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Ross C. Anderson

Patrick A. Thronson

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**ACHIEVING CLIMATE PROTECTION: FOSTERING
AN ESSENTIAL FOCUS ON HUMAN RIGHTS
AND HUMAN IMPACTS**

ROSS C. "ROCKY" ANDERSON* & PATRICK A. THRONSON**

Life in our village has changed. Years ago, when it used to rain a lot, everyone had food. The present famine is the worst we've ever had. And I'm already over sixty. Poverty is all we know now. . . . During the rainy season, we use the leaves from particular trees as food. We then wait for the rainy season to end when the grain sellers come around. The women and children are famished. We the adults are stronger than today's youngsters. If you grow up hungry, you are never strong.

- Issoufi Alimonzo, village chief, Oursi, Burkina Faso¹

INTRODUCTION

Throughout the world, human beings are already suffering, or will soon be suffering, from the results of human-caused climate chaos.² Profoundly impoverished people are feeling, or

* B.S., University of Utah; J.D., The George Washington University Law School; Mayor of Salt Lake City, 2000–2008; Founder and Executive Director, High Road for Human Rights, 2008–2011; 2012 Justice Party candidate for U.S. President.

** B.A., Harvard University; University of Michigan Law School (J.D. expected May 2013). I express my great appreciation to Katie DiSalvo for invaluable research assistance.

1. CLIMATE CHAOS IN THE SOUTH: THE VICTIMS' STORY 20:11–21:31 (Wereldmediatheek 2009), available at <http://www.cultureunplugged.com/documentary/watch-online/festival/play/7023/Climate-Chaos-in-the-South—The-Victims—Story/VmtaV>. Burkina Faso, located in West Africa, has a population of 17,257,115 people, placing it among the top quartile of the world's most populous nations. See CIA, *Country Comparison: Population*, THE WORLD FACTBOOK, <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2119rank.html?countryName=Burkina%20Faso&countryCode=uv®ionCode=af&rank=61#uv> (last visited Feb. 4, 2013).

2. See, e.g., *infra* Parts I–IV and introductory quotations. The terms “climate crisis,” “climate disruption,” “catastrophic climate change,” and “climate

will feel, most intensely the effects of a global crisis that is not of their own making.³ Prominent scientific organizations—including the U.N. Intergovernmental Panel on Climate Change, the largest scientific collaboration in history—are unanimous in concluding that this suffering will increase if greenhouse-gas emissions⁴ continue on their present explosive course.⁵ The climate crisis is already having severe effects on the wealthy countries of the global North, including the U.S.⁶ But the impacts on those nations that are least able to adapt to catastrophic climatic events will likely continue to be more widespread and profound.⁷

chaos” describe the phenomenon of radical human-caused climate impacts far better than the innocuous term “climate change.” After all, a “change” in the climate can be inconsequential, and even beneficial, to the earth’s inhabitants depending on the nature and extent of the change. The term “global warming” is often used interchangeably with “climate change” and other phrases referring to impacts on the climate. However, “global warming” and the climate-impact phrases refer to two different phenomena. “Global warming” refers to the trend of increasing average global temperature. “Climate change,” “climate disruption,” “climate chaos,” and “climate crisis” refer to changes in the global climate caused by increasing global temperatures, including changes in precipitation, increasingly prevalent and severe droughts, heat waves, and forest fires, more intense hurricanes, thunderstorms, tropical storms, floods, and even heavier snows in some places. *See, e.g.*, THOMAS FRIEDMAN, *HOT, FLAT, AND CROWDED* 133 (2008); JAMES HANSEN, *STORMS OF MY GRANDCHILDREN* 274 (2009). Hunter Lovins, cofounder of the Rocky Mountain Institute, coined the term “global weirding” to describe the many unusual events caused by global warming. *Id.* at 133.

3. *See infra* Part I.A.

4. Greenhouse gases received their common appellation because they share the property of absorbing infrared radiation reflected from the earth into the atmosphere, then emitting it back, warming the atmosphere and the earth. In the absence of these gases, infrared radiation would travel through the atmosphere into outer space. Greenhouse gases include naturally occurring gases, such as carbon dioxide, methane, nitrous oxide, water vapor, and ozone; and gases resulting only from industrial processes, such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs). *See, e.g.*, TIM FLANNERY, *THE WEATHER MAKERS: THE HISTORY AND FUTURE IMPACT OF CLIMATE CHANGE* 27–31 (2005); JOHN HOUGHTON, *GLOBAL WARMING* 14–18, 28–29, 42–47 (2004).

5. *See infra* Part I.A.

6. *See id.*

7. *See id.* An organization of Christian and Muslim young people emphasized the disproportionate impacts of climate disruption on impoverished people worldwide:

Although we are individuals from a great many backgrounds, ideals and variances of faith, we draw upon our collective moral and religious conscience to take responsibility for the condition of our planet and its people. We are aware of the evidence, understand the issues, and recognize that global warming will produce numerous unacceptable repercussions; in particular we are aware that changes in our climate will have disproportionate effects on the poor and irreversible

Tragically, the prospect for increasing human suffering is often ignored in the U.S. because of widespread denial of the climate crisis,⁸ hostility toward treating the climate crisis as a human rights issue,⁹ or a far greater focus on the fate of animals in remote areas rather than on human beings in closer proximity.¹⁰ Though extensive resources exist in international law and human rights discourses to frame the climate crisis in human rights terms¹¹—and significant evidence points toward the advantages of doing so¹²—little progress has been made in the U.S. to advance the cause of human rights in the climate chaos arena. Moreover, despite nearly thirty years of international discussions and negotiations concerning the climate crisis, the issue has only recently begun to be framed in human-rights terms in some international fora.¹³

This Article seeks to advance the treatment of the climate crisis within the framework of human rights to provide avenues of redress for victims of greenhouse-gas pollution by industrialized nations, to improve the effectiveness of messaging regarding the climate crisis, and to appropriately acknowledge the immense suffering that has occurred—and is certain to increase—as a result of human-caused climate chaos.

Part I presents an overview of the scientific consensus regarding the causes and impacts of climate change, the burden of those impacts on the world's poorest nations, and the established human-rights norms clearly applicable to the climate crisis. Part II details polling data on U.S. residents' attitudes toward the climate crisis, noting alarming trends regarding denial of and apathy toward the catastrophic impacts of unconstrained greenhouse-gas pollution. Part III describes the substantial absence of, or active hostility toward, framing of the climate crisis as a human-rights issue by the U.S. federal government, U.S. human rights nongovernmental organizations (NGOs), and the environmental community. Part IV outlines a new, essential approach to climate-change messaging that emphasizes the legal and ethical

consequences for future generations. Our faith obligates us to care for the earth and to attend to those who are in need.

Christian-Muslim Youth Statement on Climate Change, MADE IN EUROPE (Dec. 1, 2009), <http://www.madeineurope.org.uk/get-involved/young-people/campaigning/195/208/210> (presented to the U.K. Under-Secretary of State for Department of Energy & Climate Change).

8. See *infra* Part II.

9. See *infra* Part III.A–B.

10. See *infra* Part III.C.

11. See *infra* Part I.C.

12. See *infra* Part IV.

13. See *infra* Part III.A.

responsibilities of states and citizens to take vigorous action to mitigate catastrophic climate change.

In advocating for a human-rights approach to the climate crisis, the authors speak not simply from an academic perspective but also from experience. Anderson, for whom Thronson served as Communications Director, was Mayor of Salt Lake City from 2000–2008. During his administration, Anderson established a comprehensive municipal climate-protection program, which resulted in a thirty-one percent reduction of greenhouse-gas emissions in city operations in three years.¹⁴

14. Greg Hanscom, *Rocky's Road: One of the Country's Greenest Mayors Guns for the White House*, GRIST (Jan. 31, 2012, 6:10 AM), <http://grist.org/election-2012/rockys-road-one-of-the-countrys-greenest-mayors-guns-for-the-white-house/>. The Sierra Club summarized some of Anderson's climate protection work as follows:

Since taking office in 2000, Democrat Mayor Ross (Rocky) Anderson has been an outspoken advocate for the environment. He committed Salt Lake City, in its municipal operations, to abide by the Kyoto Protocol. By 2005, Salt Lake City far exceeded its Kyoto goal, 7 years before the Protocol's 2012 target date. . . . In 2003, Mayor Anderson received the Climate Protection Award from the US EPA. In 2002, he received the "Political Leader of the Year" award from the Utah chapter of the Sierra Club and the Distinguished Service Award from the national Sierra Club.

Anderson established cogeneration plants at the city's landfill and wastewater treatment facility that recapture methane to generate electricity. In November 2005, Salt Lake City won the World Leadership Award for the environment for its Salt Lake City Green Program, perhaps the most comprehensive environmental program in the US. Anderson was also named by *Business Week* as one of the top 20 international figures working to combat climate change.

Anderson is a proponent of transit-oriented urban housing and walkable, mixed-use neighborhoods that do not perpetuate dependence on the automobile or further sprawl development.

Rocky Anderson to Keynote Green Building Forum, SIERRA CLUB, http://ohio.sierraclub.org/central/2007_09_Anderson.asp (last visited Feb. 4, 2013).

Given the scale of the dangers posed by U.S. fossil-fuel-dependent energy policies, Anderson sought to enhance Salt Lake City's successes by sharing information on its programs and other cities' best practices with other governmental officials, businesses, and citizens, and by collaborating with national and international organizations. Robert Redford, Anderson, and ICLEI (previously known as International Council on Local Environmental Initiatives) hosted three annual conferences called the Sundance Summit: A Mayors' Gathering on Climate Protection, where dozens of mayors from throughout the U.S. met with numerous experts to learn the science of climate change, to strategize about actions to protect the climate, and to learn about effective messaging strategies to raise awareness about the existence, causes, and consequences of climate disruption and the contributions municipalities, businesses, and individuals can make toward solutions. See ICLEI, MAYORS MAKE SUNDANCE SUMMIT ANNUAL EVENT (2005), available at <http://www.icleiusa.org/news/press-room/press-releases/mayors-make-sundance-summit-annual-event>; Debra DeHaney-

The authors framed these efforts not simply as a matter of energy sustainability, cost savings, and “environmental” protection, but also as a matter of protecting vulnerable populations throughout the world.¹⁵ Anderson continued—and intensified—his framing in his subsequent work as founder and Executive Director of High Road for Human Rights, a human-rights education and advocacy nonprofit organization.¹⁶ The success of the Salt Lake City Green program, the receptiveness of audiences to dozens of presentations about the city’s environmental programs,¹⁷ and the effectiveness of presenting the issue in human-rights terms informs the perspective and theses of this Article.

I. PART I: THE PROBLEM

The ocean erodes the land little by little, bit by bit. It became so bad that my house was also destroyed. Where could I live? I built a house somewhere else, but that was also destroyed. I went

Howard, *Mayors Discuss Climate Protection Solutions at Sundance Summit*, U.S. CONF. OF MAYORS (Nov. 20, 2006), http://www.usmayors.org/usmayornewspaper/documents/112006/pg4_sundance.asp. Anderson was also one of the founding signatories and principal advocates of the U.S. Conference of Mayors Climate Protection Agreement, which over one thousand U.S. mayors signed, pledging to meet or surpass the Kyoto Protocol guidelines. *U.S. Mayors Climate Protection Agreement*, ABOUT.COM, http://environment.about.com/od/governmentcorporations/p/mayors_plan.htm (last visited Feb. 4, 2013).

15. See, e.g., Rocky Anderson, Speech Announcing Mayor Anderson Will Not Seek a Third Term (2006), *available at* http://en.wikisource.org/wiki/Speech_announcing_Mayor_Anderson_will_not_seek_a_third_term.

16. See, e.g., ROSS C. “ROCKY” ANDERSON, COMBATING CLIMATE CHANGE: A HUMAN RIGHTS IMPERATIVE (2008), *available at* <http://d3n8a8pro7vhmx.cloudfront.net/voterocky/pages/30/attachments/original/07-21-2008.pdf?1330630257> (presentation to the International Human Rights Funders Group); *2011 Climate Change Declaration*, HIGH ROAD FOR HUMAN RIGHTS, <http://www.highroadforhumanrights.org/node/178> (last visited Feb. 4, 2013) (authored by Anderson).

17. Recognizing the critical need to enlist national and international organizations in climate-protection efforts, Anderson took the case for climate protection to the global community, speaking to municipal and business leaders from throughout the world at side presentations at a United Nations conference on climate change (Conference of the Parties to the United Nations Framework Convention on Climate Change, hereinafter COP) in New Delhi, where he was sponsored by the U.S. EPA; at the COP in Buenos Aires, where he was sponsored by ICLEI; at the COP in Bali, Indonesia, where he was sponsored by ICLEI; as a consultant to the assistants for heads of state in London in preparation for the 2005 G8 summit, where Prime Minister Tony Blair designated climate change as one of two main agenda items; at a “Business and Sustainability Summit” in Australia; at two conferences of the Columbia Institute in Canada; at a local energy-policy conference in Sweden; and at two meetings of the Clinton Global Initiative.

*elsewhere and that house was also destroyed. I had nothing left.
What could I do? My life was worth nothing then.*

-Abdul Malek, Bangladesh¹⁸

The reality and danger of global climate disruption are well recognized in many quarters. But the extent of ignorance of, or denial about, the phenomenon—and about the seriousness of the threat—compels the emphasis of some fundamental background facts and principles. This Part, drawing from the latest findings of the United Nations Intergovernmental Panel on Climate Change (IPCC) and the scientific findings of other distinguished scientific organizations, highlights some of the most significant human impacts of climate chaos that have occurred, and that are certain to occur if governments, businesses, and citizens do not take urgent, effective steps to curb greenhouse-gas pollution.

A. *The Devastating Impacts of Climate Chaos*

Scientific studies from as early as the 19th century found that carbon dioxide and other greenhouse gases are implicated in altering the climate.¹⁹ Today, a vast scientific consensus testifies to the reality and threats posed by the global climate crisis.

1. Avoidable Human Activities, Especially the Emission of Greenhouse Gases from the Burning of Fossil Fuels and the Destruction of Forests, Cause Climate Chaos

National scientific academies and other distinguished scientific organizations have established the direct relationship between human activities²⁰ and climate change.²¹ The major national scientific academies opining on the issue have recognized that global climate chaos is caused (at least in significant part) by human activity and represents a historic challenge to the basic conditions of life for billions of human beings throughout

18. CLIMATE CHAOS IN THE SOUTH, *supra* note 1, at 35:22–35:50.

19. PAUL BROWN, GLOBAL WARMING: THE LAST CHANCE FOR CHANGE 64, 66 (2007); Spencer Weart, *The Discovery of Global Warming: Introduction*, AM. INST. OF PHYSICS (May 2010), <http://www.aip.org/history/climate/summary.htm>.

20. The main human activities causing “the global warming observed over the past 50 years” are “the burning of fossil fuels (coal, oil, and gas), with important contributions from the clearing of forests, agricultural practices, and other activities.” U.S. GLOBAL CHANGE RESEARCH PROGRAM, GLOBAL CLIMATE CHANGE IMPACTS IN THE UNITED STATES 9 (2009).

21. *See, e.g.*, NAT’L ACAD. OF SCIS., JOINT SCIENCE ACADEMIES’ STATEMENT ON GROWTH AND RESPONSIBILITY I (2007), *available at* www.nasonline.org/about-nas/leadership/president/academies-statement-on-energy.pdf.

the world.²² A 2007 joint statement by the national science academies of thirteen nations—including the U.S. and China, the world’s two largest emitters of carbon pollution²³—emphasized that “[i]t is unequivocal that the climate is changing, and it is very likely that this is predominantly caused by the increasing human interference with the atmosphere. These changes will transform the environmental conditions on Earth unless counter-measures are taken.”²⁴

In 2009, eighteen major U.S. scientific organizations issued a letter to members of Congress to “state the consensus scientific view” about climate change as follows:

Observations throughout the world make it clear that climate change is occurring, and rigorous scientific research demonstrates that the greenhouse gases emitted by human activities are the primary driver. These conclusions are based on multiple independent lines of evidence, and con-

22. See *id.* at 1–2; see also *IAP Statement on Ocean Acidification*, INTERACADEMY PANEL: THE GLOBAL NETWORK OF SCI. ACADS. (June 2009), <http://www.interacademies.net/10878/13951.aspx>; *Scientific Consensus on Global Warming*, UNION OF CONCERNED SCIENTISTS, <http://www.ucsusa.org/ssi/climate-change/scientific-consensus-on.html> (last visited Feb. 4, 2013).

23. *Carbon Dioxide Emissions*, MILLENNIUM DEV. GOALS INDICATORS, <http://mdgs.un.org/unsd/mdg/SeriesDetail.aspx?srid=749&crd=> (last updated July 2, 2012). In 2009, the most recent year for which the U.N. has data, China emitted nearly 7.7 billion metric tons of carbon dioxide, while the U.S. emitted about 5.3 billion metric tons. *Id.*

24. NAT’L ACAD. OF SCIS., *supra* note 21, at 1. The “increasing human interference with the atmosphere” is comprised primarily of the increasing rate of greenhouse-gas emissions—particularly carbon dioxide—and deforestation.

Before the Industrial Revolution, in the mid-eighteenth century, and for the previous 10,000 years or so, planet earth had roughly 280 parts per million by volume of CO₂ in its atmosphere. That means that if we could have cut out a block of a million molecules of air from the atmosphere in 1750, it would have contained 280 molecules of CO₂. Today [2008], that same block would contain roughly 384 molecules of CO₂. The only explanation for that large a differential in such a short period of time is the emission of carbon from the industrial use of fossil fuels by humans and from deforestation since the onset of the Industrial Revolution.

FRIEDMAN, *supra* note 2, at 117. As of January 2013, the atmospheric concentration of CO₂ is 394.39 parts per million. *CO₂ Now: CO₂ Home*, CO₂NOW.ORG, <http://www.co2now.org> (last visited Feb. 4, 2013) (measured at Mauna Loa Observatory by National Oceanic and Atmospheric Administration); see also *Trends in Atmospheric Carbon Dioxide*, NAT’L OCEANIC & ATMOSPHERIC ADMIN., EARTH SYS. RESEARCH LAB., GLOBAL MONITORING DIV., <http://www.esrl.noaa.gov/gmd/ccgg/trends/> (last visited Feb. 4, 2013).

trary assertions are inconsistent with an objective assessment of the vast body of peer-reviewed science.²⁵

2. Several Severe Adverse Impacts of Human-Caused Climate Chaos Have Already Occurred and Are Now Occurring

The United Nations Intergovernmental Panel on Climate Change (IPCC) is the preeminent international scientific body studying climate change.²⁶ Thousands of scientists from around the world contribute to the work of the IPCC on a voluntary, unpaid basis.²⁷ The IPCC has been described as “the largest, most rigorously peer-reviewed scientific collaboration in history.”²⁸ Synthesis reports by the IPCC, after undergoing numerous rounds of review by experts and working groups, must be adopted by a vote of members of the panel²⁹—currently from 195 countries³⁰—before publication.³¹ Given the consensus nature of this process, the IPCC’s conclusions are generally conservative.³²

25. AM. ASS’N FOR THE ADVANCEMENT OF SCI. ET AL., LETTER TO THE UNITED STATES SENATE (2009) [hereinafter LETTER FROM EIGHTEEN SCIENTIFIC ORGANIZATIONS], available at <http://www.ucsusa.org/assets/documents/ssi/climate-change-statement-from.pdf>.

26. *Organization*, INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, <http://www.ipcc.ch/organization/organization.shtml> (last visited Feb. 4, 2013).

27. *How Does the IPCC Work?*, INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, [http://www.ipcc.ch/organization/organization_structure.shtml#UGprUhh9ky4](http://www.ipcc.ch/organization/organization_structure.shtml#.UGprUhh9ky4) (last visited Feb. 4, 2013).

28. Ross Gelbspan, *Disinformation, Financial Pressures, and Misplaced Balance*, NIEMAN REP., Winter 2005, at 77, available at <http://www.nieman.harvard.edu/reportsitem.aspx?id=100591>.

29. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, PROCEDURES FOR THE PREPARATION, REVIEW, ACCEPTANCE, ADOPTION, APPROVAL AND PUBLICATION OF IPCC REPORTS § 4.6 (2012), available at <https://www.ipcc.ch/pdf/ipcc-principles/ipcc-principles-appendix-a-final.pdf>.

30. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, *supra* note 26.

31. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, *supra* note 29.

32. In one instance, the strict IPCC standards of evidence were not followed, leading to one paragraph that referred to “poorly substantiated estimates of rate of recession and date for the disappearance of Himalayan glaciers” in a 938-page Working Group II portion of the Fourth Assessment Report of the IPCC. When the problem came to the attention of the IPCC, a candid statement was issued noting the failure to properly apply “the clear and well-established standards of evidence, required by the IPCC procedures” and noting that the Chair, Vice-Chairs, and Co-Chairs of the IPCC “regret the poor application of well-established IPCC procedures in this instance.” See INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, IPCC STATEMENT ON THE MELTING OF HIMALAYAN GLACIERS (2010), available at <http://www.ipcc.ch/pdf/presentations/himalaya-statement-20january2010.pdf>.

The IPCC defines climate change as follows:

A change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forcings, or to persistent anthropogenic changes in the composition of the atmosphere or in land use.³³

According to the IPCC, “[o]bserved changes in climate extremes reflect the influence of anthropogenic climate change in addition to natural climate variability,”³⁴ and “[i]t is likely that anthropogenic influences have led to warming of extreme daily minimum and maximum temperatures at the global scale.”³⁵

Human-caused changes in the climate have been found to have adverse local, regional, and global consequences. For instance, scientists in Utah who were called upon to provide guidance to a “blue ribbon” council appointed by former Governor Jon Huntsman, Jr. found, in what is known as “the BRAC Report,” as follows:

It is likely that increases in greenhouse gas concentrations are contributing to several significant climate trends that have been observed over most of the western United States during the past 50 years. These trends are (1) a several day increase in the frost-free growing season, (2) an earlier and warmer spring, (3) earlier flower blooms and tree leaf out for many plant species, (4) an earlier spring snowmelt and run off, and (5) a greater fraction of spring precipitation falling as rain instead of snow

*In Utah, the average temperature during the past decade was higher than observed during any comparable period of the past century and roughly 2°F higher than the 100 year average.*³⁶

33. See INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, MANAGING THE RISKS OF EXTREME EVENTS AND DISASTERS TO ADVANCE CLIMATE CHANGE ADAPTATION, SUMMARY FOR POLICY MAKERS 3 (2012), available at http://www.ipcc-wg2.gov/SREX/images/uploads/SREX-SPMbrochure_FINAL.pdf.

34. *Id.* at 5.

35. *Id.* at 7.

36. UTAH GOVERNOR’S BLUE RIBBON ADVISORY COUNCIL ON CLIMATE CHANGE, CLIMATE CHANGE AND UTAH: THE SCIENTIFIC CONSENSUS 1–2 (2007) (double emphasis in original), available at http://climate.usurf.usu.edu/news/111708Sec-A-1_SCIENCE_REPORT.pdf. The scientists who prepared the report, emphasizing “the consensus view of the national and international scientific community,” *id.* at 1, were Jim Steenburgh, Professor and Chair, Department of Meteorology, University of Utah; David Bowling, Assistant Professor, Department of Biology, University of Utah; Tim Garrett, Assistant Professor, Department of Meteorology, University of Utah; Rob Gillies, Director/State Cli-

Evidence of a decrease in snowpack in Utah and the West is compelling. Philip W. Mote, Washington's State Climatologist and a research scientist at the University of Washington, concluded his detailed analysis by noting that "the West's snow resources are already declining as Earth's climate warms."³⁷

Assessing the global situation, the Utah scientists who authored the BRAC Report noted:

Observed changes in ocean temperature, sea level, mountain glaciers, seasonal snow cover, Arctic sea ice, and the Greenland and Antarctic ice sheets are consistent with what is expected from global warming. The sea surface and upper-layers of the ocean have warmed. Sea level has risen about 7 inches since 1900 and about 1 inch in the past decade, nearly all mountain glaciers are receding, sea ice in the Arctic is declining, and the Greenland ice sheet is shrinking.³⁸

The National Academies in the U.S. agree:

[T]he surface temperature data are consistent with other evidence of warming, such as increasing ocean temperatures, shrinking mountain glaciers, and decreasing polar ice cover.³⁹

Changing climate is also having human impacts: some Alaskan villages have been moved to higher ground in response to increasing storm damage, and the thawing of permafrost is undermining infrastructure, affecting houses, roads, and pipelines in northern communities around the world.⁴⁰

matologist, Utah State University; John Horel, Professor, Department of Meteorology, University of Utah; Randy Julander, Snow Survey Supervisor, Natural Resources Conservation Service; David Long, Professor, Department of Electrical and Computer Engineering and Director, BYU Center for Remote Sensing, Brigham Young University; Thomas Reichler, Assistant Professor, Department of Meteorology, University of Utah. *Id.* at 22. Those scientists noted that their summary in the BRAC report of "climate change, trends and projections for the future, and possible impacts for Utah and the western United States" is "consistent with the consensus view of the national and world scientific community." *Id.* at 3.

37. Philip W. Mote, *Variability and Trends in Mountain Snowpacks in Western North America*, in *CLIMATE WARMING IN WESTERN NORTH AMERICA: EVIDENCE AND ENVIRONMENTAL EFFECTS* 51 (Frederic H. Wagner ed., 2009).

38. UTAH GOVERNOR'S BLUE RIBBON ADVISORY COUNCIL ON CLIMATE CHANGE, *supra* note 36, at 4.

39. NAT'L ACAD. OF SCIS., *UNDERSTANDING AND RESPONDING TO CLIMATE CHANGE: HIGHLIGHTS OF NATIONAL ACADEMIES REPORTS* 4 (2008), *available at* http://www.preventionweb.net/files/2276_climatechangefinal.pdf.

40. *Id.* at 18.

The Utah BRAC Report scientists also noted:

It is very likely that earlier warming in the spring is strongly affecting plants, animals, and insects. . . . Recent climate change has led to mismatches between bird migration timing and their insect food sources, between insects and plant food sources, and between plants and the birds and insects that help them reproduce. . . .

There is very high confidence that the ranges of some plants and animals have moved towards the poles or towards higher elevations.⁴¹

A statement of The InterAcademy Panel on International Issues (IAP), endorsed by seventy academies from throughout the world (including the U.S. National Academy of Sciences, The Royal Society (U.K.), the African Academy of Sciences, the Science Council of Japan, the Chinese Academy of Sciences, and the Indian National Science Academy), describes the current impact of greenhouse-gas emissions on oceans and sea life as follows:

Over the past 200 years, the oceans have absorbed approximately a quarter of the CO₂ produced from human activities. . . . [T]he absorption of this CO₂ has affected ocean chemistry and has caused the oceans (which are on average slightly alkaline) to become more acidic. The average pH of oceanic surface waters has been lowered by 0.1 units since the pre-industrial period. This represents a 30% increase in hydrogen ion activity. Hydrogen ions attack carbonate ions which are the building blocks needed by many marine organisms, such as corals and shellfish, to produce their skeletons, shells and other hard structures. The loss of carbonate ions produce lower saturation levels for the carbonate minerals, aragonite and calcite, which are used in many shells and skeletons. Carbonate ion concentrations are now lower than at any other time during the last 800,000 years. . . .

[T]he current rate of change is much more rapid than during any event over the last 65 million years. These changes in ocean chemistry are irreversible for many thousands of years, and the biological consequences could last much longer.⁴²

41. UTAH GOVERNOR'S BLUE RIBBON ADVISORY COUNCIL ON CLIMATE CHANGE, *supra* note 36, at 9.

42. INTERACADEMY PANEL, *supra* note 22.

Among the many adverse impacts already experienced as a result of climate chaos, the U.S. Global Change Research Program described the following:

The power and frequency of Atlantic hurricanes have increased substantially in recent decades. . . . Tropical storms and hurricanes develop and gain strength over warm ocean waters. As oceans warm, they provide a source of energy for hurricane growth. During the past 30 years, annual sea surface temperatures in the main Atlantic hurricane development region increased nearly 2°F. This warming coincided with an increase in the destructive energy . . . of Atlantic tropical storms and hurricanes.⁴³

Wildfires in the U.S. are already increasing because of global warming. In the West, there has been a nearly fourfold increase in large wildfires in recent decades, with greater fire frequency, longer fire durations, and longer wildfire seasons.⁴⁴ This increase is strongly associated with increased spring and summer temperatures and earlier spring snowmelt, which have caused drying of soils and vegetation.⁴⁵

3. Human-Caused Climate Chaos Will Lead to Catastrophic Consequences for Earth's Inhabitants in the Future

The IPCC's latest findings note that, based on current projections, "[i]t is *virtually certain* that increases in the frequency and magnitude of warm daily temperature extremes and decreases in cold extremes will occur in the 21st century at the global scale."⁴⁶ The IPCC deems it "very likely" that the duration and frequency of heat waves will increase over most of the earth's landmass.⁴⁷ Based on projected emissions scenarios, a daytime temperature high that one would normally expect to occur every twenty years is likely to occur every two years by 2100.⁴⁸

43. U.S. GLOBAL CHANGE RESEARCH PROGRAM, *supra* note 20, at 35.

44. During the summer of 2012, there were more than forty-five thousand wildfires in the U.S., destroying more forested acres than during any year on record. "Almost 13,000 square miles of land in California, Utah, New Mexico, Colorado, and other states—an area larger than Massachusetts—were burned by wildfires during 2012. "Climate change is clearly a factor. The past decade has been hotter in the U.S. than any in recorded history, and prolonged drought has left forests highly combustible." *The War on Wildfires*, THE WEEK, Sept. 21, 2012, at 11.

45. U.S. GLOBAL CHANGE RESEARCH PROGRAM, *supra* note 20, at 95.

46. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, *supra* note 33, at 11 (emphasis in original).

47. *See id.*

48. *See id.* In high northern latitudes, a one-in-twenty year daytime temperature high is likely to become a one-in-five year event. *See id.*

Extreme weather events are likely to occur more frequently or with greater intensity, or both, if climate disruption continues unchecked. Climate chaos “leads to changes in the frequency, intensity, spatial extent, duration, and timing of extreme weather and climate events, and can result in unprecedented extreme weather and climate events.”⁴⁹ Hurricanes are likely to intensify if climate change continues on the course projected by the IPCC.⁵⁰

The IPCC predicts, with “medium [statistical] confidence,” that climate change will worsen droughts throughout at least southern Europe and the Mediterranean, central Europe and North America, Mexico and Central America, parts of Brazil, and southern Africa.⁵¹ At the same time, the frequency of heavy rainfalls is “likely” to increase in many areas, including tropical regions, which points toward more frequent or intense flooding.⁵² The IPCC has also stated, with “high confidence,” that increasing heavy precipitation will worsen landslides in regions throughout the world.⁵³

Carbon pollution and climate change are also having devastating effects on the world’s ocean ecosystems. The InterAcademy Panel on International Issues has described the impact greenhouse gas emissions will have on oceans and sea life in alarming terms, stating, “[a]t current emission rates models suggest that all coral reefs and polar ecosystems will be severely affected by 2050 or potentially even earlier,” and “[m]arine food supplies are likely to be reduced with significant implications for food production and security in regions dependent on fish protein, and human health and well-being.”⁵⁴ According to the InterAcademy Panel, “the current rate of change is much more rapid than during any event over the last 65 million years. These changes in ocean chemistry are irreversible for many thousands of years, and the biological consequences could last much longer.”⁵⁵

49. *Id.* at 5.

50. *Id.* at 11 (“Average tropical cyclone maximum wind speed is *likely* to increase, although increases may not occur in all ocean basins.”) (emphasis in original).

51. *Id.* Droughts are projected to worsen “due to reduced precipitation and/or increased evapotranspiration.” *Id.*

52. *See id.*

53. *See id.* at 13; *see also* INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, *supra* note 33.

54. INTERACADEMY PANEL, *supra* note 22.

55. *Id.*

The eighteen U.S. scientific organizations that sent a warning letter to Congress noted other dangerous future impacts of climate change, including “sea level rise for coastal states, greater threats of extreme weather events, and increased risk of regional water scarcity, urban heat waves, western wildfires, and the disturbance of biological systems throughout the country.”⁵⁶

National security and defense will also face significant challenges as a result of climate change, as the U.S. Department of Defense (DOD) has argued.⁵⁷ In its 2010 Quadrennial Defense Review, the DOD highlighted climate change as one of four specific issues with respect to which DOD operational reforms are required.⁵⁸

Intelligence estimates, according to the DOD, “indicate that climate change could have significant geopolitical impacts around the world, contributing to poverty, environmental degradation, and the further weakening of fragile governments.”⁵⁹ The DOD noted that climate change “may act as an accelerant of instability or conflict” throughout the globe.⁶⁰ The DOD also emphasized the looming impacts of climate change on its own operations, noting that the National Intelligence Council has already designated over thirty military installations as at risk from rising sea levels,⁶¹ and reiterating the DOD’s own commitment to reducing greenhouse-gas emissions and fostering increased use of renewable sources of energy.⁶² Also recognizing the national security threat posed by climate disruption, the Central Intelligence Agency (CIA) created a Center on Climate Change and National Security in 2009.⁶³

56. AM. ASS’N FOR THE ADVANCEMENT OF SCI. ET AL., *supra* note 25.

57. *See, e.g.*, U.S. DEP’T OF DEF., QUADRENNIAL DEFENSE REVIEW REPORT 73, 84–88 (2010), *available at* http://www.defense.gov/QDR/images/QDR_as_of_12Feb10_1000.pdf. The DOD has been concerned about the dangers of climate change for several years. *See* PETER SCHWARZ & DOUG RANDALL, GLOBAL BUSINESS NETWORK, AN ABRUPT CLIMATE CHANGE SCENARIO AND ITS IMPLICATIONS FOR UNITED STATES NATIONAL SECURITY (2003), *available at* http://www.gbn.com/consulting/article_details.php?id=53; David Stipp, *The Pentagon’s Weather Nightmare*, FORTUNE, Feb. 9, 2004, at 100.

58. *See* U.S. DEP’T OF DEF., *supra* note 57, at 73.

59. *See id.* at 85.

60. *Id.*

61. *Id.*

62. *Id.* at 87.

63. Press Release, CIA Opens Center on Climate Change and National Security (Sept. 25, 2004), *available at* <https://www.cia.gov/news-information/press-releases-statements/center-on-climate-change-and-national-security.html>. The CIA Center was closed as a “stand-alone office” in 2012, but the study of climate change issues such as water shortages and rising sea levels will continue at the CIA. *CIA Closes Its Climate Change Office*, THE WEEK, Nov. 30, 2012, at 6.

Climate chaos threatens to obliterate entire nations.⁶⁴ The Maldives, a chain of islands in the Indian Ocean, may disappear completely if climate change continues unchecked. Twenty million people may be forced to leave their homes in Bangladesh due to rising seas, along with the Cartaret Islander population in Papua, New Guinea; the populations of Barbados, Kiribati, and Tuvalu; and a significant percentage of the population of the Philippines and Egypt⁶⁵—as well as the U.S.⁶⁶ Indeed, the U.S. Army Corps of Engineers has indicated that, because of climate-change-related coastal erosion in Alaska,⁶⁷ three coastal communities will have to relocate in the next ten to fifteen years if no remedial measures are taken.⁶⁸ Both relocation and remediation are estimated to cost well over \$100 million.⁶⁹

B. *Impacts on the Most Vulnerable People and Implications for International Justice*

Scientific and historical evidence clearly indicate that natural disasters—such as hurricanes and droughts—that are multiplied or intensified by climate chaos will burden most those who are least able to adapt. From 1970 to 2008, “over 95% of deaths from natural disasters occurred in developing countries.”⁷⁰ As the national academies of science for the U.S. and twelve other nations have opined, “[m]any of the world’s poorest people, who lack the resources to respond to the impacts of climate change, are likely to suffer the most.”⁷¹ According to leading NGOs:

64. See, e.g., Rachel Cernansky, *8 Countries About to Go Underwater, Literally*, PLANET GREEN.COM (Aug. 11, 2010, 1:47 PM), <http://planetgreen.discovery.com/travel-outdoors/8-countries-about-to-go-underwater-literally.html>.

65. See *id.*

66. See generally EDWARD MAZRIA & KRISTINA KERSHNER, ARCHITECTURE 2030, NATION UNDER SIEGE: SEA LEVEL RISE AT OUR DOORSTEP (2007), available at http://architecture2030.org/files/nation_under_siege_lr.pdf (containing descriptions and detailed maps predicting drastic sea level rise in U.S. coastal communities).

67. See U.S. ARMY CORPS OF ENGINEERS, ALASKA VILLAGE EROSION TECHNICAL ASSISTANCE PROGRAM 1, 4–5 (2006), available at http://housemajority.org/coms/cli/AVETA_Report.pdf.

68. See *id.* at ii.

69. See *id.*

70. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, *supra* note 33, at 7; see also Rachel Oliver, *Rich, Poor, and Climate Change*, CNN.COM (Feb. 18, 2008), <http://edition.cnn.com/2008/BUSINESS/02/17/eco.class/> (“Between 1990 and 1998, more than 94 percent of the world’s biggest natural disasters (and there were 568 of them) occurred in the developing world, according to Oxfam.”).

71. See NAT’L ACAD. OF SCIS., *supra* note 21, at 1–2.

- One-sixth of the world's population will face water shortages because of retreating glaciers. (World Development Movement)
- One billion of the poorest people on Earth will lose their livelihoods to desertification. (UNEP [United Nations Environmental Programme])
- More than 200 million people will become environmental refugees by 2050 as a direct result of rising sea levels, erosion, and agricultural damage. (World Development Movement)
- Around 17 million Bangladeshis could lose their homes by 2030 due to flooding, cyclones, and tornadoes. (Oxfam)
- More than 60 million more Africans will be exposed to [m]alaria if temperatures rise by 2 degrees Celsius. ([T]he Independent)
- 182 million sub-Saharan Africans could die of disease "directly attributable" to climate change by the end of the century. (ChristianAid)
- In Asia, the homes of 94 million people could be flooded by the end of the century. (U.K. Department for International Development)⁷²

These and other disasters that the world's poorest people will suffer implicate fundamental concerns of fairness and justice because, among other things, the world's poor are responsible for a small fraction of global carbon emissions.⁷³ The U.N. has estimated that emissions caused by the world's one billion poorest people—approximately one-sixth of the earth's population—amount to less than 3% of total global emissions.⁷⁴ By contrast, the wealthiest 7% of the earth's inhabitants are responsible for 50% of all emissions.⁷⁵ On the basis of such disparities, one ecological economist estimated that the world's poorest people are entitled to \$2.3 trillion in compensation from the richest nations because of damage caused by climate change and related

72. Oliver, *supra* note 70. The tragedy of an exploding environmental refugee disaster attributable to the climate crisis is vividly described in LESTER R. BROWN, PLAN B 3.0: MOBILIZING TO SAVE CIVILIZATION 121–23 (2008). Many religious leaders and organizations have also emphasized the tremendous burdens on the most vulnerable people worldwide. *See, e.g., infra* note 106.

73. Oliver, *supra* note 70.

74. *Id.*

75. *Id.* ("The average American's annual carbon footprint—20.4 tons—is around 2,000 times that of someone living in the African nation of Chad. And the average Briton will emit as much carbon dioxide (CO₂) in one day as a Kenyan will in an entire year.").

environmental degradation (including “ozone layer depletion, agriculture, deforestation, over fishing and converting mangrove swamps”).⁷⁶ This figure did not include “damage caused by war, loss of biodiversity, or freshwater withdrawals.”⁷⁷

C. *Implications for Established Fundamental Human Rights*

These tragic impacts to the earth’s human inhabitants implicate not only basic principles of social justice and equity, but also fundamental established human rights. The framework of human-rights treaties provides powerful legal and rhetorical resources for framing climate change in human-rights terms. It also has special relevance for the legal obligations of the U.S., since the Supremacy Clause of the U.S. Constitution provides that “[t]his Constitution, and the Laws of the United States . . . ; and all treaties made, or which shall be made, under the authority of the United States, shall be the supreme law of the land.”⁷⁸

Human rights are “rights that exist because one is a human being” and apply to all human beings universally and equally.⁷⁹ Promoting human rights is a fundamental aim of the founding documents of the postwar international juridical order. For example, the Preamble to the U.N. Charter, the norms of which supersede all contrary agreements between states,⁸⁰ affirms the commitment of its signatories to “reaffirm faith in fundamental human rights, in the dignity and worth of the human person, in the equal rights of men and women and of nations large and small,” “establish conditions under which justice and respect for the obligations arising from treaties and other sources of international law can be maintained,” and “promote social progress and better standards of life in larger freedom.”⁸¹ The Preamble of the Universal Declaration of Human Rights specifies that “the inherent dignity . . . of . . . all members of the human family is the foundation of freedom, justice and peace in the world.”⁸²

The global community has made unequivocal commitments to guarantee human rights, which are violated by avoidable con-

76. *Id.*

77. *Id.*

78. U.S. CONST. art. VI, cl. 2.

79. See JACK DONNELLY, UNIVERSAL HUMAN RIGHTS IN THEORY AND PRACTICE 10 (2d ed. 2003).

80. See U.N. Charter art. 103, available at <http://www.un.org/en/documents/charter/chapter16.shtml>.

81. U.N. Charter Preamble, available at <http://www.un.org/en/documents/charter/preamble.shtml>.

82. Universal Declaration of Human Rights, G.A. Res. 217 (III) A, U.N. Doc. A/RES/217(III) (Dec. 10, 1948).

duct leading to global climate chaos (e.g., the burning of fossil fuels and destruction of forests). The International Covenant on Civil and Political Rights (ICCPR), a treaty ratified by 167 states (including the U.S.),⁸³ mandates that “[i]n no case may a people be deprived of its own means of subsistence.”⁸⁴ The ICCPR provides for “the inherent right to life,”⁸⁵ from which no derogation is permitted, even during an emergency.⁸⁶ The ICCPR also recognizes “the inherent right of all peoples to enjoy and utilize fully and freely their natural wealth and resources.”⁸⁷

The International Covenant on Economic, Social, and Cultural Rights (ICESCR) also has significant relevance for the impacts of climate chaos. The treaty was motivated by the recognition that “the ideal of free human beings enjoying freedom from fear and want can only be achieved if conditions are created whereby everyone may enjoy his economic, social and cultural rights, as well as his civil and political rights.”⁸⁸ Like the ICCPR, the treaty prohibits depriving a people of its means of subsistence.⁸⁹ In related provisions, the ICESCR states that all persons have the right to work⁹⁰ and to provide “a decent living for themselves and their families.”⁹¹ The ICESCR recognizes “the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions”⁹² and “the fundamental right of freedom from hunger.”⁹³

The Convention on the Rights of the Child (CRC) affirms “that every child has the inherent right to life” and that “States Parties shall ensure to the maximum extent possible the survival

83. See *International Covenant on Civil and Political Rights*, U.N. TREATY COLLECTION, http://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=IV-4&chapter=4&lang=en (last updated Nov. 25, 2012).

84. International Covenant on Civil and Political Rights, art. 1(2), G.A. Res. 2200A (XXI), U.N. Doc. A/6316 (Dec. 16, 1966), available at <http://www2.ohchr.org/english/law/pdf/ccpr.pdf> [hereinafter ICCPR]. The U.S. ratified the ICCPR on June 8, 1992. See U.N. TREATY COLLECTION, *supra* note 83.

85. *Id.* art. 6.

86. See *id.* art. 5.

87. *Id.* art. 47.

88. International Covenant on Economic, Social and Cultural Rights, Preamble, G.A. Res. 2200A(XXI), U.N. GAOR 3d Comm., 21st Sess., Supp. No. 16, U.N. Doc. A/6316 (Dec. 16, 1966), available at <http://www2.ohchr.org/english/law/pdf/cescr.pdf>.

89. *Id.* art. 1(2).

90. *Id.* art. 6(1).

91. *Id.* art. 7(a)(1)(ii).

92. *Id.* art. 11(1).

93. *Id.* art. 11(2).

and development of the child.”⁹⁴ Parties to the treaty also have the obligation “[t]o diminish child and infant mortality” and “[t]o combat disease and malnutrition . . . through, inter alia, the application of readily available technology and through the provision of adequate nutritious foods and clean drinking-water, *taking into consideration the dangers and risks of environmental pollution*.”⁹⁵ Children also have the right “to a standard of living adequate for the child’s physical, mental, spiritual, moral and social development.”⁹⁶

A number of soft-law instruments (i.e., documents regarded as persuasive but not formally binding) also buttress the case for the applicability of international human-rights norms to the climate crisis. The U.N. Human Rights Council has taken several actions (but not until relatively recently) that finally draw a connection between climate change and human rights.⁹⁷ For example, a 2009 resolution called for further U.N. action on the issue, recognizing that

climate change-related impacts have a range of implications, both direct and indirect, for the effective enjoyment of human rights including, inter alia, the right to life, the right to adequate food, the right to the highest attainable standard of health, the right to adequate housing, the right to self-determination and human rights obligations related to access to safe drinking water and sanitation, and recalling that in no case may a people be deprived of its own means of subsistence.⁹⁸

The U.S. has not ratified the ICESCR⁹⁹ or the CRC.¹⁰⁰ However, as indicated above, several of the key provisions in both

94. Convention on the Rights of the Child art. 6, G.A. Res. 44/25, U.N. Doc. A/RES/44/25 (Nov. 20, 1989).

95. *Id.* art. 24(2) (emphasis added).

96. *Id.* art. 27(1).

97. See, e.g., *Human Rights and Climate Change*, UNITED NATIONS OFFICE OF THE HIGH COMMISSIONER FOR HUMAN RIGHTS, <http://www.ohchr.org/EN/Issues/HRAndClimateChange/Pages/HRClimateChangeIndex.aspx> (last visited Feb. 4, 2013).

98. See H.R.C. Res. 10/4, U.N. Doc. H/RES/10/4 (Mar. 25, 2009).

99. See *Status, International Covenant on Economic, Cultural, and Social Rights*, U.N. TREATY COLLECTION, 3, <http://treaties.un.org/doc/Publication/MTDSG/Volume%20I/Chapter%20IV/IV-3.en.pdf> (last updated May 10, 2012). The U.S. is one of only eight countries not to have ratified the ICESCR. See *id.* This number includes South Sudan, which is not listed in the source cited because it is a new nation.

100. See *Status, Convention on the Rights of the Child*, U.N. TREATY COLLECTION, <http://treaties.un.org/dozc/Publication/MTDSG/Volume%20I/Chapter%20IV/IV-11.en.pdf> (last updated May 10, 2012). The only nations not to have ratified the CRC are the U.S., Somalia, and South Sudan. *Id.*

treaties are also found in the ICCPR.¹⁰¹ Several scholars have also indicated that climate change may legally implicate *jus cogens* peremptory norms of international law (e.g., the right to a healthy environment), which obligate a nation regardless of its treaty commitments.¹⁰² Furthermore, case law may give rise to independent obligations to curb emissions. For example, the influential *Trail Smelter* arbitral award, in which a Canadian smelter caused sulfur-dioxide pollution in the state of Washington, concluded that

under the principles of international law . . . no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence.¹⁰³

II. AMERICAN PUBLIC OPINION ON CLIMATE CHANGE

The increase in temperature of the seawater has had an effect on the lives of the fish, especially deep sea fish. Here in Togo, we have seen the anchovy catch—our main pelagic fish—halved between 2000 and 2007. Togo’s fishermen’s only livelihood is catching fish. Once fishing is no longer sustainable, it has a knock-on effect on the lives of the fishermen and their families.

-Kossi Ahoedo, Ministry of Agriculture, Togo¹⁰⁴

Decades of neglect and inaction by the U.S. government regarding climate protection have demonstrated that the vast majority of elected federal officials will not support urgent, aggressive action to reduce greenhouse-gas emissions unless the public effectively pushes them to do so. Significant climate-protection measures cannot be attained without a knowledgeable, motivated, and mobilized public. Hence, if the most catastrophic future consequences of climate disruption are to be avoided, human rights and environmental organizations must educate, inspire, organize, and mobilize the American people to

101. See ICCPR, *supra* note 84.

102. See, e.g., Rosemary Reed, *Rising Seas and Disappearing Islands: Can Island Inhabitants Seek Redress Under the Alien Tort Claims Act?*, 11 PAC. RIM L. & POL’Y J. 399 (2002); Manual Perez-Leiva, *International Law and the Right to a Healthy Environment as a Jus Cogens Human Right*, EZINEARTICLES, <http://ezinearticles.com/?International-Law-And-The-Right-To-A-Healthy-Environment-As-A-Jus-Cogens-Human-Right&id=1933199> (last visited Feb. 4, 2013).

103. *Trail Smelter (U.S. v. CAN.)*, 3 R.I.A.A. 1905 (1938 & 1941), *quoted in* JEFFREY L. DUNOFF ET AL., *INTERNATIONAL LAW: NORMS, ACTORS, PROCESS* 708 (2012).

104. CLIMATE CHAOS IN THE SOUTH, *supra* note 1, at 12:05–12:50.

demand and achieve effective governmental climate-protection measures, especially an end to dependence on fossil fuels as sources of energy.

How well have human rights and environmental organizations met those responsibilities? The answer lies not only in the ultimate failure of the U.S. government to take effective action to radically reduce greenhouse-gas emissions, but also in the failure of the American people to grasp the scientific consensus surrounding climate change,¹⁰⁵ the fundamental ethical issues at stake,¹⁰⁶ and the corresponding need to take effective steps to significantly curb greenhouse-gas emissions.

105. UNION OF CONCERNED SCIENTISTS, *supra* note 22.

106. Recognizing the compelling moral imperative to protect the earth and its inhabitants by combating climate disruption, hundreds of religious organizations and leaders have issued statements calling for urgent action to reduce the emission of greenhouse gases. The following are examples:

The nurturing and respect for Life is a central doctrine of all faiths on Earth. Yet today we are endangering life on Earth with unacceptably high and rising levels of greenhouse gas emissions. These gases are destabilizing the global climate system, heating the Earth, acidifying the oceans, and putting both humanity and all living creatures at unacceptable risk. . . . We recognize that climate change is not merely an economic or technical problem, but rather at its core is a moral, spiritual and cultural one.

INTERFAITH DECLARATION ON CLIMATE CHANGE (2009), *available at* <http://www.interfaithdeclaration.org/> (endorsed by hundreds of religious organizations and faith leaders, including World Council of Religious Leaders, Asian Muslim Action Network, World Council of Churches, Interfaith Power & Light, Baha'i International Community, Religious Society of Friends, National Council of Churches in India, Unitarian Universalist United Nations Office, Sri Sri Ravi Shankar (Hindu, Bangalore, India), Rose Yazzie (Navajo Elder), and His Holiness, The 14th Dalai Lama).

It is time for the United States to take the lead in tackling the climate and energy crisis As people of faith, we are encouraged by the emerging understanding of the need to protect our most vulnerable brothers and sisters at home and around the world from the impacts of climate change as we attempt to live up to our obligation "to till and to tend" God's earth (Genesis 2:15). The evidence is clear that climate change will affect poor and vulnerable communities most severely, and effects including changing rainfall patterns, increased flooding, and more frequent water scarcity, are already being felt.

Eric Fingerhut, *COEJL Wants a Climate Change Bill*, CAPITALJ (Sept. 30, 2009), <http://blogs.jta.org/politics/article/2009/09/30/1008242/rac-jcpa-back-climate-change-bill> (statement by Rabbi Steve Gutow, President of the Jewish Council for Public Affairs, the parent organization of the Coalition on the Environment and Jewish Life; and Rabbi David Saperstein, Director of the Religious Action Center of Reform Judaism).

We have recently engaged in study, reflection and prayer related to the challenges presented by environmental and climate change issues. . . . We must care about environmental and climate issues

Despite the overwhelming scientific evidence of the dangerous warming of the earth, the causes of that warming, and the consequences (past, present, and future), fewer Americans today, as compared with several years ago, believe that human-caused climate chaos is a reality recognized by the vast majority of scientists. Further, relatively few Americans demonstrate concern about what is likely to have the most catastrophic impacts on the inhabitants of the earth than at any other time in human history. In a representative republic—particularly one that is increasingly plutocratic, with the corrupting influence of money in government often determining public policy¹⁰⁷—all of this

because we are called to love our neighbors, to do unto others as we would have them do unto us and to protect and care for the “least of these” (Mt. 22:34-40; Mt. 7:12; Mt. 25:31-46).

A Southern Baptist Declaration on the Environment and Climate Change, SOUTHERN BAPTIST ENV'T & CLIMATE INITIATIVE, <http://www.baptistcreationcare.org/node/1> (last visited Feb. 4, 2013); see also Pope Benedict XVI, *Papal Message to Environmental Conference*, ZENIT (Sept. 7, 2007), <http://www.zenit.org/article-20435?l=english>; Ecumenical Patriarch Bartholomew [Orthodox Christian Church], *Message by Ecumenical Patriarch Bartholomew to the United Nations Climate Change Talks in Bangkok, Thailand* (Sept. 28, 2009), THE ECUMENICAL PATRIARCHATE OF CONSTANTINOPLE, <http://www.patriarchate.org/documents/bangkok-talks>; *U.S. Bishops Call for Moral Focus on Global Climate Change; New Report Demands Urgent Attention*, U.S. CONFERENCE OF CATHOLIC BISHOPS (Feb. 7, 2007), available at <http://old.usccb.org/comm/archives/2007/07-029.shtml> (containing letter to congressional leaders from Bishop Thomas G. Wenski, Chair of the U.S. Conference of Catholic Bishops' International Policy Committee); *Climate Change and the World Council of Churches*, CLIMATE JUSTICE ONLINE (Mar. 2010), <http://climatejusticeonline.org/wp-content/uploads/WCC-climate-change-booklet.pdf>. Other statements by religious leaders and on behalf of religious organizations about the moral implications of global warming and climate change are available at <http://citizensclimatelobby.org/files/images/Faith%20Based%20Statements%20PDF%20for%20printing.pdf>.

107. See, e.g., LAWRENCE LESSIG, *REPUBLIC, LOST: HOW MONEY CORRUPTS CONGRESS—AND A PLAN TO STOP IT* (2011). Lessig notes the enormous disparity in campaign contributions and lobbying expenditures between those who seek to limit carbon emissions and the fossil fuel industry: “In 2009, pro-reform and anti-reform groups fought vigorously over whether Congress would enact a cap-and-trade bill to address carbon emissions. They didn’t fight equally. The reform movement spent about \$22.4 million in lobbying and campaign contributions. The anti-reform movement spent \$210.6 million.” *Id.* at 59. Lessig also observes:

In the first two years of the Obama administration, environmental groups did whatever they could to support the administration’s efforts to get a [climate change] bill. After they contributed close to \$5.6 million in the 2008 elections, and spent \$22.4 million lobbying Congress in 2009 (compared with \$35.6 million spent by opponents of reform in the 2008 election, and \$175 million spent lobbying Congress in 2009), the House produced an extremely compromised “cap-and-trade” bill.

bodes poorly for the achievement of national efforts to mitigate disastrous climate disruption. This Part describes certain indicators of the poor state of public understanding regarding the reality of the human-caused climate crisis and the moral, legal, political, and economic necessity of urgent, aggressive climate-protection measures.¹⁰⁸

As of 2011 and early 2012, the percentage of people in the U.S. who understood that the earth is warming remained almost the same¹⁰⁹ or significantly decreased as compared with the level of understanding several years earlier. According to polls by the Pew Research Center, the percentage of people surveyed in October 2012 who understood there is “solid evidence” that the earth is warming (67%) represents a 13% decrease in the percentage who had that understanding in 2006 (77%).¹¹⁰ The pat-

Even that bill, however, couldn’t survive the onslaught of special-interest money. On July 22, 2010, Senate Majority Leader Harry Reid announced that the cap-and-trade bill was dead. And thus, no global warming legislation will now be passed during at least the first term of Obama’s administration.

Id. at 190–91.

108. This Part is not intended to be a comprehensive review of the polling data relating to the climate crisis. Rather, the data described here are presented as a clear indication of an alarming lack of long-term progress in raising awareness among the people of the U.S. concerning the existence, causes, and consequences of climate disruption, and in inspiring, organizing, and mobilizing the American people to successfully persuade elected and other governmental officials—or to elect people to office who are willing—to enact and implement policies and practices that will achieve reductions in the emission of greenhouse gases sufficient to reverse the accelerating charge toward worldwide catastrophic climate chaos.

109. In one national survey, the percentage of respondents stating that they think global warming is happening was 71% in November 2008 and 70% in September 2012, with fluctuations in the intervening years. ANTHONY LEISEROWITZ ET AL., YALE PROJECT ON CLIMATE CHANGE COMM’N & THE GEORGE MASON UNIV. CTR. FOR CLIMATE CHANGE COMM’CN, CLIMATE CHANGE IN THE AMERICAN MIND: AMERICANS’ GLOBAL WARMING BELIEFS AND ATTITUDES IN SEPTEMBER 2012 17 (2012), available at <http://environment.yale.edu/climate/files/Climate-Beliefs-September-2012.pdf>. Although those percentages are almost identical, there is a significant difference between the levels of confidence of those who said global warming was happening. In November 2008, 72% of respondents were “extremely” or “very” sure that global warming is happening. In September 2012, only 57% were “extremely” or “very” sure. *Id.*

110. *More Say There Is Solid Evidence of Global Warming*, PEW RESEARCH CTR. FOR THE PEOPLE & THE PRESS (Oct. 15, 2012), <http://www.people-press.org/2012/10/15/more-say-there-is-solid-evidence-of-global-warming/> [hereinafter PEW RESEARCH CENTER]. Another poll reached very similar results, with the following answers to the question, “From what you’ve read and heard, is there solid evidence that the average temperature on Earth has been getting warmer over the past four decades?”: Answering “Yes”: 72% in fall 2008; 52% in spring 2010; 62% in fall 2011; 65% in spring (March 28–April 16) 2012. Answering

tern was similar for people across political party lines, with a decrease from 2006 to 2012 in the percentage of people understanding there is “solid evidence” that the earth is warming, whether Democrat (from 91% to 85%), independent (from 79% to 65%), or Republican (from 59% to 48%).¹¹¹

In that same poll, the number of people saying that the increase in the earth’s temperature has been caused mostly by human activity decreased from 47% in 2006, 2007, and 2008 to 42% in 2012.¹¹² Two other sets of surveys also reflect decreases over the course of several years in the percentage of people who understood that warming of the earth is caused by human activities. In one set of polls, 61% of respondents in 2003 attributed warming to human activities, yet only 53% made the same attribution in 2012.¹¹³ From 2003 to 2012, the percentage of people attributing increases in the earth’s temperature to “natural changes in the environment that are not due to human activities” increased 24%, from 33% to 41%.¹¹⁴ In another set of polls, the percentage of respondents saying they believe global warming is human caused decreased from 57% in November 2008 to 54% in September 2012.¹¹⁵

Only 52% of Americans polled in early 2012 believed that the effects of global warming have begun to occur, down from 53% in 2009, 61% in 2008, 59% in 2007, 58% in 2006, and 54% in 2005—and only slightly higher than the polling results (48%) in 1997.¹¹⁶ That poor level of understanding among the American public has persisted and even deteriorated despite the melting of polar ice caps, the disappearance of glaciers, rising ocean levels, record forest fires, dangerous acidification of oceans, and

“No”: 17% in fall 2008; 36% in spring 2010; 26% in fall 2011; 24% in spring 2012. Christopher Borick & Barry Rabe, *Continued Rebound in American Belief in Climate Change: Spring 2012 NSAPOCC Findings*, GOVERNANCE STUDIES AT BROOKINGS (June 11, 2012), http://www.brookings.edu/~media/research/files/papers/2012/6/11%20climate%20rabe%20borick/nsapocc_belief_spring%20formatted.pdf.

111. PEW RESEARCH CENTER, *supra* note 110.

112. *Id.*

113. Lydia Saad, *In U.S., Global Warming Views Steady Despite Warm Winter*, GALLUP (Mar. 30, 2012), <http://www.gallup.com/poll/153608/global-warming-views-steady-despite-war-winter.aspx>.

114. *Id.*

115. LEISEROWITZ ET AL., *supra* note 109, at 6.

116. Saad, *supra* note 113; see also Jeffrey M. Jones, *In U.S., Concerns About Global Warming Stable at Lower Levels*, GALLUP (March 14, 2011), <http://www.gallup.com/poll/146606/concerns-global-warming-stable-lower-levels.aspx> (citing 1997–2011 Gallup poll results, but varying slightly from Saad by reporting 60%, rather than 59%, for 2007).

many extreme weather events.¹¹⁷ Even after Superstorm Sandy in October 2012, only 57% of respondents in a poll understood that changes in the climate are adding to the severity of extreme weather events such as Sandy and the summer 2012 droughts.¹¹⁸

The percentage of survey respondents saying that the effects of global warming will “never happen” has increased significantly. In one series of polls, the percentage of people saying that global warming’s effects will “never happen” was double in 2011 (18%) what it was in 1997 (9%)¹¹⁹ and more than double in 2012 (15%) what it was in 2001 (7%).¹²⁰

Compared to prior years, far fewer people in the U.S. comprehend that there is, indeed, widespread agreement among scientists about the existence, human causes, and consequences of increased warming of the earth.¹²¹ One series of polls reflects that in 2006, 59% of respondents said that scientists agree the earth is warming mostly because of human activity, and 29% said scientists are not in agreement.¹²² By October 2012, only 45% (an almost 24% decrease from 2006 levels) understood that scientists are in agreement, while almost as many (43%) believed that scientists are not in agreement.¹²³

117. See *supra* Part I.A.

118. Miles Grant, *New Poll: Sandy Fuels Widespread Concern on Climate Change* (Nov. 14, 2012), available at <http://www.nwf.org/News-and-Magazines/Media-Center/News-by-Topic/Global-Warming/2012/11-14-12-New-Poll-Sandy-Fuels-Widespread-Concern-on-Climate-Change.aspx>.

119. Jones, *supra* note 116.

120. Saad, *supra* note 113.

121. See William R. L. Anderegg et al., *Expert Credibility in Climate Change*, PROCEEDINGS OF NAT’L ACAD. OF SCI. EARLY EDITION, June 4, 2010, at 1, available at <http://www.pnas.org/content/early/2010/06/04/1003187107.full.pdf>. Among climate researchers most actively publishing in the field, 97% to 98% agree with the basic tenets of the IPCC that human-caused global warming is altering the earth’s climate. *Id.*

122. PEW RESEARCH CENTER, *supra* note 110. Some polling about respondents’ understanding concerning the level of scientific agreement may be misleading insofar as the questions inquire not about whether “most scientists agree” or whether there is “almost universal agreement” within the scientific community, but about “agreement” or “consensus,” which respondents may reasonably understand to be asking whether there is 100 percent agreement among scientists.

123. PEW RESEARCH CENTER, *supra* note 110. Another survey arrived at similar results, finding, “Surprisingly . . . only 47 percent believed that there is a consensus among the scientific community, while 33 percent of Americans believed there is a lot of disagreement among scientists over whether global warming is occurring.” ANTHONY LEISEROWITZ ET AL., YALE PROJECT ON CLIMATE CHANGE COMM’CN AND THE GEORGE MASON UNIV. CTR. FOR CLIMATE CHANGE COMM’CN, CLIMATE CHANGE IN THE AMERICAN MIND: AMERICANS’ CLIMATE CHANGE BELIEFS, ATTITUDES, POLICY PREFERENCES, AND ACTIONS 26 (2008), available at <http://environment.yale.edu/climate/files/Climate-Beliefs-September->

The American public also appears to be less concerned about global warming. Fewer people believed global warming is “very serious” (only 39%) in October 2012, than in 2006 and 2008.¹²⁴ Fewer people consider the issue of global warming to be “extremely” or “very” important to them personally—23% in September 2012, down from 32% in November 2008 (more than a 28% decrease in the percentages).¹²⁵ Fewer people have thought “a lot” or “some” about global warming before being polled—49% in September 2012, down from 55% in November 2008.¹²⁶

The apparent lack of significant concern is reflected in the ranking of what people have thought the President’s priorities should be. During the September and October before the 2008 presidential election, respondents to one national poll ranked global warming tenth out of eleven national issues.¹²⁷ The ranking was similarly dismal prior to the 2012 presidential election. Among twelve issues to choose from in answering, “How important a priority should each of the following issues be for the next president?,” the response about “environmental concerns, such as global warming” tied for last among those issues considered to be “extremely important.”¹²⁸ The ranking result was nearly the same among Romney supporters (the global warming issue tied for last among twelve issues) and Obama supporters (the global warming issue was only one percentage point above the lowest ranking issue).¹²⁹

Historical polling data indicate that much of the change in people’s understanding (or “belief”) about the existence of climate change, their level of caring, or their perception about the human causes of the climate crisis is likely attributable to a sharp rise in suspicion among Republicans of news media coverage of global warming and a significant rise in such suspicion among independents.¹³⁰ While in 1998, 35% of Republicans and 34% of

2012.pdf. Another series of polls reflect a decrease in the percentage of respondents who think that “most scientists believe that global warming is occurring” from 2000 (61%), 2006 (65%), and 2008 (65%) to 2012 (March 8–11) (58%). Saad, *supra* note 113. That series also reflects an increase in the number of people who erroneously believe that “most scientists are unsure about whether global warming is occurring or not” from 2000 (30%), 2006 (29%), 2008 (26%) to 2012 (32%). *Id.*

124. PEW RESEARCH CENTER, *supra* note 110.

125. LEISEROWITZ ET AL., *supra* note 109, at 25.

126. *Id.*

127. LEISEROWITZ ET AL., *supra* note 123, at 11.

128. Jones, *supra* note 116, at 1.

129. *Id.* at 3.

130. Saad, *supra* note 113.

independents surveyed believed news media coverage of climate change was “exaggerated,” 67% of Republicans and 42% of independents shared that belief in 2012.¹³¹ It is also likely attributable, in large part, to the political manipulation of scientific reports during the administration of President George W. Bush, when those who altered the reports sought to downplay scientific findings about the extent and causes of climate change.¹³²

Increased skepticism about climate change has been accompanied by low consumer demand for green technology and products. According to GfK MRI’s *Survey of the American Consumer*, although 65% of American adults polled in 2012 agreed with the statement, “Preserving the environment is very important,” only 31% had bought environmentally friendly household products in the past year.¹³³ A mere 22% of those who reported completing home renovations in the previous twelve months stated that they had used environmentally friendly products as part of their renovation.¹³⁴ Fifty-six percent of those surveyed in 2007 agreed with the statement, “I am willing to give up convenience for a product that is environmentally safe”; in 2012, only 47% did.¹³⁵ Similarly, the number of people responding positively to the statement, “I am willing to pay more for a product that is environmentally safe” fell 13% from 2007 to 2012.¹³⁶

These attitudes were reflected in the 2012 presidential election campaign, during which serious discussion of climate

131. *Id.*

132. See, e.g., Juliet Eilperin, *Climate Findings Were Distorted, Probe Finds*, WASH. POST, June 3, 2008, <http://www.washingtonpost.com/wp-dyn/content/article/2008/06/02/AR2008060202698.html> (“From the fall of 2004 through 2006, the report said, NASA’s public affairs office ‘managed the topic of climate change in a manner that reduced, marginalized, or mischaracterized climate change science made available to the general public.’”); Stephanie Kirchgaessner & Fiona Harvey, *Bush ‘Distorted’ Climate Change Reports*, FIN. TIMES, Jan. 31, 2007, <http://www.ft.com/cms/s/0/57ddbaea-b0c4-11db-8a62-0000779e2340.html> (“Rick Piltz, a former government official who co-ordinated and edited reports on climate change, said he resigned from his post in 2005 in protest against the Bush administration impeding communication on climate science and its implications. Mr. Piltz testified that the administration systematically attempted to ‘bury’ a ‘national assessment’ report that had been published during the Clinton administration that analysed the consequences of climate variability on the US.”).

133. See Press Release, Growth from Knowledge, Enthusiasm for Environmentally Safe Products on the Wane (Apr. 4, 2012), available at http://www.gfkmri.com/assets/PR/GfKMRI_040412PR_Green.htm.

134. *See id.*

135. *See id.*

136. *See id.*

change was rare¹³⁷—evidence of a genuine lack of leadership by both major party presidential candidates. Mitt Romney, 2012 Republican presidential candidate, used climate change as a laugh line, evoking mirth and a standing ovation at the 2012 Republican National Convention when he stated, “President Obama promised to begin to slow the rise of the oceans and to heal the planet. My promise is to help you and your family.”¹³⁸ President Obama’s website did not refer to support for legal limits on the amount of greenhouse gases emitted by polluters in the U.S.¹³⁹ For the first time since 1988, climate change was not mentioned by either the Democratic or Republican candidates, or by any moderators, during any of the presidential debates in 2012.¹⁴⁰

Immense funding provided by fossil-fuel interests to so-called climate change skeptic groups has accompanied a major change in attitudes, a high level of confusion, misinformation, and ignorance, and insufficient caring and commitment to act (all of which is entirely inconsistent with the overwhelming scientific evidence of human-caused climate chaos and its consequences).¹⁴¹ According to the Union of Concerned Scientists,

137. See David R. Baker, *Candidates Ignore Climate Change Debate*, SFGATE.COM (Oct. 3, 2012, 9:56 AM), <http://www.sfgate.com/science/article/Candidates-ignore-climate-change-debate-3914294.php>.

138. See Richard Schiffman, *The 2012 Election’s Only Bipartisan Consensus: Not to Talk Climate Change*, THE GUARDIAN (Oct. 2, 2012, 2:36 PM), <http://www.guardian.co.uk/commentisfree/2012/oct/02/us-presidential-debates-global-warming?newsfeed=true>.

139. See Baker, *supra* note 137.

140. Suzanne Goldenberg, *US Presidential Debates’ Great Unmentionable: Climate Change*, THE GUARDIAN (Oct. 23, 2012, 5:15 PM), www.guardian.co.uk/environment/2012/oct/23/us-presidential-debates-climate-change. Other presidential candidates, including one of the authors of this article, raised the issue of the climate crisis frequently throughout the 2012 campaign, although what they said was largely ignored by the mainstream media. See, e.g., Will Oremus, *Finally, a Presidential Debate Tackles Climate Change, Drones, Drugs, and Civil Liberties* (Oct. 24, 2012), www.slate.com/blogs/future_tense/2012/10/24/third-party_candidates_debate_jill_stein_gary_johnson_talk_climate_change.html; *Expanding the Debate: Second Presidential Debate*, VOTE ROCKY, http://www.voterocky.org/expanding_the_debate_second_presidential_debate (last visited Feb. 4, 2013) (video of Democracy Now! “expanded presidential debate,” in which Anderson stated, “What hasn’t been discussed during these debates [between Romney and Obama]? Nobody is talking about what’s going to impact future generations the very most, and that is the climate crisis. We have to address this if we’re going to really show that we care about our children and later generations.”); *Free and Equal Debate*, VOTE ROCKY, www.voterocky.org/free_and_equal_debate (last visited Feb. 4, 2013).

141. There may be cause for optimism here, however. One prominent study funded by climate skeptics has concluded that global warming is indisputably occurring. See Joe Romm, *Bombshell: Koch-Funded Study Finds that ‘Global*

ExxonMobil, the world's largest publicly traded oil company,¹⁴² spent nearly \$16 million between 1998 and 2005 funding "a network of ideological and advocacy organizations that manufacture uncertainty on the issue" of climate change.¹⁴³ According to a Greenpeace investigation, a single climate-change skeptic—physicist Willie Soon—received over \$1 million in compensation from oil and gas companies from 2001 to 2011.¹⁴⁴ Every grant Dr. Soon received from 2002 to 2011 was, according to the investigation, provided by fossil-fuel interests.¹⁴⁵ One Exxon-funded think tank even went so far as to send letters to scientists offering \$10,000 plus travel expenses and possible future compensation for articles criticizing the IPCC's 2007 Fourth Assessment Report on climate change.¹⁴⁶ Those offers were made before the Report had even been published.¹⁴⁷

If effective climate-protection measures by the U.S. are to be achieved, the American public must be far better informed, motivated, organized, and mobilized through vastly improved communications strategies. In the following two sections, we outline the rationale and development of a communication strategy for the public policy domain built upon the human rights and justice dimensions of climate change.

Warming is Real,' 'On the High End,' and 'Essentially All' Due to Carbon Pollution, THINKPROGRESS (July 28, 2012, 5:31 PM), <http://thinkprogress.org/climate/2012/07/28/602151/bombshell-koch-funded-study-finds-global-warming-is-real-on-the-high-end-and-essentially-all-due-to-carbon-pollution/>. The lead author of the study, once a "skeptic," has now stated that "[h]umans are almost entirely the cause" of global warming. See Richard A. Muller, *The Conversion of a Climate-Change Skeptic*, N.Y. TIMES, July 30, 2012, at A19.

142. *About Us*, EXXONMOBIL, <http://www.exxonmobil.com/Corporate/about.aspx> (last visited Feb. 4, 2013).

143. See UNION OF CONCERNED SCIENTISTS, SMOKE, MIRRORS & HOT AIR: HOW EXXONMOBIL USES BIG TOBACCO'S TACTICS TO MANUFACTURE UNCERTAINTY ON CLIMATE SCIENCE I (2007), available at http://www.ucsusa.org/assets/documents/global_warming/exxon_report.pdf.

144. John Vidal, *Climate Sceptic Willie Soon Received \$1m from Oil Companies, Papers Show*, THE GUARDIAN (June 28, 2011, 1:37 PM), <http://www.guardian.co.uk/environment/2011/jun/28/climate-change-sceptic-willie-soon>.

145. *Id.*

146. See Ian Sample, *Scientists Offered Cash to Dispute Climate Study*, THE GUARDIAN (Feb. 1, 2007), <http://www.guardian.co.uk/environment/2007/feb/02/frontpagenews.climatechange>.

147. See *id.*

III. THE FAILURE BY THE U.S. GOVERNMENT AND ENVIRONMENTAL AND HUMAN RIGHTS COMMUNITIES TO TREAT CLIMATE CHAOS WITHIN A HUMAN RIGHTS FRAMEWORK

Because poverty affects everyone, there's no money for education, no money for health care, or for clothing. Our food also suffers. The children especially grow weak and suffer terribly from undernourishment. This has become more blatant in the past 30 years. Although the climate phenomenon started 40 years ago, poverty began affecting the population of Ecuador and my province, Manabi, some 30 years ago. We now live in abject poverty.

-Alejo Banque Barrete, Upocam, Ecuador¹⁴⁸

I don't see a big advantage to calling [climate change] a human rights issue . . . There is a risk of cheapening the concept of rights, which we need to protect as a core element, and it doesn't add anything.

-Kenneth Roth, Executive Director, Human Rights Watch¹⁴⁹

Those who have assumed the awesome responsibility to protect human rights generally or to achieve support for climate-protection measures have a duty commensurate with the severity of the crisis. However, most U.S. human rights and environmental organizations have failed to develop a successful message and strategy to protect against the onslaught of human-rights catastrophes caused by climate chaos. Instead, they have chosen to either avoid the issue entirely, as so much of the human-rights community has done (as indicated by Kenneth Roth's quote at the beginning of this section), or engaged in wholly ineffective—probably counterproductive—public campaigns seemingly obsessed with polar bears.¹⁵⁰ Those campaigns may have

148. CLIMATE CHAOS IN THE SOUTH, *supra* note 1, at 15:15–15:18, 19:15–19:38.

149. *Kenneth Roth*, THE BIG THINK (Aug. 14, 2007), http://bigthink.com/users/kennethroth#!video_idea_id=4065.

150. For instance, the Environmental Defense Fund frequently utilizes images of polar bears—one species in a faraway place (albeit cute)—and has carried on a multi-part internet campaign it describes as follows: “This is the story of a fictional polar bear family—Aakaga and her cubs Qannik and Siku—as they struggle to survive in a rapidly melting Arctic world.” *See Polar Bear Odyssey*, ENVTL. DEF. FUND, <https://secure2.edf.org/site/Advocacy?page=UserActionInactive&id=1675> (last visited Feb. 4, 2013). It is little wonder that public understanding about climate chaos and its consequences is diminishing over time, when one of the primary advocacy organizations is presenting to the public fictional stories about a fictional polar bear family.

appealed to funders, but they have not helped save the earth's inhabitants from a worsening climate crisis.

Slight progress has only recently begun to be made in some quarters of the international environmental community on framing climate chaos as an issue of fundamental human rights.¹⁵¹ Although exceptions exist, much of the U.S. human-rights community has been hostile to framing climate change as a human-rights issue¹⁵²—an attitude mirrored by the federal government.¹⁵³ Prominent environmental organizations, while engaging in passionate, yet mostly ineffective, advocacy on climate change, have most often not communicated the human impacts of climate chaos and the related issues of justice, ethics, and human rights.¹⁵⁴

The general paucity of effective person- and justice-centered discourse in the area of climate change has been noted in a number of quarters.¹⁵⁵ During the 2007 United Nations Framework Convention on Climate Change Conference in Bali, U.N. Deputy Commissioner on Human Rights Kyung-wha Kang observed, “[i]n the lead up to this momentous gathering in Bali, the world heard extensively about the grave threat that climate change poses on the environment and economic growth. Much less was heard about the human dimension of climate change.”¹⁵⁶ Deputy Commissioner Kang also noted “the need for strategies to deal with climate change, whether in terms of adaptation or mitigation, to incorporate the consequences for humans, as individuals and communities,” and that “[f]urthermore, some suggest, as I certainly would, that the existing body of human rights norms and principles offers a solid foundation for responsible and effective thinking and action in this regard.”¹⁵⁷

A few U.S. activists have recognized the absence of effective framing of the climate crisis to emphasize the human-rights implications. For example, one of the present authors made the point in 2009, as follows:

151. See *infra* part III.A.

152. See *infra* Part III.B.

153. See *infra* Part III.C.

154. See *infra* Part III.D.

155. See, e.g., ANDERSON, *COMBATING CLIMATE CHANGE: A HUMAN RIGHTS IMPERATIVE*, *supra* note 16.

156. Kyung-wha Kang, United Nations Deputy High Comm’r for Human Rights, Address to the United Nations Conference of the Parties to the United Nations Framework Convention on Climate Change and Its Kyoto Protocol, Climate Change and Human Rights (2007), available at <http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=200&LangID=E>.

157. *Id.*

When one considers the well-established fundamental human rights standards regarding which there is now almost universal agreement, one must wonder why the consideration of climate change in a human rights context has taken so long, particularly since the application of human rights principles will aid significantly in combating climate change. In fact, one is left perplexed indeed as to why the human rights community seems to have been so somnolent—so absolutely irresponsible—in the face of the imminent human rights disasters caused by climate change—the most widespread and catastrophic tragedies in the history of humankind.¹⁵⁸

A summer 2012 panel during the Netroots Nation conference was convened under the title “People, Not Polar Bears.” The panel was advertised as a rallying cry to more person-centered messaging and advocacy on climate change:

From epidemics of asthma to water shortages, our most vulnerable populations are disproportionately impacted by pollution and global warming—and it’s time for our environmental fights to reflect this. For decades, communities of color and indigenous peoples have fought discriminatory environmental policies and disproportionate toxic burdens from polluting industries, but these efforts must be brought to the mainstream.¹⁵⁹

This Part summarizes the efforts—and lack thereof—made so far by the federal government and U.S. nongovernmental organizations (NGOs) to communicate and respond to the human-rights dimensions of climate change.

A. *The U.S.: Hostility Toward the Human-Rights Dimensions of Climate Change*

“In responding to climate change, governments have traditionally approached it as an ecological problem or more recently, as

158. ROSS C. “ROCKY” ANDERSON: COMBATING CLIMATE CHANGE: A HUMAN RIGHTS IMPERATIVE (2009), available at <http://www.highroadforhumanrights.org/wp-content/uploads/2010/12/02.14.09SpeechesCombatingClimateChangeAHumanRightsImperative.pdf> (presentation at Winter Conference for Activists, Healthy Planet Mobilization Committee).

159. *People, Not Polar Bears: Digital Revolutions and the New Fight Against Climate Change*, NETROOTS NATION, http://www.netrootsnation.org/nn_events/nn-12/digital-environmental-justice/ (last visited Feb. 4, 2013).

an economic one. To date the social and human rights implications of climate change have received little attention.”

—Australian Human Rights Commission¹⁶⁰

The U.S. government has clearly expressed its opposition to recognizing climate change as a human-rights issue. In comments submitted to the U.N. High Commissioner on Human Rights, the U.S. agreed that “climate change . . . has implications for the full enjoyment of human rights,” and that “a safe and sustainable environment . . . may further the realization of certain human rights, such as the ‘right to a standard of living adequate for the health and well-being’ of all individuals.”¹⁶¹ But the U.S. opined that it “does not consider that a right to a ‘safe environment’—or other similarly worded or conceived rights—exists under international law. Further, the United States takes the view that a ‘human rights approach’ to addressing climate change is unlikely to be effective.”¹⁶²

The U.S. based its conclusion on a rather formalistic observation that none of the major human-rights treaties specifically mention a right to a healthy environment—notwithstanding the fact that such a right is clearly and logically implied from, *inter alia*, the rights to life, liberty, and the security of person; to a livelihood; to productive and sustainable employment; to an adequate standard of living; to freedom from hunger and malnutrition; to clean water; to maintain livelihoods and homes; and for indigenous people to maintain their cultures.¹⁶³ Further, the U.S. opined that climate change was too complex from a scientific standpoint to serve as an appropriate subject for human rights.¹⁶⁴ Although this document was submitted during the

160. See AUSTL. HUMAN RIGHTS & EQUAL OPPORTUNITY COMM’N, HUMAN RIGHTS AND CLIMATE CHANGE 2 (2008), available at http://www.hreoc.gov.au/about/media/papers/handclimate_change.html; see also JOHN VON DOUSSA, PRESIDENT, AUSTL. HUMAN RIGHTS & EQUAL OPPORTUNITY COMM’N, CLIMATE CHANGE: CATASTROPHIC IMPACTS AND HUMAN RIGHTS (2007), available at humanrights.gov.au/about/media/speeches/speeches_president/2007/20071211_Climate_Change.html (“Whilst there is now plenty of discussion about the responses that governments should be making to address the predicted consequences of climate change, the focus seems to have been largely on the economic, trade and security issues. The social and human rights implications rarely rate a mention.”).

161. *Observations by the United States of America on the Relationship Between Climate Change and Human Rights* [hereinafter *Observations*], UNITED NATIONS OFFICE OF THE HIGH COMM’R FOR HUMAN RIGHTS 1 (undated), <http://www2.ohchr.org/english/issues/climatechange/docs/submissions/USA.pdf> (last visited Feb. 4, 2013).

162. *Id.*

163. See *supra* Part I.C.

164. See *Observations*, *supra* note 161, at 4–6.

waning days of the George W. Bush administration, the Obama administration has shown no signs of repudiating this tragically flawed position.

The U.S. viewpoint in this regard reflects the longstanding opposition of the U.S. to recognizing positive economic rights, otherwise known as “resource rights.” This position was perhaps most clearly expressed during the Reagan Administration. Elliott Abrams, then-Assistant Secretary of State for Human Rights and Humanitarian Affairs, expressed the administration’s position that

the inclusion of these rights blurred “the vital core of human rights.” The distinction he drew was between economic and social rights, which he portrayed as “goods [which] the government ought to encourage over the long term,” and civil and political rights, which are “rights [that] the government has an absolute duty to respect at any time.”¹⁶⁵

Abrams also claimed, bafflingly, that corrupt governments had abused, and would continue to abuse, the recognition of such rights.¹⁶⁶ Thus, the administration believed the prudent path would be to reject the existence of such rights altogether.¹⁶⁷ No subsequent administration has repudiated this position.

B. *U.S. Human Rights NGOs—Hostility Toward, or Inconsistent and Weak Efforts Regarding, the Framing of Climate Chaos as a Human-Rights Issue*

The position of the U.S. human-rights community has generally been to ignore climate change as a human-rights issue.¹⁶⁸

165. Philip Alston, *Putting Economic, Social, and Cultural Rights Back on the Agenda of the United States* 4 (Ctr. for Human Rights and Global Justice, Working Paper No. 22,2009), available at <http://www.chrgj.org/publications/docs/wp/Alston%20Spring%2009.pdf> (quoting *Review of State Department Country Reports on Human Rights Practices for 1981: Hearing Before the H. Subcomm. on Human Rights and Int’l Orgs.*, 97th Cong. 13–17 (1982) (statement of Elliot Abrams, Assistant Secretary of State for Human Rights and Humanitarian Affairs)).

166. *Id.* at 4–5.

167. *Id.*

168. The absence of interest in the climate crisis by the human-rights community in the U.S. is not unique. It is, incredibly, characteristic of most of the international human-rights community:

The paucity of rights-specific information is not, of course, merely a *cause* of the negligible analysis of the human rights dimensions of climate change, it is also a *consequence*. Given their salience to the main themes discussed in the IPCC’s fourth assessment report, for example it is remarkable that human rights are scarcely signaled in almost 3,000 pages of analysis. This would appear to indicate a near complete

For example, Human Rights Watch has explicitly stated that climate change should not be recognized as a human-rights issue except with regard to the collateral matters of state action to impose censorship or repress reporting on the issue.¹⁶⁹

Amnesty International (AI) is a partial exception to this trend. The organization, echoing the Covenant on Economic, Social, and Cultural Rights,¹⁷⁰ states on its website that “[t]here is an intrinsic link between [the] environmental impacts [of climate change] and the ability to realize a range of human rights.”¹⁷¹ It also helpfully indicates that “[s]tate failure to act effectively to curb climate change could result in widespread violations of the right to life, right to health, right to water, right to food, and the right to housing.”¹⁷² AI lists “[a]cute water shortages and decreased crop yields in the poorer region of the world” as two climate-related events that “would undermine the rights of millions of people.”¹⁷³ The organization has also launched impressive organizing efforts.

However, AI does *not* conclude from this that states are obligated under existing human-rights norms to take effective actions to significantly reduce greenhouse-gas pollution, or refrain from destroying forests. Rather, it concludes, strangely, that “[s]tate responses to the threat of climate change must ensure that human rights are protected.”¹⁷⁴ The organization lists principles that must be followed to ensure that state efforts to mitigate climate change meet human-rights norms, such as nondiscrimination, free access to information, and the right to

disciplinary disconnect, an impression borne out by a glance at the 10,000-strong participants’ list for the recent (thirteenth) Conference of the Parties of December 2007, among whom no more than a tiny handful hailed from human rights backgrounds Since the IPCC reports are essentially literature reviews, the shortage of rights references no doubt indicates a mere vacuum in the literature rather than any conclusion, bias or failing on the part of the IPCC authors. That vacuum says as much about an absence of interest in climate change among human rights professionals to date as vice versa.

Int’l Council on Human Rights Policy, *Climate Change and Human Rights: A Rough Guide* 3 (2008).

169. THE BIG THINK, *supra* note 149.

170. See *supra* Part I.C.

171. *Upholding Human Rights While Confronting Climate Change*, AMNESTY INT’L (Sept. 29, 2009), <http://www.amnesty.org/en/appeals-for-action/upholding-human-rights-while-confronting-climate-change>.

172. *Id.*

173. *Id.*

174. *Id.* (emphasis added).

active participation.¹⁷⁵ While the obligation of states to respect fundamental human rights during the process of tackling climate change is self-evident, placing the emphasis on the process, rather than on the complicity of states in violating human rights by contributing to the catastrophic climate crisis, falls far short of what is needed to effectively meet the greatest human-rights challenges facing the world's most vulnerable people, now and in the future.

C. *The Neglect by the Environmental Community of the Human-Rights Aspect of Climate Chaos*

Visiting the webpage of Greenpeace, one of the oldest and perhaps the most prominent environmental organization in the world, one is (at least one was, as of November 2012) immediately confronted with a popup window.¹⁷⁶ Headlined "Let's Declare a Global Sanctuary in the Arctic: Save the Arctic," the window contains a form to fill out to become a member of Greenpeace.¹⁷⁷ But the form is not accompanied by any picture of or appeal to the interests of people.¹⁷⁸ Instead, the window features what has become a nearly omnipresent image in the debate over climate change: a charming polar bear family.¹⁷⁹

The polar bear—though doubtless an improvement over organisms such as the ice worm that have been presented as alternatives for highlighting the dangers of climate change¹⁸⁰—fails to communicate the fact that climate change is having a devastating impact on *people*, and is also affecting *us* where *we* live, rather than animals in distant locations.¹⁸¹ Implications for human rights in connection with the climate crisis have been widely underemphasized—or usually ignored—in the environmental community. For example, a search of the database of academic journal articles related to climate change maintained by the George Mason University Center for Climate Change Com-

175. *Id.* AI also emphasizes the right of redress for human-rights violations resulting from "states' actions and omissions in relation to the impacts of climate change," which seems crucial for any effective human-rights-based policies on climate change. *Id.*

176. *See Greenpeace USA*, GREENPEACE, <http://www.greenpeace.org> (last visited Feb. 4, 2013).

177. *See Save the Arctic*, GREENPEACE, <http://savethearctic.org/en> (last visited Feb. 4, 2013).

178. *Id.*

179. *Id.*

180. *See* Joel Connelly, *Poster Child of Climate Change: Polar Bear*, SEATTLE POST-INTELLIGENCER (Mar. 18, 2007, 10:00 PM), <http://www.seattlepi.com/local/connelly/article/Poster-child-of-climate-change-Polar-bear-1231566.php>.

181. *See supra* Part I.A.

munication reveals only two results for “rights” and five results for “justice.”¹⁸² Although the environmental community has seen fit to inaugurate an International Polar Bear Day to highlight the impacts of climate change on those animals,¹⁸³ no specific day yet exists to emphasize the fundamental human-rights violations that have occurred, and appear likely to continue, as a result of catastrophic climate chaos.

Environmentally oriented philanthropy has also shown general disregard for NGO work that advances social justice and human rights in the area of climate change. Between 2007 and 2009, “only 15 percent of environmental grant dollars were classified as benefitting [sic] marginalized communities, and only 11 percent were classified as advancing ‘social justice’ strategies.”¹⁸⁴ Similarly, an influential 2007 report that guided significant grant making in the environmental sector, “framed climate change as a physical threat that requires primarily scientific and economic expertise to solve.”¹⁸⁵ As a result, little grant making focused on promoting the necessary state action to develop new technologies and adaptation solutions, “[n]or was there equivalent investment in important human dimensions of the issue, such as adaptation, health, equity, justice or economic development.”¹⁸⁶ A 2010 Oxfam report concluded that

182. *New Journal Articles from the Academic Literature*, GEORGE MASON UNIV. CTR. FOR CLIMATE CHANGE COMM’N, http://www.climatechangecommunication.org/resources_articles.cfm (search performed Feb. 4, 2013). Contrary to the name of the page, the database is not limited to new articles, but rather contains articles published from 1978–2012. See *Bibliography Database*, GEORGE MASON UNIV. CTR. FOR CLIMATE CHANGE COMM’N, http://www.climatechangecommunication.org/images/files/4c_bibliography_database.pdf (last visited Feb. 4, 2013).

183. See, e.g., *On Polar Bear Day: The State of the Species*, ENVTL. DEF. FUND, <http://www.edf.org/polar-bear-day> (last visited Feb. 4, 2013).

184. See SARAH HANSEN, NAT’L COMM. FOR RESPONSIBLE PHILANTHROPY, *CULTIVATING THE GRASSROOTS: A WINNING APPROACH FOR ENVIRONMENT AND CLIMATE FUNDERS 1* (2012), available at http://www.ncrp.org/files/publications/Cultivating_the_grassroots_final_lowres.pdf. The report defines “social justice” as “a proxy for policy advocacy and community organizing that works toward structural change on behalf of those who are the least well off politically, economically and socially.” *Id.*

185. Matthew C. Nisbet, *Clear Vision for the Next Decade of Public Debate*, CLIMATE SHIFT (Summer 2011), <http://climateshiftproject.org/report/climate-shift-clear-vision-for-the-next-decade-of-public-debate/#climate-shift-clear-vision-for-the-next-decade-of-public-debate>. For a survey of reactions to the publication of this report and the challenges facing the climate movement in the legislative arena, see Andrew C. Revkin, *Beyond the Climate Blame Game*, N.Y. TIMES, Apr. 25, 2011, <http://dotearth.blogs.nytimes.com/2011/04/25/beyond-the-climate-blame-game/>.

186. Nisbet, *supra* note 185.

less than a tenth of climate funds to date have been spent on helping people in vulnerable countries adapt to the impacts of climate change. The poor are losing out twice: they are hardest hit by climate change they didn't cause, and they are being neglected by funds that should be helping them.¹⁸⁷

IV. THE WAY FORWARD

Scarcely thirty years ago the harvests were already getting smaller and smaller, until there was nothing more to harvest. And why? A lack of rain.

-Ancelmo Kimi, farmer, Ecuador¹⁸⁸

What are the advantages of recognizing climate change as a human-rights issue?¹⁸⁹ The Australian Human Rights and Equal Opportunity Commission has succinctly answered this question:

What . . . , if anything, does the modern human rights discourse offer or require from governments when developing appropriate responses to the impacts of climate change? The answer, it appears, is "a lot." As noted by the Deputy High Commissioner, states have a positive obligation to protect individuals against the threat posed to human rights by climate change, regardless of the causes. The most effective means of facilitating this is to adopt a "human rights-based approach" to policy and legislative responses to climate change; an approach that is *normatively* based on international human rights standards and that is *practically* directed to promoting and protecting human rights.¹⁹⁰

As Amnesty International has noted, doing so presents an opportunity for affected persons to obtain redress in international juridical fora.¹⁹¹ Perhaps most importantly, doing so puts a human face on the challenges posed by climate change. This fact has been noted by the Deputy High Commissioner for

187. See OXFAM, BRIEFING NOTE, RIGHTING TWO WRONGS: MAKING A NEW GLOBAL CLIMATE FUND WORK FOR POOR PEOPLE 1 (2010), available at <http://www.oxfam.org/sites/www.oxfam.org/files/righting-two-wrongs-global-climate-fund-061010.pdf>.

188. CLIMATE CHAOS IN THE SOUTH, *supra* note 1, at 4:41–5:11.

189. Elements of this section were included in ANDERSON, COMBATING CLIMATE CHANGE: A HUMAN RIGHTS IMPERATIVE, *supra* note 16.

190. *Human Rights and Climate Change*, AUSTL. HUMAN RIGHTS COMM'N, http://www.hreoc.gov.au/about/media/papers/hrandclimate_change.html (last visited Feb. 4, 2013).

191. See *supra* Part III.B.

Human Rights: “A human rights perspective shifts the focus more directly to individuals and to the effect of climate change on their lives.”¹⁹² This type of discourse—focusing on real people, facing concrete, disastrous circumstances—as opposed to abstract focus on scientific data, is likely to create far greater grassroots pressure and political will to solve the problem. Research has demonstrated that people are much more emotionally affected when issues are framed in terms of individual people and the impacts on their lives, rather than abstract facts and data.¹⁹³ As Mary Robinson has observed:

The human rights framework reminds us that climate change is about suffering—about the human misery that results directly from the damage we are doing to nature [I]f we build human rights criteria into our future planning, we will better understand who is at risk and how we should act to protect them.¹⁹⁴

Framing the issue of climate change in person-centered terms holds great promise in persuading people to support climate-protection measures. A recent study, *A Public Health Frame Arouses Hopeful Emotions About Climate Change*,¹⁹⁵ shows that “people who are indifferent, or even hostile, to climate change are more receptive to the issue when it’s talked about as a health issue.”¹⁹⁶ A public-health frame apparently has far more potential in making climate change personally relevant and convincing people of the threats posed by climate chaos than messaging approaches focused on threats to the environment or national security.¹⁹⁷ As one of the study authors observed, “[t]he idea of protecting people, the innocent especially, from harm, and caring for the innocent, is a value that’s widely held across the political spectrum.”¹⁹⁸

Finally, viewing climate change from a human-rights perspective recognizes our shared humanity with those who are most

192. Kang, *supra* note 156, cited in ANDERSON, *supra* note 16, at 12.

193. See, e.g., Paul Slovic, “If I Look at the Mass I Will Never Act”: *Psychic Numbing and Genocide*, 2 JUDGMENT & DECISION MAKING 79, 95 (2007).

194. Mary Robinson, *Foreword* to INT’L COUNCIL ON HUMAN RIGHTS POLICY, CLIMATE CHANGE AND HUMAN RIGHTS: A ROUGH GUIDE, at iii (2008).

195. See Theresa A. Meyers et al., *A Public Health Frame Arouses Hopeful Emotions About Climate Change*, CLIMATE CHANGE, at 1105–21 (2012), available at <http://www.springerlink.com/content/b0072m777772k7r/fulltext.html?MUD=MP>.

196. See Richard Harris, *When Heat Kills: Global Warming as a Public Health Threat*, NPR (Sept. 10, 2012, 3:08 PM), <http://www.npr.org/blogs/health/2012/09/10/160761974/when-heat-kills-global-warming-as-public-health-threat>.

197. See *id.*

198. See *id.* (emphasis added).

affected not only by the actions of our government or large corporations, but also by our individual lifestyle choices. Envisioning the real human impacts and impacts on the natural world of our energy use drives home the crucial fact of our interconnectedness and the reality that the way we live our lives is bound up in central questions of rights and social justice. A human-rights perspective is not simply a more convenient or appropriate frame for exploring the issue of climate change. Rather, it is an organizing principle of just treatment toward impoverished people throughout the world, and a basic recognition of their equal dignity in human affairs.

The Australian Human Rights and Equal Opportunity Commission provides a compelling conclusion with respect to the crucial role of the human-rights community, and of treating the climate crisis as a major human-rights tragedy, in successfully combating climate disruption:

The values that inspired the drafters of the Universal Declaration of Human Rights provide a powerful point of reference in the climate change context. That document was an international response to the human tragedy of extreme nationalism, fascism and world war. It established a set of entitlements and rights—civil, political, cultural, social and economic for ‘all members of the human family’ to prevent the ‘disregard and contempt for human rights that have resulted in barbarous acts which have outraged the conscience of mankind.’ While the drafters of the Universal Declaration of Human Rights were looking back at a human tragedy that had already happened, we are now looking at a human rights tragedy *in the making*. Allowing that tragedy to evolve would represent ‘a systematic violation of the human rights of the poor and of future generations.’¹⁹⁹

Let us not be complicit in the “systematic violation of the human rights of the poor and of future generations” by ignoring the human-rights dimension of the climate crisis and allowing the continued warming of the earth and climate chaos resulting from the burning of fossil fuels and destruction of forests. Let the protection of human rights be the primary framework for our response to global warming and climate disruption, and let compassion and caring for the poor and later generations be the foundation for our rallying cry and for sustained, urgent, effective climate-protection action.

199. AUSTRALIAN HUMAN RIGHTS & EQUAL OPPORTUNITY COMM’N, *supra* note 160.