it

currently enjoys and more on the critical decision points in the negotiating process. He felt that 2015 will be a crucial year, observing that the next full assessment of the Intergovernmental Panel on Climate Change (IPCC) will be available then and “we will have to make a deal for a legally-binding instrument for all – so actually there’s not much time. We will be coming to a very difficult time if we lose 2015. All is now building up to that.”

***Africa Developing:*** Echoing his view was the representative of a large developing country in Africa. He said, “If nothing is done soon, people will ask, ‘Why must I abide by certain rules if others won’t follow?’ He felt that the window for demonstrating that it is possible to mount an effective global response to climate change is narrow and that it will be necessary to act “very soon – by 2015.”

***Asia Developing:*** Another representative of a major Asian developing country emphasized that leadership lies in technology and in the ability to use technology to control emissions. He noted that this is not China’s strength but affirmed that the United States is a leader in this area and would remain so. He felt that the United States could have a large and significant multiplier effect. He emphasized that technology is the key driver and that the United States will continue to have power and influence into the future.

***Europe Developed:*** The representative of a European country drew a contrast between China and the United States, noting that China focuses on economic development, while the United States focuses on policy, research,

science, etc. In her view, the United States will not lose its opportunity to influence over time.

**Asia Developing:** The representative of a large developing country in Asia considered the question in a different way. He noted that the United States does not seek to influence the UNFCCC negotiating process by its domestic action. He said flatly that the UNFCCC negotiating process is not a driver of U.S. policy. He felt that it is hard to define what “positive influence” consists of – because all efforts to influence are based on one’s own interests. He contended that “historic responsibility” is an important fact, and that even in coming decades the U.S. impact on climate change will not be reduced. He thus rejected the notion that the United States might have a narrow “window of opportunity” or that the U.S. impact/influence on the process would diminish soon. The linkage he made between continuing influence because of continuing responsibility was novel.

**Asia Developing:** The representative of another Asian developing country took a longer-term view, noting that U.S. influence is likely to decline over time because China’s will grow. He averred that China is the number one investor in Africa today and the number one importer of African oil and products. By 2025 China’s will be the number one economy as well, he said. China’s influence is tied to economics and for the next 10-15 years he felt that China would be ascendant. At the same time, he said that the United States feels “more shaky” than it should. In his view, “Your system/infrastructure are real sources of power – China doesn’t have these.” But in his view as well,

“America’s current leadership follows the masses – instead it should lead. American leadership, public opinion and media are all controlled by money – American leadership should rise above that. In his view, a good example could be found in Canada’s former Prime Minister Paul Martin.

**Europe Developed:** The representative of a significant developed country in Europe also felt that U.S. influence would diminish over time – from perhaps an 8.5 on a 10 point scale today to a 6 in 10 years. But he wondered what such a “loss” would mean. He said that it would likely mean that the United States is able to produce much smaller political benefits. But except in technology and innovation power, he averred that the United States is not a leader today but a follower – in the arena of global action.

### ***Other Candidates Who Might Galvanize Global Action***

Practically no one interviewed felt that there is any country other than the United States that would be able to produce positive momentum in the climate negotiations by taking significant or far-reaching actions at home. The single exception mentioned by some was China, but most said that there is no single country, including China. A number of those interviewed felt that various combinations of countries might be able to exert significant, though not necessarily “game changing” influence. Such groups included: (1) China, India and Brazil collectively; (2) the Umbrella Group countries (minus the United States) plus the big developing country emitters; (3) Canada, Japan and Russia collectively; (4) the Umbrella Group countries

(minus the United States) collectively; (5) the European Union, Japan and the BASIC countries collectively; (6) Europe collectively; (7) India, South Africa and Brazil collectively; and (8) the EU and China collectively. In nearly all cases the alternatives mentioned were individual views – none of those interviewed coalesced around a single alternative and the ideas of some were directly contradicted by the views of others.

***Asia:*** The representative of an Asian country offered some of the most colorful views. He felt that China could – but not the EU. He felt that India might but said that it is a little bit too early – because India is so riveted on its level of development and the survival/development of the country. He said that India is not ‘internationalized’ yet – that it’s mind is still on “getting something from the West, unlike China.” He felt that Brazil has potential but has not figured out how to behave – how to lead Latin American countries.” In his view, “Brazil is not yet a global powerhouse.” He said that the country had made some progress under Lula but that it still needs to decide what it can offer. He noted that it is said that Mexico is too close to the United States and too far from heaven; Brazil, he said, “is not too close to the United States and not too far from heaven, but it must lead Latin America in talking to the United States – because the United States forgets Latin America.”

***Africa Developing:*** The representative of a large developing country in Africa returned in his response to this question to his earlier comment about the “symbiotic” relationship between the United States and China. He said, “China hates to be alone, and is dragging the BASIC countries along with

it – and it is very difficult not to be dragged. You too have been very successful at dragging other people. All of WTO and the Breton Woods institutions are the U.S. dragging others along. Now China is doing it, with the size of its market and such.” When asked if there were any one else besides China, he said, “Russia had the potential, but dropped the ball – Russia can pull Europe a lot because it controls the gas.”

***Europe Developed:*** The representative of a large European developed country was somewhat more expansive. In his view, there are a number of candidates, including: (1) China, whose market power is extraordinary, and is building new infrastructure at a pace that completely outstrips old, outdated Europe and the United States; (2) ‘Collective Europe’ – “if we believed in our strength in capturing new technology markets, we could do so [exert game-changing influence on the climate negotiations] as well”; in his view there is already a European shift toward Asia, but it is too slow – and it shouldn’t happen at the expense of Europe’s transatlantic ties – “we need both,” he said “because we have the same history, culture and security and economic concerns, but sometimes we forget this;” (3) China and Europe together, if they were to “go strategic”; and (4) India, Brazil and South Africa – which collectively could be progressive, and (5) the BASICS together (China, Brazil, India and South Africa). Most of those interviewed, however, were less inclined to see so many different constellations of powers that could galvanize global action.

### ***Who Else Might Step Forward If the United States Does Not?***

This study differentiated in the questions asked of those interviewed between what other country or countries could galvanize global action on climate change and what other country or countries might be likely to do so, if the United States does not. Many felt that, while a broad coalition of the willing – involving perhaps developed and developing countries -- could do so, no such coalition is likely to emerge. Why not? Because there are no incentives that would cause it to do so – whether positive or negative, they said.

***Latin America Developing:*** The representative of a Latin American developing country said that others will still look at ways to do more, and he suggested that if a joint effort were able to raise the level of collective action significantly, it could raise things broadly and develop into a virtuous circle, not attributable to a specific country or group. He felt that the BASIC countries will do more, “but the United States coming in will set the stage for when and how this happens.” “If the United States comes in,” he said, “I think all others would do more. If not, others will do more...but less than they would with the United States coming in. No one would have something comparable in terms of impact as an individual player.”

***Africa Developing:*** The representative of a large African developed country echoed his view; he said, “People may do things but they will go for the lower end of the range – a minimalist approach. This is general tone of the process now.”

**Asia Developed:** The representative of a key developed country in Asia agreed that no one else is likely to step forward because all think that the United States should take the first step. “China won’t jump without the United States,” he said, “but China and the United States could jump together.” He said also that, “Only a country they [the Chinese] fear like hell can influence them.” He felt that for the next 10 years China would continue to “fear” the United States. He also noted that China fears for its physical survival – and that climate change could threaten China’s physical survival.

**Africa Developing:** One of the most thoughtful responses to this question came from the representative of a large developing country in Africa. He said, “China by choice has the opportunity but by choice has chosen not to. The Chinese are very well aware of their global leadership role, they’re very proud of this and very serious about it, but their status in the group [not clear whether ‘group’ meant BASICs or G-77 more broadly] provides temporary advantages. China is trying to consolidate and extend its temporary advantages. If you analyze their numbers, they are very carefully calibrated to be just below yours.” When asked why China has chosen to play this role, that is, one step behind the United States, he responded “Because of common but differentiated responsibilities, equity and historic responsibility.” When asked whether he thought this was a matter of basic fairness in the Chinese view, his response was dismissive. He said, “I think this has nothing to do with ‘fairness.’ The issue [for them] is how to extend their temporary advantages for as long as they can.” When China ultimately

emerges in an ascendant position, he said, the regime it imposes will not be 'fair.' He was completely skeptical that the concept of 'fairness' plays any role in how things actually work in the world.

**Asia Developing:** Skepticism also emerged in response to questions about whether Europe would step forward if the United States does not. One representative of an Asian developing country noted that Europe is divided internally. The representative of another large Asian developing country expressed skepticism also because Europe's contribution to global emissions, even collectively, is not that significant. He said that, "even if they raise their level of effort from 20 to 30 percent – it will be viewed well, but doesn't mean we'd be moved to act." A third representative of a large Asian developing country observed that Europe is critical because it is a crucible of technology development. But he said that Europe must make this technology available and affordable, and that Europe must act ambitiously. "At the moment, they are not," he said. "They are hiding behind the numbers – they are using soft sectors to meet their targets but they are not really serious."

**Europe Developed:** The representative of a small European developed country echoed the sentiments of others in saying that there is no one other than the United States that could produce a profound change in the climate negotiations through significant or far-reaching domestic action. He said that no one would move without the United States -- that they are not in a position [to do so] historically, economically or politically. He said that many don't want to move at all, and would likely make good arguments to

avoid doing so, even if the United States were to act – but that it would be harder for them if the United States acted. He predicted that the EU would go to the high end of its range (i.e. to a 30 percent reduction from 1990 levels, versus the current 20 percent reduction pledged) immediately. He said, “We have positive forces that should be recognized and used – South Africa, Mexico, Peru, Thailand, Indonesia – could be part of a new coalition emerging in the developing world. They don’t know whether to move when [there is a] great gap in [the] performance of Annex I [developed countries listed in Annex I to the UNFCCC].”

***Europe Developed:*** A representative from a large, European developed country observed, “In the absence of the United States, I don’t think anything significant or far-reaching will happen. I don’t think it is workable to isolate the United States. Individuals, even in this process, make a difference – [former Minister of Environment and Forests Jairam] Ramesh from India” [for example]. [But] “Whatever happens [in the United States] has to be bipartisan. If [you] want to move something, [you] need support from both sides; somehow this has broken down in the United States.” Perhaps portentously, he added, “I can’t believe Obama can do it in a second period.”

The representative of a major developing country in Africa opined that a group of the BASIC countries might step forward, but she considered that this is not likely in the near future. She noted that much is demanded of those countries, but not as much as is demanded of the United States. “It’s a

matter of those that 'ought' to do things," she said. In terms of galvanizing global action, she said that the United States is in a unique position to do that, not just because of its size, its emissions and its wealth but also because of its impact on others. "A lot is expected of you," she said. "If you wake up and find that not much is expected, that's the time to worry."

## **Chapter Four - How Does Policy Change?**

The interviews recounted in Chapter 3 with foreign climate change negotiators provide ample evidence of the importance of the United States in crafting a solution to the climate problem, of the opportunity that the United States now enjoys to influence the global negotiations, of the wide space the United States has to develop significant, far-reaching domestic action that makes sense in its national circumstances and of the enormous impact such action would have on the negotiations themselves. Why then has the United States been so reluctant to do so? If U.S. climate policy is stuck, how and when might it change?

To answer this question, it may be useful first to ask more broadly how does public policy change in the United States? How does an issue become a widespread public concern – how does it get onto the “public agenda”? Once an issue attracts significant public attention, how does it move from something people worry about to something they act upon? How does such change occur? Does it evolve over time, growing in importance at a steady rate? Or does it occur abruptly, with long periods of equilibrium punctuated by explosive, transformative events that usher in new periods of equilibrium. Even more important, what causes change to occur? How do major disruptions to the established order come about? How does framing an issue affect its rise to serious consideration? Does policy change lead to change in public perceptions – or do public perceptions, and public values, change before policies?

Much literature in the field of political science addresses questions like these. What does it say that is relevant to U.S. policy on climate change? Does it suggest why and how U.S. climate policy has changed over time? Can it help to predict when, how and why tectonic change in U.S. climate policy may yet occur in the future?

The chapters that follow will discuss these issues drawing on the writings of John W. Kingdon, Frank R. Baumgartner and Bryan D. Jones, and Thomas R. Rochon – all prominent and highly influential theorists on public agenda setting and public policy change. In each case, an initial chapter will unpack their major ideas, while a subsequent chapter will apply them to the climate issue. The purpose will be to identify factors that point to how and under what circumstances U.S. policy with respect to global climate change may shift dramatically, leading to a major, comprehensive national effort to come to grips with the problem.

### ***Process Streams and Public Policy***

Few ideas exist without antecedents but those of some thinkers stand out as ideas that marked a significant turning point in our understanding or insight. The ideas of these thinkers are often said to have been “seminal” – that is, they are recognized to have triggered new schools of thought or lines of inquiry. One such thinker is John W. Kingdon, whose *Agendas, Alternatives and Public Policies*, first published in 1984, is now a classic in U.S. political science on public agenda setting and policy formulation. In it he deals with

how the public agenda is set -- with how issues get on the “public agenda” and with how they move (or fail to move) once there.

This chapter will unpack the major aspects of Kingdon’s theories, providing examples (as he does) of how these work in practice. The next chapter will consider them with specific reference to climate change and draw conclusions as to how Kingdon’s ideas may help gauge when and how U.S. policy on climate change may yet evolve in the future.

In Kingdon’s conception, three separate process streams run through public policy making: (1) problem recognition, (2) the formation and refining of policy proposals, and (3) politics.<sup>137</sup> He distinguishes between the *governmental agenda* and the *decision agenda* – the set of issues and problems that hold the attention of government officials at any one time versus a smaller set of issues that is “ripe” for decision – but the process streams he posits are common to both.

### ***Problem Recognition***

According to Kingdon, problems come to the attention of policy makers in various ways, sometimes because systematic indicators signal that there is a problem. Examples of these indicators include: highway deaths, disease rates, immunization rates, consumer prices, costs of entitlement

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<sup>137</sup>John W. Kingdon, *Agendas, Alternatives and Public Policies, Second Edition*, (New York: Addison-Wesley Educational Publishers Inc., 2003), 87.

programs, etc.<sup>138</sup> Kingdon notes that, in addition to routine monitoring, studies are often carried out on particular problems at particular times. But he acknowledges that neither indicators nor studies are used primarily to determine whether or not a problem exists. Instead, policy makers use them to assess the magnitude of a problem and to become aware of changes in a problem.<sup>139</sup>

How then do policy makers determine whether or not a problem exists? Here Kingdon is not completely clear. On the one hand, he notes that policy makers may consider a change in an indicator to mark a change in the state of a system – which they then define as a problem.<sup>140</sup> At the same time, he suggests that problem recognition rests as much on perception and intuition as on analysis of data.<sup>141</sup>

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<sup>138</sup> Ibid., 90

<sup>139</sup> Ibid., 91

<sup>140</sup> Ibid., 92

<sup>141</sup> For example, in his discussion of the importance of powerful symbols in focusing the attention of policy makers, (e.g., California's Proposition 13 limiting property tax increases as a symbol of restiveness among taxpayers), Kingdon notes that, "Symbols catch on and have important focusing effects because they capture in a nutshell some sort of reality that people already sense in a vaguer, more diffuse way." Ibid., 97-98. Similarly, in his discussion of conditions versus problems, Kingdon says that, "Conditions become defined as problems when we come to believe that we should do something about them. Problems are not simply the conditions or external events themselves; there is also a perceptual, interpretive element. As one respondent replied, when I asked him why a new initiative on smoking should come from HEW at the time that it did:

I don't know. I don't know if there is any answer to that kind of question, even in the abstract. People just finally decide that they have to do it. That sort of thing has happened with a lot of social problems. We live with these social problems for a while, and then we finally decide that if we're serious about them we should do it. The problem doesn't have to get any worse or any better. It doesn't have to be some major change in the problem. Take

This duality plays out throughout his discussion of how problems are recognized. Kingdon observes that problems may not be self-evident from the indicators and argues that they often need a focusing event to get the attention of policy makers. Crises, disasters, powerful symbols that catch on or the personal experiences of policy makers can act as focusing events, he maintains. With respect to disasters, he notes a difference between crises and disasters in the fields of transportation, on the one hand, and health on the other. He observes that crises and disasters occur much more frequently in the field of transportation than in the field of health, a phenomenon he attributes to the different structure of the two domains and the fact that crises are more “aggregated” in the field of transportation than in the field of health. For a crisis to occur in the field of health, it must build patient by patient – individual cases must be aggregated into a study or statistic that proves compelling, whereas in transportation, when something goes wrong (a plane crash or a train wreck) it is “pre-aggregated,” according to Kingdon.<sup>142</sup>

Kingdon also notes that a focusing event rarely is sufficient by itself to push a problem to prominence on the public agenda. Something else is needed, he maintains. This “something else” consists first of the need for the focusing event to reinforce a pre-existing perception of a problem, second for it to serve as an early warning of a wide-spread condition that needs

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poverty. Poverty didn't get any worse. Lyndon Johnson just decided to undertake this war on poverty. Why one moment seems better than another I don't know. Ibid., 109-110

<sup>142</sup>Ibid., 95-96

attention, and third for one focusing event to work in combination with similar events occurring close together. Says Kingdon, "Awareness of a problem sometimes comes only with the second crisis, not the first, because the second cannot be dismissed as an isolated fluke, as the first could."<sup>143</sup>

In his discussion of problems, Kingdon also addresses why some fade from prominence. Among the reasons he gives: (1) sometimes government actions solve problems and they fade away; (2) sometimes government officials believe they have solved a problem (even if they have not) by enacting legislation or making an administrative decision; (3) sometimes sufficient action can be taken to eliminate the more extreme consequences of a problem; (4) sometimes people simply become inured to a problem; (5) sometimes, programs designed to address a problem grow to the point where they elicit negative reactions; (6) sometimes programs to address a problem reach a point where further efforts are unsustainable; (7) sometimes if solutions are not readily available or prove too difficult, policy makers lose interest and the problem may need to lie fallow for awhile; and finally (8) budgetary constraints may cause problems to fade from view.<sup>144</sup>

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<sup>143</sup> Ibid., 98

<sup>144</sup> Ibid., 103-109. Kingdon notes that, "Tight times lead people to be conservative, to protect what they have, and to avoid big changes. Slack resources free up organizations. They have more room for experimentation and more resources to sink into production of innovations." Ibid, 109. Most revealing on this question of budgetary constraint is the observation of one of Kingdon's survey respondents on Capitol Hill:

Ever since I've been dealing with these things, it's been my impression that the single overriding issue is the impact on the federal budget. You can take all the analysts and get them in a room, and they'll talk and talk and talk, but when you get into a serious

Kingdon points out that there is a difference between problems and conditions. He says that conditions only become problems when we think something should be done about them. He uses poverty to illustrate this point, noting that liberals and conservatives might both agree that there is a particular income distribution in the population, and that some are poor by any classification. But they disagree over whether government should be used to address poverty – with liberals seeing it as a problem and conservatives seeing it as a condition. Even if both agreed that poverty is a problem, they might still disagree that it is “appropriate for government action.”

Comparison also factors into problem definition in his view. If others are achieving things but we are not the mere fact of being behind is enough to constitute a problem for some people, Kingdon maintains -- which can apply across nations. Examples he mentions include the Soviet launch of the first Sputnik, French high-speed trains and Canadian national health insurance.

Categories matter significantly to problem definition, according to Kingdon, so that putting a problem in one category versus another can have an enormous influence not only on how people see problems, but on whether

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discussion with the president or with a committee chairman, the first thing they begin with is, ‘I think we can spend x dollars.’ And x dollars is what you come up with. That happened with welfare reform. I would guess that if you asked anybody proposing welfare reform, ‘Why five billion,’ they’d say, ‘That’s what we can buy right now.’ They’d probably say it’s the wrong thing to do too, but that’s what we can buy., Ibid., 107

they see them. The most compelling example he gives is that of transportation for the handicapped. In the 1970s, the problem took hold and ultimately meant retrofitting existing subways and facilities with elevators and other devices to make them accessible to the handicapped. The problem could arguably have been solved more cheaply and conveniently by providing separate services (e.g. dial-a-ride alternatives or subsidized taxis). But Kingdon notes that the problem turned on how it was classified – in this case, it was viewed as a civil rights issue rather than a transportation problem, such that separate was not equal.

Kingdon points out that old categories tend to persist for a long time, that “government’s first instinct is to preserve old categories as long as possible.” Changing categories can threaten someone’s interests, he says, so that politicians seek to put off such changes as long as possible. He cites the difference between “construction” and “maintenance” of the federal highway program as a leading example. At the outset, the federal government was to help pay for new construction, but states and localities were to pay for maintenance. Over time, however, local government would not or could not pay for all the maintenance needed. At the same time, the federal government could not simply take over the expense of maintenance altogether. Instead, some things that were once considered “maintenance” (resurfacing an existing road, for example) were instead called “construction” so that they could be paid for by the federal government. The definition of what “construction” embraced thus changed over the years.

Kingdon notes that, “Eventually the fit between the categories and reality becomes so weak that new categories emerge.” In the 1960s and 1970s, not only were federal highways deteriorating but so too were railroad rights-of-way and locks and dams. Eventually, people began to link them all as “transportation infrastructure deterioration” rather than as deterioration of the infrastructure for separate transportation modes – the creation of a new category that signaled a much more massive problem than if each mode were viewed individually, and that argued for significantly more resources to rebuild. In Kingdon’s view, “The emergence of a new category is a signal public policy event” opening up new definitions of problems and conceptualizations of solutions.<sup>145</sup>

### ***Policy Proposals***

The second policy stream that Kingdon discusses is the formation and refining of policy proposals. This is something that takes place within a community of specialists – “researchers, congressional staffers, people in planning and evaluation offices and in budget offices, academics and interest group analysts.” He likens the process of generating alternatives and proposals in this community to the process of biological natural selection. “Much as molecules floated around in what biologists call the ‘primeval soup’ before life came into being, so ideas float around in these communities.”<sup>146</sup>

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<sup>145</sup> Kingdon, 112-113

<sup>146</sup> Ibid., 116-117

He argues that ideas rise and fall, fade and recede, confront one another and combine with each other. Some survive and some are taken more seriously than others. Kingdon calls this the “policy primeval soup.”

Life in these communities goes on largely unaffected by political events or pressure from constituent groups. Specialists tend to know each other well and have common interactions, although Kingdon points out that policy communities vary greatly in their degree of fragmentation. Some are closed and tight-knit, others are more diverse and fragmented. Communities tend to form around specific activities or aspects of activities – e.g., health care or transportation – but within these broad areas there can be significant fragmentation – e.g., biomedical researchers, manpower specialists, and insurance advocates or urban mass transit, aviation and highways.

Fragmentation within policy communities carries a variety of consequences. The first of these is policy fragmentation – one group may be completely unaware of what another group is doing. As the result, a group may act completely unaware of the implications of its action for other groups. Kingdon notes that building a national highway system had profound consequences for railroads (and was one factor that led to the deterioration of railroad services) and for urban areas (that experienced considerable dislocation), but such consequences received little attention at the time because of fragmentation in the transportation policy community. Less fragmentation, on the other hand, promotes more common outlooks, orientations and ways of thinking, meaning that specialists share common

paradigms. On the other hand, greater fragmentation produces agenda instability, such that the agenda is “free to shift from one time to another in a more volatile fashion.”<sup>147</sup>

Kingdon assigns much weight to the role of “policy entrepreneurs” in “softening up” the general public, more specialized publics or the policy community itself to particular policy proposals. Policy entrepreneurs are advocates -- individuals willing to invest their time, energy, reputations, and sometimes, financial resources in pursuit of a particular policy proposal. They can be people in or outside of government, in appointed or elected positions, in research organizations or interest groups.

In the “policy stream” Kingdon argues “ideas continuously confront one another and are refined until they are ready to enter a serious decision state.”<sup>148</sup> He believes that this creative process involves more the combining of old elements than the invention of new ones. Because policy communities and the general public are both characterized by inertia and are resistant to change, policy entrepreneurs help introduce ‘new’ ideas (actually, recombined elements of old ideas) and build acceptance for them. Policy entrepreneurs use many means, including making speeches, introducing bills, writing op-eds, etc. to dramatize a problem or proposal. The ‘softening up’ process can take considerable time but is a necessary prerequisite for a proposal to be taken seriously.

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<sup>147</sup> Ibid., 121

<sup>148</sup> Ibid., 124

Kingdon maintains that there are several criteria policy proposals must meet to survive. These include technical feasibility (will it work and will it achieve its intended purpose?), value acceptability (whether a proposal meets with the values of the specialists in the policy community, for example, with regard to the proper size of the federal government versus state governments or the size of the public sector vis-à-vis the private sector), tolerable cost, anticipated public acceptance and a reasonable chance elected decision makers will consider it seriously. Kingdon argues that proposals meeting these criteria normally survive, but those that do not may be returned to the policy primeval soup and recombined or reworked with other ideas.

In his discussion of the policy stream, Kingdon points out that the existence of a problem, even a pressing problem, is not enough to get it on a decision agenda. There must also be an “available alternative” that has been ‘softened up’ in the policy community and that provides a solution that is ‘ready to go.’ He says,

The availability of a viable alternative is not a sufficient condition for a high position on a decision agenda, since many good proposals kick around the system for a long time before the lightning strikes. But the chances for a problem to rise on the governmental agenda increase if a solution is attached to the problem. The chances for a problem to rise on the decision agenda are dramatically increased if a solution is attached.”<sup>149</sup>

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<sup>149</sup> Ibid., 142-143

### ***The Political Stream***

The third of Kingdon's major process streams is the "political stream" that flows independently of the "problem" and "policy" streams and is comprised of such things as "the public mood, pressure group campaigns, election results, partisan and ideological distributions in Congress, and change of administration."<sup>150</sup> He maintains that the political stream consists of three components: (1) swings in the national mood; (2) the balance of organized political forces; and (3) events within the government.

Developments in the political stream powerfully affect the public agenda, he says, because with them, new ideas ascend and old ones are discarded or set aside. Kingdon uses a narrow definition of "political" to mean "electoral, partisan and pressure group factors" and he argues that political events are central to and an integral part of the policy-making process – not exogenous forces outside of it.

He asserts that there is a "national mood" that people in and around government sense – they know what it is, they are comfortable discussing its content and believe they can sense when it shifts. Changes in this national mood can be key for policy agendas or policy outcomes. The mood is not confined to specialists in policy communities but extends much more broadly throughout the country and it serves to push some issues higher on the public agenda, while constraining others. Examples of this "national mood"

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<sup>150</sup> Ibid., 145

include the general feeling that favored deregulation in the 1970s and the overwhelming concern with inflation and big government in the late 1970s.

Kingdon notes that to some extent changes in the national mood can be seen as inevitable swings of the pendulum – from left to right and back again. He says that social retrenchment in the 1970s can be seen as a reaction to the grand policy enactments (the Great Society) of the 1960s. He acknowledges that some swings of the pendulum may follow partisan realignments, but others may be feedback cycles in which “a program is enacted, problems with its implementation emerge, corrections are made and new problems emerge from the corrections.”<sup>151</sup>

But although Kingdon believes that the national mood is not confined to specialists in policy communities, he notes that it does not necessarily reside in the mass public. In fact, he is not sure exactly where it resides – and admits it. Instead he suggests that elected politicians sense their constituents’ mood from the wide array of interactions they have with them, that non-elected officials sense the national mood from politicians, assuming that they have their finger on the pulse of the body politic because it is their business to do so, and that both groups follow the media “which is filled with commentary on and impressions of the nature of the times.”<sup>152</sup> He also suggests that the national mood may be an echo of events at the governmental level – for example, the sense on Reagan’s election that the national mood had swung in a conservative direction. Presidents also help

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<sup>151</sup> Ibid., 148

<sup>152</sup> Ibid., 149

establish the national mood with their priorities and their public pronouncements. What is more important to Kingdon is that people in and around government believe that the national mood has important consequences for policy, on elections, on the fortunes of political parties and on the extent to which government decision makers are receptive to interest group lobbying. Shifts in the national mood, in his view, make some policy proposals suddenly viable and others dead in the water.

The second component of the political stream is the balance of organized political forces. Kingdon points out that if all groups are tending in one direction, the public context provides a strong incentive to move in that direction, but that if there is conflict, political leaders “implicitly arrive at an image of their environment that strikes some balance between those for and those against a given proposal.”<sup>153</sup> If they find that the balance is tilting against the proposal, it may not prevent them from considering it seriously, but it will suggest that a price will be paid for carrying it forward. At the same time, support for a proposal allows it to be pushed and may propel it to agenda prominence. Kingdon acknowledges that it is difficult to know precisely how people in and around government decide where the balance of support and opposition for a given proposal lies. He suggests that it may be attributable partly to how often they hear about a proposal from one side or the other or on a determination of which side has superior political resources, where the communication is about even. But his point is that decision

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<sup>153</sup> Ibid., 150

makers do make such determinations and they know with precision which side is stronger, however they define strength.

He notes that the balance of organized forces often militates against making any change because decision makers can see very clearly what doing so would cost in energy and political capital. A major reason for government inertia, he claims, is the inevitable client base that forms around particular government programs and both supports them and fends off attackers – making any proposal that might change these programs difficult to undertake. The antidote is a strong set of articulate beneficiaries and supporters. Kingdon does not believe that organized political forces always prevail. He notes that “Swings in national mood and the shifts of administration and of seats in Congress brought about by election results can be sufficient to overcome organized opposition, and to define the political stream as leaning toward change.”<sup>154</sup>

The final component of the political stream are events within the government itself, among which Kingdon cites changes in administrations, changes in Congress, and other changes in personnel and staffing. He says, “When it involves governmental actors, agenda change occurs in one of two ways. Either incumbents in positions of authority change their priorities and push new agenda items; or the personnel in those positions changes, bringing new priorities onto the agenda by virtue of the turnover.”<sup>155</sup> Turnover affects what gets onto the policy agenda -- as priorities of the new

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<sup>154</sup> Ibid., 152

<sup>155</sup> Ibid., 153

administration or party in power come to the fore -- and what does not get on the policy agenda -- as the same changes make some ideas impossible to consider.

In addition to turnover, Kingdon cites jurisdiction as the second central governmental process affecting the political stream – or more specifically, competition for jurisdiction or battles over “turf.” Turf disputes normally retard the possibilities for governmental action, he claims, but they may also promote the rise of items on the governmental agenda. An example of the first proposition can be found in the near guaranteed opposition of the Office of Management and Budget to proposals that call for increased budgets; an example of the second can be found in two Congressional committee chairs anxious to claim credit for a proposal they think will be popular – their competition may actually hasten governmental movement. In Kingdon’s view, the key difference in determining which result obtains seems to be the perceived or potential popularity of the issue. He maintains: “Competition for jurisdiction simply reinforces the other forces that are already at work.”<sup>156</sup>

Importantly, Kingdon also notes that “many potential agenda items never are the subject of a given policy maker’s attention, largely because they fall into someone else’s jurisdiction. They may be agenda items somewhere in government, but not where a given official is located.”<sup>157</sup>

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<sup>156</sup> Ibid., 158

<sup>157</sup> Ibid. On the other hand, there are times, when a decision maker who would not normally have jurisdiction over an issue decides to claim it, which can create

Whereas persuasion and diffusion characterized consensus building in the policy stream, Kingdon argues that consensus in the political stream is governed by bargaining. Coalitions are built by granting concessions in return for support, and joining the coalition occurs because potential members either seek specific advantages or fear that not joining would deny them the benefits of participating. In Kingdon's view, "In the political stream, if one does not pay sufficient attention to coalition building through bargaining, one pays a major price...."<sup>158</sup>

He notes that there can be explosive growth in coalitions in the political stream, particularly when participants conclude that the bandwagon is rolling. They quickly shed rigid adherence to initial positions so as to shape or bend the outcome to their own purposes. "Once an issue seems to

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enormous problems for the established order. One such episode occurred in the waning months of the George W. Bush Administration when Treasury Secretary Henry Paulson decided to launch the "Strategic Economic Dialogue" with China, which created enormous consternation institutionally for the State Department. Paulson was the "right guy" -- in the sense that he understood the importance of the bilateral relationship with China and had the stature to elevate it to a very senior level -- but he was in the "wrong place" -- because Treasury did not normally lead on many of the issues -- like climate change -- that were taken up. When Secretary of State Hillary Rodham Clinton took office in 2009, she maintained the initiative but recast it as the "Strategic and Economic Dialogue." Treasury still led on economic issues, but co-chaired the effort with State, which led on strategic issues -- an outcome more consistent with the institutional roles of the two departments. See, "It Could Have Been A Lot Worse: A Conversation with Henry Paulson by Henry M. Paulson, Jr., *The American Interest*, May 1, 2010 (accessed July 6, 2013); available from <http://www.the-american-interest.com/article.cfm?piece=815> . See also Merritt T. Cooke, "Sustaining U.S.-China Clean Energy Cooperation", Woodrow Wilson International Center for Scholars (accessed July 6, 2013); available from [http://www.wilsoncenter.org/sites/default/files/US\\_China%20Cooperatin%20in%20Clean%20Energy\\_0.pdf](http://www.wilsoncenter.org/sites/default/files/US_China%20Cooperatin%20in%20Clean%20Energy_0.pdf).

<sup>158</sup> Kingdon, 160.

be moving, everybody with an interest in the subject leaps in, out of fear that they will be left out.”<sup>159</sup>

While the balance of organized political forces can militate against change, Kingdon argues that “the complex of national mood and elections seems to create extremely powerful impacts on policy agendas” with the potential to bowl over the advocates of stasis. He says, “This mood-elections combination has particularly powerful impacts on the agenda. It can force some subjects high on the agenda, and can also make it virtually impossible for government to pay serious attention to others.”<sup>160</sup>

### ***Policy Windows and the Coupling of Streams***

Kingdon argues that there are “windows” in policy systems just as there are “windows” in space shots – “windows” that present opportunities for a launch because target planets are properly aligned but will not stay that way for long, windows that will close, causing a launch opportunity to slip away if not taken, and windows that may recur sometime in the future, but mean an indeterminate period of waiting for a launch opportunity to come again. At these times, “Participants dump their conceptions of problems, their proposals, and political forces into the choice opportunity, and the

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<sup>159</sup> Ibid., 162

<sup>160</sup> Ibid., 164

outcomes depend on the mix of elements and how the various elements are coupled.”<sup>161</sup>

In his view, the *governmental agenda* is the set of issues to which people in and around government have been paying serious attention, but the *decision agenda* is a smaller set within it that is being moved into position for action to be taken – whether for legislative enactment or decision by the president or a cabinet secretary. Getting on the *decision agenda* will not guarantee a positive outcome, but issues on it are “live” in comparison with those in a less active status on the *governmental agenda*. He believes that the opening of a policy window establishes a priority order to issues in the queue, based largely on perceptions of which proposals stand the best chance of positive action. If not for an open policy window, proponents are unwilling to invest their time and energy in efforts unlikely to succeed. Kingdon notes that many potential items never rise to the decision agenda because their advocates conclude they are not worth the effort to push them. He observes that the same reasoning applies to bargaining – proponents stick to their extreme positions when an issue isn’t really “hot” because there is no incentive to compromise; but when an issue begins to move, they become more flexible in order to play a role.

Kingdon argues that the agenda is affected more by the problem and political streams, whereas the alternatives are affected more by the policy stream. A window opens because of a change in the political stream (a

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<sup>161</sup> Ibid., 166

change of administration is the most obvious of these) or it opens because a new problem captures the attention of government officials and those close to them. Political events set general themes that need to be filled subsequently with specific proposals – none specifies in detail what is to be done. Like political events, problems can become so pressing that they create windows through which policy advocates may press forward with specific proposals. Kingdon cites gas lines as one such example that can bring governmental attention to energy shortages.

In Kingdon's world, the coupling of problems, policies and politics is crucial. He contends that none of the three streams is sufficient by itself to place an issue firmly on the decision agenda. He says:

If one of the three elements is missing—if a solution is not available, a problem cannot be found or is not sufficiently compelling, or support is not forthcoming from the political stream – then the subject's place on the decision agenda is fleeting. The window may be open for a short time, but if the coupling is not made quickly, the window closes. A subject can rise on the agenda abruptly and be there for a short time. A president can place a high priority on it, for instance, or a focusing event like an airplane crash can open a window. But the item is likely to fade from view quickly without the critical joining of the three streams. Since it cannot move from governmental agenda status to a decision agenda, attention turns to other matters.<sup>162</sup>

Similarly, he contends that if the policy stream provides no available alternative, the subject will either fade away or never rise to the decision agenda in the first place. On the other hand, if an alternative is available, the issue can move very quickly.

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<sup>162</sup> Ibid., 178

Kingdon observes that the high placement of an issue on the decision agenda normally results from the joint effect of a combination of factors – rarely can it be explained as the result of a single factor. And in his view, “the combination of these streams, as well as their separate development, is the key to understanding agenda change.”<sup>163</sup>

### ***A Place on the Agenda***

Kingdon acknowledges that issues queue up for a place on the agenda and that the system has a limited capacity to process a multitude of agenda items. He also points to strategic considerations, noting that participants only have a limited stock of political resources and that these must be carefully shepherded to deal with the highest priorities. There are dangers in overloading the circuits and in needlessly mobilizing opponents if too many issues are introduced simultaneously. Above all, money is finite and severe budget constraints limit the opportunities for action.

But Kingdon also counsels against exaggerating the issue of competition for space on the agenda. Alluding to the New Deal and the Great Society legislative efforts in the 1930s and the mid-1960s, he agrees that the agenda swells and shrinks at different times, and that there is a cycle to reform in which things that are possible in the early days become more difficult later – particularly with regard to a presidential administration. Specialization, he says, also facilitates focusing on multiple items at the same

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<sup>163</sup> Ibid., 179

time and thus implies a lesser need to set priorities. He draws a distinction between the ability of the system to handle multiple, routine items simultaneously through standard operating procedures and its relative inability to handle less routine items in the same way. These, he says, lead to bottlenecks and limits on how much can be handled at the same time.<sup>164</sup>

Kingdon observes that some policy windows open on a regular schedule – the annual budget cycle, the president’s State of the Union address – but he says that there are larger cycles as well that are less precisely scheduled but “still noticeable in their occurrence and their regularity.” Examples of these larger cycles are reform cycles in American politics and the swing of the pendulum between liberal and conservative national moods. He also concedes that there can be randomness in the opening of a policy window as well. Citing a “remaining randomness” identified by many of his respondents, he quotes from one:

Government does not come to conclusions. It stumbles into paradoxical situations that force it to move one way or another. There are social forces that you can identify, but what comes out of them is just accident.

Which idea gets struck by lightning, I can’t tell you. I’ve been watching this process for twenty years and I can’t tell you. I can’t tell you why an idea has been sitting around for five years, being pushed by somebody, and all of a sudden it catches on. Then another idea with the same kind of advocates, being pushed for those five years, won’t catch on fire. You have an element of chance.<sup>165</sup>

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<sup>164</sup> Ibid., 186. On this point, Kingdon presages the distinction made by Baumgartner and Jones about serial *versus* parallel processing of issues, as will be seen.

<sup>165</sup> Ibid., 189

Still, he argues that recognizing an element of randomness does not imply that all is random. He sees a degree of pattern in three areas: (1) processes within each stream, (2) processes that structure couplings, and (3) general constraints on the system. With respect to processes within each stream, he notes that not all conditions are defined as problems, and not every problem has an equal chance of surfacing, particularly those that are not highlighted by indicators or that lack focusing events or feedback. He also argues that proposals must meet certain standards to survive, including technical feasibility, value acceptability, public acquiescence, politicians' receptivity and budgetary stringency. In addition, he says, not every environment (context) or event in the political stream is equally likely – some groups may lack adequate funds to press their case, some swings of national mood are unlikely and turnover of some elected officials is more likely than others.

With respect to processes that structure couplings, he believes that timing, germaneness and the appearance or non-appearance of a skillful policy entrepreneur all affect the chances of coupling among the problem, policy and political streams. With respect to general constraints, Kingdon argues that national mood, budget and various rules of procedure all impose constraints as well as the scarcity of open policy windows.<sup>166</sup>

With particular poignancy for this study, Kingdon concludes that some problems, such as long-term health care and mental health, remained

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<sup>166</sup> Ibid., 206-07

low on the policy agenda for years, “not because participants would not recognize real problems there but because they had little sense of alternatives that might be available as solutions.”<sup>167</sup>

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<sup>167</sup> Ibid., 208

## Chapter Five: Applying Kingdon to Climate

The preceding pages have sought to unpack Kingdon's main ideas for two reasons: (1) to explain them, and (2) to make them available in analyzing the global climate change issue. How do Kingdon's ideas help explain the emergence of the climate issue in the United States? What insights do they offer regarding how and under what circumstances a policy consensus may emerge? Are they useful in determining what form a future U.S. policy response might take?

### ***Problem Recognition***

Climate change today is recognized nearly universally as a threat to the global environment. But that recognition has built sometimes haltingly over more than forty years. Many date the origin of awareness of the "greenhouse effect" to Swedish physicist/chemist Svante Arrhenius, who in the last few years of the 19<sup>th</sup> century first projected how the increase of carbon dioxide levels in the atmosphere could alter the surface temperature of the Earth.<sup>168</sup>

From Arrhenius onward for the next three-quarters of a century there are many strands of early concern among scientists. One of the most significant was a study in 1977 by the National Academy of Sciences, which called attention to the increase in the concentration of carbon dioxide in the

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<sup>168</sup> See, Spencer R. Weart, *The Discovery of Global Warming* (Cambridge, MA: Harvard University Press, 2003).

atmosphere largely from the burning of fossil fuels. The study was widely publicized and extremely influential among U.S. scientists.<sup>169 170</sup>

In the years that followed this report another problem for the global atmosphere also helped foster recognition of concern about climate change – depletion of the stratospheric ozone layer. International efforts to craft a policy response – that ultimately produced the Vienna Convention on Protection of the Ozone Layer in 1985 and its Montreal Protocol on Substances that Deplete the Ozone Layer in 1987 -- brought scientists and

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<sup>169</sup> In their forward to the National Academy of Science's "Energy and Climate" in 1977, Co-Chairmen Philip H. Abelson and Thomas F. Malone acknowledged differences among various model projections in how they partitioned carbon dioxide among the oceans, the biosphere and the atmosphere, but they said, "What is important is *not* that there are differences but that the span of agreement embraces a fourfold to eightfold increase in atmospheric carbon dioxide in the latter part of the twenty-second century. Our best understanding of the relation between an increase in carbon dioxide in the atmosphere and change in global temperature suggests a corresponding increase in average world temperature of more than 6°C, with polar temperature increases of as much as three times this figure. This would exceed by far the temperature fluctuations of the past several thousand years and would very likely, along the way, have a highly significant impact on global precipitation."

With prescience they concluded, "In the light of a rapidly expanding knowledge and interest in natural climatic change, perhaps the question that should be addressed soon is, "What *should* the atmospheric carbon dioxide content be over the next century or two to achieve an optimum global climate?" Sooner or later, we are likely to be confronted by that issue." Philip H. Abelson and Thomas F. Malone, "Forward," *Energy and Climate*, Energy and Climate Geophysics Study Committee, National Academy of Sciences, 1977, R8-9

<sup>170</sup> On the significance of the 1977 National Academy Study, see Ben Block, "A look back at Jim Hansen's seminal testimony on climate, part one," *Grist.org*, (accessed July 27, 2013); available from [grist.org/article/a-climate-hero-the-early-years/](http://grist.org/article/a-climate-hero-the-early-years/).

government officials together and led them to recognize the problem posed by increased concentration levels of greenhouse gases in the atmosphere.<sup>171</sup>

Less difficult than fixing a date certain for widespread recognition among scientists of concern about climate change is pinpointing its emergence as a public policy issue in the United States. The date that stands out is June 23, 1988. On that very warm day, at a hearing orchestrated by Colorado Senator Tim Wirth before the Senate Energy and Natural Resources Committee, Dr. James E. Hansen, Director of NASA's Institute for Space Studies in Manhattan, testified that the greenhouse effect was here. Hansen's testimony attracted wide media coverage (the *New York Times* carried a front page story the next day) and sparked a firestorm within the scientific community about whether Hansen was a Cassandra or whether he had gone too far in his conclusions based on the available evidence. That controversy reverberates even to this day but the Senate hearing and Hansen's testimony likely mark the beginning of the "modern" policy history of the climate change issue in the United States.<sup>172 173</sup>

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<sup>171</sup>See Richard Benedict's discussion of global climate change as a critical emerging issue in the concluding chapter of his history of the negotiations that led to the Montreal Protocol on Substances that Deplete the Ozone Layer, *Ozone Diplomacy: New Directions in Safeguarding the Planet*, (Cambridge: Harvard University Press, 1991), 199-211.

<sup>172</sup> Philip Shabecoff, "Global Warming Has Begun, Expert Tells Senate," *New York Times*, June 24, 1988 (accessed July 21, 2013); available from <http://www.nytimes.com/1988/06/24/us/global-warming-has-begun-expert-tells-senate.html>. The article noted that:

Dr. Hansen, a leading expert on climate change, said in an interview that there was no "magic number" that showed when the greenhouse effect was actually starting to cause changes in climate and weather. But he added, 'It is time to stop waffling so much and say that the

In a relatively short period thereafter – slightly less than four years -- climate change moved from being the subject of a Congressional hearing to the *raison d’etre* for a new international convention – the United Nations Framework Convention on Climate Change (UNFCCC) adopted on May 9, and opened for signature at the Earth Summit in Rio de Janeiro in June 1992.

To link this issue to Kingdon, concern about global climate change might be said to have begun with change in an indicator – the level of carbon dioxide in the atmosphere. The most celebrated effort to measure the atmospheric carbon dioxide concentration is that of Dr. C. David Keeling of the Scripps Institution of Oceanography. He first began direct measurements of carbon dioxide in the atmosphere in March 1958 at the National Oceanic and Atmospheric Administration’s Mauna Loa Observatory on the Big Island in Hawaii. His is the longest, continuous direct measurement of such concentrations anywhere in the world. That measurement shows that atmospheric carbon dioxide increased from about 316 parts per million (ppm) when Keeling took his first readings in 1958 to 400 ppm on May 9,

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evidence is pretty strong that the greenhouse effect is here.’ If Dr. Hansen and other scientists are correct, then humans, by burning of fossil fuels and other activities, have altered the global climate in a manner that will affect life on earth for centuries to come.

<sup>173</sup> Two prior reports – from the Villach and Bellagio Conferences in 1987 – also led to Senate hearings. See: George M. Woodwell, “Testimony before the Senate Committee on Energy and Natural Resources,” June 23, 1988 (accessed March 1, 2014); available from <http://thinkprogress.org/climate/2010/03/09/205617/exclusive-dr-george-woodwell-sets-the-record-straight/>

2013 (ironically, the same day the UNFCCC was adopted 21 years earlier).<sup>174</sup>,

<sup>175</sup> However, the level Keeling recorded in 1958 was already 36 ppm higher than the pre-industrial level of 280 ppm that obtained in 1750.<sup>176</sup>

But as Kingdon observes, indicators are not used primarily to determine whether a problem exists – more often they are used to assess the magnitude of a problem and to become aware of changes in a problem. The accelerating rate of increase in carbon dioxide levels from the beginning of the Industrial Revolution through the period in which Keeling took his measurements became a source of apprehension for scientists, who conveyed that apprehension to policy makers, some of whom, like Senator Wirth, shared their concern. Still, Kingdon acknowledges that problems may not be self-evident from the indicators, and that problem recognition rests as much on perception and intuition as on analysis of data. Here it is important to recall Kingdon’s observation that problems often need a focusing event to get the attention of policy makers, and that crises, disasters, powerful

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<sup>174</sup> On the level of atmospheric carbon dioxide when Keeling began his measurements in March 1958 see “Frequently Asked Questions,” Global Monitoring Division, Earth System Research Laboratory, National Oceanic and Atmospheric Administration (accessed July 21, 2013); available from <http://www.esrl.noaa.gov/gmd/obop/mlo/programs/coop/scripps/co2/co2.html>.

<sup>175</sup> With regard to the current atmospheric concentration of carbon dioxide, see Kevin Bullis, “New Milestone for CO<sub>2</sub> Levels: Mauna Loa Observatory Records 400 PPM,” *MIT Technology Review*, May 10, 2013 (accessed July 21, 2013); available from <http://www.technologyreview.com/view/514811/new-milestone-for-co2-levels-mauna-loa-observatory-records-400-ppm/>.

<sup>176</sup> On the pre-industrial level of carbon dioxide in the atmosphere see “Chapter 2.1.1 – Changes in Atmospheric Carbon Dioxide, Methane and Nitrous Oxide, Technical Summary, Fourth Assessment Report, Intergovernmental Panel on Climate Change (accessed July 21, 2013); available from [http://www.ipcc.ch/publications\\_and\\_data/ar4/wg1/en/tssts-2-1-1.html](http://www.ipcc.ch/publications_and_data/ar4/wg1/en/tssts-2-1-1.html).

symbols that catch on or the personal experiences of policy makers can act as focusing events.

What can be said of the climate issue in this regard – has there been a readily identifiable focusing event? In the period in which public concern about global climate change has grown, say since 1988, there have been multiple natural disasters. But these are not new -- natural disasters existed long before this period as well. Is it possible to establish a link between them and climate change? Therein lies the conundrum.

When Hurricane Katrina hit New Orleans on August 29, 2005, it proved to be the most destructive tropical cyclone of 2005, the deadliest since 1928, and the costliest natural disaster in U.S. history. The storm – and the response at various levels --riveted national attention for weeks. It has since generated considerable literature on lessons learned.<sup>177</sup> But Katrina as a harbinger of global climate change does not appear to be one of them. In the aftermath of Hurricane Katrina there appeared to be no public conclusion that climate change might be a factor. Why not? First, there is the matter of attribution -- scientists have long maintained that it is not possible to attribute any single weather event to climate change, and there is little

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<sup>177</sup> See Report to the President of Frances Fragos Townsend, Assistant to the President for Homeland Security and Counter Terrorism, on “The Federal Response to Katrina: Lessons Learned,” February 23, 2006 (accessed July 28, 2013); available from <http://library.stmarytx.edu/acadlib/edocs/katrinawh.pdf>. A fascinating study of the “anti-commons” problem posed by Katrina is the study by Russell S. Sobel and Peter T. Leeson, “Government’s Response to Hurricane Katrina: A Public Choice Analysis,” *Public Choice*, (2006) 127: 55–73 (accessed July 28, 2013); available from [www.peterleeson.com/hurricane\\_katrina.pdf](http://www.peterleeson.com/hurricane_katrina.pdf).

evidence to suggest that hurricanes have increased in frequency in recent years, although it is well accepted that climate change will likely increase the intensity of such storms. Second, hurricanes -- sometimes devastating ones -- are recurring phenomena in the southeastern part of the United States, from the Atlantic to the Gulf of Mexico. As Kingdon also points out there is a difference between a condition and a problem: "We put up with all manner of conditions every day: bad weather, unavoidable and untreatable illnesses, pestilence, poverty, fanaticism. As one lobbyist said, 'If you only have four fingers on one hand, that's not a problem; that's a situation.'"<sup>178</sup> For conditions to become problems, says Kingdon, people must feel that something should be done about them.

But even assuming that Hurricane Katrina was a focusing event, Kingdon notes that such an event alone is rarely sufficient to push a problem on to the public agenda – something else is needed. In his view this something else consists of the need for the focusing event to: (1) reinforce a pre-existing perception of a problem; (2) serve as an early warning of a widespread condition that needs attention; and (3) work in combination with similar events occurring close together. Of these three additional factors, none seems to have been present in the case of Hurricane Katrina. The problem of attribution worked against any pre-existing perception of a problem – even if people perceived that climate change was a problem, Katrina could not be directly linked to it. Katrina might have been seen as an

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<sup>178</sup> Kingdon, 109

early warning, but public attention focused almost exclusively on inadequacies at all levels in responding to it rather than Katrina as a harbinger of future such storms. And while Katrina proved a disastrous storm, many others had preceded it over the years.

Indeed, somewhat contrary to Kingdon's theory in this case, similar events occurring close together did not form a pillar of the "something else" needed to push a focusing event onto the public agenda – just the opposite, they seemed to militate against any linkage to climate change. Even when Hurricane Rita struck in late September 2005 -- not even a month after Katrina, devastating some of the same areas for a second time and occasioning a massive evacuation in eastern Texas -- no link seems to have been made in the public mind to climate change.

It is interesting to contrast public perceptions in the United States in the aftermath of Hurricane Katrina with public perceptions in Australia in reaction to the Black Saturday bushfires in early February 2009. There, the devastation of the fires occasioned considerable press attention to the link between them and climate change. Remarkably, one group -- the United Firefighters Union of Australia -- even wrote an open letter to the Prime Minister and the Premier of Victoria urging that greenhouse gas emissions be cut in half by 2020 in response.<sup>179</sup> In that case, all three of Kingdon's

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<sup>179</sup> The letter read in part:

Research by the CSIRO, Climate Institute and the Bushfire Council found that a "low global warming scenario" will see catastrophic fire events happen in parts of regional Victoria every five to seven years

additional elements seem to have been present: a pre-existing perception of a problem, repeated, devastating fires in previous years that served as an early warning, and similar events occurring close together.

Hurricane Sandy followed Katrina seven years and multiple other hurricanes later (including Dolly, Gustav and Ike in 2008 and Irene in 2011, with Ike as the third costliest in U.S. history, and Irene as the seventh costliest). In late October 2012, Sandy struck the heart of the U.S. East Coast establishment, tearing through New Jersey, New York and Connecticut and becoming the second costliest hurricane in U.S. history, next in rank only to

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by 2020, and every three to four years by 2050, with up to 50 per cent more extreme danger fire days. However, under a “high global warming scenario”, catastrophic events are predicted to occur every year in Mildura, and firefighters have been warned to expect up to a 230 per cent increase in extreme danger fire days in Bendigo. And in Canberra, the site of devastating fires in 2003, we are being asked to prepare for a massive increase of up to 221 per cent in extreme fire days by 2050, with catastrophic events predicted as often as every eight years. Given the Federal Government’s dismal greenhouse gas emissions cut of 5 per cent, the science suggests we are well on the way to guaranteeing that somewhere in the country there will be an almost annual repeat of the recent disaster and more frequent extreme weather events.

Something is going on. As we battle blazes here in Victoria, firefighters are busy rescuing people from floods in Queensland. Without a massive turnaround in policies, aside from the tragic loss of life and property, we will be asking firefighters to put themselves at an unacceptable risk. Firefighters know that it is better to prevent an emergency than to have to rescue people from it, and we urge state and federal governments to follow scientific advice and keep firefighters and the community safe by halving the country’s greenhouse gas emissions by 2020.

See “An open letter from the United Firefighters Union of Australia to the Australian Prime Minister and Victorian Premier” March 11, 2009 (accessed July 28, 2013); available from <http://www.ufua.asn.au/atprint.cgi?ID=267>.

Katrina. In the aftermath of Hurricane Sandy there was considerable speculation about its relationship to climate change. President Obama himself said at the end of his press conference on November 14, 2012 – after having secured his second term of office:

[A]s you know...we can't attribute any particular weather event to climate change. What we do know is the temperature around the globe is increasing faster than was predicted even 10 years ago. We do know that the Arctic ice cap is melting faster than was predicted even five years ago. We do know that there have been extraordinarily — there have been an extraordinarily large number of severe weather events here in North America, but also around the globe.

And I am a firm believer that climate change is real, that it is impacted by human behavior and carbon emissions. And as a consequence, I think we've got an obligation to future generations to do something about it.<sup>180</sup>

Why the difference between the public reaction after Hurricane Katrina and that after Hurricane Sandy? For one, the storms took place in different U.S. administrations with different perspectives on the climate issue. For another, all three of Kingdon's "additional elements" seem to have been present to some degree: (1) By 2012, there was a more widely shared, pre-existing perception of a problem; (2) Sandy's massive devastation in a highly populated area and a nerve center of mainstream America seemed to serve as an early warning of a widespread condition needing attention; and (3) though it came seven

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<sup>180</sup> Transcript of President Obama's News Conference, November 14, 2012 (accessed July 28, 2013); available from <http://www.nytimes.com/2012/11/14/us/politics/running-transcript-of-president-obamas-press-conference.html?pagewanted=1&r=3&>.

years after Katrina its “geography” was critical, and people began to link it to Katrina, making it harder to dismiss Hurricane Sandy as an isolated fluke or just another of nature’s annual surprises. The “geography” factor seems also to have been very central – Hurricane Ike, the third costliest in U.S. history after Katrina and Sandy, struck the Louisiana/Texas coast in early September 2008 but occasioned no such linkage to the climate change issue.

In this discussion of problem recognition, it is useful to recall Kingdon’s list of reasons that problems fade from prominence – and perhaps to add to it. The climate change problem has indeed faded from prominence at several times over the last quarter century, only to return even more solidly thereafter. To Kingdon’s six reasons could be added a seventh -- that of “supervening events.” The Gulf War from August 1990 through February 1991 and the financial crisis of 2007-2008 were two such events. While they occurred at very different times in the development of U.S. public perceptions of the climate change problem, both served temporarily to sweep aside or significantly mute public concern as these “supervening events” took center stage and riveted public attention.

Whereas the annual onslaught of hurricanes in the southeastern part of the United States may have been viewed more as a “condition” up to Hurricane Sandy, it is possible that Sandy marked an important

milestone in public perceptions – where climate change began to be seen more as a problem. Still, as Kingdon notes with respect to poverty, even if liberals and conservatives agree it is a problem, they may still disagree that it is “appropriate for government action.”

Kingdon maintains that comparison also factors into problem definition – the fact of being behind may be enough to constitute a problem for some people, like the Soviet launch of Sputnik, French high-speed trains and Canadian national health insurance. This has notoriously not been the case with respect to climate change. Some have suggested that, without significant action to constrain carbon, the United States risks falling behind as other nations, particularly in Europe but also increasingly China, become more energy efficient and therefore more competitive. Nevertheless, U.S. reaction to the Kyoto Protocol suggests that comparison may also work in reverse – equally as an excuse for not acting as a motivator for doing so. Recall that one of the two requirements of the Senate’s Byrd-Hagel resolution in 1997 (before the Kyoto Protocol was adopted in December of that year) was that key developing countries should have commitments comparable to those of the United States.<sup>181</sup> The Senate urged the administration not to sign any new agreement that did not contain such comparable commitments.

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<sup>181</sup> Byrd-Hagel Resolution, S. Res. 98, 105<sup>th</sup> Congress, 1<sup>st</sup> Session, July 25, 1997, (accessed August 4, 2013); available from <http://www.nationalcenter.org/KyotoSenate.html>.

Kingdon's discussion of categories is also relevant to the climate change problem. Over the years and particularly as the climate issue has become highly polarized politically in the United States, some have thought that achieving many of the same objectives might be accomplished more easily by talking about such related but relatively non-controversial issues as energy conservation and energy efficiency, energy security or the need for a coherent energy policy. In fact, measures to conserve energy, improve energy efficiency, address energy security issues and/or legislate energy policy take place continuously and often without strife but the magnitude of the climate problem is thought to dwarf the actions that can be accomplished under these headings. Moving the United States to an economy with no net carbon emissions is thought to require much more fundamental and far-reaching change. In effect, "climate change" could yet emerge as the kind of new category Kingdon mentions, opening up new definitions of problems and conceptualizations of solutions – but it appears at present to be hopelessly mired in ideological warfare adding to the tendency to preserve old categories and to put off change as long as possible.

### ***Climate's Policy Community***

As in other areas of endeavor, there is a community of specialists with respect to climate change that includes all of those Kingdon enumerates: researchers, congressional staffers, people in planning and evaluation offices and in budget offices, academics and interest group analysts. Perhaps because the climate change policy community is relatively young compared with other communities formed around such other activities as transportation or health care, many within it have come from other disciplines. For example, some of the most renowned climate change scientists came to the issue from other disciplines, like Robert T. Watson, former Chair of the Intergovernmental Panel on Climate Change (IPCC), who trained in chemistry and Daniel L. Albritton, former Director of NOAA's Aeronomy Lab in Boulder, Colorado, who received his Ph.D. in physics. Similarly, many of the prominent economists who have written about climate change arrived to the issue after distinguished careers in other areas – like Joseph Stiglitz, winner of the Nobel Prize in Economics in 2001, who is most noted for his work laying the foundation for markets with asymmetric information or William Nordhaus, who is noted for his earlier work on the political business cycle.

While the climate change community embraces a wide range of experts from different disciplines -- from biology to atmospheric

chemistry and from energy technology to political science – that has grown exponentially over the past quarter century, the community overall is characterized by a relatively low degree of fragmentation in Kingdon’s terms. Specialists tend to share common paradigms. This means that different groups of specialists are generally aware of what is going on in other groups within the community and that the agenda is relatively stable.

The climate change community also embraces policy entrepreneurs, individuals willing to invest their time, energy, reputations and financial resources in pursuit of a particular policy proposal. Perhaps the most prominent is former Vice President Al Gore, whose “Inconvenient Truth” won an Oscar and on whom the Nobel Committee conferred the Peace Prize in 2007 shared with IPCC. Rather than advocate for a particular policy proposal, however, Gore has been an advocate for far reaching action to address the climate change problem. Other examples of policy entrepreneurs in this field likely include Congressman Henry Waxman of California and Senator Edward Markey of Massachusetts, whose American Clean Energy and Security (Waxman-Markey) bill in 2009 passed the House of Representatives by a vote of 219 to 212, but failed in the Senate. Their bill represented a policy proposal to address the climate change problem by instituting a cap and trade system in the United States under which U.S. greenhouse gas emissions would have been capped but individual actors would

have been able to trade emission allowances to minimize the cost of compliance. Their proposal reflected one of the three major approaches available to address greenhouse gas emissions on an economy wide basis in the United States, the other two being a carbon tax and regulation.

As a specific policy proposal, the Waxman-Markey bill did not survive. But can it be said to have met the specific criteria Kingdon describes as critical to survival? First, was it technically feasible – would it work and would it have achieved its intended purpose? Second, did it enjoy value acceptability – did it meet with the values of specialists in the policy community? Third, was its projected cost tolerable? Fourth could it have enjoyed public acceptance and did it have a reasonable chance that elected decision makers would consider it seriously? The simple fact that a majority of the House of Representatives acted favorably on the Waxman-Markey bill suggests that the answer to all of these questions was yes. And yet the bill failed subsequently in the Senate. What went wrong?

It was not clear that the bill, which reportedly ran to some 1,427 pages and took approximately 12 hours to read in its entirety, was in fact technically feasible, that is, it is not clear that it would have worked

to achieve its intended purpose.<sup>182</sup> Second, while it achieved “value acceptability” among many in the climate change policy community, there is a sizeable segment that believes a cap and trade approach is not optimal.<sup>183</sup> This group believes that a carbon tax is preferable on a number of grounds, foremost among them being that it would be less prone to gaming.<sup>184 185</sup>

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<sup>182</sup> “Should Legislators Pledge to Read Every Word of Every Bill They Vote On?” *Washington Post*, September 23, 2009 (accessed July 29, 2013); available from <http://www.washingtonpost.com/wp-dyn/content/article/2009/09/22/AR2009092203473.html>. According to this editorial: “The average college graduate reads about 300 words per minute. Assume that there are about 150 words per page of legislative text, a number we derived from counting the words on a few randomly chosen pages from the Waxman-Markey energy bill. To read all 1,427 pages of Waxman-Markey, it would take at least 12 hours -- tough on a tight legislative timeline. And that assumes that lawmakers can read complex bills at the same pace they do a John Grisham novel (we tried -- it's not even close).”

<sup>183</sup> Particularly interesting in this regard is the Brookings Institution’s Hamilton Project in October 2007 in which Tufts University economist Gilbert E. Metcalf was asked to argue the merits of a carbon tax (“A Proposal for a U.S. Carbon Tax Swap: An Equitable Tax Reform to Address Global Climate Change”) while Harvard economist Robert N. Stavins argued for cap and trade (“A U.S. Cap-and-Trade System to Address Global Climate Change”), Discussion Papers 2007-12 and 2007-13 (accessed August 4, 2013); available from [http://www.hamiltonproject.org/files/downloads\\_and\\_links/An\\_Equitable\\_Tax\\_Reform\\_to\\_Address\\_Global\\_Climate\\_Change.pdf](http://www.hamiltonproject.org/files/downloads_and_links/An_Equitable_Tax_Reform_to_Address_Global_Climate_Change.pdf), and [http://www.hamiltonproject.org/files/downloads\\_and\\_links/A\\_US\\_Cap-and-Trade\\_System\\_to\\_Address\\_Global\\_Climate\\_Change.pdf](http://www.hamiltonproject.org/files/downloads_and_links/A_US_Cap-and-Trade_System_to_Address_Global_Climate_Change.pdf).

<sup>184</sup> See, for example, Citizens Action Coalition, “White Paper: Cap and Trade versus a Carbon Tax,” July 7, 2009 (accessed July 29, 2013); available from <http://www.citact.org/energy-policy-fossil-fuels-and-nuclear-energy/news/white-paper-cap-and-trade-versus-carbon-tax>.

<sup>185</sup> One of the most succinct explanations of the differences in the two as well as their pros and cons appeared in a newspaper article “Carbon tax versus cap-and-trade: which is better” in the *Guardian*, January 13, 2013 (accessed July 29, 2013); available from <http://www.guardian.co.uk/environment/2013/jan/31/carbon-tax-cap-and-trade>.

And what about the bill's cost? Some opponents put the cost at as much as \$9.4 trillion and jobs lost at 1.145 million compared with no bill.<sup>186</sup> Some proponents put the benefits at as much as \$5.2 trillion over 40 years.<sup>187</sup> These figures, drawn admittedly from opposite ends of the political spectrum, suggest that the verdict as to cost was not clear.

Finally, the bill did have a reasonable chance that elected decision makers would consider it seriously – for they did just that and it succeeded in the House. But whether in fact it enjoyed public acceptance is less clear. It turned out that June 26, 2009, proved to be a high water mark – thereafter, despite efforts by John Kerry and Barbara Boxer (and Senators Joe Lieberman and Lindsey Graham) to push counterpart legislation in the Senate, the effort stalled in 2010 and ultimately crashed when Majority Leader Harry Reid decided not to include a cap-and-trade proposal in pending energy legislation because he assessed that it lacked the 60 votes needed to overcome a filibuster. Many reasons have since been advanced for the failure of Waxman-

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<sup>186</sup> See the Heritage Foundation's study: William W. Beach, Ken Lieberman, Karen Lieberman, Karen Campbell, Ph.D., and David W. Kreutzer, Ph.D., "Son of Waxman-Markey: More Politics Makes for a More Costly Bill," revised and updated June 16, 2009 (accessed July 29, 2013); available from <http://www.heritage.org/research/reports/2009/05/son-of-waxman-markey-more-politics-makes-for-a-more-costly-bill>.

<sup>187</sup> See J. Scott Holladay and Jason A. Schwartz, "The Other Side of the Coin: The Economic Benefits of Climate Legislation," Institute for Policy Integrity, New York University School of Law, *Policy Brief No. 4, September 2009* (accessed July 29, 2013); available from <http://policyintegrity.org/documents/OtherSideoftheCoin.pdf>.

Markey.<sup>188</sup> Among them, the low priority of the climate change issue in public opinion polls, the public lack of understanding of a cap-and-trade approach and using the wrong arguments as the rationale for the legislation.<sup>189 190</sup>

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<sup>188</sup> One of the most entertaining analyses is: Ryan Lizza, “As the World Burns: How the Senate and the White House missed their best chance to deal with climate change,” the *New Yorker*, October 11, 2010 (accessed August 1, 2013); available from [http://www.newyorker.com/reporting/2010/10/11/101011fa\\_fact\\_lizza](http://www.newyorker.com/reporting/2010/10/11/101011fa_fact_lizza). But a more profound analysis is that of Theda Skocpol, “Naming the Problem: What It Will Take to Counter Extremism and Engage Americans in the Fight against Global Warming,,” paper prepared for the “Symposium on The Politics of America’s Fight Against Global Warming, Co-sponsored by the Columbia School of Journalism and the Scholars Strategy Network, Harvard University, February 14, 2013, (accessed August 3, 2014); available from [http://www.scholarsstrategynetwork.org/sites/default/files/skocpol\\_captrade\\_report\\_january\\_2013\\_0.pdf](http://www.scholarsstrategynetwork.org/sites/default/files/skocpol_captrade_report_january_2013_0.pdf).

<sup>189</sup> A Pew Center poll released on January 25, 2010 indicated that only 28 percent of Americans ranked climate change as a top priority. According to the poll: “Dealing with global warming ranks at the bottom of the public’s list of priorities; just 28% consider this a top priority, the lowest measure for any issue tested in the survey. Since 2007, when the item was first included on the priorities list, dealing with global warming has consistently ranked at or near the bottom. Even so, the percentage that now says addressing global warming should be a top priority has fallen 10 points from 2007, when 38% considered it a top priority. Such a low ranking is driven in part by indifference among Republicans: just 11% consider global warming a top priority, compared with 43% of Democrats and 25% of independents.” (Accessed July 31, 2013); available from <http://www.people-press.org/2010/01/25/publics-priorities-for-2010-economy-jobs-terrorism/>. A Pew Center poll released on October 22, 2009, indicated that cap-and-trade proposals were not well understood: “This issue has not registered widely with the public. Just 14% say they have heard a lot about the so-called “cap and trade” policy that would set carbon dioxide emissions limits; another 30% say they have heard a little about the policy, while a majority (55%) has heard nothing at all.”

<sup>190</sup> In his article “Why the Climate Bill Died,” *Time Magazine* writer Bryan Walsh pointed out that: “The White House insisted on crafting its message around green jobs, rather than climate change—in fact, in April 2009 the White House climate and energy czar told environmentalists that they should avoid actually talking about global warming, and instead focus on green jobs and energy independence.” Yet ironically, he says, “Wasserman points out the problem here—if climate change really is an existential threat to humanity, it seems disingenuous at least to confine advocates to hyping green jobs. Referencing the civil rights era, Wasserman writes:

In the wake of Waxman-Markey and the failed Senate legislative effort of 2010, the national mood (in Kingdon's parlance) shifted dramatically. Democrats lost the House of Representatives in the 2010 election, and the Tea Party ascended as a major force in national politics and a powerful force in the House. Thereafter, any policy window that may have opened with President Obama's election in 2008 slammed shut.

### ***Opening of Another Policy Window***

No administration yet has supported a carbon tax, but in his State of the Union Address on February 17, 1993, President Bill Clinton unveiled his economic plan, one element of which included a broad-based tax on energy. He said, "Our plan includes a tax on energy as the best way to provide us with new revenue to lower the deficit and invest in our people. Moreover, unlike other taxes, this one reduces pollution, increases energy efficiency, and eases our dependence on oil from unstable regions of the world."<sup>191</sup> With those words, the battle over the so-called Btu tax began.

Vice President Al Gore reportedly pushed to include the proposal in the administration's deficit reduction package. It was styled as an energy tax,

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Had Lyndon Johnson likewise relied on polling, he would have told the Rev. Dr. Martin Luther King Jr. to talk only about the expanded industry and jobs that Southerners would realize after passage of a federal civil rights act. One could imagine Dr. King's response. (Accessed July 31, 2013); available from <http://science.time.com/2010/07/26/why-the-climate-bill-died/#ixzz2akPVPPAT>.

<sup>191</sup> William J. Clinton, State of the Union Address, February 17, 1993 (accessed August 31, 2013); available from <http://www.infoplease.com/t/hist/state-of-the-union/206.html#ixzz2amPUj8CT>.

not a carbon tax, to avoid offending Senator Robert Byrd of coal rich West Virginia. A gasoline tax had been ruled out because Clinton has opposed it during his campaign for the presidency, and the only other option – an *ad valorem* tax – was opposed by environmental groups – particularly the Sierra Club and the Natural Resources Defense Council -- who argued for a structure that favored fuels, and who opposed an *ad valorem* tax because they felt it would exacerbate price change of various energy sources.

According to one writer:

“The hybrid Btu tax was brilliantly conceived in every way. It was simple, clean, easy to administer, and raised significant revenue. It encouraged cleaner forms of energy, and thus would cut pollution without being a carbon tax. It taxed oil at a relatively high rate without being a gasoline tax. Its incidence was regionally balanced, and measures were attached to cushion the impact on low-income people. In addition, the impact on the middle class was relatively modest.”<sup>192</sup>

So what went wrong? By many accounts, the administration made a fatal mistake in seeking to curry favor with concessions rather than holding firm and insisting on a fair tax. One of its staunchest opponents noted ironically, “They allowed their proposal to move from a relatively fair tax, across the board, to one that was riddled with loopholes,” said Jerry Jasinowski, president of the National Association of Manufacturers, a Washington-based industry lobby.” Said the *New York Times*:

“And last week -- after the proposed tax on coal was lowered; after aluminum smelters and barge operators got a break; after

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<sup>192</sup> Dawn Erlandson, “The BTU Tax Experience: What Happened and Why it Happened,” *Pace Environmental Law Review*, Volume 12, Issue 1, Fall 1994 (accessed August 1, 2013); available from <http://digitalcommons.pace.edu/cgi/viewcontent.cgi?article=1528&context=pehr>.

farmers and city dwellers won exemptions for the diesel that heats homes and runs combines; after oil refiners and gas and electric companies moved the tax off their backs and onto consumers'; after grain merchants won and then lost a battle to exempt ethanol; after chemical and glass makers secured protection against untaxed foreign competitors -- last week, after all that and more, the White House gave up on enacting a tax on the heat content of fuels, at least for now. Who Would Have Thought?"<sup>193</sup>

It would seem that the deals that were made to promote passage of the proposal were ultimately a major cause of its undoing – not unlike criticisms made of the Waxman-Markey bill and the Senate's effort to enact counterpart legislation. But other reasons have been advanced as well. As one analyst has noted:

Perhaps most importantly, the President failed to persuade the public as he had persuaded some economists and editorial writers. He was unable to invoke public understanding that energy taxes are more beneficial to the country than other taxes, like consumption taxes, because they discourage pollution. The message of what the country stood to gain from the enactment of the Btu tax never, in this legislative travesty, reached the ears, or minds, of the people.<sup>194</sup>

Not unlike events in President Obama's first term, the policy window that opened with Bill Clinton's election in 1992 also slammed shut barely two years later when Republicans took control of the Senate (for the first time since 1986) and the House of Representatives (for the first time since 1954). The "national mood" changed dramatically with House Speaker Newt

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<sup>193</sup> "Tax's Demise Illustrates First Rule of Lobbying: Work, Work, Work", Michael Wines, *New York Times*, June 14, 1993 (accessed August 2, 2012); available from <http://www.nytimes.com/1993/06/14/us/tax-s-demise-illustrates-first-rule-of-lobbying-work-work-work.html?pagewanted=all&src=pm>.

<sup>194</sup> Erlandson, 12

Gingrich's "Compact with America," making any effort at a comprehensive, legislative approach to climate change out of the question for the foreseeable future.

### ***The Political Stream***

The election of Bill Clinton in 1992 and that of Barack Obama in 2008 represented what Kingdon refers to as "policy windows" – key opportunities for significant policy change in many areas but particularly with regard to climate change. Running for the presidency himself on August 31, 1988, George H.W. Bush said he would use the "White House effect" to counter the "greenhouse effect" and promised, if elected, to "do something about it."<sup>195</sup> But neither George H.W. Bush nor George W. Bush seriously contemplated attaching value to carbon by any means, whether a tax or a cap-and-trade regime. In fact, just the opposite occurred. George H.W. Bush steadfastly opposed a cap on U.S. emissions (thought to be a *sine qua non* for any cap and trade system), and George W. Bush rejected the Kyoto Protocol, which also would have capped U.S. greenhouse gas emissions.

Unlike either Bush, Bill Clinton sought to attach value to carbon albeit indirectly through his Btu tax proposal, and unlike either Bush, Barack Obama supported efforts in the House and in the Senate to legislate a cap and trade approach that would also have attached value to carbon. Remarkably

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<sup>195</sup> "The White House and the Green House," *New York Times*, May 9, 1989 (accessed August 2, 2013); available from <http://www.nytimes.com/1989/05/09/opinion/the-white-house-and-the-greenhouse.html>.

too, both Clinton and Obama began their presidencies with a majority in both the House and the Senate. In Kingdon's world, it is difficult to find a better opportunity than Clinton and Obama each had to effect major policy change with respect to the climate issue.

But as Kingdon also observes, policy windows open only briefly. If opportunities are not seized, they slip away. Clinton seized the opportunity before him in 1993, although the global climate regime then was in its infancy. The U.N. Framework Convention on Climate Change was adopted on May 9 of the previous year and opened for signature in June at the Conference on Environment and Development – the “Earth Summit.” -- in Rio de Janeiro. Thereafter, the Senate quickly gave its advice and consent and President George H.W. Bush ratified it on October 15, 1992. But the Convention contained no binding caps on greenhouse gas emissions – it would take another five years for such commitments to emerge. Introduction of a Btu tax in 1993 would have been a stunning advance and would have positioned the United States far ahead of the pack in addressing climate change. The failure of that legislative effort, as noted, saw the closing of a policy window that would not open again for over a decade and a half.

When it next came – with the Obama Administration in 2009 – one of the constraints Kingdon identifies took hold. In addition to dealing with the financial crisis, which the president could not escape, two major policy areas competed for attention: health care, and climate change. As one who has catalogued the history of the cap and trade effort has noted:

After the election, Obama decided to work on both issues simultaneously. Representative Henry Waxman moved climate change through the House, while Max Baucus, of Montana, moved health care in the Senate. “The plan was to throw two things against the wall, and see which one looks more promising,” a senior Administration official said.<sup>196</sup>

After the cap and trade effort fizzled in the Senate, many felt that climate had taken second priority, and could have succeeded had it been first. The same writer summed up the view of many environmentalists and congressional staffers thusly:

“Many of them believe that Obama made an epic blunder by not pursuing climate change first when he was sworn into office. The stimulus failed to reduce unemployment to an acceptable level. The health-care law, while significant, only raised the percentage of people with insurance from eighty-five per cent to ninety-five per cent. Meanwhile, the amount of carbon dioxide in the atmosphere is already above the level that scientists say risks causing runaway global warming. According to the argument, Obama was correct when he said during the campaign that placing a price on carbon in order to transform the economy and begin the process of halting climate change was his more pressing priority.”<sup>197</sup>

That view is not universally shared, including by political scientist Theda Skocpol, who argues that proponents of the cap and trade legislation – leading environmentalists and corporate CEOs who formed an alliance known as the U.S. Climate Action Partnership or USCAP – erred in two principal ways. First, they believed erroneously that they could craft legislation that could simply be handed to Congress for enactment. Second, they utterly failed to recognize the profound changes that had been taking

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<sup>196</sup> Lizza, “As the World Burns.”

<sup>197</sup> Ibid.

place in the country – both in Congress and outside the Beltway, characterized by widening polarization between Democrats and Republicans in Congress over the climate issue, and including the rise of the Tea Party as a potent political force. He says:

The USCAP effort from 2006 through 2010 was another effort to do a Congressional push for a largely pre-cooked corporatist bargain on a huge economically weighty reform. The surprise was that a USCAP-encouraged cap and trade bill managed to get through one house of Congress, not that the effort fell short altogether. Tellingly, cap and trade legislation squeaked through the House during a very unusual moment – in which a large Democratic majority was directed with near-Leninist discipline by one of history’s strongest House leaders, Speaker Nancy Pelosi, who had loyal, strongly pro-environmentalist allies in key committees. When the effort moved into the Senate, the usual dynamics returned: not just GOP minority obstruction and oppositional campaigns in the states, but the feckless wanderings of Democratic Senatorial cats that Leader Harry Reid could barely corral. Left to its own devices, facing no popularly rooted pressures except from fossil fuel businesses and the Tea Party, the Senate was not going to move forward with carbon capping of any sort.<sup>198</sup>

As blunt and hard-hitting as Skocpol’s analysis is in other respects, he nevertheless offers some creative insights on how to approach the opening of the next policy window – sometime after 2016!

A final note with regard to Kingdon’s discussion of jurisdiction, which he identifies as the second central governmental process affecting the political stream. While Kingdon focuses in his work on jurisdiction as it relates to committees of Congress or the respective responsibilities of

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<sup>198</sup> Skocpol, p. 121-122.

government agencies, there is another dimension altogether when it comes to the climate issue – the more Constitutional question of jurisdiction between the Congress and the Executive Branch – or the Judiciary, as will be seen.

When Senator Wirth held his hearing in June 1988, climate change was very much the province of Congress. In 1986, then Senator Joe Biden introduced one of the first pieces of legislation on the subject – the Global Climate Protection Act of 1987 – to “assist the Nation and the world to understand and respond to natural and man-induced climate processes and their implications.”<sup>199</sup> Very quickly thereafter – in the fall of 1988 – the “action” on climate change began to shift to the Executive Branch as the World Meteorological Organization and the U.N. Environment Programme established the Intergovernmental Panel on Climate Change (IPCC) to assess the science, impacts and response strategies for addressing climate change.<sup>200201</sup> The Department of State led the U.S. delegation to meetings of

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<sup>199</sup> The Global Climate Protection Act of 1987, 15 U.S.C. 2902 et seq. (accessed August 4, 2013); available from <http://www.law.cornell.edu/uscode/text/15/2902>.

<sup>200</sup> See Alan D. Hecht and Dennis Tirpak, “Framework Agreement on Climate Change: A Scientific and Policy History,” *Climate Change*, Vol. 29, 4 (April 1995); available from: ProQuest Environmental Science Collection. Their history extends back to 1970 and provides a fascinating account of the many antecedents to the Hansen testimony in 1998. In particular, they discuss the reasons that the United States moved forward with the IPCC in 1988:

At a time when it was difficult to get interagency agreement on any action, there was convergence (for different reasons) around the concept of an international scientific assessment. Some U.S. agencies clearly saw this as a means to 'buy time' before engaging in serious policy decisions. Others saw it as a necessary step similar to the

the IPCC, which presaged the UNFCCC negotiations that were to begin in February 1991, after the IPCC issued its First Assessment Report in August of 1990, and after nations met in Geneva (even during the Gulf War) in November 1990 at the Second World Climate Conference. With the exception, perhaps, of the Clean Air Act Amendments of 1990, Congress thereafter played a much-diminished role from the late 1980s until the Byrd-Hagel Resolution of 1997, partly in recognition of the fact that climate change is a global problem that cannot successfully be addressed by one nation alone.

Ironically, jurisdiction may have worked for some time against the climate issue as Congress ceded the lead to the Executive Branch, which conducted the negotiations from 1991 to 1992 of the UNFCCC. Thereafter, Congress continued to cede the lead to the Executive Branch as the UNFCCC entered into force in 1994, as the first Conference of the Parties was held in Berlin in 1995, and as negotiations began anew from that point forward that led to the Kyoto Protocol in December of 1997. Unfortunately, the Congressional-Executive partnership that is needed to address the climate issue effectively never got off the ground.

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scientific ozone assessment, which was useful in building policy consensus and eventually the Montreal Protocol. In the end the IPCC scientific report actually triggered the beginning of the climate convention process.

<sup>201</sup> See Shardul Agrawala, "Context and Early Origins of the Intergovernmental Panel on Climate Change," *Climate Change*, Vol. 39, 4 (1998). Agrawala's article is one of the most well-researched and thoughtful accounts available of the various strands there were woven together to create the IPCC.

## Chapter Six: Punctuated Equilibrium

Frank R. Baumgartner and Bryan D. Jones followed Kingdon by nearly a decade and built on his work. In their signature study, *Agendas and Instability in American Politics*,<sup>202</sup> they also deal with agenda setting and how issues emerge and recede from the public agenda. But they argue that Kingdon's view is essentially a "close-up" view of the key moments when new ideas infuse the policy process. In contrast, they maintain that American politics are characterized by long periods of stability followed by short, violent periods of change. The moments of dramatic change they describe coincide with the "open policy windows" that Kingdon discusses. They claim to take a more holistic view and instead propose a "punctuated equilibrium" model to explain both periods of stability and moments of rapid change. They borrow the term from paleontology, where Niles Eldridge and Stephen Jay Gould first proposed it, because they feel that it evokes images of stability interrupted by major alternations to a system.

Baumgartner and Jones consider a central question regarding the American political system: Does it provide a safe haven for privileged economic interests, or does it ensure competition among political ideas, constantly providing opportunity for those on the losing side of the political debate to reverse their fortunes? Stated differently, does mass public opinion influence the behavior of political elites, or do elites govern with

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<sup>202</sup> Frank R. Baumgartner and Bryan D. Jones, *Agendas and Instability in American Politics*, (Chicago: The University of Chicago Press, 1993).

little accountability? After surveying a number of previous analyses of this question with compelling evidence on either side, Baumgartner and Jones conclude that both are valid descriptions of the emergence and development of public policy issues, depending on the moment and duration of the period considered for any particular issue. In other words, a more complete description of the evolution of any particular public policy issue must rely on observations taken over a timeframe of decades not years.

Baumgartner and Jones maintain that their model accounts for “both long periods of stability and domination of important policy areas by privileged groups of elites, and for rapid change in political outcomes, where apparently entrenched economic interests find themselves on the losing side of the political battle.”<sup>203</sup> Their model is driven both by how issues are portrayed and which institutions have jurisdiction over them. They focus in particular on how ideas undergird elite privilege and how policy monopolies -- monopolies on political understanding of particular policy interests and institutional arrangements to reinforce that understanding -- come to dominate. Still, they observe that policy monopolies, which may seem immutable, are actually quite fragile and are subject to decay as new ideas emerge and render them unstable over time.

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<sup>203</sup> Ibid., 3

### ***Policy Monopolies***

In their view, the “distribution of intensities of preference” (that is, how many people care strongly about particular issues) constitutes a major source of stability in political systems. They argue that, at any particular time, a political system will feature many areas of “privileged access” to decision making that give powerful economic interests preferential treatment. Conversely, they maintain that the same “citizen indifference” on which such “privileged access” is based is equally a source of instability as long as it is possible to redefine issues and thereby to mobilize people who were previously indifferent. In their view, “No system based on the shared preferences of the interested is safe.”<sup>204</sup>

Baumgartner and Jones argue that policy monopolies are continually being created and destroyed in American politics. When policy monopolies are strong they can enforce a conservative and incremental process. But at times when they are being created or destroyed, changes can be dramatic and self-reinforcing. Baumgartner and Jones see the American political system as “a mosaic of continually reshaping systems of limited participation.” They believe that everyone wants to have a policy monopoly and that many groups either now have them or have had them in the past. What characterizes a policy monopoly are: (1) an institutional structure that is responsible for policymaking, which limits access to the policy process; and (2) a powerful supporting idea associated with the institution. They argue

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<sup>204</sup> Ibid., 19

that these supporting ideas are connected to core political values that can be communicated simply and directly through rhetoric and images, uncontestable values such as progress, participation, patriotism, independence from foreign domination, fairness and economic growth. They point out that, "If a group can convince others that their activities serve such lofty goals, then it may be possible to create a policy monopoly."<sup>205</sup>

Participation in a policy monopoly is governed by rules of access that are designed to discourage outsiders. Prevalent understandings of the policy are so positive that those not involved either support it or are indifferent to it, which helps to ensure their continued non-involvement. Again because of "differential intensities of preference," Baumgartner and Jones affirm that those with a vested interest will always be more active than those with nothing to gain.<sup>206</sup>

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<sup>205</sup> Ibid., 7

<sup>206</sup> See Olivier Cadot and Douglas Webber, "Banana Splits: Policy Process, Particularistic Interests, Political Capture and Money in Transatlantic Trade Politics, *Business and Politics*, Vol. 4, 1 (2002). This example from a very different arena – the trade disputes over bananas between the United States and the European Union in the Caribbean -- substantiates the Baumgartner-Jones contention on this point. Cadot and Webber note:

The combined effect of these different policy process traits [in the European Union and in the United States] has been to facilitate the capture of banana trade policy by highly organized, particularistic, and predominantly *trading* interests. Although neither the WTO nor the transatlantic trading relationship ultimately "slipped" over bananas, the conflict provides scant reason for optimism concerning the future of this relationship or indeed of the multilateral international trading system, at least in as far as the latter depends on good EU-U.S. relations.

For Baumgartner and Jones policy monopolies are extremely difficult to sustain in the open American political system – thus many are incomplete. The destruction of policy monopolies, they maintain, is almost always associated with changes in intensities of interest. “People, political leaders, government agencies, and private institutions, which had once shown no interest in a particular question, become involved for some reason.”<sup>207</sup> Most often the reason is a new understanding of the nature of the policies involved. Proponents may claim that a practice promotes equity and fairness, but opponents may assert that it harms the environment, profits only foreign investors or wastes taxpayer dollars. Baumgartner and Jones point out that a given policy may be associated with many contending images and that the dominant public understanding of many public issues has often changed over time. As dominant public images crumble, the policy monopolies they shield often weaken or disintegrate.

At such times, those who are disadvantaged may propose a new interpretation of events and may try to attract allies in other areas of the political system. Despite the odds against them -- as powerful, well-endowed advantaged interests fight back -- challengers may win from time to time.

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<sup>207</sup> Ibid., 8

### ***Serial v. Parallel Processing of Issues by Government***

Baumgartner and Jones distinguish between serial processing and parallel processing of issues by legislative bodies. Issues that are important and controversial are addressed through serial processing – which requires the simultaneous attention of voters and legislators. But government’s capacity for serial processing is limited because it must decide so many issues. Consequently, most issues, where the attention of legislators and of broader political elites is low, are dealt with by parallel processing. For Baumgartner and Jones the job of those on the outside of political monopolies is to move the issue from the realm of parallel processing to that of serial processing by seeking to reallocate attention.<sup>208</sup>

Agenda setting is highly consequential for partial equilibria and the policy consequences of agenda access can be dramatic. Baumgartner and Jones observe that media attention to issues in the United States tends to follow a pattern of feast or famine in which important issues can be ignored for years only to find themselves the focus of intense media interest at other times. Because media outlets base their coverage in part on what other media outlets are covering, Baumgartner and Jones observe that there is a mimicking behavior on the part of the media that serves to reinforce the

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<sup>208</sup> This tracks with Kingdon’s observations about competition among issues for a place on the agenda – see p. 148, *supra*.

lurching behavior of agendas. And they contend that each time media interest in a subject surges there is a degree of policy change.<sup>209</sup>

Baumgartner and Jones contend that democratic political systems are characterized both by policy monopolies and turbulent change. The former spring up in part because of the limited capacity of government to focus on multiple issues simultaneously, but the latter occurs when the “Eye of Sauron” swings back to focus on a particular policy issue. They say that democratic systems consist of “punctuated partial equilibria.” Apathy and attention are key:

The mobilization of the apathetic provides the key to linking the partial equilibria of policy subsystems in American politics to the broader forces of governance. As different groups become active on a given issue partial equilibria of preferences are altered quickly from one point to another. Apathy is the key variable in politics. Some seek to promote it, others to fight it. Depending on the degree of apathy that prevails, different groups will see their views adopted as the majority view. As the level of apathy changes, so do majority opinions.<sup>210</sup>

Importantly, Baumgartner and Jones also recognize the difference between “macropolitics” -- the province of political parties -- and “subsystem politics” and “micropolitics” -- or individual political behavior. Still, they argue that “macropolitics” can be seen as simply an extension of the process of creating and destroying policy monopolies. In their view political subsystems grow through inattention, so when an issue attracts widespread attention, it can no longer remain confined to a subsystem. Amid partisan

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<sup>209</sup> Baumgartner and Jones, 20.

<sup>210</sup> Ibid., 21

politics, it is normally not possible to maintain policy monopolies because there is too much general attention and there are too few disinterested citizens.<sup>211</sup>

### ***Policy Images and Institutional Venues***

For Baumgartner and Jones two factors are key to understanding shifts between equilibria and change in political systems: (1) policy images – or “public understanding of policy problems,” and (2) the institutional structure in which policy making takes place – which they term “institutional venues.” They maintain that people are not equally interested in or knowledgeable about all issues confronting society. Thus, specialists in particular areas often have an advantage. While specialists spend much of their time communicating with other specialists, from time to time they must explain issues to a broader public with limited interest in the subject matter. When they do so, specialists normally use simpler terms to convey and justify public policies. Seemingly for this reason Baumgartner and Jones argue that every public policy problem is understood, even by the politically sophisticated, in simplified, symbolic terms. And every policy monopoly is intimately linked to the creation and maintenance of a policy image that supports it.

Policy images have a number of characteristics. Baumgartner and Jones maintain that they invariably combine both empirical information and

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<sup>211</sup> Ibid., 22

emotive appeals. They term the emotive aspect the “evaluative component” and refer to the evaluative component of a policy image as its “tone.” They say: “Tone is critical to issue development because rapid changes in the tone of a policy image held by key social actors (such as the mass media) often presage changes in patterns of mass mobilization.”<sup>212</sup> If the tone of an issue changes in the mass media from positive to negative, opponents of the policy have an opportunity to attack it.

Baumgartner and Jones closely adhere to Kingdon’s view that conditions must be seen as problems before action can be taken to address them. They also agree that problems must be seen to be solvable by governmental action before they are likely to be taken up on the public agenda. Baumgartner and Jones point out that different understandings of what facts mean will give rise to different policy outcomes. Thus, they see that a particular set of conditions may produce competing policy images. And they contend that conflict over the definition of policy images is the essence of political struggle.

Baumgartner and Jones agree with Kingdon that getting an issue on the public agenda does not imply any particular solution. They also acknowledge Kingdon’s view of the role of policy entrepreneurs in seeking to link particular solutions to problems, and they agree that much public policy making involves artfully connecting solutions to problems. But here Baumgartner and Jones contend that “...augmentation and creation of a new

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<sup>212</sup> Ibid., 26

understanding of an issue are at the heart of the political process.”<sup>213</sup> At the same time they concede that changing the nature of public debates is neither simple nor to be taken for granted.

In addition to policy images – or the ways in which policies are understood and discussed – Baumgartner and Jones stress the importance of policy venues – institutions or groups that have the authority to make decisions regarding particular issues. They note that one set of institutions may have a monopoly on making such decisions or that jurisdiction over issues may be shared. How institutions come to have jurisdiction over particular issues remains a mystery even to them. They say: “[H]ow an issue gets assigned to a particular area of policy-making is just as much a puzzle as how an issue comes to be associated with one set of images rather than another. Just as images may change over time, so may venues. Further, just as an issue may at times have multiple images, so may it fall within the jurisdiction of multiple venues.”<sup>214</sup>

Baumgartner and Jones spend much time discussing the opportunities for policy change that arise from efforts to shift policy venues. This is because different institutions may be more receptive to one set of arguments than another and one set of constituents than another, hence the search for favorable venues. That search is likely to be relatively easier where jurisdiction is shared among several institutions. But Baumgartner and Jones point out that the mere existence of alternative policy venues is more

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<sup>213</sup> Ibid., 29

<sup>214</sup> Ibid., 32

important than the distribution of advantage that may be conferred by a particular venue. They also note that large public policy problems tend to be shared among multiple institutions, with each focused on a different aspect of the broader issue.

Recalling Schattschneider's concept of conflict expansion -- that losers in a policy debate have a motivation to change the participants by appealing to those not currently involved in it<sup>215</sup> -- Baumgartner and Jones acknowledge that conflict expansion forms the basis for their notion of institutional venue and the importance of image. For these "issue expanders," both changing policy images and shifting policy venues offer opportunities to attract the attention of new allies and find better receptivity to their arguments -- leading to the destruction of existing policy monopolies, and potentially the creation of new ones.

In discussing the interplay between policy image and policy venue and their effect on punctuated equilibriums, Baumgartner and Jones cite one example that has particular resonance for this study. They say:

As an example of how image and venue changes may reinforce themselves, consider a case where an environmental group is continually on the losing side of regulatory decisions made within the executive branch of the federal government. Let us assume that the environmental group achieves some initial success by appealing to a previously uninvolved group in Congress. The group's understanding of the issue, disregarded or considered marginal in the original jurisdiction, may receive a more favorable hearing here. Then Congress may pass legislation that allows protagonists greater access to the courts or the regulatory process, thereby allowing the environmental

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<sup>215</sup> Elmer Eric Schattschneider, *The Semi-Sovereign People*, (New York: Holt, Rinehart and Winston, 1960).

group greater powers even in those venues where previously it has been weak. Further, the laws passed by Congress may explicitly make legitimate certain rhetorical symbols, so the venue change may lead to changes in image as well. From one strategic appeal, a whole series of self-reinforcing changes in image and venue may potentially follow.”<sup>216</sup>

As proof that this scenario is not simply hypothetical, they cite enactment of the National Environmental Policy Act of 1969<sup>217</sup> that required environmental impact assessments and allowed wider access to federal courts as a single piece of legislation that triggered massive change in how the environment and environmental concerns were factored into widespread decision-making.

Ironically, Baumgartner and Jones also point out that just as image and venue may combine to produce rapid change, they may also serve to reinforce the existing assignment of authority. “Both stability and rapid change in policy outcomes can come from the same process.”

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<sup>216</sup> Baumgartner and Jones, 37-38.

<sup>217</sup> 42 U.S.C. § 4321 *et seq.*

## Chapter Seven: Applying Baumgartner and Jones to Climate

Much of what Baumgartner and Jones advance to explain the policy process broadly in the United States has salience for the climate change issue. In particular, their ideas help to explain why the United States as a nation and Americans as a people have not yet reached a consensus on how important the climate change issue is or on what should be done about it. Baumgartner and Jones might say that we have been living through a long period of policy stability since the late 1980s. But have we?

Over the period since 1988, public awareness of the climate issue has increased dramatically – to a point where it features prominently in periodic meetings of world leaders. Is it accurate to say that over this time the United States has experienced a long period of policy stability?

From the standpoint of those deeply troubled by mounting scientific evidence of a major existential threat, this assertion is likely both accurate and a source of despair.<sup>218</sup> Despite periodic scientific assessments of the

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<sup>218</sup> See Thomas F. Stocker and Dahe Qin, eds., “Summary for Policy Makers, Climate Change 2013: The Physical Science Basis,” *Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (accessed January 27, 2014); available from [http://www.climatechange2013.org/images/uploads/WGI\\_AR5\\_SPM\\_brochure.pdf](http://www.climatechange2013.org/images/uploads/WGI_AR5_SPM_brochure.pdf). Among the most critical:

- Warming of the climate is unequivocal. 2
- The rate of sea level rise since the mid-19<sup>th</sup> century has been larger than the mean rate during the previous two millennia (*high confidence*). 9
- The atmospheric concentrations of carbon dioxide, methane and nitrous oxide have increased to levels unprecedented in at least the last 800,000 years. *Ibid.*

Intergovernmental Panel on Climate Change, each of which has grown more definitive, the American people have yet to demand far-reaching action and Congress has yet to respond comprehensively.

### ***Political Tumult v. Policy Stability***

Here it is important to distinguish between “political tumult” and “policy stability.” Since 1988 unquestionably there has been an enormous degree of political tumult that has influenced the climate issue. Examples include the changes in U.S. administrations (from George H.W. Bush, to Bill Clinton, to George W. Bush, to Barack Obama). They also include extreme weather events, like Hurricane Katrina in 2005, Hurricane Sandy in 2012 and the extreme drought of 2012. They include as well dramatic events outside the climate arena that significantly diverted public attention from the issue. Examples of these ‘exogenous’ events include the Gulf War from 1990-1991, the 9/11 attacks in 2001, the Afghan War from 2001 to the present, and the

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- Human influence on the climate system is clear. 13
  - It is *extremely likely* that human influence has been the dominant cause of the observed warming since the mid-20<sup>th</sup> century. 15
  - Continued emissions of greenhouse gases will cause further warming and changes in all components of the climate system. Limiting climate change will require will require substantial and sustained reductions of greenhouse gas emissions. 17
  - The global ocean will continue to warm during the 21<sup>st</sup> century. Heat will penetrate from the surface to the deep ocean and affect ocean circulation. 22
  - Most aspects of climate change will persist for many centuries even if emissions of CO<sub>2</sub> are stopped. This represents a substantial, multi-century climate change commitment created by past, present and future emissions of CO<sub>2</sub>. 25

Iraq War from 2003 to 2011. They might also include the legislative effort to enact the Affordable Care Act during President Obama's first term.

There has also been considerable political tumult within the climate arena itself. Examples of such dramatic 'endogenous' events include heads of state signing the Framework Convention at 1992's Earth Summit in Rio, the first UNFCCC Conference of the Parties (COP) in Berlin in April 1995, the Senate's approval of the Byrd-Hagel Resolution in June 1997, adoption of the Kyoto Protocol in December of that year, rejection of the Protocol by President Georg W. Bush's in March 2001, President Obama's dramatic gambit at the December 2009 Copenhagen COP, and the launch of new negotiations toward a post-2020 climate regime at the Durban COP in December 2011. There has been political tumult as well occasioned by the periodic IPCC assessment reports and their steady drumbeat of concern about the climate threat, in addition to "theatrical" events like the 2006 release of Al Gore's *An Inconvenient Truth*, and the Nobel Committee's decision to award him and the IPCC the Peace Prize in 2007.

Still despite these events and the political tumult they have triggered, U.S. policy on climate change has remained remarkably stable over this period. The voluntary measures for which President Clinton criticized President George H.W. Bush are largely the same kinds of measure to which President Clinton himself turned after the demise of the Btu tax. And President Clinton pursued nothing else through the end of his second term. The two terms of President George W. Bush brought a continued embrace of

voluntary approaches and a commitment to reduce the carbon intensity of the economy – but not to halt the increase in greenhouse gas emissions.

While President Obama supported Congressional efforts to develop cap-and-trade legislation, those efforts failed – like efforts to enact a Btu tax before them. Stability in this sense is characterized by the absence of abrupt or far-reaching policy change at the domestic level. From 1988 to the present, then, climate policy at the federal level has largely been confined to voluntary measures or limited regulatory measures in specific sectors. With the exception of the Btu tax and the Waxman-Markey cap-and-trade proposal, there has been no comprehensive effort to attach value to carbon economy-wide in the United States. The Clean Air Act Amendments of 1990, while dramatic, addressed the climate issue only at the margins. And efforts since then to use the Clean Air Act to tackle climate change, beginning with *Massachusetts v. EPA* in 2007, remain largely untested. It is in this sense that U.S. climate policy has been remarkably stable over the past quarter century.

### ***The No-Regrets Strategy***

If so, what is that policy? It is largely a much circumscribed “no-regrets” strategy – circumscribed because even efforts to undertake limited “no regrets measures” have come under fire in the culture war against global warming. Curiously, the beginnings of both (action and reaction) can be found in the first days of the Bush Administration in 1989.

In a press conference on January 4, 1989, several prominent scientists called attention to white papers prepared on four subjects containing scientific advice and recommendations for President-elect Bush: (1) the global environment; (2) AIDS; (3) space policy; and (4) the organization of science and technology advice within the new administration. Dr. Robert M. White, President of the National Academy of Engineering (and the first Administrator of the National Oceanic and Atmospheric Administration) spoke to the global environment. He said:

“First, both global warming and acid deposition are linked to the heavy reliance on fossil fuels; therefore, efforts to enhance both energy efficiency and conservation should be strengthened. Means for increasing the use of the cleanest fossil fuels such as natural gas should be considered, but in the context of appraising their finite availability, alternative non-fossil fuel energy sources such as nuclear reactors and solar energy need to be reappraised with more emphasis put on their use in a safe, and publicly acceptable manner. The Montreal Protocol is an important first step toward controlling stratospheric ozone depletion. However, the provisions of the protocol should be called upon to encourage deeper reductions in emissions of ozone destroying chemicals with a total phase out of chlorofluorocarbons on a reasonable timescale. Global warming will affect sea levels, agricultural systems, forestry, and water resources. It's not too soon then to assess possible impacts and responses. Tropical forests are being cut down at an alarming rate and mitigating strategies that consider economic and other forces driving this destruction need to be implemented in collaboration with the affected nations. And lastly, the improved predictions of the future course of the global environment require new and innovative approaches studying the Earth and its environment. A substantial investment in research and ground and space-based monitoring activities is needed.”<sup>219</sup>

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<sup>219</sup> Transcript of Press Conference with the National Academies of Science and Engineering and the National Institute of Medicine on “Four White Papers containing recommendations to President-elect Bush on Presidential Science Advice, AIDS, Space Policy and Environmental Problems,” Speakers: Frank Press, President

White was well acquainted with the issue of global climate change. Among his many roles, he served on the advisory committee to the Bureau of Oceans and International Environmental and Scientific Affairs at the Department of State. According to one scholar of the period:

Perhaps the committee's most notable effort came in the area of international environmental concerns. Committee member Robert White, president of the National Academy of Engineering, led an effort to alert the department to the global warming issue. A report prepared by White, drawing on the resources of his organization, led to a study that had wide circulation within the Department of State. It was influential in alerting at least some high-level officials to the importance of this issue. A number of informal briefings took place between committee members and senior officials. An October 28, 1988, speech by Secretary of State Shultz, "The Ecology of International Change," delivered at the Commonwealth Club of California, drew on the study's analysis on greenhouse gases and climate change.<sup>220</sup>

In fact, Secretary Shultz's remarks barely touched the issue. In the last of his three "Global Trends" speeches that year, he said only:

So this is the third and final installment. It deals with the *new political complexities* we face as a result of our recent years of accomplishments. I call this the "ecology of international change." The relatively recent concept of ecology teaches us that our natural environment is interrelated. Beneficial activity in one location can create unexpected problems in another. We increased dependence on coal and oil when people grew concerned about nuclear energy, but now we know that fossil

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of the National Academy of Sciences; H. Guyford Stever, Chairman of the Committee on Space Policy, National Academies of Sciences and Engineering; Samuel O. Their, President, Institute of Medicine; and Robert M. White, President National Academy of Engineering, January 4, 1989 (accessed February 2, 2014); available from <http://www.lexisnexis.com.ezproxy.library.tufts.edu/hottopics/lnacademic/>.

<sup>220</sup> Bruce L.R. Smith, *The Advisers: Scientists in the Policy Process*, (Washington, D.C.: The Brookings Institution, 1992), 149-50.

fuels are producing the gases that lead to global warming problems.<sup>221</sup>

What is remarkable for the era is not that the preponderance of his speech dealt with the Soviet Union, arms control and conflict prevention but that the Secretary of State would mention the issue of global warming in any public statement at all<sup>222</sup>.

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<sup>221</sup> George Shultz, "The Ecology of International Change," Department of State Bulletin, Vol. 89, No. 2142, January 1989, 6 (accessed February 5, 2014); available from: <https://archive.org/details/departmentofstata89unit>.

<sup>222</sup> However, former Secretary Shultz had this to say in a recent interview when asked if there were any past experiences that give him hope that the United States "might address climate change in a more coherent way." He said:

We had a version of the climate change issue in a little different way when I was Secretary of State in the 1980s. There were a lot of scientists who thought that the ozone layer was depleting. There were some who doubted it. They all agreed that, if it happened, it would be a catastrophe. I had two private meetings a week with President Reagan, and we talked about it. We decided that we should take out an insurance policy. Rather than go and confront the people who were doubting it and have a big argument with them, we'd say to them: Look, there must be, in the back of your mind, at least a little doubt. You might be wrong, so let's all get together on an insurance policy. It wound up as a treaty called the Montreal Protocol.

In retrospect, it's clear that the scientists who were worried were right, and the Montreal Protocol came on in the nick of time. So, on a lot of these issues, time is not on your side because [environmental problems] can get, if not beyond repair, increasingly hard to repair. I also worry about discontinuities. You can point to a number of things that might produce a discontinuity, where, in other words, suddenly things get much warmer quickly, and you scramble around to do something. We know that carbon stays in the atmosphere. It doesn't disappear. You know, a new ocean is being created for the first time since the Ice Age [in the Arctic with the meltdown of sea ice]. How could that happen? It's getting warmer.

See David Biello, "A Republican Secretary of State Urges Action on Climate Change," Scientific American, July 24, 2012 (accessed February 17, 2014); available from <http://www.scientificamerican.com/article/questions-and-answers-with-george-shultz-on-climate-change-and-energy/>.

About two weeks after Frank Press, Robert White, Guyford Stever and Samuel Their held their joint press conference, then Secretary of the Treasury James A. Baker, III, underwent two days of testimony (January 17-18) before the Senate Foreign Relations Committee regarding his nomination to be Secretary of State. Chairman Claiborne Pell raised a general question about the environment, but Senators Rudy Boschwitz and Richard Lugar raised detailed questions about global climate change. In a delicious bit of historical irony one Secretary of State to be (Senator John F. Kerry) asked another Secretary of State to be (James A. Baker, III) detailed questions about a meeting coming up from January 30-31 at the State Department of the IPCC's Response Strategies Working Group (RSWG or "Riswik").<sup>223</sup>

### ***Baker One***

Assistant Secretary of State for Oceans and International Environmental and Scientific Affairs Fred Bernthal chaired the RSWG, and invited the new Secretary to address the delegates. In light of the interest expressed by Senator Kerry and others during his confirmation hearing, Baker likely had little choice but to accept. He delivered his remarks at the opening of the meeting on January 30, saying:

Some months ago President Bush said, 'We face the prospect of being trapped on a boat that we have irreparably damaged - not

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<sup>223</sup> See Hearing of Senate Foreign Relations Committee on Nomination of James Baker III for Secretary of State (morning and afternoon sessions), January 17, 1989 (accessed February 2, 2014); available from <http://www.lexisnexis.com.ezproxy.library.tufts.edu/hottopics/lnacademic/>.

by the cataclysm of war, but by the slow neglect of a vessel we believed to be impervious to our abuse.' The establishment of the Intergovernmental Panel on Climate Change and this meeting of the Panel's Response Strategies Working Group, I think, show beyond a doubt that this is a transnational issue. We are all in the same boat. And as I put it in my testimony to the Senate recently, "The tides and the winds can spread environmental damages to continents and hemispheres far removed from the immediate disasters."

So, if I may borrow a phrase from the environmentalists, the political ecology is now ripe for action. We know that we need to act, and we also know that we need to act together. This is what this meeting is all about. But I would take it even a step further. One of the big advantages of being Secretary of State is that because I am not a scientist, I am, therefore, not called upon to assess the evidence, especially on global climate change. Yet it is also clear, I think, that we face more than simply a scientific problem. It is also a diplomatic problem of when and how we take action. And here, if I might, I would like to make four points.<sup>224</sup>

Baker continued to establish in four short points the policy that has largely guided the U.S. approach from that point to the present. He said:

The first is that we can probably not afford to wait until all of the uncertainties have been resolved before we do act. Time will not make the problem go away.

The second is that while scientists refine the state of our knowledge, we should focus immediately on prudent steps that are already justified on grounds other than climate change. These include reducing CFC emissions, greater energy efficiency and reforestation.

The third is that whatever global solutions to global climate change are considered, they should be as specific and cost-effective as they can possibly be.

The fourth is that those solutions will be most effective if they transcend the great fault line of our times, the need to reconcile the

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<sup>224</sup>James A. Baker, III, "Remarks before the Intergovernmental Panel on Climate Change Response Strategies Working Group, January 30, 1989 (accessed January 30, 2014); available from <http://www.lexisnexis.com.ezproxy.library.tufts.edu/hottopics/lnacademic/>.

transcendent requirements for both economic development and a safe environment.<sup>225</sup>

The second of Baker's points embodies the so-called "no-regrets" strategy, and it is that strategy that has characterized U.S. policy on climate change for nearly a quarter century. Baker's speech was remarkable in a number of ways. First, it set forth a common sense approach that could have been the basis for a well-crafted series of meaningful actions going forward. Had the policy he articulated been seriously pursued in the Bush Administration, it could -- in those days -- have put the United States in a leadership position internationally.

### ***Baker Two***

Baker expanded on his early remarks just over a year later, in an extensive address on the global environment before the National Governors Association in Washington, D.C. He said:

Just a few weeks ago, the President addressed the Intergovernmental Panel on Climate Change. He was the first head of state to speak before this panel, and his presence demonstrated I think the seriousness with which our government regards this question, as well as our dedication to finding appropriate scientific, economic, and environmental solutions. The President reiterated our policy toward climate change. It is a policy that we call the 'no regrets' policy. And we encourage other nations to adopt a similar approach.

Just what do we mean by 'no regrets'? We mean that while we are pursuing the serious scientific research that is critical to any responsible approach, we are also hedging our bets in an economically sound way. We mean that the united States is

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<sup>206</sup>Ibid.

making a major financial commitment to analyze these scientific issues, increasing our funding for the United States Global Change Research Program to over \$1 billion; and we mean that we're prepared to take actions that are fully justified in and of their own right, and which have the added advantage of coping with greenhouse gases. They are precisely the policies that we will never have any cause to regret.

Specifically we are committed to phasing out chlorofluorocarbons by the year 2000 to protect the ozone layer. CFCs also contribute significantly to the greenhouse effect. Next the President has launched a major reforestation initiative called 'America the Beautiful.' Under this multiyear program, our citizens will plant one billion trees each year in partnership with the government and the business community. The trees will provide, of course, habitats for wildlife, stem soil erosion, provide recreational facilities, offer employment and generate forest products. At the same time the trees will help absorb carbon dioxide, a major greenhouse gas.

And finally, we are dedicated to a program of energy conservation and energy efficiency. This contributes to efficient use of scarce energy supplies, it reduces our dependence on foreign energy sources, and saves all of us money – citizens, government, and industry alike. Moreover, decreasing the use of fossil fuels will reduce greenhouse gas emissions.

If the results of international scientific research demonstrate that climatic conditions will not change in a significant way, we will have no regrets for these actions, because they have provided us, or will have provided us, with other benefits. If, on the other hand, the findings of our research turn out to be more troublesome, we will have taken prudent steps towards solving the problem in a cost-effective way. We urge other nations to join us in our 'no regrets' efforts.<sup>226</sup>

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<sup>226</sup> James Baker, "Address to the National Governors' Association, Washington, D.C.," February 26, 1990 (accessed February 5, 2014); available from <http://www.lexisnexis.com.ezproxy.library.tufts.edu/hottopics/lnacademic/>.

### ***No Traction for No Regrets***

Instead championing a policy based on the ‘no-regrets’ strategy, the Bush Administration took a different approach. White House Chief of Staff John H. Sununu (who earned his Ph.D. from MIT in mechanical engineering) quickly asserted a powerful role over the issue, frequently intervening in policy debates and often questioning the science. Sununu felt strongly that the uncertainties surrounding the issue were significant and that “the science of climate change” had been exaggerated. He firmly opposed any targets or timetables for greenhouse gas reductions. Sununu’s views cast a pall over the issue, which spread to other kinds of actions that might be taken to address the climate problem consistent with the “no-regrets” strategy.

A particularly poignant example was the White House Conference on Climate Change held from April 17-18, 1990. Sununu orchestrated every aspect of the conference, which provoked a storm of criticism, in particular from European participants. Said French Environment Minister Brice Lalonde, “We have the feeling we were invited just to listen.” Said the *Washington Post*, “Sources close to the White House said aides to Chief of Staff John H. Sununu had structured the conference that way to mute opposition to Bush’s stance, which Sununu was instrumental in formulating.” And President Bush was described as having “assumed a cautious stance in office, bowing to advisers who view global warming as a scientific fad and see

proposals to curb greenhouse gases, created by the burning of coal and oil, as potentially ruinous to the U.S. industrial base.”<sup>227</sup>

After his remarks to the National Governors’ Association in late February 1990, Secretary of State Baker recused himself from the climate issue, citing his oil and gas holdings. He never again engaged on the issue during the remainder of his days in the Bush Administration. Many insiders believed at the time that Baker’s motivation was less ethical and more political – he saw no need to cross swords over this issue with John Sununu.<sup>228</sup>

One of the most penetrating assessments of climate policy in the George H.W. Bush Administration is that of Michael Weisskopf, who offered a retrospective in late 1992. In Weisskopf’s view the President himself was detached and uninterested, “responsive only to the politics of a complex issue.” He pointed out:

In the absence of any presidential involvement, Sununu followed his personal belief that global warming projections were alarmist and overruled the recommendations of the administration’s own environmental officials. Stressing his engineering credentials, Sununu commissioned government-supported scientists to develop a simplified climate model that he ran on his office computer. His strong arguments -- even in the face of contrary scientific evidence -- that excess heat from

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<sup>227</sup> Michael Weisskopf, “Bush Says More Data on Warming Needed: U.S. Criticized at Conference,” *Washington Post*, April 18, 1990.

<sup>228</sup> Personal observation based on widespread speculation in the State Department at the time. See also, Leslie H. Gelb, “Sununu vs. Scientists,” *New York Times*, February 10, 1991;

the burning of carbon fuels would be absorbed by oceans earned him the nickname "plankton man" from the president."<sup>229</sup>

Weisskopf also noted another result of the president's disengagement:

The issue drove his advisers into factions, dominated for the first three years by Sununu, who declined to be interviewed for this article. Sununu had powerful allies in Richard G. Darman, director of the Office of Management and Budget, and Michael J. Boskin, chairman of the Council of Economic Advisers. They argued that limits on greenhouse gases, produced by burning oil and coal, would be economically ruinous because of U.S. dependence on those fuels. As Boskin warned before the 1990 economic summit in Houston, 'Remember, Mr. President, this is a bet-your-economy issue.'<sup>230</sup>

The Administration of George H.W. Bush has been thought to be far less "ideological" than that of Ronald Reagan before him. But, as Weisskopf attests, the climate issue divided his advisers into factions, and those factions had an ideological dimension. An example can be found in the unstinting support for market mechanisms to solve environmental problems (as opposed to 'command and control' regulatory approaches) from such influential figures in the Bush Administration as White House Counsel Boyden Gray and Department of Justice Assistant Attorney General for Land and Natural Resources Richard Stewart. The two missed no opportunity to extoll the virtues of market mechanisms over regulation and had no patience for anything that smacked of it. The irony is that market mechanisms only work to reduce greenhouse gas emissions if those emissions first are

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<sup>229</sup> Michael Weisskopf, "Bush was Aloof in Climate Debate; Climate Treaty Offers View of President's Role in Complex Policy," *Washington Post*, October 31, 1992.

<sup>230</sup> Ibid.

capped.<sup>231</sup> But Chief of Staff Sununu remained adamantly opposed to any such notion. Remarkably, Sununu's opposition to "targets and timetables" or "caps" on greenhouse gas emissions co-existed with Gray and Stewart's continued advocacy of market mechanisms throughout the Bush years. These competing views were never reconciled and (miraculously) seemed never to collide.

Returning then to the "punctuated equilibrium model," Baumgartner and Jones also contend that "policy monopolies" arise largely because of government's limited capacity for "serial processing" – bringing voters and legislators together simultaneously to focus on important and controversial issues. Under the Baumgartner-Jones model, policy monopolies arise because most issues – those for which the attention of legislators and broader political elites is low – are dealt with through parallel processing. Each policy monopoly is driven by a specific "policy image" and depends on a particular "policy venue."

### ***Raising the Profile***

This aspect of the Baumgartner and Jones model seems highly relevant to the climate issue, particularly in the years that led up to the Kyoto Protocol in 1997. While President George H.W. Bush was the first head of state to address the IPCC at its Third Plenary Meeting in Washington, D.C., in

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<sup>231</sup> A highly regarded State Department lawyer who sought to point this out -- from concern that U.S. negotiating partners might otherwise take it as implicit support for "targets and timetables" -- was nearly fired by the White House for being a disciple of "command and control" approaches. Personal recollection.

February 1990,<sup>232</sup> negotiation of the U.N. Framework Convention on Climate Change was largely left to senior officials. While heads of state and government participated in the “Earth Summit” (aka the United Nations Conference on Environment and Development) in June 1992, they simply signed the UNFCCC there – negotiations on it had concluded and senior officials adopted it in New York on May 9, 1992, preceding the Rio Conference. Ministers did not begin to take part in the climate negotiations until the First Conference of the Parties in Berlin in April 1995.<sup>233</sup> In other words, for many years, the climate issue did not rate sustained senior-level attention. Similarly, media attention was also episodic, hinged for the most part to announcements of new scientific findings or studies of the economic costs of addressing the problem or to controversy surrounding specific international meetings.<sup>234 235</sup>

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<sup>232</sup> Philip Shabecoff, “Bush Asks Cautious Response to Threat of Global Warming,” *New York Times*, February 6, 1990 (accessed January 27, 2014); available from <http://www.nytimes.com/1990/02/06/us/bush-asks-cautious-response-to-threat-of-global-warming.html>. For specific reference to President George H.W. Bush as the first head of state to address the IPCC, see Matthew L. Wald, “Watkins Defends Policy on Warming,” *New York Times*, February 9, 1990 (accessed January 27, 2014) available from <http://www.nytimes.com/1990/02/09/us/watkins-defends-policy-on-warming.html>. See also “George Johnson, “IDEAS & TRENDS; Bush Would Wait for a Weatherman,” *New York Times*, February 11, 1990 (accessed January 27, 2014); available from <http://www.nytimes.com/1990/02/11/weekinreview/ideas-trends-bush-would-wait-for-a-weatherman.html>.

<sup>233</sup> Personal observation. The model now established is for senior officials to take part in the various subsidiary body meetings of the UNFCCC throughout the year; ministers (and some heads of state) normally attend the “high-level” segment (the final two to three days) of the annual COPs.

<sup>234</sup> A fascinating study and an impressive piece of scholarship can be found in David Howland, “Good Press, Bad Press: A 25-Year Comparison of Arguments and Trends in American News Coverage of Climate Change and the Ozone Hole,” (Ph.D. diss.,

## ***The Global Climate Coalition***

If it can be said that the attention of legislators and political elites to the climate issue was low, presumably there would be fertile ground in which a policy monopoly could establish itself. Does any such policy monopoly stand out with reference to the climate issue? While a number of candidates might be suggested, the most prominent between its founding in 1988 and its ultimate dissolution in 2002 was the Global Climate Coalition (GCC).

*New York Times* environment writer Andrew Revkin described the group in an article that appeared years after it dissolved:

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University of New Hampshire, 2006). One of Howland's key research questions is: "How have the sources, structure and content of arguments carried by mainstream American print media about the ozone hole and climate change evolved from 1980 to 2004?" In his "Summary of Key Findings of Case Comparisons, Howland says: "Over the 24-year sample, arguments of scientists in both ozone and climate change news coverage were focused on defining the "problem" and were solidly and consistently supportive of the Montreal and Kyoto Protocol's goals and principles. Peaks in these arguments corresponded with protocol conferences and the release of major scientific reports." 201.

<sup>235</sup> See Maxwell T. Boycott and Jules M. Boycott, "Climate change and journalistic norms: A case study of US mass media coverage," *Geoforum* (5 January 2007) (accessed January 27, 2014); available from <http://www.eci.ox.ac.uk/publications/downloads/boykoff07-geoforum.pdf>. They take issue with Downs' 1972 theory positing five sequential stages in explaining the rise and fall of media coverage of ecological issues: "1) the 'pre-problem' stage; (2) the 'alarmed discovery and euphoric enthusiasm' stage; (3) the gradual realization of the cost stage; (4) the gradual decline of intense public interest stage; and (5) the 'post problem stage' in which the formerly 'hot issue' moves into a prolonged limbo – a twilight realm of lesser attention or spasmodic recurrences of interest." They reject Downs' 'natural cycle' model and argue instead that 'unpredictable, real-world dynamics thrust social and environmental issues into the purview of policy makers and the public. As such, environmental issues that climb to the top of the mass media's agenda – like anthropogenic climate change – may not do so for scientific reasons or those of 'alarmed discovery.' Real-world issues, events and dynamics must interact with journalistic norms in order to successfully translate into media coverage."

For more than a decade the Global Climate Coalition, a group representing industries with profits tied to fossil fuels, led an aggressive lobbying and public relations campaign against the idea that emissions of heat-trapping gases could lead to global warming. “The role of greenhouse gases in climate change is not well understood,” the coalition said in a scientific “backgrounder” provided to lawmakers and journalists through the early 1990s, adding that “scientists differ” on the issue.

The coalition was financed by fees from large corporations and trade groups representing the oil, coal and auto industries, among others. In 1997, the year an international climate agreement that came to be known as the Kyoto Protocol was negotiated, its budget totaled \$1.68 million, according to tax records obtained by environmental groups. “Throughout the 1990s, when the coalition conducted a multimillion-dollar advertising campaign challenging the merits of an international agreement, policy makers and pundits were fiercely debating whether humans could dangerously warm the planet. Today, with general agreement on the basics of warming, the debate has largely moved on to the question of how extensively to respond to rising temperatures.<sup>236</sup>

The GCC might be seen as a specific offshoot of a broader movement in the private sector dating back to the Powell Memorandum of 1971. In that memorandum [written privately to the U.S. Chamber of Commerce, but obtained and published by *Washington Post* columnist Jack Anderson], future Supreme Court Associate Justice Lewis F. Powell, Jr. asserted that: “No thoughtful person can question that the American economic system is under broad attack.” He said:

We are not dealing with sporadic or isolated attacks from a relatively few extremists or even from the minority socialist cadre. Rather, the assault on the enterprise system is broadly

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<sup>236</sup> Andrew C. Revkin, “Industry Ignored Its Scientists on Climate,” *New York Times*, April 23, 2009 (accessed February 2, 2014); available from <http://www.nytimes.com/2009/04/24/science/earth/24deny.html>.

based and consistently pursued. It is gaining momentum and converts.<sup>237</sup>

Powell's memorandum was a manifesto that proposed a broad suite of actions that corporate America should take to address the threat to its survival. He said:

The overriding first need is for businessmen to recognize that the ultimate issue may be survival – survival of what we call the free enterprise system, and all that this means for the strength and prosperity of America and the freedom of our people.<sup>238</sup>

The Powell Memorandum triggered a massive mobilization by Corporate America. The National Association of Manufacturers moved its headquarters to Washington, D.C.; the U.S. Chamber of Commerce doubled its membership and tripled its budget by 1974; and by 1978, trade associations in Washington, D.C., had increased to nearly 2,000 with combined staff of 50,000.<sup>239</sup> According to Hedrick Smith:

Previously, business politicking had been fragmented, each company operating on its own. Corporations founded new think tanks like the Heritage Foundation and the Cato Institute and vastly stepped up funding for the previously modest American Enterprise Institute, to generate policy analysis from a business perspective.

While acknowledging other factors that “were challenging the long-accepted governmental activism of the welfare state, including “movement conservatism,” dating from the nomination of Senator Barry F. Goldwater in 1964, Smith contends:

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<sup>237</sup> Lewis F. Powell, Jr., “Confidential Memorandum: Attack on American Free Enterprise System,” August 23, 1971, in *Who Stole the American Dream?* Hedrick Smith (New York: Random House Trade Paperbacks, 2013), 446.

<sup>238</sup> *Ibid.*, 451

<sup>239</sup> Hedrick Smith, *Who Stole the American Dream?* 11-12.

But it was Powell's rallying cry and corporate manifesto, infused into the political bloodstream of the business community by the U.S. Chamber of Commerce that generated broad tremors of change in Corporate America and set off a seismic transformation of our political system. Forty years later, we still feel the aftershocks.<sup>240</sup>

### ***Policy Image: The Byrd-Hagel Resolution***

According to Baumgartner and Jones, every policy monopoly depends on the creation and maintenance of a policy image that supports it, an image that combines both empirical information and emotive appeals. If the GCC represented a true policy monopoly in the sense of Baumgartner and Jones, what policy image did it create and on what image did it rely for its perpetuation? Eric Pooley claims that freshman Nebraska Senator Chuck Hagel co-authored the Byrd-Hagel Resolution of 1997 on behalf of the GCC. He says:

Byrd-Hagel was the Senate's first chance to speak on global warming, and it spoke with a loud, unambiguous *hell no*—framing the issue as a choice between the earth and the economy, and making clear that the economy came first. The notion that fixing the climate necessarily means destroying the economy was to become the Big Lie of the climate debate and the signature achievement of the opponents of action. It has dominated the argument ever since. Every time a bill was proposed, it would be shot down because it would cost 'too much.' Climate campaigners...found themselves arguing in vain that the costs 'wouldn't be as bad' as the opponents claim. *Not that bad* is not that good a strategy, and it lost every time.<sup>241</sup>

Byrd-Hagel was a "sense of the Senate" resolution that enumerated two conditions that would need to be met for the United States to become a

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<sup>240</sup> Ibid., 6-7

<sup>241</sup> Eric Pooley, *The Climate War: True Believers, Power Brokers and the Fight to Save the Earth*, (New York: Hyperion, 2010), 90-91.

signatory to any international agreement on greenhouse gas emissions under the UNFCCC: (1) it would need to mandate “new specific scheduled commitments to limit or reduce greenhouse gas emissions for Developing Country Parties within the same compliance period” and (2) it would not result in serious harm to the economy of the United States.” The GCC frequently asked why the United States should have to limit its greenhouse gas emissions if key competitors like China and India were not also bound to limit theirs.<sup>242</sup>

### ***Policy Venue: The Executive Branch***

In addition to policy image, Baumgartner and Jones also stress the importance of policy venue – institutions or groups that have the authority to make decisions regarding particular issues. Here, as has been noted, the

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<sup>242</sup> The Byrd-Hagel passed the Senate by a vote of 95-0. Many have since wondered how such a resolution could be supported not only by so many U.S. Senators, but by those with such disparate views (for example, Senators Biden, Boxer, Kennedy, Kerry and Lieberman on the one hand, and Senators Enzi, Helms, Inhofe, McConnell and Santorum on the other)? In his remarks on the Senate floor, Senator Kerry commented on the “strange hybrid of Senators” that signed on, noting that some did not support any action to address global climate change. He said that he would vote for the resolution because it “embraces common sense” in that a global solution would require the participation of all countries – but he made clear that he and many others favored acting to address the climate problem. See C-Span, “Global Climate Change Treaty,” July 25, 1997 (Beginning at 9:30 a.m. senators debated a Senate Resolution 98, a non-binding resolution on the negotiations of the Global Climate Change Treaty sponsored by Senators Byrd and Hagel) (accessed March 2, 2014); available from: <http://www.c-span.org/video/?96242-1/global-climate-change-treaty>. At the time, it was rumored that the White House, once it was clear the resolution had enough votes to pass, urged those not inclined to support it to vote in favor. It was thought that a near unanimous vote for a resolution embraced simultaneously by those at opposite ends of the ideological spectrum would muddy its meaning. If so, this subtlety seems now to have been lost on the press and the public, who today recall only 95-0. Personal recall and observation.

climate issue largely migrated from Congress to the Executive Branch with the advent of the IPCC in 1988 and the subsequent international drive toward first the UNFCCC in 1992 and subsequently to the Kyoto Protocol in 1997. Representatives of the GCC and its members took regular part – as non-governmental organizations – in the negotiations that led to both. For a brief period the State Department experimented with including a representative of an environmental organization as well as a representative of a private sector group on the U.S. delegation. During the Bush Administration, the GCC “owned” this private sector slot. When the Clinton Administration took office in 1993, it broadened the representation to other, “more progressive” business interests as well. Ultimately, the State Department decided not to include NGOs on U.S. climate delegations because of the complexities of ensuring that all specific interests who wished to be included could have a slot (e.g., in addition to environmental and business groups -- states, municipalities, utility commissions, religious groups, indigenous peoples, etc.) and because all of these interests could be accredited to the UNFCCC in their own right.<sup>243</sup>

The GCC dissolved in 2002 after the election of President George W. Bush, his decision not to proceed with the Kyoto Protocol, and his announcement of a greenhouse gas intensity target (as opposed to absolute

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<sup>243</sup> Personal observation.

reductions in U.S. greenhouse gas emissions).<sup>244</sup> Partly because of the GCC and the Bush Administration policies, environmental groups began seeking to shift the venue of the debate – from the Executive Branch to the Judicial Branch – that culminated in *Massachusetts v. EPA*.

From the foregoing, it would seem that Baumgartner and Jones “punctuated equilibrium” model, as well as their discussion of policy monopolies that rely on policy images and policy venues fit rather well in helping to explain the history of the climate issue.

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<sup>244</sup> By 2002, the GCC had experienced multiple defections from its ranks, starting first in 1997 with Dupont and British Petroleum, but followed by British Petroleum, Royal Dutch Shell, Ford, Daimler Chrysler, Texaco and General Motors, etc. Some joined more progressive business groups, like the Pew Center’s Business Environmental Leadership Council whose view differed: “We accept the views of most scientists that enough is known about the science and environmental impacts of climate change for us to take actions to address its consequences.” See Lester R. Brown, “The Rise and Fall of the Global Climate Coalition,” *Earth Policy Institute*, July 25, 2000 (accessed March 2, 2014); available from [http://www.earth-policy.org/index.php?plan\\_b\\_updates/2000/alert6](http://www.earth-policy.org/index.php?plan_b_updates/2000/alert6).

## Chapter Eight: Must Values Change Before Policies?

Moving from the agenda setting literature to sociology, another theorist who offers important insights on how public policies change is Thomas R. Rochon. Unlike Kingdon, Rochon does not focus on the public agenda and the processes by which issues move onto it and get decided once they are there. And unlike Baumgartner and Jones, Rochon does not focus on policy monopolies, on how new ideas ultimately supplant them or on the tempo of policy change, whether gradual or abrupt. Instead, Rochon is concerned with perceptions of reality, with cultural change and with the processes by which new cultural values are diffused into society, which in turn lead to policy change. He asks, "Must values change before policies do?"

### *Irresistible Tides and Oncoming Freight Trains*

Rochon says that his *Culture Moves: Ideas, Activism and Changing Values* is "a study of irresistible tides and oncoming freight trains."<sup>245</sup> He asks, "What causes tidal forces to sweep periodically through the political system, disrupting long-standing policy networks and widely accepted understandings of policy issues?" His answer is "crisis" -- but he quickly acknowledges that a more elaborated explanation is needed. He wants to know how crises come about. So he pushes further, noting that crises are

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<sup>245</sup> Thomas R. Rochon, *Culture Moves: Ideas, Activism and Changing Values*, (Princeton, NJ: Princeton University Press, 1998), 7.

“rooted in interpretations of events, imputations of causality that carry with them claims that the events will be recurrent.” In this he is reminiscent of Kingdon’s recognition of crises as “focusing events.” Rochon says:

The argument of this book in a nutshell, is that political and social transformation both occur in response to rapid cultural change. The creation of new values begins with the creation of new ideas among small groups of critical thinkers: people whose experience, reading and interaction with each other help them to develop a set of cultural values that is out of step with the larger society.<sup>246</sup>

Here he is reminiscent of Baumgartner and Jones in their observations about disadvantaged policy entrepreneurs who propose new interpretations of events and seek to attract allies from other parts of the political system. But Rochon’s specific focus is on cultural change not policies. While he admits: “The process of cultural change involves a change of mentalities as well as a change of laws,” for him, ‘mentalities’ usually change first. He says:

Culture consists of the linked stock of ideas that define a set of commonsense beliefs about what is right, what is natural, what works. These commonsense beliefs are not universal, but are instead typically bounded by time as well as by space. Today’s orthodoxy may be the heterodoxy of yesterday and tomorrow. Although cultural change is not usually perceptible from day to day, when we look over a longer time span it becomes apparent that even the most fundamental assumptions about morality and the standards by which quality of life should be evaluated are subject to change.<sup>247</sup>

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<sup>246</sup> Ibid., 8

<sup>247</sup> Ibid., 9

## ***Rapid Change Is Not Gradual Change Accelerated***

Rochon's view of when cultural change occurs is similar to that of Baumgartner and Jones regarding political change – much of it occurs during times of explosive upheaval. Also like Baumgartner and Jones, Rochon maintains that cultural change occurs both slowly and rapidly, with little in-between. Gradual changes in beliefs occur through the evolution of values with the accumulation of experience or exposure to new ideas – what Rochon refers to as 'Bayesian updating'<sup>248</sup> – and by generational replacement. Rapid

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<sup>248</sup> The concept is fascinating. Reviewing *The Theory that Would Not Die: How Bayes' Rule Cracked the Enigma Code, Hunted Down Russian Submarines and Emerged Triumphant from Two Centuries of Controversy* (Yale University Press: New Haven, 2011), John Allen Paulos, wrote:

Sharon Bertsch McGrayne introduces Bayes' theorem in her new book with a remark by John Maynard Keynes: "When the facts change, I change my opinion. What do you do, sir?" Bayes' theorem, named after the 18th-century Presbyterian minister Thomas Bayes, addresses this selfsame essential task: How should we modify our beliefs in the light of additional information? Do we cling to old assumptions long after they've become untenable, or abandon them too readily at the first whisper of doubt? Bayesian reasoning promises to bring our views gradually into line with reality and so has become an invaluable tool for scientists of all sorts and, indeed, for anyone who wants, putting it grandiloquently, to sync up with the universe. If you are not thinking like a Bayesian, perhaps you should be."

He says:

The theorem itself can be stated simply. Beginning with a provisional hypothesis about the world (there are, of course, no other kinds), we assign to it an initial probability called the prior probability or simply the prior. After actively collecting or happening upon some potentially relevant evidence, we use Bayes' theorem to recalculate the probability of the hypothesis in light of the new evidence. This revised probability is called the posterior probability or simply the posterior. Specifically Bayes' theorem states (trumpets sound here) that the posterior probability of a hypothesis is equal to the product of (a) the prior probability of the hypothesis and (b) the conditional

change, on the other hand, involves “large-scale conversions to a new way of thinking about a subject” and is “not just an accelerated version of gradual change.”

Rochon argues that rapid cultural change cannot be explained by “Bayesian updating” or population turnover but must be attributable to “active agents of cultural change somewhere in the environment.” He identifies these “active agents” in turn as changes in social or economic conditions and in technological capabilities, citing as leading examples urbanization, increasing levels of wealth and exposure to mass media. Still, he acknowledges that economic and technological changes have no inherent meaning for values – they can lead to various outcomes with respect to values. He says, “It takes no great stretch of the imagination to picture a post-materialist value system that embraces rather than rejects nuclear energy as a substitute for the burning of fossil fuels.”<sup>249</sup> In his view, economic and technological change are not (cannot be) the direct agents of cultural change, even though cultural change is responsive to changes in the economic and social environment.

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probability of the evidence given the hypothesis, divided by (c) the probability of the new evidence.

John Allen Paulos, “The Mathematics of Changing Your Mind,” *New York Times*, August 5, 2011 (accessed January 20, 2014) available from [http://www.nytimes.com/2011/08/07/books/review/the-theory-that-would-not-die-by-sharon-bertsch-mcgrayne-book-review.html?\\_r=0](http://www.nytimes.com/2011/08/07/books/review/the-theory-that-would-not-die-by-sharon-bertsch-mcgrayne-book-review.html?_r=0).

<sup>249</sup> Rochon, 14.

Rochon thus believes that reality is a matter for culture to decide. He says:

For example, artificial additions to the air, water and soil are labeled as pollutants only when the effects judged to be harmful become a concern significant enough to outweigh our perception of benefits that stem from the polluting activities. Heavy metals are water pollutants, but fluoride is not. Human beings and cars both emit carbon dioxide, but only the latter is considered a source of pollution.<sup>250</sup>

In his view, cultural change occurs when people change the conceptual categories they use to give meaning to reality – when things that were taken as a matter of consensus no longer remain so. He says that the process of cultural change involves introducing contention into how events should be viewed.

Indeed, a necessary first step in the process of cultural change, he says, is to raise a value to the status of controversy – but change is complete only when new values cease to be controversial and are accepted as normal.

### ***Language Indicators***

Rochon also focuses on the close link between language and culture, noting that the changing use of language is a primary signal that culture is being re-formed. He gives as examples the change from “species preservation” to “biological diversity” as signaling a shift away from a “museum-orientation” toward “maintaining ecological wholeness in natural habitats.” Others include the change from “rape” to “sexual assault,” from

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<sup>250</sup> Ibid., 15

“victim” to “survivor,” from “jungles” to “rain forests,” and from “swamps” to “wetlands.”<sup>251</sup>

### ***Critical Communities***

Rochon highlights the importance of “critical communities” to the development of new values and new conceptualizations of problems. They differ from Kingdon’s policy communities in important respects: (1) their perspectives criticize the policy establishment rather than help it work better; (2) they increase policy uncertainty by developing new ways of looking at established issue areas; and (3) members of ‘critical communities’ often do not have connections to the policy establishment. He also points out that they seek to influence not so much specific policies as the conceptual framework used to think about issues. Rochon cites the French “*philosophes*” as perhaps the best example.<sup>252</sup>

### ***Movements***

Rochon also highlights the importance of “movements” in the process of cultural change, whose role is “to bring the new ideas of critical communities to a wider audience.”<sup>253</sup> In his view, “The critical community is interested primarily in the development of new values; the movement is

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<sup>251</sup> Ibid., 16-17

<sup>252</sup> Ibid., 25

<sup>253</sup> Ibid., 30

interested in winning social and political acceptance for those values.”<sup>254</sup> He differentiates between social movements and political movements: “Social movements seek to spread the values of the critical community throughout society. Political movements seek authoritative sanctioning of new values in the form of binding laws and regulations.”<sup>255</sup> But many movements seek both, and their defining characteristic is not protest but attempts to obtain change in both the political and social arenas.

Rochon notes that the conditions for rapid social change come about when the power of a movement is harnessed to the ideas of a critical community, and the most successful movements blend action in the social and political arenas. He observes that, “The environmental movement would have had only a small fraction of its actual impact had it been successful in one arena but a failure in the other. In practice, the environmental movement is both a political and a social movement. Organization, action and ultimate goals in the two arenas are intertwined.”<sup>256</sup>

Despite the differences between Rochon’s “critical communities” and Kingdon’s “policy communities” both are similar in generating many more critical ideas than will ultimately be taken up beyond the network in which they originated. For Rochon, the ideas of critical communities at a minimum “must be repackaged in a way that connects them with mobilizable social groups.” And movement leaders find the ideas of a critical community useful

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<sup>254</sup> Ibid., 31

<sup>255</sup> Ibid.

<sup>256</sup> Ibid., 35

only when they can connect them to existing group networks and to plans for collective action. Here he cites an interesting example in the environmental community. As environmental advocates found that emphasizing the “limits to growth” had little resonance beyond college campuses, they turned to other ideas, including the use of market instruments to solve environmental problems.<sup>257</sup>

### ***Value Conversion, Creation and Connection***

One of the most interesting aspects of Rochon’s theory involves how new cultural values come to be accepted. He posits three principal means: (1) value conversion; (2) value creation; and (3) value connection. Value conversion involves replacing existing cultural values with new ones on the same topic. Value creation involves developing new ideas that apply to situations that had not before given rise to explicit cultural values. Value connection involves developing a conceptual link between phenomena previously thought to be unconnected or connected differently.

Rochon argues that value conversion is likely the most difficult of the three because it implies confronting and supplanting existing values with new ones. He provides three examples, including arguing that: (1) segregation is wrong, (2) women deserve equal opportunity in the work force, and (3) adding to the nuclear arsenal reduces national security.

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<sup>257</sup> Ibid., 52

Value creation is easier, he says, because it does not require confronting existing values and attempting to re-categorize them. Instead, it brings new ideas to bear on a topic that represents an expansion of existing culture. Again Rochon offers examples, all of which are drawn from the environmental movement in the last century: (1) setting aside public lands under Teddy Roosevelt for national forests, (2) the terms “biodegradable,” “endangered species,” and “global climate change” – terms that bring attention to issues and embed perspectives on actions that need to be taken. In his view, these examples involve value creation because they deal with issues not taken into account previously in judging human behavior. Differentiating these examples from those related to value conversation, he notes that previous values did not advocate using non-degradable phosphates in detergents or the extinction of species or thinning of the ozone layer.

Rochon sees value connection as perhaps the subtlest of the three. He refers to it as “applied philosophy.” It involves how issues are framed, forging conceptual links between phenomena previously thought to be unconnected or connected in different ways. Examples include: (1) linking environmental beliefs to existing aesthetic or religious values (e.g., ‘abusing the earth is wrong because God created it’), (2) linking the struggle for civil rights to the stories of struggle and redemption in the Bible and to the ideals of American democracy, and (3) linking drunk driving to the twin themes of

reducing government involvement in society and increasing individual responsibility. Again, he makes explicit reference to the environment:

In the environmental realm, beliefs about the link between environmental protection and economic growth have changed from the 'limits to growth' claim of antagonism to 'sustainable development' idea of searching for complementarity. As a result, the connection of environmental virtue to reduced consumption has been severed in favor of viewing environmental soundness as linked to patterns of consumption that take into account environmental consequences. One consequence of this shift has been to rethink environmental policy making in a way that downplays reliance on governmental regulation and increases reliance on market incentives by developing price mechanisms for the real costs of environmental degradation. Such changes in the connections between values alter the substantive focus of environmentalism by placing its objectives in a new value context.<sup>258</sup>

Rochon notes that all three of these forms of value change "make possible new coalitions of social forces" but he sees value connection as particularly potent. He is like Kingdon in that he also sees a two-step process involving the need for new ideas first to incubate in a "small, interacting, self-conscious critical community" and then to diffuse to a wider public – but in his view this diffusion takes place through the creation of social or political movements.

After discussing them separately, Rochon argues that successful movements blend all three forms of value change. He notes that the civil rights movement fostered the conversion of values on segregation, the creation of a new sense of self-worth among African Americans and the connection of desegregation to Constitutional principles. Similarly, with

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<sup>258</sup> Ibid., 56

respect to the environment, he notes that the environmental movement tried to delegitimize the notion that the natural environment should be subordinated to the purposes of humankind (its least successful struggle, he says), to create new values on the importance of a healthy, diverse environment for the quality of human life, and to make new connections between daily behavior and environmentally sound practices.

### ***“Heresthetic” Arts***

Rochon is puzzling however on the question of how beliefs diffuse in society. On the one hand he says, “New values are accepted outside of their ideological home only by people whose own level of political information is too low to enable them to decipher cues about the partisan source of the message.” He continues then to say, “To the extent that new values spread at all beyond those with an ideological affinity for them, this will occur among those least informed and among the young, whose prior beliefs are less firmly entrenched.” Rochon himself seems to acknowledge this conundrum, and he explains it first by noting, “New values will tempt both parties into advocating the critical perspective.” But he believes that “value connection offers even greater opportunity for new values to be accepted across lines of political cleavage, because forging new connections between values implies reshaping political coalitions.” In his view, “value connection results from the strategic redefinition of an issue by placing it in a new context” – something he calls the “application of heresthetic arts.” This consists of not

simply refashioning existing coalitions but actually reinventing issues.

Rochon believes that “new values brought to the political agenda by heresthetical means are likely to find supporters across the lines of prior partisan division.<sup>259</sup>

Rochon believes that movements are critical to the diffusion of the ideas of critical communities to society at large, and he believes that movement mobilization is easiest in the case of movements styled as claims for group rights. In other cases movement mobilization is more difficult because group solidarity is based on more tenuous sympathies and identifications. In particular, he notes that “the environmental movement faces greater problems in connecting critical community ideas to group identities than do the women’s movement or the gay rights, student or civil rights movements of an earlier generation. Rochon argues that environmental movement mobilization has been particularly weak relative to critical community assessments with regard to global climate change and the loss of biodiversity from species extinction. Thus, he says, the environmental movement focuses much activity on threats to public health – a focus Rochon finds to be disproportionate to the range of threats to the environment identified by critical communities.

In addition to repackaging the ideas of critical communities, movements must also develop targets of action, specific goals, potential alliances and the tactics to be used. These in turn depend on available

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<sup>259</sup> Ibid., 87-89

resources and they must conform to the group's image of itself. Movements must also devise a strategy that reinforces the group solidarity that mobilization relies on -- and the strategy must have a gradient of roles for activists from the cheap and riskless to the expensive and perilous.

Rochon astutely observes:

When the process of change begins to occur in a society, it is marked by broad discussion of new value perspectives. Critical community experts are joined by others who were not involved in the development of the perspective. The debate that ensues may be highly polarized between passionate supporters and equally passionate resisters of the new concepts. Advocates of the new ideas claim that change to embody new values is necessary to avoid severe injustices or dire consequences. Opponents reply that the ideas are utopian, that the dire consequences will not occur, or that the changes proposed would create other troubles greater than the problems they are supposed to remedy. Philosophers are likely to engage the issue, but so are radio and television talk show hosts. The process is not pretty, but it is highly consequential.<sup>260</sup>

Finally, Rochon observes that periods of quickening movement activity and cultural change tend to cluster together in a 'cycle of protest.' When one movement successfully mobilizes large numbers of activists, develops new forms of collective action and finds powerful political and social allies, opportunities for other movements increase as well. He notes that coalitions mobilized for one political or social cause are at least partially transferrable to other causes as well such that a 'movement society' develops in which movements become part of the normal social and political landscapes. What Rochon has to say about the movement society is particularly relevant with respect to global climate change, as will be seen:

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<sup>260</sup> Ibid., 242

At the heart of the idea of a movement society is the view that progressive change has come to be seen as possible and normal. Our confidence in the power of change is such that most projections of the future assume that new technologies will be developed, greater efficiencies will be found, and human organization and behavior will adapt to changed circumstances. It is not uncommon for legislators to set policy targets, such as pollution abatement requirements, that cannot be met with present technologies, population densities, and consumption patterns. The assumption is that the necessary technical innovations and behavioral adaptations will occur in order to meet these policy targets.<sup>261</sup>

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<sup>261</sup> Ibid., 250

## Chapter Nine: Applying Rochon to Climate

At a time when the climate change issue in the United States seems hopelessly mired in controversy and inaction, Rochon's theories of how values change lend a ray of hope. In particular, the following Rochon observations could have been made specifically about the climate issue rather than about social change more broadly:

- When the process of change begins to occur in a society, it is marked by broad discussion of new value perspectives
- Critical community experts are joined by others who were not involved in the development of the perspective
- The debate that ensues may be highly polarized between passionate supporters and equally passionate resisters of the new concepts
- Advocates of the new ideas claim that change to embody new values is necessary to avoid severe injustices or dire consequences.
- Opponents reply that the ideas are utopian, that the dire consequences will not occur, or that the changes proposed would create other troubles greater than the problems they are supposed to remedy.
- Philosophers are likely to engage the issue, but so are radio and television talk show hosts
- The process is not pretty, but it is highly consequential.<sup>262</sup>

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<sup>262</sup> Rochon, 242.

### ***Broad Discussion of New Values***

The debates in Congress alone between those in favor of climate action and those opposed provide ample evidence that a broad discussion of new value perspectives is taking place. The following excerpt from a news account of two senators (Barbara Boxer, Chair of the Senate Committee on Environment and Public Works, and James Inhofe, Ranking Minority Member) speaking by webcam to delegates at the 17<sup>th</sup> UNFCCC Conference of the Parties in Durban in December 2011 clearly substantiates it:

Ms. Boxer urged the delegates to take strong action and said the United States was taking steps to reduce greenhouse gas emissions through regulation of factories and vehicles. She said that evidence of dangerous climate change was growing by the day and blasted those who denied it.

“The message I have for climate deniers is this: you are endangering humankind. It is time for climate deniers to face reality, because the body of evidence is overwhelming and the world’s leading scientists agree.”

She went on, “The U.S. National Academy of Sciences has recently confirmed once again: climate change is real, human activities are the primary cause, and the warming planet poses a significant risk to people and the environment. Wishing that climate change will go away by clinging to a tiny minority view is not a policy – it is a fantasy.”

“Problems do not go away by pretending they do not exist,” she said. “And the longer that a vocal minority insists on keeping their heads in the sand, the more it endangers billions of people around the globe and threatens to dramatically and negatively reshape the world as we know it.”

Mr. Inhofe, the most outspoken climate change skeptic in Congress, gloated in a video message shown in a conference room here over the difficulties facing the international negotiations.

“Today, I’m happy to bring you the good news about the complete collapse of the global warming movement and the failure of the Kyoto process, as world leaders meet for the United Nations global warming conference in Durban, South Africa,” he said.

“For the past decade, I have been the leader in the United States Senate standing up against global warming alarmism and cap and trade, which would have been the largest tax increase in American history.

“This victory is especially important today, as families in America and around the world continue to face tough economic times. Tossing out any remote possibility of a U.N. global warming treaty is one of the most important things we can do for the economy.”<sup>263</sup>

Curiously, Rochon says both that cultural change is usually not perceptible day-to-day, and that, when change begins to occur, it is marked by discussion of new value perspectives. Perhaps both are true -- or perhaps the discussion of new value perspectives that he mentions indicates that cultural change is taking place.

### ***Evidence of Evolutionary Change?***

Climate change has been on the public agenda now more or less since the late 1980s (if Jim Hansen’s Senate testimony in 1988 is taken to mark the beginning). Since more than a generation has elapsed, some evolution in values should have occurred under Rochon’s theory simply due to generational replacement. But the evidence is mixed. According to the Yale Project on Climate Change Communication:

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<sup>263</sup> John M. Broder, “On Climate Change a Gloat and a Warning,” *New York Times*, December 7, 2011 (accessed February 9, 2014); available from <http://green.blogs.nytimes.com/2011/12/07/on-climate-change-a-gloat-and-a-warning/>.

...[C]ontrary to this conventional wisdom [that young Americans are more engaged with and concerned about the issue because of “more certain scientific evidence, increasing news attention, alarming entertainment portrayals and school-based curricula”] Americans between the ages of 18 and 34 are, for the most part, split on the issue of global warming and, on some indicators, relatively disengaged when compared to older generations.<sup>264</sup>

Still, the Yale Project noted two important caveats: (1) it dealt only with attitudes of those 18 years of age and older (not younger Americans between 13 and 17); and (2) “It is also possible that there has been a surge in young people getting politically involved in climate action, but this has not (yet) translated to the entire age cohort. We have certainly heard (and seen) anecdotal evidence to support this hypothesis, but the Center wouldn’t be able to observe such a trend in their national survey data.”<sup>265</sup>

Whether or not “generational” replacement has led to increased concern about climate change since 1988, under Rochon’s theory ‘Bayesian updating’ would seem likely to have had an impact. This is because, over this period, there has been mounting scientific evidence that ‘warming of the climate is unequivocal’ and that “it is extremely likely that human influence

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<sup>264</sup> Yale School of Forestry and Environmental Studies, “Youth Less Concerned About Global Warming than their Elders? (accessed February 9, 2014) available from <http://environment.yale.edu/climate-communication/article/youth-less-concerned-about-global-warming-than-their-elders>. See also the full report: Lauren Feldman, Matthew C. Nisbet, Anthony Leiserowitz, Edward Maibach, “Yale School of Forestry and Environmental Studies, “The Climate Change Generation? Survey Analysis of the Perceptions and Beliefs of Young Americans,” *Yale Project on Climate Change and George Mason University Center for Climate Change Communication*, March 2, 2010 (accessed February 9, 2014); available from <http://environment.yale.edu/climate-communication/files/YouthJan2010.pdf>.

<sup>265</sup> Yale Project.

has been the dominant cause.”<sup>266</sup> But a very recent study by the Pew Research Center (conducted during the period January 15-19, 2014) revealed some remarkable things. First, Americans ranked global warming next to last on a list of 20 priorities for the president and the Congress – only 29 percent rated it a top priority. But, another Pew survey conducted in October 2013 showed that 67 percent of Americans believe that there is solid evidence that the Earth has warmed over the past few decades – a figure that Pew notes had changed little in the past few years. Second, in yet another survey Pew conducted from March to May 2013, fewer Americans saw global warming as a major threat to their country than did the publics in 39 other countries -- 40 percent v. 54 percent -- (by region, in Latin America the figure was 65 percent, in Asia and the Pacific it was 56 percent, and Europe and Africa it was 54 percent; only in the Middle East was the figure (at 42 percent) comparable to that in the United States). And yet, in Pew’s October 2013 survey, 65 percent of Americans supported stricter emissions limits on power plants – including 74 percent of Democrats, 67 percent of Independents and 52 percent of Republicans.<sup>267</sup>

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<sup>266</sup> Stocker and Qin, 2, 15.

<sup>267</sup> Pew Research Center, “Climate Change: Key Data Points from Pew Research,” January 27, 2014 (accessed February 16, 2014); available from <http://www.pewresearch.org/key-data-points/climate-change-key-data-points-from-pew-research/>.

### ***Asking the Right Question***

How can Americans hold such seemingly contradictory beliefs in their heads at the same time? Here, Rochon may help, particularly his notion that crises are “rooted in interpretations of events, imputations of causality that carry with them claims that the events will be recurrent.”<sup>268</sup> The fact that over two-thirds of Americans believe that the climate has changed over the past few decades is extremely important to the “interpretation of events” that Rochon believes underlie a crisis. This Pew survey finding also tends to confirm Moomaw’s argument that the right question “is not whether climate change caused a particular weather event, but whether the climate has changed from what it was at a previous time.”<sup>269</sup> For one of the first times the snow storms that have battered the East Coast during the winter of 2014 have led to questioning about whether they are the result of a changed climate – not derisive jokes on talk shows about how they prove that concerns about climate change are overstated.

A further example, both of the polarized debate (which occurs over the discussion of new concepts, marking the beginning of the process of change in Rochon’s view) and the “new concepts” themselves can be seen in a Sunday *Meet the Press* exchange on February 16, 2014, between science educator Joe Nye (The Science Guy) and Tennessee Republican Congresswoman Marsha Blackburn. In this brief debate, host David Gregory

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<sup>268</sup> Rochon, 7.

<sup>269</sup> See Moomaw, *unpublished paper*, 18-20.

asked whether recent extreme weather events (devastating snow storms in the Southeast and East, prolonged drought in California, floods in England) created an “extreme weather moment” with a new urgency to act? Several of the “usual” arguments surfaced in this exchange, including (1) the science of climate change is now settled/the science remains uncertain, (2) impacts are now such that government must act/costs of addressing climate change could be very expensive and measures to do so should be subject to rigorous cost-benefit analysis; (3) climate change is an opportunity for the United States to lead the world in innovation/even achieving all of the goals set forth in the President’s Climate Action Plan<sup>270</sup> will not have an appreciable impact on the problem globally.<sup>271</sup>

While the Nye-Blackburn debate was not unlike numerous others that have taken place in recent years between those on either side of the issue, what stood out was the press itself – David Gregory challenged Blackburn’s assertions that the science is unsettled and played a clip from President Obama’s State of the Union address in which he said, “The debate is settled. Climate change is a fact.”<sup>272</sup> This “tilt” was also evident in the short

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<sup>270</sup> The President’s Climate Change Action Plan, June 2013 (accessed February 16, 2014); available from <http://www.whitehouse.gov/sites/default/files/image/president27sclimateactionplan.pdf>.

<sup>271</sup> David Gregory, “The Politics of Weather,” Meet the Press, February 16, 2014 (accessed February 16, 2014); available from <http://www.nbcnews.com/meet-the-press/flurry-storms-result-climate-change-n31606>.

<sup>272</sup> President Barack Obama, “State of the Union Address,” January 28, 2014 (accessed February 16, 2014); available from <http://www.whitehouse.gov/the-press-office/2014/01/28/president-barack-obamas-state-union-address>.

appearance of Al Roker of NBC who said that, whether it is due to a natural cycle or human interference is “open to debate,” but he averred that “There is no doubt, the climate is changing.”<sup>273</sup> Two other aspects stand out: (1) what gave rise to this segment in the first place were recent extreme weather events, which occasioned a debate about whether they require government to act [the kind of action was unspecified in the question, although it seemed to suggest measures to increase resilience to climate impacts] and whether they created a new moment for “urgent action” [again, the kind of action was unspecified, but here it seemed broader, perhaps even to include mitigation efforts] and, (2) the argument Congresswoman Blackburn made (citing testimony by EPA Administrator Gina McCarthy) that even if all actions in the President’s Climate Change Action Plan were fully implemented, they would not have a discernible effect on climate change [because, she seemed to imply, U.S. action alone is not enough].<sup>274</sup> What seems to be emerging in the public

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<sup>12</sup>Meet the Press, February 16, 2014.

<sup>274</sup> See Marlo Lewis, “Rep. Pompeo Questions EPA Administrator McCarthy on Obama’s Climate Action Plan,” September 18, 2013 (accessed February 16, 2014); available from <http://www.globalwarming.org/2013/09/18/rep-pompeo-questions-epa-administrator-mccarthy-on-obama-climate-plan/>. Pompeo asked McCarthy whether the actions being taken under the President’s Climate Action Plan would have a “good outcome on some or all of” 26 indicators of climate change (e.g., heat-related deaths) listed on EPA’s website. McCarthy noted that responding to climate change requires a global effort, and a better way to think about the actions as “one piece” or “one step” in a broader strategy to position the United States for leadership in an international discussion. Writing about this hearing, Lewis said:

Through persistent questioning, Pompeo spotlighted a key fact well-known to the climate cognoscenti but not to the general public. Even assuming climate change is as bad as the global warming movement says it is, the administration’s policies will

discourse is the notion that the impacts of extreme weather events are serious and require government to act to increase resilience to such events, and that whether or not a single extreme event can be attributed to climate change, there is no doubt that the climate has changed (essentially, Moomaw's thesis).

### ***Having It Both Ways***

In addition, while the argument against taking action that would harm the economy unless key developing countries also act dates to the Byrd-Hagel Resolution in 1997 (if not before), opponents of climate action now seem to be arguing both that "actions by the United States alone will have no "discernible effect" on climate change, and that their "real" rationale is to encourage countries like China and India to act, when those countries are too

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have no discernible effect on climate change and produce no identifiable benefit to public health and welfare.

The real objective of the administration's current and proposed greenhouse gas regulations is not to protect the public but to influence "the international community," particularly China, India, and other developing nations. Developing country emissions are growing so rapidly that no combination of U.S. domestic actions — not even a magical carbon tax that eliminates all U.S. carbon dioxide emissions — would detectably affect global temperatures.

The administration's underlying theory, apparently, is that if the U.S. sets a good example, others will follow suit. But that's been the thinking behind international climate negotiations from day one, and so far it hasn't panned out. China and India feel no obligation to limit their emissions (and consequently, economic growth) just because Western nations are willing to shoot themselves in the foot.

smart to “shoot themselves in the foot.”<sup>275</sup> This is an odd pairing of arguments. On the one hand, the fact that U.S. actions alone will not solve the climate problem is clearly one of the strongest arguments in favor of global action; here it is turned around as an argument in favor of not acting – that is, U.S. efforts alone will have no impact, so the “real reason” the administration is taking these actions is a belief that U.S. action will influence China and India to act, but those countries are too smart for that! This is precisely the battle of core political ideas and policy images that Baumgartner and Jones describe.

### ***Still No Tidal Force but Important Indicia of Cultural Change***

Despite the changes that seem to be taking place in public understanding of the climate problem – as seen in the somewhat “evolved” view of NBC’s David Gregory and Al Roker just described -- it is clear that no tidal force has yet swept through the political system, “disrupting policy networks and widely accepted understandings of policy issues.”<sup>276</sup> While, as Rochon says, “the process of cultural change involves introducing contention

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<sup>275</sup> Marlow Lewis, a well-known opponent of climate action, likely chose his words -- “discernible effect” -- for sarcastic emphasis; one of the key findings from the IPCC’s 1995 Second Assessment Report was: “The balance of evidence suggests a discernible human influence on global climate.” Science Daily Reference Article, “Attribution of Recent Climate Change,” (accessed February 16, 2014); available from [http://www.sciencedaily.com/articles/a/attribution\\_of\\_recent\\_climate\\_change.htm](http://www.sciencedaily.com/articles/a/attribution_of_recent_climate_change.htm).

<sup>276</sup> Rochon, 7.

into how events are viewed,”<sup>277</sup> there is so far plenty of contention but only subtle changes in attitude.

Still, the accuracy of Rochon’s observation about the strong link between language and culture finds some important substantiation in the climate arena. First and foremost is the shift to carbon “pollution” initiated by the Supreme Court in *Massachusetts v. EPA*.<sup>278</sup> Until that time, many argued that carbon dioxide was not a pollutant like other chemical compounds because humans produce it when they exhale, and plants rely in it for photosynthesis – notwithstanding the differences in scale between the CO<sub>2</sub> produced in these activities and that produced from the combustion fossil fuels for energy. With the Court’s decision, subsequently bolstered by EPA Administrator Lisa Jackson’s “endangerment” finding of December 7, 2009, the term “pollution” thereafter stuck to greenhouse gases with no practical distinction any longer between “greenhouse gas pollution” and other forms of pollution.<sup>279</sup> As a primary signal that “culture” with respect to climate change is being re-formed, this shift was profound.

But there are others as well. Climate “skeptics” have increasingly been labeled “climate deniers.”<sup>280</sup> Secretary of State John Kerry joined this

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<sup>277</sup> Rochon, 14-15.

<sup>278</sup> See footnote 75 above.

<sup>279</sup> See Lisa P. Jackson, “Remarks on the Endangerment Finding on Greenhouse Gases, As Prepared,” December 7, 2009 (accessed February 16, 2014); available from <http://yosemite.epa.gov/opa/admpress.nsf/8d49f7ad4bbcf4ef852573590040b7f6/b6b7098bb1dfaf9a85257685005483d5!OpenDocument>.

<sup>280</sup> One of the best, and most amusing essays, on the difference between the two is a blog by David Brin, “Distinguishing Climate Deniers and Climate Skeptics,” 2010

debate in a climate change speech he gave in Jakarta on the same day this chapter was being written.<sup>281</sup> Northeastern Alberta's newest source of

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(accessed February 16, 2014); available from <http://www.davidbrin.com/climatechange3.html>. At the conclusion of his entertaining essay he asks, "It is all for nothing?" and says:

Have I wasted my time, here? Because, while the species of sincere, conservative-but-rational AGW [Anthropogenic Global Warming] Skeptics does exist (I know several, and kind-of qualify as one, myself), they turn out to be rare. For the most part, those calling themselves "*climate skeptics*" are nothing but fully-imbibed *Denialists*, who wallow in anecdotes and faux-partyline talking points, participating in something that is far more insidious and devastating to our civilization than mere Energy Company Propaganda.

As I have suggested elsewhere, the real purpose of it all may be to undermine the very notion of expertise in our civilization, leaving no strong force to challenge any ruling elite.

But whatever the underlying purpose, one result is clear: tens of thousands of *Denialists* egotistically assume that their fact-poor, pre-spun, group-rage opinion entitles them to howl "corrupt fools!" at the men and women who have actually studied and are confronting this important topic.

Historian Arnold Toynbee – one of the greatest of all experts on the rise and fall of civilizations – when asked what critical mistake seemed most often to lead to a collapse – said it was "failure to support and believe in the society's creative minority." In our own technological enlightenment nation and civilization, that creative minority, to a large degree, is one of science. We do not have to worship at their feet, or obey blindly. But we'll be fools, treading the downhill slope followed by Babylon and Rome, if we despise them.

<sup>281</sup> Associated Press, "Secretary of State John Kerry mocks climate change deniers," February 16, 2014 (accessed February 16, 2014); available from [http://www.pennlive.com/midstate/index.ssf/2014/02/john\\_kerry\\_mock\\_those\\_who\\_den.html](http://www.pennlive.com/midstate/index.ssf/2014/02/john_kerry_mock_those_who_den.html). According to the article, Kerry said in part:

"We simply don't have time to let a few loud interest groups hijack the climate conversation," he said, referring to what he called "big companies" that "don't want to change and spend a lot of money" to act to reduce the risks.

petroleum is variously described as “oil sands” and “tar sands” depending on the views of the writer. Said one writer in a Canadian journal:

To refer to them as the Athabasca “tar sands” has become a signal of opposition to their uninhibited exploitation. Calling them the “oil sands,” the industry-approved phrase, indicates that one is comfortable with digging them up and selling them to the highest bidder, whether Chinese or Chicagoan.<sup>282</sup>

Still more examples can be found in the recent change from “adaptation to climate change” in favor of “climate resilience.” This difference is not as clear-cut in its significance, however. It could be that some consider “adaptation” to be too passive or fatalistic. Recognizing that the world is already committed to some climate

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Kerry later singled out major oil and coal concerns as the primary offenders.

"We should not allow a tiny minority of shoddy scientists and science and extreme ideologues to compete with scientific facts," Kerry told the audience at a U.S. Embassy-run American Center in a shopping mall in Jakarta.

"Nor should we allow any room for those who think that the costs associated with doing the right thing outweigh the benefits."

"The science is unequivocal, and those who refuse to believe it are simply burying their heads in the sand," Kerry said. "We don't have time for a meeting anywhere of the Flat Earth Society,"

Kerry said the cost of inaction will far outweigh the significant expense of reducing greenhouse gas emissions that trap solar heat in the atmosphere and contribute to the Earth's rising temperatures.

<sup>282</sup> Colby Cosh, “Don’t call them ‘tar sands’ – The industry-approved lingo for Alberta’s hydro-carbon gunk is ‘oil sands,’” *McLeans*, April 3, 2012 (accessed February 16, 2014); available from <http://www2.macleans.ca/2012/04/03/oil-by-any-other-name/>.

change and will inevitably need to adapt, the term “resilience” may be seen as both more active and more optimistic.<sup>283</sup>

Another language change in recent years that is also likely significant but that tends to cut in the other direction is that now applied to what was once “carbon capture and storage.” It is increasingly referred to as “carbon capture, use and storage,” particularly by those who seek to promote technologies to separate carbon dioxide before or after combustion of a fossil fuel and use it (for example to make jet fuel from algae -- which can utilize massive quantities of carbon dioxide as it grows -- as is now taking place on an

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<sup>283</sup> See Bindu, Lohani, “From Adaptation to Resilience: The Need for Transformational Change,” *Asian Development Bank*, March 12, 2012 (accessed February 16, 2014); available from <http://www.adb.org/news/speeches/adaptation-resilience-need-transformational-change>. In his keynote address to the Asia-Pacific Climate Change Adaptation Forum in Bangkok, Bindu Lohani, Vice President, Knowledge Management and Sustainable Development at the Asian Development Bank, said with respect to the difference between adaptation and resilience:

We must therefore improve our ability to make sound investment decisions under fundamental uncertainty regarding future climate, even as we work to fill critical knowledge gaps. We must employ adaptive approaches in the design and management of infrastructure. We must shift our thinking from a focus on optimization to an emphasis on minimizing the likelihood of unacceptable outcomes. And, we must identify and utilize “no-regret” interventions wherever feasible. In short, we must manage uncertain risks by minimizing the consequences of being wrong.

We can also manage climate risks by shifting our focus from adaptation to resilience. Adaptation – as a calibrated response to anticipated changes – will certainly be required, but it is in the final analysis only a means to attain a more resilient society, with sustainable development and eradication of poverty as the final objectives.

experimental scale in an “eco-partnership” between Chinese clean energy giant ENN and Duke Energy at Langfang, an eco-city one hour from Beijing).<sup>284</sup>

As the United States launched the Carbon Sequestration Leadership Forum in 2004 to bring together key countries to promote research, experimentation and development of carbon capture and storage technologies, many in the private sector quietly urged that “oceanic” sequestration (i.e., storage of methane hydrates in the water column) not be pursued because storage in terrestrial saline aquifers had already raised environmental concerns. They argued that “oceanic” sequestration, if actively pursued, would doom even terrestrial sequestration from the outset.<sup>285</sup> Such changes in terminology with respect to specific technology options for addressing climate change are significant as well because of the role Rochon sees with respect to technological change and its effect on broader cultural change. He says:

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<sup>284</sup> Duke Energy News Release, “Duke Energy and ENN Group Sign EcoPartnership at U.S. State Department,” May 10, 2011 (accessed February 16, 2014, available from <http://www.duke-energy.com/news/releases/2011051001.asp>). During a tour of this facility on April 25, 2013, ENN Group Chair Wang Yasuo emphasized the “u” [use] inclusion in the acronym, particularly in light of his company’s efforts in this area. Personal recall. A fascinating interview with Chair Wang is that of Michael Wang and David Xu, “Cleaner energy for China: An interview with the Chairman of ENN Group,” *The McKinsey Quarterly*, July 2008 (accessed February 16, 2014); available from <http://www.mckinsey.it/storage/first/uploadfile/attach/140404/file/clen08.pdf>.

<sup>285</sup> Personal observation.

Such innovations as the electronic mass media, birth control pills, networked computers and genetic screening create opportunities to reexamine existing cultural attitudes and ethical prescriptions. None, however, mandates that particular cultural values be adopted or even that values must change at all. Environmentalism, feminism, and other bundles of new cultural values are responsive to changes in the material and social conditions of life, but the specific elements of these new values cannot be deduced from those conditions alone.<sup>286</sup>

### ***Bill McKibben and 350.org***

Rochon's theories of critical communities and movements also find equivalents in the climate arena in activists such as Bill McKibben and 350.org. This organization, which has gained particular prominence for its opposition to the Keystone XL Pipeline, explains its purpose as:

The number 350 means climate safety: to preserve a livable planet, scientists tell us we must reduce the amount of CO<sub>2</sub> in the atmosphere from its current level of 400 parts per million to below 350 ppm.

We believe that a global grassroots movement can hold our leaders accountable to the realities of science and the principles of justice. That movement is rising from the bottom up all over the world, and is uniting to create the solutions that will ensure a better future for all.<sup>287</sup>

It describes itself as "a movement more than an organization" and it affirms: "We believe that the only way we'll see meaningful action on climate change is if we can counter the power of the fossil fuel industry with the power of people taking collective action."<sup>288</sup> Founder Bill McKibben began his work on the climate issue in

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<sup>286</sup> Rochon, 14.

<sup>287</sup> 350.org, "What We Do," (accessed February 16, 2014); available from <http://350.org/about/what-we-do/>.

<sup>288</sup> 350.org, "How We Work."

1989 with the publication of *The End of Nature*.<sup>289</sup> His journey has taken him from member of a “critical community” to activist, and he has written, organized, spoken and demonstrated vigorously ever since, founding 350.org in 2008. His most recent book, *Oil and Honey: The Education of an Unlikely Activist*,<sup>290</sup> describes his fight against global warming and another to grow local food.

While 350.org targets specific actions – like the proposed Keystone XL pipeline and a campaign to end fossil fuel subsidies -- it also seeks to change values broadly by moving away from fossil fuels toward a renewable energy future. Its U.S. activities are currently funded at about \$3 million annually from individual donors and a number of companies and over 86 percent of its revenue is used to undertake its various campaigns.<sup>291</sup> It hardly seems to be a mass movement at this stage – at least not on the scale of the Earth Day movement in 1970 or the Vietnam War protests of the 1960s and 1970s -- but it has been quite effective at garnering headlines and creating controversy.<sup>292</sup>

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<sup>289</sup> Bill McKibben, *The End of Nature*, (Random House: New York, 1989).

<sup>290</sup> Bill McKibben, *Oil and Honey: The Education of an Unlikely Activist*, (Times Books: New York, 2013).

<sup>291</sup> 350.org, “Financial Information,” *Annual Report 2012* (accessed February 16, 2016); available from <http://350.org/about/financials/>.

<sup>292</sup> Over 15 days of protest in Washington, D.C., in late August/early September 2011, police arrested 1,252 people. See Amanda Peterson Beadle, “Tar Sands Action: 150-Day White House Protest Ends With 1,252 Total Arrests,” *Climate Progress*, September 6, 2011 (accessed March 2, 2014); available from <http://thinkprogress.org/climate/2011/09/06/312076/tar-sands-action-15-day-white-house-protest-ends-with-1252-total-arrests/>. By comparison, an estimated 20 million people marched, rallied and held teach-ins on Earth Day 1970, “the largest one-day grassroots demonstration this country has ever seen.” See Hedrick Smith, *Who Stole the American Dream?*, 30. Nevertheless, in this electronic age, physical presence at a rally may hold less significance than “votes” cast by electronic media. McKibben claimed that during the August/September 2011 Keystone XL protest, “800,000 Americans flooded D.C. Offices with emails and faxes.” See “Dozens Arrested at White House Protest of Keystone XL Pipeline,” *Environment News Service*, February 13, 2013 (accessed March 2, 2014); available from

As noted, there has as yet been no tidal force sweeping through the political system, “disrupting policy networks and widely accepted understandings of policy issues” but there is an ever expanding set of indicators that significant cultural change is taking place, which Rochon believes often precedes political change. And as Rochon observes, periods of rapid activity by movements tend to cluster into what has been described as a “cycle of protest.” He observes: “When one movement is successful in mobilizing large numbers of activists, innovating new forms of collective action, and finding powerful social and political allies, opportunities for other movements are increased as well.”<sup>293</sup> Two other movements have succeeded in mobilizing large numbers of activists in recent years and have found powerful social and political allies – the movement to recognize gay marriage and the movement to legalize marijuana. While links between these movements and movements like 350.org do not seem obvious, Rochon does not suggest that movements be similar or related to benefit from the “cycle of protest” that he describes.

But what of the most intriguing part of Rochon’s theory of cultural change – his theories of value conversion, value creation and value connection? All three would seem to be present in the current battle of policy images over climate change. Value conversion can be seen in the large percentage of Americans who believe that the climate is changing. Value

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<http://ens-newswire.com/2013/02/13/dozens-arrested-at-white-house-protest-of-keystone-xl-pipeline/>.

<sup>293</sup> Rochon, 249.

creation can be seen in efforts to promote energy efficiency and renewable energy. And value connection can be seen in efforts to link climate action to national security and decreased dependence on foreign oil.

As Rochon observes:

All three forms of value change make possible new coalitions of social forces, but value connection is especially potent in this regard. Through value connection, utility companies support the idea of pollution rights vouchers, the English middle class came to support extension of the franchise to the working class, and increasing numbers of Americans in the North concluded that some means had to be found not just to contain slavery in its existing territory, but to end it.<sup>294</sup>

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<sup>294</sup> Rochon, 57.

## **Chapter Ten: Takeaways from Theoretical Perspectives**

After unpacking the theories of Kingdon, Baumgartner and Jones and Rochon on agenda setting and policy change, and after relating them to the climate issue as it has developed over the last quarter century, what can we infer about how and when a significant pivot in U.S. climate policy is likely to occur? Each of the three seems to offer key takeaways that individually or jointly may shed some light on this question.

### ***Lessons from Kingdon***

First and foremost, Kingdon's work provides an extremely valuable framework for evaluating the history of the climate issue. His theories about problem recognition, the development of proposals in the policy stream and the opening of policy windows in the political stream all resonate with respect to climate change. Clearly the issue has found its way onto the public agenda. But Kingdon differentiates between the "government agenda" and the "decision agenda." While the issue has been on the "government agenda" arguably since the late 1980s in the United States, it has only twice made it to the "decision agenda" – in the "policy window" that opened in 1992 with the election of Bill Clinton and his effort in 1993 to move forward with the Btu tax, and again in 2008 when another "policy window" opened with the election of Barack Obama and the effort

in 2009-10 to enact a cap and trade regime. In both cases, both presidents enjoyed a majority in both houses of Congress. In both cases, all three “streams” (problem, policy and political) seemed to couple. But in both cases these efforts failed. What might Kingdon say about that?

What Kingdon does say in his final chapter is this:

Finally, it should be noted that all of our ideas are probabilistic. I have tried to adhere to such formulations as ‘the chances are improved or lessened’ and ‘these events are more likely than other.’ In describing these processes, hard-and-fast rules and the specification of conditions that *must* be met seem less fruitful than a quotation of odds.<sup>295</sup>

In other words, Kingdon would say that he never promised a formula, and he does not deliver one either. His final words eloquently capture the difficulty involved:

Thus we have made some progress in understanding the vague and imprecise phenomena we wanted to understand at the beginning of our journey. To the extent that our vision is still obscured, the world itself may be somewhat opaque. But further research and thinking beyond what is presented in this book may also allow us to see more clearly.<sup>296</sup>

But there are several “takeaways” from this analysis that may be salient at such time as a policy window may open in the future. First, it is not clear that the policy stream has yet produced an available alternative that is ‘ready to go.’ Kingdon’s notion that it is not enough for a problem to be pressing to get it on the public agenda – that is, on the “decision agenda” –

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<sup>295</sup> Kingdon, 208.

<sup>296</sup> Ibid.

there must also be an ‘available alternative’ that has been ‘softened up’ in the policy community and that provides a solution that is ‘ready to go.’ These “requirements” pose an interesting problem for climate change. There are two principal ways of attaching value to carbon – through a tax or through a cap and trade regime – but there is as yet no clarity as to which is optimal.<sup>297</sup> Economists tend to prefer a tax because it is more efficient.

Environmentalists tend to prefer a cap and trade regime because the environmental result is more certain. Either could be made to work, but neither is without pitfalls. It is not clear how the question of which is preferable -- meaning which may be more acceptable politically and thus stand a better chance of enactment -- will be resolved. Unless it is, a policy window may open in the future but there may not be an available alternative – or worse, disagreement over which alternative is preferable could impede efforts to seize the opportunity presented. The author of a recent paper contends that a “cap and dividend” approach — like that introduced in December 2009 by Senators Cantwell and Collins in the “Carbon Limits and Energy for American’s Renewal (CLEAR) bill -- may be preferable to either of those mentioned because it would be simpler and would avoid the kind of

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<sup>297</sup> It can also be argued that there is a third way of attaching value to carbon, and that this is what the Obama Administration is currently undertaking through its use of Executive power – namely through regulation. Regulations that increase fuel efficiency standards or emissions standards for new and existing power plants also attach value to carbon, albeit indirectly. But this approach is less certain given the lead time required to implement them, and the litigation that normally accompanies such efforts. In addition, regulations affect only particular sectors – they are not necessarily felt uniformly throughout the economy. And the significance and importance of regulations are not as easily explained to or grasped by the public -- or appreciated abroad.

insider bargains and pay-offs that in part doomed Waxman-Markey.<sup>298</sup> His argument in favor of such an approach is compelling:

Politically speaking, the cap and dividend route has a number of advantages. Instead of building political support by bargaining with industrial interests about how many permits they may get cheaply or for free, the cap and dividend approach makes it possible to speak with average citizens about what they might gain as well as pay during the transitional period of increasing prices for energy from carbon sources. Cap and dividend is easy to spell out (the Collins-Cantwell bill was 39 pages, compared to over a thousand pages for cap and trade) and it is also relatively transparent. Citizens could understand and trust this policy. Like Social Security, taxes or proceeds from auctions are collected for a separate trust fund – and the revenues are used to pay for broadly valued benefits for each citizen and every family. No opaque, messy, corrupt insider deals. The dividend payments also deliver a relatively greater economic pay-off to the lowest income groups who have to spend more of their incomes as home heating, electricity, and gasoline. Popularly rooted organizations like labor unions, churches, and old people’s associations might rally behind such an approach, because it is economically just in its impact.”<sup>299</sup>

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<sup>298</sup> In 2008, the Province of British Columbia introduced a carbon tax that by law is revenue neutral. All revenue raised is returned to citizens and businesses through tax reductions. The province’s ministry of finance claims that \$500 million more was returned to taxpayers in the form of tax reductions than was raised by the tax since its inception. It applies broadly to virtually all emissions from fossil fuel combustion in British Columbia, some 70 percent of its total greenhouse gas emissions. See “Myths and Facts about the Carbon Tax,” Ministry of Finance, Province of British Columbia (accessed March 2, 2014); available from <http://www.fin.gov.bc.ca/tbs/tp/climate/A6.htm>. British Columbia’s greenhouse gas emissions fell 10 percent compared with 1.1 percent in the rest of Canada between 2008-2011, and its effect on the province’s economy appears to be neutral – although it now has the lowest income taxes in Canada. See John Abraham and Dana Nuccitelli, “Can a carbon tax work without hurting the economy? Ask British Columbia,” *The Guardian*, July 30, 2013 (accessed March 2, 2013); available from: <http://www.theguardian.com/environment/climate-consensus-97-percent/2013/jul/30/climate-change-british-columbia-carbon-tax>.

<sup>299</sup> Skocpol, 125.

The point is, however, that much work remains to be done in the policy stream if an alternative is to be 'ready to go' when the next policy window opens – and this despite all the debate and discussion of taxes versus cap and trade thus far.

And just when is it likely than another policy window may open?

Following Kingdon's theory of the political stream, two possibilities seem likely – one more predictable than the other. The first seems unlikely to arise before 2016 and the advent of a new presidential administration and perhaps a different make up in the Congress. While Congress could also change at the mid-term election in 2014, historically these elections have gone against the president and his party. Of course, all will depend in 2016 on the issues and the candidates that emerge. Despite President Obama's resolve now to address this issue, as reflected in his State of the Union address, in the appointments he has made in particular at the Departments of State, Energy and at the Environmental Protection Agency, and in the Climate Action Plan announced in June 2013, the climate issue featured not at all in the 2012 election. In other words, it may now be important to President Obama and his administration in his second term, but it is not clear that it is a compelling issue at the moment for the electorate.

Another way a policy window could open would be in response to a focusing event, or possibly several focusing events in close temporal proximity. Hurricane Katrina was not enough, nor the subsequent

hurricanes that followed –until Hurricane Sandy. But even Hurricane Sandy was not enough, although it began to raise questions and bring climate change more into focus. Recent concerns about the rapid melting of Arctic Ice and the California and Midwestern droughts<sup>300</sup> also have not been enough. But this is not to say that a policy window will never open as the result of a major disaster. Any such policy window, like the major disaster that could cause it to open, would however be entirely unpredictable.

A final take-away from Kingdon’s analysis involves his discussion of categories. Recall that in Kingdon’s view “the emergence of a new category is a signal public policy event” creating new definitions of problems and new conceptualizations of solutions. One problem in seeking to address climate change is the effort, however well meaning, to bury the issue, “euphemize” it, or describe it in other terms – terms like energy conservation, energy

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<sup>300</sup> See Justin Gillis, “Science Linking Drought to Global Warming Remains Matter of Dispute,” New York Times, February 16, 2014 (accessed February 18, 2014); available from <http://www.nytimes.com/2014/02/17/science/some-scientists-disagree-with-presidents-linking-drought-to-warming.html>. Actually, the headline of this article is terribly misleading. On the one hand, it said:

“I’m pretty sure the severity of this thing is due to natural variability,” said Richard Seager, a climate scientist who studies water issues at the Lamont-Doherty Earth Observatory of Columbia University.

But on the other hand it also said:

What may be different about this drought is that, whatever the cause, the effects appear to have been made worse by climatic warming. And in making that case last week, scientists said, the administration was on solid ground.

The lesson here is that it is important to read beyond the headline!

efficiency or energy security. Describing the need for action in these terms may help make the need more understandable, and at first blush more acceptable to a public skeptical about climate change (if it is), but it also masks and significantly diminishes the true extent of the environmental problem we face. For people to act, the problem must seem compelling. Of the other terms often used in place of climate change but arguably synonymous, only energy security comes close to being broadly compelling. Unfortunately, energy security concerns can be addressed through actions that actually exacerbate the climate problem – like burning more coal. In addition, the revolutionary development of shale gas in the United States in the past few years has diminished if not eclipsed concern about energy security.<sup>301</sup>

For these reasons, it may be that climate change must become its own category – with its own rationale for action – regardless of the extent to which those who focus on scientific uncertainty have obscured that rationale in recent years. No matter how often some politicians announce that the scientific debate is over, it will not be over until climate change is broadly accepted as a compelling reason to act in its own right. And using other issues as surrogates for climate concern may not foster such acceptance.

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<sup>301</sup> This is not to say that acting to address climate change will not have co-benefits in terms of improving energy conservation, energy efficiency and energy security.

### *Lessons from Baumgartner and Jones*

It is argued here that U.S. policy on global climate change has been remarkably stable over the past quarter century, and that this policy is known as the “no-regrets” strategy. Whether or not robust endorsement and implementation of this strategy might have served the United States well in the earlier years of the global debate over climate change, it is clear that no-regrets measures alone -- that is, only doing things that can be justified on grounds independent of concern about climate change -- no longer suffice. While no one knows what level of atmospheric concentrations of greenhouse gases “would prevent dangerous human interference with the climate system,” the Copenhagen Accord,<sup>302</sup> “recognizing the scientific view,” called for holding the increase in global temperature to below 2 degrees Centigrade. Such a goal cannot be achieved with no-regrets measures alone. Specific actions to address the growing concern about climate change in its own right now are needed. However, adopting such actions will require a significant change in U.S. climate policy – a policy that, it is argued, has been stable for a quarter century. How might it occur?

Baumgartner and Jones offer several clues. First, they would likely argue for the need to move the climate change issue from “parallel processing” to “serial processing” by government. They might say that it will be necessary to attract the simultaneous attention of voters and legislators.

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<sup>302</sup> Copenhagen Accord, December 18, 2009 (accessed February 17, 2014); available from <http://unfccc.int/resource/docs/2009/cop15/eng/l07.pdf>.

And how might that happen? Partly it could occur if political leaders were to focus more attention on the issue. While health care seemed to dominate during President Obama's first term (with the exception of the Waxman-Markey effort), the President and senior members of his administration, in particular Secretary of State John Kerry, Secretary of Energy Ernie Moniz and EPA Administrator Gina McCarthy, as previously noted seem now to be intent on doing just that. In light of Congressional opposition, particularly in the House of Representatives, the President has decided to push ahead as far as possible using Executive authority. EPA, which has already established regulations for new power plants, is now tackling the issue of drafting regulations for existing power plants to be announced in June. No one believes that the Clean Air Act, as amended, is an ideal vehicle for regulating greenhouse gas emissions, but absent Congressional action, the administration now seems intent on using regulatory approaches to the fullest.

How will such efforts likely be viewed internationally? Judging from the interviews with senior climate negotiators undertaken in the course of this study, other countries seem relatively content with the notion that the United States should decide on the specific approaches that make sense in its national circumstances. But will they view regulatory action by the Executive Branch, no matter how broad the reach, as significant and far reaching enough to signal a major change on the part of the United States?

Aside from higher level, more frequent and more sustained attention from political leaders, what else could help trigger rapid change in U.S. climate policy? Baumgartner and Jones might counsel more attention to policy image (or public understanding of a policy problem) and institutional venue. As noted, they believe that every policy image combines empirical information and emotive appeals. The emotive aspect they define as the “evaluative component,” and the “evaluative component” of a policy image is referred to as its tone. Tone is critical, in their view, because rapid changes in the tone of a policy image can presage changes in matters of mass mobilization. If the tone of an issue changes in the mass media from positive to negative, Baumgartner and Jones contend that opponents have an opportunity to attack. But similarly, if the tone of an issue in the mass media changes from negative to positive, then presumably proponents of the issue have an opportunity to advance. This is why the views of the press are so critical. For some time, the press has sought to portray “both sides of the climate issue,” lining up those who support action against those who do not, and those who believe that the science is a cause for concern and those who do not. In part, such efforts conform with journalistic standards of fairness and of affording equal time to those on different sides of an issue. In practice, many mainstream scientists believe that this approach has given the small minority of climate skeptics or deniers a soapbox, and has created a false impression that there is a more even split in the scientific community. Thus, the more knowledgeable the press, the more likely individual members are

to push back against claims that are based on false or misleading information and to challenge assertions that lack support. This was evident, for example, in David Gregory's questioning of several assertions made by Congresswoman Marsha Blackburn on NBC's Meet the Press on February 16, 2014, previously described. And this is why Baumgartner and Jones would likely counsel those seeking significant policy change to work hard on educating the press so as to cultivate a positive tone of the policy image or public understanding of the policy problem they hope to establish.

Baumgartner and Jones would also likely counsel those seeking rapid climate policy change to pay close attention to institutional venue. Here, we have already seen the environmental community shift its efforts during the George W. Bush Administration from the Executive Branch to the Judicial Branch with *Massachusetts v. EPA*. It is continuing to pay close attention to institutional venue as it encourages regulatory action by the Executive Branch to counter the current impasse in Congress.

A note of caution might be sounded, however, regarding an approach that some in the environmental community used from the early 1990s until the end of that decade up to the time it became clear that the Senate would never give its advice and consent to the Kyoto Protocol. In those early years, there seemed to be a belief that strong calls for action in the international arena could be used to leverage action domestically in the United States. The problem with this approach is "U.S. exceptionalism" discussed earlier in this study. While no nation may wish to stand alone in the international

community, the United States seems not to recoil from that prospect as readily as others, and even at times to embrace it. The ultimate failure of this tactic was the Kyoto Protocol, which blew up in the hands of those who sought to use international pressure to leverage action at home in the United States. One of the most important lessons that many drew from the Kyoto experience was that there can be no substitute for the hard work needed domestically at the grass-roots level to achieve a domestic consensus on the merits of the issues. This would have been wise counsel before Kyoto; it is especially wise in its aftermath.

Finally, Baumgartner and Jones might also recall that the desire to establish a policy monopoly is strong and exists on the part of nearly every interest group. While the Global Climate Coalition disbanded in 2002, it should be anticipated that, if the United States were to move toward significant and far-reaching action on climate change, opponents would rally round a new set of coalitions, as they have often done in the past, seeking both to advance their own policy image and to defeat the efforts of others. The fact that Baumgartner and Jones believe that policy monopolies are inherently fragile and evanescent works as no deterrent to those who would establish and defend them.

### ***Lessons from Rochon***

What guidance also might Rochon offer with respect to the prospects for rapid change in U.S. climate policy? The most important takeaway is that

cultural change is as important – if not more important – than policy change. This is because, as Rochon notes, cultural change must often precede dramatic change in policies. He notes that rapid change involves large-scale conversions to a new way of thinking – something we are seeing now in a cultural (and political) context with respect to gay marriage. If Rochon is right about the “cycle of protest,” it is conceivable that the climate issue could be joined with other rapidly moving issues – like gay marriage and the legalization of marijuana -- and be swept forward.

But Rochon’s ideas about value conversion, value creation and value connection seem to hold greater promise. Here several possibilities arise, none of them new but each of them intriguing. Because, as Rochon admits, value conversion involves a frontal assault on the firmly held views of others, it is the most difficult and likely least popular of the three. For this reason, opportunities involving value creation and value connection may be more promising in the near term. And under each there would seem to be possibilities.

For example, economists (and others) have long pointed out that there is a social cost of carbon that is not currently taken into account in the prices we pay for fossil fuels. This cost is related to the damage carbon inflicts on the environment and the cost of addressing it, either by avoiding carbon pollution altogether (for example, by using renewable sources of energy) or ameliorating it (for example, by carbon capture, use and

storage).<sup>303</sup> There have multiple and repeated calls over the years to “internalize the externalities” – that is, to develop some method of capturing this social cost of carbon. While widely understood and accepted, such calls have produced little action – because action costs money. But this is where Kingdon’s policy communities enter the picture. There are potentially multiple ways to “internalize the externalities” – a carbon tax or a cap-and-trade regime are only two, but they are not exclusive. They may be the most far-reaching, but there are more modest approaches that could be employed to “begin and build.” This is evident, for example, in the emissions trading approaches that EPA is considering with respect to carbon pollution from existing coal-fired power plants. They would not apply to carbon dioxide emissions economy-wide -- only within power generation. But they would begin to move in the direction of capturing the social cost of carbon. The same can be seen in the administration’s approach to raising vehicle fuel efficiency standards, another regulatory action that begins to assess the social cost of carbon.

More broadly than with respect to climate change alone, there is considerable ferment now in the environmental “policy community” with respect to “ecosystem services.” These are the “services” ecosystems provide, whose value in many cases can be quantified -- for example, the value to

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<sup>303</sup> There are other externalities from burning coal as well, for example the costs to human health from air pollution. These have much more direct implications for people, but efforts to “internalize” these costs by raising prices charged for fossil fuels have not been particularly successful. This experience makes the prospects of “internalizing” indirect costs even more daunting.

farmers of clean water for their livestock herds, the value of honeybee pollination to agriculture (and society), the value of clean air to human health. Recognition that ecosystems provide such services and ongoing work to quantify them financially almost ineluctably will lead to enhanced recognition of their value, more attention to conserving them and even broadening the ways that they are priced. Rochon would likely agree that this is an important area for value creation. He might argue that existing values do not advocate polluting fresh water, destroying pollinators or choking on dirty air.<sup>304</sup>

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<sup>304</sup> At the same time, it would seem that the battleground is now shifting to this arena. See Jeff Keuter, "Considering the Social Costs of Carbon," George C. Marshall Institute, e-mail notice sent on February 19, 2014 (accessed on February 19, 2014); available from: <http://marshall.org/>. Keuter, who is President of the George C. Marshall Institute, sent an announcement of a panel discussion that will take place on February 26, 2014, in the Rayburn House Office Building on Capitol Hill that read:

On **February 26**, the George C. Marshall Institute will host a discussion of the ***Social Cost of Carbon***, which is a tool used by the Environmental Protection Agency (EPA) to calculate the benefits of carbon dioxide reductions (see here for details) and thereby justify new regulations limiting fossil fuel use.

SCC calculations are contentious. They rely on the uncertain projections of climate change models to calculate the long-term impacts of CO<sub>2</sub>, while largely downplaying prospective and known benefits. They are highly sensitive to changing key assumptions, such as the discount rate (or the present value of a future value) or the time horizon.

Yet, the EPA is using the tool to establish regulations on emissions from power plants, motor vehicles, and manufacturing facilities.

The Institute has assembled a panel to discuss the SCC, how it is derived, and its limitations. Panelists include:

- **Dr. Patrick Michaels**, Director of the Center for the Study of Science at the Cato Institute

But Rochon believes that value connection offers the most potent means of bridging the cultural divide. One possibility here that could unite right and left is to change the approach taken in the United States to taxation. Many on the right have long decried taxing income because income taxes work to discourage human industry and innovation. Many on the left want to tax pollution or the activities that give rise to it, both to discourage them and to promote innovation and better, cleaner and more efficient ways of doing things. Some have suggested that right and left could ultimately coalesce over a comprehensive change to the tax code in the United States that would shift the basis for raising revenue from federal taxes on income to taxes on consumption<sup>305</sup>. This is, of course, not a small thing and would require a revolution even more profound than the revolution still unfolding with respect to health care in the United States. But it is to say that value connection could produce extraordinary change and extraordinary alliances.<sup>306</sup> As Rochon notes, cultural change occurs when people change the conceptual categories they use to give meaning to reality, when things that were once a matter of consensus no longer remain so.

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- **Dr. David Kreutzer**, Senior Policy Analyst in Energy Economics and Climate Change at The Heritage Foundation
  - **Dr. Roger Bezdek**, President, Management Information Services

<sup>305</sup> A current model may be the revenue-neutral carbon tax introduced by British Columbia in 2008, previously discussed.

<sup>306</sup> When he was Under Secretary of State for Global Affairs in the Clinton Administration, former Colorado Senator Tim Wirth mentioned this possibility repeatedly in informal conversation. Personal recall.

## ***Reality Check***

On February 18, 2014, President Obama made a public appearance at a Safeway distribution center in Upper Marlboro, Maryland. There he announced development of new fuel standards for heavy-duty trucks, “as part of what aides say will be an increasingly muscular and unilateral approach to tackling climate change through the use of the president’s executive power.”<sup>307</sup> The *New York Times* front-page above the fold report of this announcement is remarkable. It notes:

The new regulations, to be drafted by the Environmental Protection Agency and the Transportation Department by March 2015 and completed a year later so they are in place before Mr. Obama leaves office, are the latest in a series of actions intended to cut back on greenhouse gases without the sort of comprehensive legislation the president failed to push through Congress in his first term.

The limits on greenhouse gas pollution from trucks would combine with previous rules requiring passenger cars and light trucks to burn fuel more efficiently and pending rules to limit the carbon emissions of power plants. Cumulatively, experts said the à la carte approach should enable Mr. Obama to meet his target of cutting carbon pollution in the United States by 17 percent from 2005 levels by 2020. But they said he would still be far short of his goal of an 80 percent reduction by 2050.<sup>308</sup>

The *New York Times* piece recounts all of the different actions that the administration is taking in President Obama’s second term, saying: “While Mr. Obama effectively gave up on comprehensive climate legislation after it

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<sup>307</sup> See Peter Baker and Coral Davenport, “Obama Orders New Efficiency for Big Trucks – Using Executive Power to Confront Global Warming,” *New York Times*, February 18, 2014 (accessed February 19, 2014); available from <http://www.nytimes.com/2014/02/19/us/politics/obama-to-request-new-rules-for-cutting-truck-pollution.html? r=0>. The article appeared in the print edition on February 19, 2014.

<sup>308</sup> *Ibid.*

stalled in the Senate in his first term, aides said he saw climate change as an area where he could still shape his legacy.” It noted the observation of a long-time environmental activist: “‘They have to do the actions at home to show the rest of the international community that they’re doing actions they need the rest of the world to do,’ said Durwood Zaelke, president of the Institute for Governance and Sustainable Development, a Washington research organization.” Still the *New York Times* made a sober observation:

But environmental advocates warn that the E.P.A. rules will be effective only if they withstand legal and legislative efforts to undo them, which is why they want Mr. Obama to be more energetic about selling them to the public. “If you make a push purely on the executive action front and you don’t back it up with measures to bolster public support, a lot of this can crumble under a new administration,” said Michael Levi, a climate change expert at the Council on Foreign Relations.

Specialists like Mr. Levi also note that no matter what the United States does on its own, it may not matter if Washington fails to persuade other nations, like China and India, to commit to similar actions, which is Mr. Kerry’s assignment.<sup>309</sup>

In this regard, Rochon might agree that “policy change” cannot get too far ahead of cultural change, because it is vital for people to change “the conceptual categories they use to give meaning to reality.” And not only that, it will be vital to use domestic action to leverage comparable efforts from other countries for there to be an effective global response.

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<sup>309</sup> Ibid.

## **Chapter Eleven: Assume an Epiphany: Then What?**

What if there were to be a dramatic shift in U.S. policy toward global climate change such that the United States decided as a matter of urgency to take significant, far-reaching action? What then? Would such a change affect other countries? How would they view it? Would it prompt them to take comparable action of their own? What impact might a U.S. epiphany have on the [currently ossified] “negotiations” under the UNFCCC? And how quickly might such an impact be observed? Would such action by the United States alone lead countries to adopt an effective global response? This chapter explores these questions, returning to the interviews first unpacked in Chapter Three, but then making a number of additional observations and recalling again the reasons others have cited for stalemate in the international negotiations and the suggestions made for what to do about it that are detailed in Chapter One.

### ***If the United States Leads Will Others Follow?***

The interviews undertaken for this study also explored whether taking significant, far-reaching action domestically in the United States would be enough to develop an effective global response to climate change (i.e., not just a change in the negotiations, but a serious global effort to resolve the environmental problem), and if so, how directly and immediately such change might be likely to occur.

Responses varied considerably concerning this theme. Some respondents answered only some of the several questions. Some focused on particular questions, and responses exhibited greater variation than if respondents had been asked a single question. Specifically, respondents were asked:

Would significant or far-reaching action at home by the United States be enough to produce significant, positive momentum in the negotiations and develop an effective global response to climate change? How directly and immediately would this be likely to occur?

The first part of this question – whether significant or far-reaching U.S. domestic action would produce significant, positive momentum in the climate negotiations – has been discussed earlier. With a single exception, all of those interviewed – from developing as well as developed countries, from small countries to very large ones and across multiple regions (Africa, Asia, Latin America and Europe -- agreed that significant or far-reaching domestic action by the United States would produce significant, positive momentum in the negotiations – provided, of course, that it was well publicized internationally. The only representative (from a medium size European country) who disagreed felt that such action would not be very important to the negotiation process “because people are more focused on themselves.”

Views diverged, however, on whether such action would be enough to develop an effective global response. They also diverged both on how directly such action might produce positive momentum in the negotiations and on how quickly positive momentum would develop. Seven respondents

thought that such action would produce positive momentum in the negotiations directly and immediately. These included two African developing country representatives, two Asian representatives – one from a large developing country, the other from a large developed country – two European developed country representatives and one representative from a developing country in Latin America.

Four respondents thought that the impact of significant or far-reaching domestic action by the United States would be slow to develop for various reasons. Two representatives, one from a large developing country in Africa, the other from a large developed country in Europe – thought that it would take time for people to understand the significance of what had occurred and/or to accept and believe it. In their view, it would take time for people to adjust.

Two others – one from a developing country in Asia, the other from a European developed country, expressed some skepticism that the negotiations – as large and ponderous as they have become -- can react quickly to external developments. Both have worked many years under the UNFCCC in the negotiations and are easily among the most experienced of those interviewed.

Two of those interviewed considered the questions specifically in terms of the impact such action by the United States might have under the

Durban Platform<sup>310</sup> and in the context of the agreement to be reached in 2015. Concerns were also expressed about the issue of “reversibility,” as noted in Chapter 3.

### ***Specific Views***

***Asia Developing:*** The representative of a large developing country in Asia evinced some frustration with the “deadlines” imposed by the UNFCCC negotiating process. He said, “Now, unfortunately, we are caught in a bind – the Durban 2015 package. It is not practical to expect [such] deadlines [can] produce miracles. What you will do domestically is ultimately what will work [for you, in your context.]” He felt it would be “tough” for the United States to act by 2015. “The thing you could do is have legislation that would trigger action at the global level. If you send [such] a signal, it may or may not work elsewhere – but others would then believe that the United States is willing to act and they might do the same. For those similarly situated – with similar endowments and income levels -- it could be an example – others might do the same.”

***Europe Developed:*** The representative from a large European country noted that the UNFCCC negotiations have a kind of “gravitas” and that “things can take awhile.” He said that if the United States were to join with Europe to push harder on developing countries, they might just say,

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<sup>310</sup> See Decision 1/CP.17 “Establishment of an Ad Hoc Working Group on the Durban Platform for Enhanced Action,” UNFCCC/CP/2011/9/Add.1 (accessed February 17, 2014); available from <http://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf> - page=2.

“You’re only now doing what you should have been doing all along anyway.” Nevertheless, he agreed completely that significant, far-reaching domestic action by the United States “would change the whole dynamic of the negotiations – it would change the 2015 negotiations. At the same time, he affirmed that, “it [would be] tied to the cycle in the [ongoing] negotiations.”

### ***Sanctity of “The Process”***

The notion that action taken outside the UNFCCC negotiating process – or even action taken within it, but not within its existing bodies – can direct or supersede that process is often assumed, especially by those outside the process, but it is fundamentally mistaken. Having established the UNFCCC process, countries are strongly attached to it – with all of its faults – for multiple reasons and it is highly unlikely that any other process can be established in the foreseeable future to supplant it – or even that leaders of the biggest and most powerful nations on Earth can walk into the process and dictate outcomes. Two examples – one from outside, the other from inside the process – may serve to substantiate this assertion.

First, when the George W. Bush Administration created the Major Economies Meeting (MEM), the seventeen or so major economies that took part insisted early on that the MEM could not and would not decide issues being taken up in the UNFCCC negotiations. Instead, they maintained strongly that, whatever discussions might take place in the MEM such discussions would only inform those negotiations or supplement the

decisions taken under the UNFCCC. Developing countries, in particular, were extremely reluctant to suggest in any way that they had somehow left their caucus – the G-77 and China – or that they would cut any separate deal with developed countries in the MEM.

Lest this insistence on the UNFCCC as the only true forum in which to negotiate global agreements on climate change be thought a specific reaction to the George W. Bush Administration, which after all had rejected the Kyoto Protocol and only decided to re-engage seriously in the UNFCCC process at the Heiligendam G-8 Meeting in 2006, developing countries reiterated it immediately when the Obama Administration decided to continue that effort, re-styling it as the Major Economies Forum (MEF) in 2009. And developing countries were not alone. U.S. partners from the developed world also agreed that neither the MEM nor the MEF could or would supplant the UNFCCC negotiations. Partly, their agreement could be seen as the price of going forward with developing country participation in both forums. But partly it could be seen as a reflection of their suspicion of U.S. motives in the MEM and in the MEF. Absent complete breakdown or impasse in the UNFCCC negotiations (as almost occurred in Copenhagen in 2009) with no hope of resuscitation, efforts to replace or supplant the UNFCCC negotiations, even with what might be described as a more efficient, agile or responsive effort among a smaller group of countries, even the major economies, is likely to prove nearly impossible in the foreseeable future.

### ***Copenhagen and the “Upstairs-Downstairs” Problem***

Similarly, efforts within the UNFCCC process that do not originate from within its existing bodies are equally problematic. Take, for example, the Copenhagen Accord – the only thing that kept the 2009 Conference of the Parties from complete failure. It was hammered out through intense negotiations among heads of state – including the President of the United States and the Prime Ministers of Brazil, China, India and South Africa – not to mention the Chancellor of Germany, the President of France and the Prime Minister of the United Kingdom among others. Yet even though the group included key leaders from most of the major economies and even leaders from some smaller economies, ultimately only enough agreement could be found in the UNFCCC process to “take note” of the Accord. A determined and bitter cabal of countries – sufficient to block consensus in the UNFCCC -- violently rejected the Copenhagen Accord when it was brought “downstairs” from the leaders’ meeting to the plenary floor. They argued both against its substance and against the “closed door, undemocratic” process in which it had been produced.

Four of those interviewed felt that significant or far-reaching domestic action by the United States would have a major impact on the negotiations because it would mean that other countries – particularly the major economies -- could no longer hide behind the United States. Three expressed this view directly – one each from a large developed country in Europe, a large developing country in Africa and a developing country in

Latin American. The representative of a medium size developing country in Asia held the same view, but cast it more positively as setting a good example that others might seek to follow.

**Europe Developed:** The representative of a large, developed European country said, “In Copenhagen, the United States was between China and the European Union – if you moved to the progressive side, it would shift the baseline instantly because China cannot hide behind the United States. Sometimes we like to hide as well, but that too would be ripped down.”

**Latin America Developing:** The representative from a Latin American country agreed completely with the notion that action from the United States would give others no place to hide. He said, “It would remove the excuse major economies use for the lack of action/ambition -- Canada, China and Japan would also move as well. It would create positive momentum in negotiations. We saw this in 2009 when you started to re-engage – there was a tremendous amount of good will. You think we’re constantly attacking you – and we are – but you are the most important country in the world. I think the impact would be almost immediate. If there were a narrow window in which to clinch a deal, I think countries would be willing to contribute.”

**Africa Developing:** The representative of a large developing country in Africa attached a key condition to such action by the United States. He agreed that the impact on the negotiations would be immediate, whether it

was presented as international policy action or domestic policy action with a global link. “If you translate the numbers into a trajectory, it will have an immediate effect on the global price [of carbon]. Everyone has an eye on the global market. We in [my country] are developing our own [carbon market]. He preferred not to call a “trajectory” a “cap” because he did not think that the United States would opt for a cap per se – he instead used the term “budget.”

***Asia Developing:*** The representative of a medium size Asian developing country saw significant or far-reaching domestic actions by the United States as vital because, “[With] the United States on board, China and India will have more confidence. If they don’t see a minimum level [of action] they can’t or won’t [engage]. But if you do the first step, they will do two steps – although they won’t go beyond what the United States does. There must be differential responsibility – equity with some sense of historical responsibility.”

***Europe Developed:*** The representative of a small, developed European country echoed his remarks on the issue of “equity.” He said, “I’m a great believer in this – far reaching action by the United States will make a big difference. It is a precondition for 2015. The question of equity is coming forcefully. [At issue is the] leadership of western industrialized countries. We won’t get pledges [from developing countries] unless we show leadership.” He urged that these countries consider the Montreal Protocol

model: “(1) We go first; (2) we obey the science; and (3) we pay. We can do 25 percent -- it’s not very hard, and it’s the IPCC’s lower range.”

**Europe Developed:** Two representatives questioned, however, whether significant or far-reaching domestic action by the United States would of itself be sufficient to spur development of an effective global response. One – from a developed European country – mentioned Justus von Liebig’s “Law of the Minimum” in this regard. He said, “[It] would be an important enabler, but it would not be sufficient. It is not credible to blame only the United States but it would be a very significant game changer. Still, I worry about leadership in developing countries. “He observed that under the “Law of the Minimum” the growth of a plant is limited by the nutrient that exists in shortest supply. In the climate negotiations, he asked, what nutrient exists in shortest supply? Answering his own question he said, “Accepting responsibility for impacts on others, including on the future.” He expressed concern about finding the right tools to implement global action, in particular about the collective ability of countries to mobilize the private sector. “It is the art of actually doing things that starts changing the direction of the super tanker,” he said.

**Latin America Developing:** Finally, the representative of a developing country in Latin America also expressed some doubt about whether even significant, far-reaching domestic action by the United States would be enough to produce an effective climate regime. He said, “The task is tremendous. I’m not sure anyone has a clear-cut idea of the amount of

action, financing, and technology transfer [needed] to be effective. No one knows how much is enough. So even if the United States were coming in very strong – which is critical, and it can't happen without the United States -- but is the United States alone enough? I don't know.”

***Delays, Communication Problems, Procedural Obstacles, etc.***

The interviews were revealing in the kinds of issues they surfaced that could, and likely would, delay, hinder and moderate the power of a dramatic change in U.S. climate change policy involving significant, far-reaching action at home. Curiously, nearly all of those interviewed agreed that what the United States does domestically should be up to the United States (and not others) because each country is the best arbiter of what is possible in its own national circumstances. This kind of non-interference principle (like Star Trek's 'prime directive') is at once very positive but also possibly negative. It is positive in the sense that others are not prepared to dictate what the United States does at home, thus respecting our national sovereignty.

But it could also be negative in that there is no guarantee that what the United States ultimately does will be understood by others and recognized by them to be significant and far-reaching. This is part of the problem with relying on regulatory actions alone – it is difficult for other nations to grasp their significance, notwithstanding the transparency of the U.S. system. And for the United States to say so will not necessarily make it

so – it must convince others, many of whom have become quite skeptical. Without *a priori* agreement on what is “significant” or “far-reaching,” this could be a major undertaking. As one of those interviewed from a large European country observed, developing countries might say that you are only now doing what you should have been doing all along. This point was made indirectly by the *New York Times* in the article reporting on President Obama’s announcement ordering development of new fuel standards for the nation’s fleet of heavy-duty trucks. It observed:

The limits on greenhouse gas pollution from trucks would combine with previous rules requiring passenger cars and light trucks to burn fuel more efficiently and pending rules to limit the carbon emissions of power plants. Cumulatively, experts said the *à la carte* approach should enable Mr. Obama to meet his target of cutting carbon pollution in the United States by 17 percent from 2005 levels by 2020. But they said he would still be far short of his goal of an 80 percent reduction by 2050.<sup>311</sup>

While hardly insignificant, Executive action that would enable the administration only to meet the target it announced in Copenhagen in 2009 will not go very far toward convincing the rest of the world that U.S. policy has undergone a sea change – even if, in domestic terms, it well may have.

Another problem likely to be encountered is that of the lag between announcement, implementation and result. The easiest of course is announcement. Politicians make them routinely. They are the “deliverables” of every trip and visit, domestic or foreign. Implementation is harder and less certain, particularly if actions depend on appropriations, which depend on Congress, or if they depend on “smooth sailing” in the courts, which most

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<sup>311</sup> Baker and Davenport.

regulations do. As Thackeray said: “There’s many a slip twixt the cup and the lip.”<sup>312</sup> And there is invariably a lag, shorter or longer, depending on these factors.

Then there is the problem of producing and showing actual results. The Kyoto Protocol established a first commitment period from 2008-2012. Annex I Parties had commitments in this first period to limit or reduce their greenhouse gas emissions to negotiated percentages of their 1990 baseline (except in the case of “economies in transition” -- Eastern European countries and former members of the Soviet Union that were authorized, under the UNFCCC’s Article 4.6, to use a different baseline). The problem that arose in the negotiations involved how and when parties would know whether those commitments had been met. There is invariably a lag in reporting, as anyone who has sought data on current greenhouse gas emissions can attest, that makes it difficult to know quickly. Add to this

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<sup>312</sup> William Makepeace Thackeray, *The History of Pendennis, His Fortunes and Misfortunes, His Friends and His Greatest Enemy*, (New York: Harper Brothers, 1858), 924. An English proverb, Thackeray was the first to use it in a publication. Reportedly, the saying dates to Ancient Greece:

Dr. Brewer recounts the story of Ancaeus, the helmsman of Jason’s ship *Argo* in Greek mythology. ‘He was told by a slave that he would never live to taste the wine of his vineyards. When a bottle made from his own grapes was set before him, he sent for the slave to laugh at his prognostications; but the slave made answer, “There’s many a slip ‘twixt the cup and the lip.” At this instant a messenger came in, and told Ancaeus that the Calydonian boar was laying his vineyard waste, whereupon he set down his cup, went out against the boar, and was killed in the encounter.’

*English Learning Resources* (accessed February 19, 2014; available from <http://english.al/proverb/theres-many-a-slip-twixt-the-cup-and-the-lip/>).

problem the implementation problems just discussed, which may well make results less than announced goals or targets, and the picture becomes more complicated. Delays and differences between commitments announced and results delivered make for skepticism about whatever is trumpeted in political announcements, even by those who are well intentioned.

### ***Form of Commitment and Reversibility***

Additionally, there are two other categories of problems that might be cited: (1) the question of the form of any commitment announced, and (2) the issue of reversibility. In the current negotiations leading up to post 2020 commitments at the 21<sup>st</sup> Conference of the Parties that will take place in Paris in 2015, there has been considerable discussion of the question of what form the “deal” will take. The Durban Platform calls for a protocol, another legal instrument, or an agreed outcome with legal force” – but its “bindingness” could take many different forms. For example, commitments made by parties could be binding domestically (where in fact they might be stronger, given the difficulty of enforcing legally binding commitments under international agreements) with the obligation to report them being a binding obligation internationally.<sup>313</sup> Such an approach might be easier for many countries, but it might not provide the assurance sought, for example by small island countries that view climate change as an existential threat. As

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<sup>313</sup> This is Moomaw’s suggestion on “participation through autonomous action.” See Moomaw, “Can the International Treaty System Address Climate Change?”

noted in the course of the interviews undertaken for this study, for many countries it is not just about what big emitters will do, but also about what they will commit to do internationally.

A somewhat similar concern underlies the issue of reversibility. Australia's decision to adopt a carbon tax that was to lead ultimately to a flexible emissions trading scheme a few years after its inception was greeted with great fanfare internationally when it was adopted on July 1, 2012, by the Gillard Government. But that government fell soon afterward (in the fall of 2013) and the Abbott Government dismantled it, abolished many environmental programs of the previous government and banned Australian carbon polluters from buying carbon credits overseas.<sup>314</sup> Aware of the

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<sup>314</sup> See "Policy: Australia prepares reverse auction approach to replace carbon tax," Climate Wire, E&E Publishing, LLC, February 19, 2014 (accessed on February 19, 2014); available from: <http://www.eenews.net/stories/1059994746>. With regard to Abbott's alternative, the article says:

The centerpiece of Prime Minister Tony Abbott's Australian Climate Direct Action Plan is a reverse auction at which polluters are supposed to compete for about \$3 billion in government funding over five years by bidding with their cheapest ways to eliminate emissions. The Emissions Reduction Fund would award credits to companies that cut pollution faster than their peers, Environment Minister Greg Hunt wrote in a working paper published by the government.

"We will use architecture that is already in place and working well," Hunt said in a speech in Melbourne. "We agree on the science. We agree on the targets. We agree on market mechanisms. We disagree absolutely on what is the right market mechanism."

The fund is scheduled to start July 1, and it will initially deal only with rewarding emission reductions, without specifying penalties for carbon polluters that fail to meet their emission targets.

"By buying up the 'abatement cost curve,' we will provide powerful incentives for businesses to bring forward the lowest cost emissions reduction projects," Hunt said. "There is no need to tax the economy as

controversy over climate action in a number of countries, several of those interviewed for this study expressed concern about the “reversibility” of actions adopted – particularly in the United States where Democrats and Republicans sometimes delight once in power in tossing out the programs developed by the other side.

The kinds of issues identified above are related to any seismic change in U.S. climate policy itself. But as seen in Chapter One of this study, there are many theories for why the climate negotiations have gone off the rails and many suggestions for what must be done to bring them back again. It is argued here that those theories and suggestions cannot reliably be tested until the “indispensable party” determines to engage.

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a whole. The important thing is to focus on the gap and then purchase the reduction necessary to fill that gap. The lowest cost abatement may involve a whole range of projects including those to clean up waste coal mine gas, clean up power stations or to capture landfill gas."

## Chapter Twelve: Conclusions

At the outset, this study asked three questions:

- (1) Why are the global negotiations on climate change stuck?
- (2) What do certain theories about public policy change in the United States have to say about climate?
- (3) How would significant, far-reaching climate action in the United States affect the international negotiations?

Where have we come?

### ***Why are the global negotiations stuck?***

The global negotiations on climate change are stuck because they are not just about an environmental issue. They are a metaphor for the most difficult problems facing humankind at the beginning of the 21<sup>st</sup> century. On their back, various actors are seeking to right historical wrongs, to raise the human condition, to enfranchise the disenfranchised, to level the economic playing field among nations, to stimulate technological innovation, and to change the world order – among other things. Is it any wonder that these negotiations are stuck?

Addressing such matters is a much broader proposition that will play out over a longer period, and resolution is likely to occur, if it does, in fits and starts -- in pieces over time, not all at once in an historic “grand bargain.” Those who ask why the global climate negotiations are stuck might do better to ask, “What is it that such negotiations realistically can do?” Here too, expectations seem stretched well beyond any reasonable – or even

reasonably optimistic – assessment of what is possible. Here, many of the critical observations and proposals outlined in Chapter One come into play. A number of them – specifically Najam, Huq and Kokona; Bradley, Baumert *et al.*, Birdsall and Subramanian; and Moomaw and Papa – argue that the negotiations should not focus solely or even primarily on greenhouse gas emissions, although all acknowledge that they are the problem. In their view, the negotiations must adopt a broader perspective, focusing in particular on sustainable development.

While such an approach might stimulate broader interest among developing countries and enhance their willingness to engage, two broad concerns arise with these proposals: (1) the objective of the UNFCCC is clear – to prevent dangerous human interference with the climate system – it is an environmental, not a development, objective; and (2) development is well-understood by most governments in the industrialized world, and relegated by most of them to overseas development agencies like USAID in the United States or DFID in the United Kingdom or GTZ in Germany. Development is a category of government activity with its own institutions and corporate culture, and its own objectives. Seeking to use the development tool to solve this global environmental problem risks subjugating other, legitimate development goals to the singular objective of reducing the threat of climate change. It also risks failing to engage the much broader cross-section of government agencies and civil society in the enormous undertaking required

to stem the global increase in greenhouse gas emissions – relegating the effort to a kind of development ghetto.<sup>315</sup>

But at the same time, how can nations approach the climate issue only as an environmental problem -- without acknowledging that solving it requires fundamental changes in patterns of energy use, which underlie economic prosperity and the development hopes and aspirations of all nations for a better future? This is essentially what those writers aver, and they are not wrong. The question, again, is what can the climate negotiations realistically do in this regard?

Is it a question that scientists have failed to communicate their concerns adequately or need to retool how they articulate the problem? This is an issue identified by Risbey and Moomaw, and they too are not wrong. This study has also referenced the efforts of climate skeptics or climate deniers to sow doubt and focus on uncertainty with the specific objective of slowing or preventing action. And a number of them seem genuinely to believe that they are serving a greater good – safeguarding the nation’s economy and preventing false science from dictating wrong policy choices with profound economic implications. But even communicating the science effectively -- and effectively neutralizing the efforts of climate deniers – would not seem to be sufficient to move forward in the negotiations. While not unimportant – the issues are bigger than this.

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<sup>315</sup> In fairness, the question could be asked whether this would be worse than the “environmental ghetto” that many parties see as a distraction from their development goals?

Once again, it is important to ask, what can the climate negotiations realistically hope to accomplish? What can 195 countries at vastly different levels of economic prosperity, with vastly different natural, geographic, historic, demographic, and other categories of national circumstances, hope to do together in a formal negotiating setting? Whatever this may be, can it be done under a decision framework requiring that all actions be taken by consensus? And if so, how robust is that action ever likely to be? Can it be sufficient to solve the problem of global climate change?

This is perhaps why a number of people have focused on problems of decision-making within that process – like Balsillie and Lazaridis who started the L.20 Project and Victor, Carin and Winterkorn-Meikle, some of its theorists; and like Stern and Antholis, who advocate an E-8 and layered diplomacy.” It also helps explain why Prins and Rayner propose a portfolio of approaches -- to hedge their bets – and why Bodansky calls for a more “bottom-up” approach.

Likely for these reasons, some seek solutions outside the formal negotiating framework. Shellenberger and Nordhaus number among them with their call for a technological “Apollo Project” but, fortunately for the planet, many others also acknowledge the inherent weaknesses of the international negotiating process and do not look seriously to it to solve the problem. Many, like Shellenberger and Nordhaus, place great emphasis on the need for invention and the ability of the human species to produce it with the right incentives. Also among those advocating in one way or another for

rapid technological development (or acknowledging the contribution it could make) are Moomaw and Papa, Stern and Antholis, Prins and Rayner as well as Verolme, Yamin, Menotti and Fuhr.

While technological solutions will not originate in the negotiating process, the negotiations and the global focus they bring to the issue, undoubtedly influence investment decisions of governments and businesses in both the research and development of alternatives that avoid, reduce or sequester greenhouse gas emissions. The negotiations influence governments in particular in considering national policies and measures to meet the challenge across a wide spectrum of activities. With its annual, two-week COPs, the UNFCCC has spawned one of the largest annual environmental/energy conclaves in history, with participants numbering in the many thousands – and in the case of Copenhagen numbering more than 40,000<sup>316</sup> -- with intense global media attention normally guaranteed.

Aside from the global focus on the issue that the negotiations bring to the problem, critical too is the forum they provide for even the smallest island country to “give voice” to its concerns. Without the platform the UNFCCC offers, and the platform offered more broadly by the United Nations

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<sup>316</sup> Number “representing governments, nongovernmental organizations, intergovernmental organizations, faith-based organizations, media and UN agencies [that] applied for accreditation” according to the UNFCCC Secretariat (accessed February 22, 2014); available from [http://unfccc.int/meetings/copenhagen\\_dec\\_2009/meeting/6295.php](http://unfccc.int/meetings/copenhagen_dec_2009/meeting/6295.php). For those who have never attended, the enormous scale is difficult to imagine – and complexity of the process can be overwhelming and intimidating to new initiates.

– including annual meetings of the General Assembly, special “summits” convened by the Secretary General (like the summit Ban Ki Moon has called for September 2014)<sup>317</sup> or special conferences (like the Third International Conference on Small Island Developing States (SIDS) that will take place in early September 2014 in Samoa<sup>318</sup>), and Security Council debates (like those that have taken place in 2011 and 2013, following the first in 2007, held at the instance of the United Kingdom)<sup>319</sup>—small countries that are likely to experience the adverse impacts of climate change most severely, would have a far more difficult time attracting global attention to the particular problems they face. Lacking the means to cope with many of these adverse impacts, their central strategy is both to encourage large emitters to take action to reduce their greenhouse gas emissions and to seek their assistance in adapting to the impacts so far as possible. As noted in Chapter One, Badrinarayana has urged that the negotiations also focus on issues involving the resettlement of persons likely to be displaced by climate change impacts.

So, while the negotiations may not themselves solve the problem of global climate change, they provide a vital forum through which to keep global attention focused on the issue, that in turn stimulates practical

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<sup>317</sup> See UN website on the “Climate Summit 2014: Catalyzing Action” (accessed February 22, 2014); available from <http://www.un.org/climatechange/summit2014/>.

<sup>318</sup> See SIDS website on “2014 UN Conference on Small Island Developing States,” (accessed February 22, 2014); available from <http://www.sids2014.org/>.

<sup>319</sup> See The Centre for Climate and Security, “UN Security Council Strengthens the Climate and Security Link (Sort Of),” (accessed February 22, 2014); available from <http://climateandsecurity.org/2013/07/01/the-un-security-councils-role-in-addressing-climate-change/>.

solutions, from national policies to investment decisions to R&D to coping strategies, that are acutely needed to address the problem. And they provide a vital forum in which countries, particularly small, disadvantaged countries, can give voice to their concerns on a regular basis.

### ***Where is the United States?***

But a key problem in the negotiations since the Kyoto Protocol in 2007--and in responding to global climate change generally -- is the widespread view that the United States is not playing its expected role. This study thus differs from those mentioned in Chapter One because it argues that a key reason that the international negotiations are stuck is that the United States is not leading. That view finds strong support among the senior climate negotiators from a broad range of countries interviewed for this study and has been clearly proven here.

It has also been argued here that, through the administrations of four U.S. Presidents, U.S. policy toward climate change has been remarkably consistent. Despite two significant efforts to go beyond it (the proposed Btu tax in the Clinton Administration and the Waxman-Markey cap-and-trade legislation during Obama's first term) that policy has focused for the most part on "no regrets" measures and voluntary actions. Although an early and robust embrace of the no-regrets strategy might have been enough in the early days to propel the United States into a leadership position, any such

opportunity was lost when senior officials began questioning the science and the forces of opposition began organizing in a serious way.

In the meantime, the science of climate change has become ever more compelling and the need to progress beyond no-regrets measures has become increasingly apparent. Why? Simply put, it will not be possible to stimulate the level of investment in new technologies needed to address this problem, whether technologies to avoid, reduce or sequester greenhouse gas emissions or to cope with the inevitable impacts of climate change, without attaching value to carbon economy wide. However, attaching value to carbon economy wide would call for a significant and far-reaching change in U.S. policy, at a time when U.S. climate policy – like the international negotiations themselves – seems hopelessly stuck.

***What insights do theory and the findings of this research offer?***

Because the international consensus strongly supports the notion that there will be little progress internationally unless the U.S. demonstrates commitment domestically, and takes a leadership position internationally, this study has examined what factors lead to changes in United States public policy. It has drawn on the analysis of four major theorists and sought to apply their insights more specifically to the climate issue. Chapter 10 provides detailed “takeaways” from this analysis, and they will not be restated here except to note that Kingdon’s theory of policy windows is highly relevant to the question of when U.S. policy may change. There seem

to be two possibilities: (1) with the election of any future U.S. President; and/or (2) in the wake of a major environmental (and unfortunately human) catastrophe. The current efforts of President Obama's Administration will likely move the needle, but without a significant change in Congress it is not clear how far he and others will be able to go, or how powerful the forces of opposition may be in rejecting even relatively modest advances. The Baumgartner and Jones discussion of policy monopolies comes to mind. But so does their suggestion that often, for issues to move, they must be lifted out of parallel processing by governments, which relies first and foremost on apathy of the citizenry, and into serial processing, where the attention of legislators and citizens are focused simultaneously. While Baumgartner and Jones acknowledge that government has a limited capacity for serial processing of issues, like Kingdon they agree that forcing events or crises can propel them there, as can attention from leaders at the highest level – hence the value of the Obama Administration's powerful focusing efforts in the president's his second term.

A concern raised here, based on Kingdon's notion that ideas must emerge from the "policy primeval soup" -- from policy communities where they are vetted and burnished and many are rejected -- is that no clear preference has yet emerged with respect to whether a tax or a cap-and-trade or cap-and-dividend approach is preferable. If a policy window opens and there is no consensus on this point, the opportunity could be lost.

A significant concern as nations approach the 2015 agreement in Paris under the UNFCCC's Durban Platform is also that, what may be significant and far-reaching in terms of domestic politics and "what the traffic will bear" in the United States, may be too little in the court of international opinion, either because the difficulties here are insufficiently understood and appreciated abroad, or because they are simply too puny in the context of what science says must be done if we are to avoid dire impacts of climate change in the future.

Another factor that emerges from this study's effort to apply policy change theory to the climate issue is the importance of venue. While Congress in the late 1980s was the locus of concern about climate change, and many of those who would later play key roles in U.S. policy domestically, including Al Gore, Tim Wirth and John Kerry, were "early movers" on this issue, the "action" arguably shifted to the Executive Branch with the advent of the IPCC and subsequently the negotiations under U.N. auspices of both the UNFCCC and the Kyoto Protocol. While the "action" seemed to remain there, with the exception of a brief moment in July 1997 when the Senate made known its opposition to the Kyoto Protocol, the venue has also been shifting in more recent years.

The Executive Branch still dominates U.S. policy internationally, but "action" domestically is much more distributed. States like California or those in New England – serve as policy incubators, and it is likely that many

future efforts at the Federal level will take shape from the ideas and approaches that are tested in those arenas.

Equally, “action” began to shift from the Executive to the Judicial Branch with *Massachusetts v. EPA* in 2007, and that shift may not yet have run its course. The Supreme Court heard oral argument on February 24, 2014, on whether EPA may extend its reach under the Clean Air Act to regulate greenhouse gas emissions from power plants using the same rationale that it used to regulate greenhouse gas emissions from new cars.<sup>320</sup> The battle continues.

Given the important role that the Executive Branch and Congress each play under the Constitution, it has occurred to some that effectively addressing this global environmental problem on the part of the United States likely will require a closer partnership between the two than is normally known under what might be called the Constitution’s Article II, Section 2 “treaty” approach. Under that approach, the Executive Branch negotiates treaties that are submitted to the Senate for its advice and consent and are subsequently ratified and proclaimed by the President. If domestic authority is needed to give effect to the treaty’s provisions domestically, and if funds are needed for this purpose, implementing legislation must also be adopted by the Senate and the House of Representatives.

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<sup>320</sup> See Adam Liptak, “As Obama Vows to Act on Climate Change, Justices Weigh His Approach,” *New York Times*, February 19, 2014 (accessed February 22, 2014); available from <http://www.nytimes.com/2014/02/20/us/politics/in-emissions-case-supreme-court-to-consider-the-limits-of-obamas-authority.html>.

But given that climate significant, far-reaching action to address climate change is likely to require extensive domestic efforts in the United States (which are normally the province of Congress), and at the same time that solving this problem cannot be accomplished by one nation alone but must involve a coordinated effort of many nations (which is normally the province of the Executive Branch), some have urged consideration of the “Congressional-Executive” model often followed with respect to trade agreements. Under that model, Congress establishes parameters for an acceptable outcome that is then negotiated by the Executive Branch and, if an outcome consistent with those parameters is achieved, is voted up or down by a majority of both Houses (not Article II, Section 2’s two-thirds of the Senate).<sup>321</sup>

While the current impasse in Congress over the climate issue likely rules out such an approach at present, the kind of significant, far-reaching action at home in the United States that is needed to mount an effective global response ultimately can only be accomplished with a strong, bipartisan effort involving both Congress and the Executive Branch. Fortunately, what today may be laughable may yet be the stuff of serious compromise in the future.

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<sup>321</sup> Daniel A. Reifsnyder, “Global Warming and the Constitution: Need Past be Prologue?” April 28, 2007 (unpublished paper). See also Nigel Purvis, “Paving the Way for U.S. Climate Leadership: The Case for Executive Agreements and Climate Protection Authority,” *Discussion Paper RFF DP 08-09, Resources for the Future*, Washington, D.C., April 2008. He argues that the President and Congress should handle “the most significant climate change agreements” as congressional-executive agreements requiring a simple majority of both house of Congress.

A key finding of this study is that cultural change with respect to this issue may be every bit as important as policy change, because it may be necessary for cultural change to precede it. Rochon's ideas of value conversion, value creation and value connection also offer important insights into how culture changes and what may already be occurring here in the United States.<sup>322</sup> Recall his notion that cultural change occurs when people change the conceptual categories they use to give meaning to reality, when things that were taken as a matter of consensus no longer remain so, and that the process of cultural change involves introducing contention into how events should be viewed.

### ***What if?***

And what if U.S. policy were to change under some combination of conditions or cultural changes or in some way and for some reason not even imagined here – what then? What can we conclude about what is likely to happen if the United States were to take significant and far-reaching action on climate change at home? What consequences would such a change have on the international climate negotiations? The conclusions reached by this study fall into two categories: 1) those that one might fully expect – for example,

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<sup>322</sup> It is remarkable, for example, that all but 13 states have renewable energy portfolio standards or goals – whatever their views may be about global climate change. See “Most States Have Renewable Portfolio Standards,” *Energy Information Administration*, February 3, 2012 (accessed March 2, 2014); available from <http://www.eia.gov/todayinenergy/detail.cfm?id=4850>.

that significant, far-reaching domestic action in the United States would have a profound effect on other nations; and 2) those that were surprising – for example, what the United States does at home is up to the United States in the eyes of most of the rest of the world. It is the significance of U.S. actions that count.

However, conclusions in neither category can be stated categorically. While the international impact of significant U.S. domestic action would likely be profound, it would probably take some time to be understood and appreciated. While it might be significant and far-reaching in a domestic sense given the politics at home, it might be judged wanting by an international audience. This could happen, for instance, if U.S. action did not meet expectations of the U.S. “fair share of reductions” in light of what the science says needs to be done. It might also happen if the United States were unwilling to translate its domestic action into a commitment legally binding under international law. It might happen as well if the U.S. commitment were conditioned too extensively on comparable actions by others, particularly if those comparable actions were judged to be too demanding or onerous.

Similarly, it is difficult to imagine that what the United States does at home is completely up to it, particularly in terms of the result likely to be achieved. While senior climate change negotiators interviewed for this study did not express any clear preference for a tax or a cap and trade regime – or even for attaching value to carbon economy-wide by whatever means – it is unimaginable that they do not care about what the method of choice adds up

to in terms of its impact on U.S. greenhouse gas emissions. And how much is that? This study did not attempt to discern those specific implications.

Another issue that the United States would confront, even with significant, far-reaching domestic action is that the process itself has grown exceedingly complex and weighted down with institutions and procedures. Nothing happens quickly. Moreover, the group dynamics of the negotiations in which almost all nations now belong to negotiating blocs of one stripe or another (and some belong to several) makes progress even slower and more ponderous. Groups need time to meet, groups need time to discuss, groups need time to reach positions and more time to react to proposals made by others. And most difficult, perceptions of the need for group solidarity can cause nations to support ideas from which they would rather distance themselves or oppose ideas to which they have no major objection or might even find attractive. It can be exceedingly difficult to pierce the group veil to discover the true positions of each member or to get individual members of the group to assert their own views when at variance with the group view.

There is also the issue of the decision-making framework already mentioned. As incredible as it may seem, the UNFCCC has only been able to “apply” most of its rules of procedure – it has never been able to “adopt” them in the course of its nearly 20 year history. Consequently, all decisions by the 195 UNFCCC Parties must be taken by “consensus.” This framework makes it difficult to proceed, as leaders found in Copenhagen, when a determined group of countries strenuously objects.

On the other hand, while such problems are real and would likely be more significant than might be imagined, they are not insurmountable. Moreover, if the United States were to engage after implementing significant, far-reaching domestic action, the impact would be stunning. While it would still take time to fashion an effective global response, it would open very significant opportunities and create possibilities for an effective global climate agreement.

### ***Responses to Questions***

At the outset, this study asked three questions:

- (1) Why are the global negotiations on climate change stuck?
- (2) What do certain theories about public policy change in the United States have to say about climate?
- (3) How would significant, far-reaching climate action in the United States affect the international negotiations?

These questions can now be answered succinctly:

- (1) The global negotiations are stuck in part because the United States, an indispensable party, has been reluctant to lead.
- (2) The theories examined about public policy change in the United States indicate that a significant, far-reaching shift in policy is possible if advantage is taken of the next *policy window* and if leadership creates an effective narrative that convinces the public and the Congress that it is essential to take action; and
- (3) Significant, far-reaching climate action in the United States would have a profound impact on the international negotiations – while such action is necessary it will nevertheless be exceedingly difficult to craft an effective global response in light of the other factors that have blocked an agreement thus far, the widely

varying circumstances and aspirations of the parties, and the complexities of the current process.

### ***Key Findings***

To conclude, the key findings of this study are:

- (1) *The United States today can significantly shape the global response to climate change.*
- (2) *To do so, significant and far-reaching U.S. domestic action is vital.*
- (3) *The United States has broad scope to decide what kind of action makes sense for it, but the impact will need to be viewed by others as significant, in line both with the science and with perceptions of the U.S. "fair share."*
- (4) *A shift in American attitudes toward climate change is necessary and possible if leadership takes advantage of the next policy window, and creates an effective narrative that convinces the public and the Congress that action is essential.*
- (5) *U.S. domestic action is necessary but not sufficient to craft an effective global response that addresses some of the factors that have blocked an agreement thus far.*
- (6) *Even with U.S. action and engagement, the issue will be exceedingly difficult to resolve because of the widely varying circumstances and aspirations of the parties and the complexities of the current process.*

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## Appendix I – List of Officials Interviewed for this Study

- 1) Ambassador Nozipho Mxakato-**Diseko**, Ph.D.  
Deputy Director General  
Department of International Relations  
and Cooperation  
Pretoria, South Africa  
*Interview conducted on May 16, 2012, in Bonn, Germany*
  
- 2) Mr. Selwin **Hart**  
Counsellor  
Permanent Mission of Barbados to the  
United Nations  
New York, USA  
(also served as chief negotiator for Barbados and lead negotiator for  
the Alliance of Small Island States) in the Ad Hoc Working Group  
on Long-Term Cooperative Action (AWG/LCA))  
*Interview conducted on May 15, 2012, in Bonn, Germany*
  
- 3) Dr. Mizan R. **Kahn**  
Professor of Environmental Science and Management  
North South University  
Dhaka  
Dhaka, Bangladesh  
(also serves as a climate negotiator for Bangladesh)  
*Interview conducted on May 17, 2012, in Bonn, Germany*
  
- 4) Ms. Nataliya **Kushko**  
Adviser to the Head of the Agency and  
UNFCCC Chief Negotiator  
National Environmental Investment Agency  
Kiev, Ukraine  
*Interview conducted on May 17, 2012, in Bonn, Germany*
  
- 5) Dr. **Li** Gao  
Deputy Director General  
Climate Change Department  
National Development and Reform Commission  
Beijing, People's Republic of China  
*Interview conducted on May 16, 2012, in Bonn, Germany*

- 6) Mr. Tosi **Mpanu Mpanu**  
National Director of CDM National Designated Authority  
Former Chair of Africa Group 2010-11; Transitional Committee –  
Board of the Green Climate Fund  
Kinshasa, Democratic Republic of the Congo  
*Interview conducted on May 17, 2012, in Bonn, Germany*
- 7) Ms. Margaret **Mukahana** Sangarwe  
(formerly) Permanent Secretary  
Ministry of Environment and Tourism  
Zimbabwe  
and (formerly) Chair and Vic Chair of the Ad Hoc Working Group on  
Long-Term Cooperative Action  
(currently) Permanent Secretary  
Ministry of Tourism and Hospitality Industry  
Harare, Zimbabwe  
*Interview conducted on May 17, 2012, in Bonn, Germany*
- 8) Ms. Bernaditas de Castro **Muller**  
Retired Career Diplomat  
Ministry of Foreign Affairs and (currently)  
Consultant to the National Climate Change Commission  
Republic of the Philippines  
also (currently) Special Adviser on Climate Change  
South Centre  
Geneva, Switzerland  
*Interview conducted on May 16, 2012, in Bonn, Germany*
- 9) Andre **Odenbreit** Carvalho  
Counsellor  
Division of Environmental Policy and Sustainable Development  
Ministry of Foreign Relations  
Brasilia, Brazil  
*Interview conducted on May 17, 2012, in Bonn, Germany*
- 10) Mr. Rajni Ranjan **Rashmi**  
Joint Secretary  
Climate Change Division  
Ministry of Environment and Forests  
New Delhi, India  
*Interview conducted on May 18, 2012, in Bonn, Germany*

- 11) Dr. Artur **Runge Metzger**  
Director of International and Climate Strategy  
Climate Action Directorate-General (DG Clima)  
European Commission  
Brussels, Belgium  
*Interview conducted on May 14, 2012, in Bonn, Germany*
- 12) Dr. Karsten **Sach**  
Deputy Director-General  
International Cooperation  
Federal Ministry for Environment, Nature Conservation  
and Nuclear Safety  
Berlin, Germany  
*Interview conducted on May 14, 2012, in Bonn, Germany*
- 13) Mr. Oleg **Shamanov**  
Head of Division  
Department of International Organization  
Ministry of Foreign Affairs  
Moscow, Russian Federation  
*Interview conducted on May 17, 2012, in Bonn, Germany*
- 14) Mr. Kunihiro **Shimada**  
Special Adviser to the Minister  
Ministry of Environment  
Tokyo, Japan  
*Interview conducted on May 16, 2012, in Bonn, Germany*
- 15) Dr. Halldor **Thorgeirsson**  
Director  
Implementation Strategy Unit  
Secretariat of the U.N. Framework Convention on Climate Change  
Bonn, Germany  
(formerly with the Icelandic Ministry of Environment)  
*Interview conducted on May 14, 2012, in Bonn, Germany*
- 16) Mr. Jukka **Uosukainen**  
(then) Director General, International Affairs  
Ministry of the Environment  
Helsinki, Finland  
(now Director, Climate Technology Center and Network,  
Copenhagen, Denmark)  
*Interview conducted on May 16, 2012, in Bonn, Germany*

- 17) Mr. Alf **Wills**  
Deputy Director General  
Department of Environmental Affairs  
Pretoria, South Africa  
*Interview conducted on November 15, 2012, in Geneva, Switzerland*

## Appendix II – Interview Questions

- (1) How important to the negotiating process is what the United States does or doesn't do at home to address its emissions of greenhouse gases -- (on a scale of 1-10, with 1 being "unimportant" and 10 being "critically important")?
- (2) Why does this matter?
- (3) Do U.S. actions at home to date make the United States a leader on this issue – that is, have those actions shaped the global agenda in a positive way and have they influenced others to take action themselves to address their own emissions? If not, what is lacking?
- (4) If the United States were to take significant or far-reaching action at home to address climate change, would this lead to a change in the negotiations? How would you rate this possibility on a scale of 1-10, with 1 being "very unlikely" and 10 being "very likely"?
- (5) What kind of domestic action would be "significant or far-reaching" in your view?
- (6) Are there multiple possibilities, or is the kind of action that would be considered "significant or far-reaching" limited and why?
- (7) Would significant or far-reaching action at home by the United States be enough to produce significant positive momentum in the negotiations and develop an effective global response to climate change? How directly and immediately would this be likely to occur?
- (8) If United States today has an opportunity to influence the negotiations in a direct and positive way, could this opportunity be lost if not taken by some date in the future? How might it be lost?
- (9) What other countries could produce such positive momentum in the negotiations by taking significant or far-reaching actions at home?
- (10) Does any other country or group of countries have the same opportunity today? In the absence of significant or far-reaching action by the United States, is any another country or group of

countries able and likely to step forward to catalyze global action?  
If so, who and why