

## ABSTRACTS

### Keynotes

Dale Bryk—Natural Resources Defense Council and Yale University

“Solving Global Warming: Putting America on a Responsible Path to a New Energy Economy”

The imperative for the 21st century utility is to meet the nation’s energy needs at reasonable cost and with dramatically lower environmental impacts. How and when we respond to global warming and our growing demand for energy will define our generation and will determine what kind of planet we have for generations to come. The scale of the challenge will require an unprecedented societal response, one that transforms U.S. and global energy markets. Our response will require advanced technologies, well-functioning markets, and rational market rules. Fortunately, many of the technologies and policy tools we need to make this transformation already exist. However, industry is not deploying these tools effectively, nor is it making sufficient investment in the next generation of technologies. Market failures abound, and perverse regulatory incentives are widespread. The challenge then is to create an environment in which the next generation of utility companies is incentivized to develop and deliver new technologies and affordable, reliable and environmentally sustainable energy services. There also is a need for clear policies that will allow markets to function properly and facilitate rapid technological transformation. By implementing just a few strategies, the United States can address global warming while ensuring a role for U.S. companies in the growing market for advanced energy technologies. Investing in these areas also will result in a range of societal and economic benefits. The United States is finally starting to move toward addressing the threat of global warming. Data indicate that we can solve the problem while continuing to grow our economy. We have the solutions we need today. Starting now will build momentum, and the market will generate many more solutions. Acting now also means that we start leading the global economy to a clean energy future. Failure to act forces us to run unacceptable economic and environmental risks from global warming. The time is now for political leadership both at home and abroad.

Dale Jamieson—New York University

“Ethics, Energy, and the Transformation of Nature”

Since at least the rise of the contemporary environmental movement in the 1960s different sources of energy have carried various social meanings and even moral evaluations. Nuclear power was anathema to most environmentalists of the 1960s and 1970s, in part expressing the movement’s roots in the anti-nuclear weapons movement of the 1950s. Wood was green in the 1960s and 1970s, perhaps because of its direct connection to nature and the decentralized energy system that it seemed to imply. Many environmentalists were slow to recognize the centrality and importance of climate change, in part because it disrupted these familiar associations. Wood, at

least without a lot of technological help, is no longer good, while nuclear power, at least on its face, is no longer bad. Even more disorienting is that the widespread appreciation of the challenge of climate change augured a new way of looking at our relation to the natural world. Environmental problems, instead of being discrete violations of the natural order, have increasingly come to be seen as manifestations of the human domination of nature. But using energy, in all of its forms, transforms nature. When does transformation become domination? Answering this and related questions is the greatest theoretical challenge facing contemporary environmentalism.

Richard Morgenstern—Resources for the Future

#### “Addressing Competitiveness in U.S. Climate Policy”

A variety of mandatory policies to reduce U.S. greenhouse gas emissions—principally cap-and-trade systems, occasionally carbon taxes, and sometimes standards—are now being seriously debated in Congress. A frequent concern raised in these debates concerns the potential for adverse impacts on the competitiveness of U.S. industry, particularly on firms or in sectors that face high energy costs and significant international competition. As Mancur Olson argued more than 40 years ago, the more narrowly focused the adverse impacts of a policy, the more politically difficult it is to sustain that policy.

This paper explores how production across individual manufacturing industries could be affected by a unilateral policy that establishes a price on carbon dioxide emissions. After surveying the evidence from economic research on potential competitiveness impacts, the paper then examines possible policy responses to address these impacts.

A range of specific policy options are surveyed, including the use of standards instead of market-based policies for some sectors, different types of free allowance allocation under a cap-and-trade system, and trade-related policies—including some form of border adjustment for energy- or carbon-intensive goods. The pros and cons of each of the options are considered, with an emphasis on both the efficiency and equity issues involved.

Henry Shue—Merton College, Oxford

#### “Deadly Delays”

The Bush/Cheney attitude toward climate change is awesomely irresponsible because: (1) failing to deal with climate change constitutes, not merely failing to help future generations, but inflicting harm on them; (2) failing to deal with climate change constitutes inflicting harm on additional future generations who could have been spared all such harm; (3) failing to deal with climate change constitutes not simply continuing to make it worse, but unnecessarily creating opportunities for it to become significantly worse by feeding upon itself through positive feedbacks that would otherwise not have occurred; and (4) failing to deal with climate change

constitutes not only unnecessarily creating opportunities for the planetary environment to become significantly worse, but also unnecessarily creating opportunities for it to become catastrophically worse and subjecting future generations to this completely unnecessary risk. Rejecting current federal policies can create opportunities to provide future generations with the magnificent legacy of salvation from vulnerabilities against which they could have had no defense of their own.

Robert Socolow—Princeton University

### “Living Ethically in a Greenhouse”

I welcome the opportunity to entice ethicists to help others deal with climate change, including the formidable environmental risks and social issues related to energy production, distribution, and consumption. To lower the barriers to entry, I will do my best to tame the underlying science and technology and to clarify what is known and unknown. Here are seven challenges:

- 1) Living well, as widely conceived today but not always in the past, means maximizing one's experiences, accumulating property, exuding exuberance. Should environmental constraints affect the conceptualization of the good life?
- 2) Arguably, humanity will be well served if the human population, after peaking in a few decades, falls slowly, without pestilence or war, to, say, two billion people in 2200. Do environment constraints challenge the utilitarian goal of the greatest good for the greatest number?
- 3) The alleviation of abject poverty, the domain of the Millennium Development Goals, can be accomplished with negligible negative impact on the environment and natural resources. With what tools can we distinguish problems of poverty from problems of modernity?
- 4) Half of the world's carbon dioxide emissions today come from people living relatively well in so-called developing countries, with lifestyles resembling those in developed countries. Can we establish an ethic of “fairness” where the consumption pattern of every prosperous individual is addressed with the same urgency independent of the country where he or she lives—independent, in particular, of whether the country has few or many poor people?
- 5) It has long been assumed that our children will be richer than we are, but environmental concerns are driving a reexamination of this assumption. How should judgments about progress affect the ethics of intergenerational equity?
- 6) The more dire the consequences of environmental stress, the less we can allow ourselves to be squeamish about less than perfect “solutions,” from CO<sub>2</sub> storage below ground to nuclear power to placing reflective particles in the upper atmosphere. Yet, to be sure, some cures are worse than the disease. By what criteria can we compare the disruption from avoiding environmental damage to the disruption from the environmental damage itself?
- 7) We need a new discipline, let me call it *prospicience* (the art and science of looking ahead), that asks what we as a species are here on earth to do. Prospicience will enable us to sort out our collective goals and responsibilities for

distinct time frames: for example, the next 50 years vs. the next 500 years. How can ethicists help us develop a disciplined inquiry into our collective destiny?

## Session Papers

Zulfiqar Ahmed—University of Rajshahi, Bangladesh

“A Fact of the Blowout Occurrence in Tangratila Gas Field in Bangladesh”

Jeff Boyer—Appalachian State University; and  
Steve Owen—Appalachian Institute for Renewable Energy

“When the Well is Poisoned: Local Knowledge and the Politics of Scale in Shaping a Socially Responsible Wind Energy Strategy in Appalachia”

This paper uses comparative cases of corporate and community-scale wind energy to frame the current political battles in Appalachia. Facilities siting and planning, the primacy of community economic benefit, and the dilemma of compromised local knowledge are key issues. The authors deconstruct the overly broad and usually pejorative NIMBY explanatory theory of resistance in order to refine local understandings of the conditions under which communities might welcome wind energy development. The overarching need to reduce carbon footprint may put the rapid adoption of renewables and the participatory process in conflict, raising questions for movement actors, policymakers, and the industry.

Christopher Caldwell—Virginia State University

“Energy Lifestyle: The Moral Significance of Daily Choices”

The ethical issues surrounding energy use and production are often directed towards groups of individuals. The focus upon groups is, I believe, motivated by the noble goal of affecting large-scale change. However, the relationship between the ethical evaluation of a particular individual and lifestyle choices surrounding energy use has been neglected. I argue that, due to various moral considerations, lifestyle choices concerning energy use should have a greater moral weight than usually assessed. Thus, the argument illustrates the moral significance of choices surrounding energy use by individuals and the role, which is more central than normally thought, of such choices.

Simon Caney—Oxford University

“Justice, Energy and Climate Change”

It is now widely recognized that the use of fossil fuels has a profound effect on the Earth’s atmosphere and that the high levels of greenhouse gas emissions has led to

climate change. This paper examines what rights persons have to engage in activities which emit greenhouse gases. It begins, in Section I, by examining whether it is possible jointly to meet both the rights of the global poor to develop and the entitlements of current and future generations not to be exposed to dangerous climate change. It argues that that, contrary to a common view, a commitment to development does not entail rejecting an ambitious program of combating dangerous climate change. The paper then examines how the right to use fossil fuel energy (and other energy sources that emit greenhouse gases) should be distributed. To do so it considers, (a) which kind of entities own the right to emit greenhouse gases—individuals, corporations, states (section II)? It then considers, (b) how the right to emit greenhouse gases should be distributed—according to “grandfathering” or “equality” or “to the highest bidder” or some other principle (section III)? It argues that existing answers to (a) and (b) are inadequate because they do not take into account people’s other entitlements, including their economic entitlements. A compelling answer to (a) and (b) requires a comprehensive account of global justice.

Cheryl Cline—Queen’s University, Ontario

“An Ethical Analysis of Institutional Conflicts of Interest in Energy Research”

The purpose of this presentation is to build a case for why a large-scale debate about institutional conflicts of interest is needed in the field of energy research and to begin to set the stage for that debate. Over the course of the talk, I will distinguish individual from institutional conflicts of interest, provide an overview of evidence for a range of harmful funding effects in cognate research areas, and outline a framework for analyzing conflicts of interest that can be applied to cases like the recent BP-Berkeley agreement which polarized the local university community and drew international media attention.

Colin Crawford—Georgia State University

“The Paradox of Preservation: Biodiversity Protection, Bio-fuel Development and Environmental Justice”

Bio-fuels, and especially cane or soy-based fuels, appear to present promising and more efficient sources of future energy supplies than do many other currently available alternatives. They are potentially sustainable and marginally less destructive in their environmental impact than petroleum-based fuels, and appear to be somewhat cleaner and more efficient than other bio-fuels like corn. Likely producers of such bio-fuel supplies include tropical and sub-tropical nations with climates conducive to sugar cane and/or year-round soy production. Yet if these countries go the route of entering the bio-fuel production market, they may also sacrifice long-term biodiversity and land preservation and the arguably more solid economic benefits they may bring. Indeed, biodiversity preservation arguably may better serve development, a phenomenon that may be characterized as the “paradox of preservation.” In particular, this paper will examine how long-term development of

bio-fuel supply markets could have devastating consequences for biodiversity protection, a particularly troubling prospect since many of the nations poised to enter the bio-fuel production market are biodiversity “hotspots.” The biodiversity threat therefore raises fundamental questions of environmental justice. The paper will apply an environmental justice framework—at both the international and national levels—to help better understand the consequences of a rush to develop these bio-energy sources.

Lisa Dilling and Benjamin Hale—University of Colorado, Boulder,

“Carbon Sequestration, Ocean Fertilization, and the Problem of Permissible Pollution”

Ocean fertilization has been proposed to mitigate anthropogenic climate change. Some have called fertilization a way to feed the poor while others maintain it is an ineffective scheme with disastrous impacts on marine life. Our question is whether it is permissible to change, modify, or sully an ambient resource in order to clean up an environmental pollutant. Is it permissible to alter the marine environment through ocean fertilization in order to remediate carbon pollution? We argue that the wrong-making attribute of carbon emissions is not countered by the good-making attribute of remediation, and so the moral impermissibility of pollution stands.

Kevin C. Elliott—University of South Carolina

“Hydrogen Fuel Cells, Energy Policy, and the Ethics of Expertise”

The Bush administration has promoted the development of hydrogen fuel-cell (HFC) vehicles as an important component of its efforts to reduce pollution, to encourage energy independence, and to respond to global climate change. In sharp contrast, others argue that hydrogen technology is a distraction and perhaps even a liability in the fight against contemporary environmental and energy problems. This paper proposes an ethics of expertise (EOE) and argues, based on an analysis of the hydrogen case study, that experts could sometimes mitigate energy policy disputes by disseminating information in accordance with this EOE.

Janice Harper. The University of Tennessee

“Nuclear Futures: Public Visions and Revisions of Science, Secrecy and Security from Oak Ridge to Iraq”

Following the Manhattan Project, ideologies of secrecy and security facilitated a national consensus that disclosure of environmental and health risks of nuclear science could bring an end to the world. This legacy of scientific secrecy has led some stakeholders to interpret scientific uncertainty regarding nuclear energy as evidence that its use may bring about catastrophic destruction; others interpret uncertainty to suggest scientific closure and thus, safety and security. In this

presentation, I explore this paradox of security and secrecy surrounding nuclear energy through an anthropological analysis of scientific knowledge and public discourse concerning depleted uranium used in weapons production.

Nicole Hassoun—Carnegie Mellon University

“Free Trade and the Environment”

What should environmentalists say about free trade? This paper considers the case for free trade on the assumption that there is an obligation to mitigate environmental problems. Many environmentalists rest their case against free trade on the *Race to the Bottom Argument*. This paper suggests that this argument is inconclusive, but that there are reasons to worry about unrestricted free trade’s environmental effects nonetheless; the rules of trade embodied in institutions like the World Trade Organization may be unjustifiable. Trade-related adjustment assistance programs, linkage, trade barriers, and consumer movements (like the Fair Trade movement) may be necessary and desirable.

Andrew Jameton—University of Nebraska Medical Center

“How Deep Are the Implications of Climate Change for Ethics?”

The need to mitigate and adapt to climate change requires significant shifts in technology, policy, culture, and individual behavior. These large changes require a shared ethical sensibility by which coordination can be motivated and appreciated. And, significant change requires reevaluating assumptions typically underlying ethical judgments. Appealing to high-level philosophical ethical theories insensitive to cultural change may be unhelpful. However, “middle principles” (liberty, justice, materialism, responsibility, trust, and others) that commonly determine ethical judgments and resolve disputes may be reinterpreted usefully. This paper canvasses promising perspectives on middle principles that may help to motivate and support social re-organization.

Michele John—Curtin University, Perth Western Australia; and

Stephen Schilizzi—University of Western Australia

“Energy and the Environment—What Are the Ethics and Responsibilities? An Industry Perspective”

Energy use and energy-related greenhouse gas emissions (GHG) are significant issues for industrial production. This issue is further complicated when viewed from a global perspective and the concomitant link between energy use and climate change. The externalities produced from industrial production continue to be borne by society and the environment with little or no internalizing of these externality costs by industry. This paper will review some of the ethics and responsibilities associated

with modern industrial energy consumption and production in Australia, and the potential for new policy initiatives to encourage more sustainable energy use.

Alice Kaswan—University of South Florida School of Law

“Reconciling Efficiency and Justice: Integrating Environmental Justice into Cap and Trade Programs for Controlling Greenhouse Gases”

Cap and trade programs are emerging as a core strategy for addressing climate change. Such market-based programs have long been considered antithetical to the environmental justice movement’s distributional and participatory goals. This presentation will analyze how cap and trade programs could interfere with environmental justice goals. Rather than concluding that the conflict is unbridgeable, however, I then propose a reconciliation. I suggest that, with compromise, policymakers could impose certain limitations on cap and trade programs that would allow the achievement of both efficiency and justice goals.

Sarah Kenehan—University of Bern, Switzerland

“Energy Use, the Externalization of Costs to Future Generations, and the Philosophy of John Rawls”

Many of the issues regarding current energy practices are centered largely around the fact that most of the benefits gained from using fossil fuels are enjoyed by current generations, while the costs will most likely be borne by future generations. In this paper, I consider whether the framework that John Rawls develops offers a viable way in which to consider problems of intergenerational justice that arise in this context. I contend that Rawls’ theory presents a strong foundation for minimum obligations owed to future generations, and thus lends a way in which to fruitfully reexamine current energy use.

Jon Frederick Kirchoff and Wendy Tate—The University of Tennessee

“What Motivates Organizations in the Hospitality Industry to Adopt Energy-Saving Changes?”

Energy is a critical component nearly all companies depend on to run their operations. Recent changes in price and availability, as well as a growing ethical concern about energy use, are creating an impetus for organizations to make energy saving changes. Using case study methodology within the context of the hospitality industry, this paper explores the motivational factors leading hotels to make their operations more energy efficient. We conclude the main drivers of motivation for organizations to change are more financial in nature, questioning the involvement of ethical considerations.

Daniel Klingensmith—Maryville College

“Two Cheers for Arthur Morgan: Energy, Ethics, and Politics in New Deal Environmentalism”

This paper considers the career and ideas of Arthur Morgan, founding chairman of the Tennessee Valley Authority, specifically his vision of an alternative economy of energy production and use in the Upper South, his explicit concern with the ethics informing economic life, and the political failings which ultimately cost him both his leadership of TVA and a substantial audience for his ideas. The paper takes Morgan’s ethical ideas and political difficulties as indicative of an enduring environmentalist problem in a consumerist society: how to fashion convincing, democratic and transformative politics that makes global sustainability and equity into genuinely popular priorities.

Alissa Meyer and Clare Hinrichs--Pennsylvania State University

“Growing Energy for the Public Good?”

Bioenergy is framed as the environmentally benign, socially responsible solution to the increasingly critical issue of energy security. But will it transform social relationships in a healthy and ethical manner, or do existing structures of corporate, state, and scientific authority predetermine a stagnant energy future with minimal transformative capability? This paper draws on in-depth personal interviews with switchgrass farmers in southern Iowa’s Chariton Valley and what used to be the tobacco country of northeast Kentucky to examine the ethical themes and potential tradeoffs that prospective feedstock producers perceive in the development of an energy bioeconomy.

Amos Nascimento—University of Washington

“Global Measures for Global Problems: The Case for an Ethics of Collective Responsibility”

This paper has three parts. The first introduces the production, distribution, and consumption of energy as *a global problem* that requires *global answers* and presents three principles that have been advocated as key to global ethics: *responsibility*, *sustainability*, and *precaution*. The second reviews theoretical approaches to ethics and discusses the limits of these principles. The third proposes a *principle of collective responsibility* based on the discourse ethics of Karl-Otto Apel and Peter French’s definition of collective decision-making. The conclusion affirms that *collective responsibility* seems to be a better guide for personal and collective *actions* concerning global energy and environmental problems.

John Nolt—The University of Tennessee

“Greenhouse Gas Emission and the Domination of Posterity”

Using a conception of domination derived from the work of Francis Lovett, this presentation contends that greenhouse gas emissions by individuals and collective entities (e.g. corporations, nations) constitute unjust domination of posterity. This injustice is egregious in light of various considerations involving the power asymmetry between us and posterity and the fact that the effects of greenhouse gas emissions worsen over many generations. Hence we, both individually and collectively, have strict duties to eliminate unnecessary greenhouse gas emissions. For individuals—and individual Americans in particular—this implies severely curtailing many now-common activities.

Efrain O’Neill-Carrillo, Marla Pérez-Lugo, Agustín A. Irizarry-Rivera, José A. Colucci-Rios, and Cecilio Ortiz-García—University of Puerto Rico-Mayaguez

“Sustainability, Energy Policy and Ethics in Puerto Rico”

Many of the problems the World are managed from a mostly technical or economical perspective, even though global problems also have social and environmental dimensions. Energy is an example of a global, interdisciplinary problem that is usually approached from a narrow technical or economical perspective. This paper will approach the energy dilemma from the broader perspective of sustainability, balancing economic, environmental and social aspects, and striving to merge energy policy and ethics with special attention to Puerto Rico.

Clare Palmer—Washington University

“Polar Bears, Climate Change and Group Harm”

The United States Fish and Wildlife Service (USFWS) is currently considering listing the polar bear species as threatened, primarily due to global climate change. In this paper, I use the threat to the polar bear species to examine questions about the value of species. In particular, I’ll consider whether analogous frameworks to those used in arguing for *group harms* in human cases (such as genocide) could be applied to at least some species cases. Although transferring frameworks from the human case to the species case is not straightforward, I’ll argue that for *some* species—including polar bears—endangerment can be seen as a group harm.

Satya Prateek—National University of Juridical Sciences, India

“Energy at Play: Ethics on a Holiday? Deliberative Development, Contested Environmentalism, and the Great ‘Rights’ Replay”

Babu Ram—African Development Bank, Tunis, Tunisia

“The Economics and Ethics of Climate Change in Africa”

Climate change poses a major challenge to sustainable development and poverty reduction in Sub-Saharan Africa. The debate places more and more emphasis on solutions based on the economics and less and less on ethics. This paper combines the economics and ethics in order to equipose the two to address issues of climate change. The paper will elaborate on the Kyoto Protocol spurring clean energy investments. Such notions as “values first,” and “ethically responsible development,” etc., will be reviewed under the ethics. Finally, the role of social values will be discussed to stimulate voluntary actions reducing greenhouse gases and lessening regulatory burden.

David Schweickart—Loyola University

“Is ‘Sustainable Capitalism’ an Oxymoron?”

Is Joel Kovel right that it’s either “the end of capitalism or the end of the world?” Or are Paul Hawken, Amory and Hunter Lovins right that we are on the brink of a “natural capitalism” that can usher in an ecological utopia, “a world where cities have become peaceful and serene because cars and buses are whisper quiet, vehicles exhaust only water vapor, and parks and greenways have replaced unneeded urban freeways.” I argue that while Hunter-Lovins’ have much to offer and Kovel overstates his case, a sustainable capitalism is highly unlikely. I sketch an alternative to both “natural capitalism” and Kovel’s non-market socialism that is more promising than either.

Behnam Taebi—Delft University of Technology, The Netherlands

“Nuclear Waste Management and Intergenerational Justice; Beyond Repositories”

According to the International Atomic and Energy Agency (IAEA), nuclear waste should be managed in such a way that it “will not impose undue burdens on future generations.” This “undue burden” can best be understood within the framework of *intergenerational justice*: long-term policy is mainly founded on the latter. In this paper, I incorporate the most recent developments of Nuclear Waste Management (P&T) in current policy. Both retrievability of waste and the preference for geological repositories could be challenged by changing the time dimension and the nature of waste. (How) should we include new technology in policymaking?

Bruce E. Tonn and Brandon Blalock—The University of Tennessee

“Intervention In Countries With Unsustainable Energy Policies: Is It Ever Justifiable?”

This paper explores whether it is ever justifiable for the international community to forcibly intervene in countries that have unsustainable energy policies. A simple risk analysis framework is used to organize our discussion about possible conditions for justifiable intervention. If the probability of deaths resulting from unsustainable energy policies is very large, if the energy problem can be attributed to a relatively small number of countries, and if the risk of intervention is acceptable, then intervention may be justifiable. Without further analysis and successful confrontation with several vexing theoretical questions, it cannot be stated whether unsustainable energy policies being pursued by countries at the beginning of the 21<sup>st</sup> century meet the criteria for forcible intervention by the international community.

Laura Westra—University of Windsor

“Extractive/Mining Industries and Indigenous Peoples Rights: The Interface”

The over 370 million indigenous peoples spread across the globe possess extraordinarily vibrant cultures, political systems, values and immense traditional knowledge about their homelands (Morse, 2007). Unsustainable and hazardous industrial practices to ensure oil production, and the results of the increasing use of the products of these practices that foster climate change, combine to make the homelands of indigenous peoples unlivable. This happens most clearly in the arctic, but also in many other locations where traditional communities live close to the locations where these resources are found. We are all affected in various ways by climate change, but the combination of public health hazards arising from energy extraction and the unrestrained use of these products (WHO 2005; Grandjean and Landrigan 2006), not only affect indigenous peoples individually, but also their whole communities and way of life, collectively. When this happens, an indigenous community cannot survive as such, that is, living its traditional lifestyle and the final result is the annihilation of that community and those peoples: it is cultural genocide. International law protects two major indigenous rights: the right to self-determination, and the right to cultural integrity. I propose a third, most basic right: the right to biological/ecological integrity, to alleviate the multiple environmental attacks that gravely affect those communities today.

Evelyn Wright and Paul Pojman—Towson University

“Examining the Resistance to Geologic Carbon Sequestration: Looking Beyond Technology Solutions in the Climate Policy Debate”

This paper identifies two conceptual approaches to climate change mitigation—one which places climate change within a broader search for sustainability and another

that sees climate change as a unique emergency that must be addressed on its own terms. We analyze the potential role of geologic carbon sequestration as seen from these two views. Drawing from the literature of technology studies, which has framed a discourse about the political nature of the technology system, we argue that there is more at stake in mitigation technology selection than is immediately obvious for shaping the ways we may think about future energy systems problems.

Jeffery G. York—University of Virginia, Darden Graduate School of Business

“Ethical Stances and Renewable Energy: A Pragmatic Approach”

In this paper I address the question, “Why should business pro-actively attempt to move to the adoption of renewable energy?” First, I will offer a normative argument, from a variety of ethical perspectives, that managers have an ethical responsibility to address such issues. Second, I will offer a purely instrumental argument that demonstrates that regardless of the ethical stance taken by a company, there are good economic reasons for addressing the firm’s impact on the natural environment, particularly, regarding energy usage. Finally, I will explain that viewing these two perspectives (normative and instrumental) is indicative a false dualism.

## **Panels and Workshops**

### **Workshop—“Using Ethics to Inform Responsible Action”**

*Participants:*

Nina Gregg—Charter of Human Responsibilities;  
Jan Roberts—Earth Charter  
Tonia Moya—Green Cross  
Don Huisingh—The University of Tennessee

This workshop introduces participants to three international projects: the Charter of Human Responsibilities, the Earth Charter, and Green Cross. These projects have distinct ethical foundations, each of which promotes action on environmental issues. The workshop offers perspectives and tools for individuals, communities, and organizations to engage directly with energy issues. Workshop participants will become familiar with the perspectives and tools of all three projects and through a participatory activity will apply these tools to energy concerns of their choice and develop action plans for their own contexts.

### **Panel—“Justice, Morality and Futility: Environmental and Other Ethics in the Face of Potentially Tragic Environmental Problems”**

*Participants:*

Sarah Krakoff, University of Colorado Law School (“Parenting the Planet: Towards an Ethic for Human and other Natures”)  
Maxine Burkett, University of Colorado Law School (Global Environmental Reparations: Ending Dependencies in Both the Developing and Developed Worlds”)  
Douglas Kysar, Cornell Law School (“The Point of Precaution: Economics and the Forgetting of Environmental Law”)

This panel will include three papers that address the ethical bases for adopting policies that mitigate climate change notwithstanding the possibility that such actions might be futile. A common theme is the unavoidability of background values informing our decisions, even when our mechanisms for decision making appear or profess to be value neutral. Another related theme is a critical stance towards rational choice theories in particular, and their tendency to displace explicit value discussions even while they instantiate a flat and desiccated version of human valuing. The panel will be designed to invite and encourage lively engagement by audience members.

### **Panel—“Irreversibility and Environmental Damage”**

Neil A. Manson—University of Mississippi  
“Defining Environmental Irreversibility”

This paper gives a detailed analysis of the concept of environmental irreversibility. Three senses of “irreversible” are distinguished: thermodynamic,

medical, and economic. For each sense, an ontology (a realm of application) and a normative status (descriptive or evaluative) are identified. Then specific uses of “irreversible” in the literatures on sustainable development and the Precautionary Principle are analyzed. The paper concludes with reflections on the relevance of the concept of irreversibility for energy policy.

Derek Turner—Connecticut College  
“Irreversibility and Cost-Benefit Analysis”

Barry Thacker—Geo/Environmental Associates  
“Coal Procurement and Mining with the End-Product in Mind”  
Coal is still the workhorse for generating electricity and the transition away from burning coal will take generations to complete. A plan is presented to enable utilities to accelerate the transition by partnering with mining companies and landowners to build renewable energy facilities as part of the reclamation of remote mining sites. Outcrops adjacent to renewable energy structures can then be reclaimed as forestland to sequester carbon. Reclamation involves more than the land, and the plan includes steps to prepare coal-field communities for the day when mining ends.

### **Panel—Business, Ethics and Energy**

Perry Minnis—Global Director, Ethics & Compliance, Alcoa  
“Ethics and Sustainability at Alcoa: A Symbiotic Relationship”  
A symbiotic relationship between ethics and sustainability within Alcoa is rooted in the company’s values-driven approach to business and indicative of how companies today must look beyond financial performance to meet the needs of an increasingly diverse and sophisticated stakeholder base. You cannot be considered an ethical company if you do not follow sustainability principles. Nor can you apply sustainability concepts if you do not have a strong foundation of ethical principles. The two are intrinsically intertwined, and a company must have clear, unequivocal approaches to both that are integrated into the culture and monitored continuously to fulfill its financial, environmental, and social responsibilities

Truman Semans, Committee, U.S. Climate Action Partnership; formerly Director, Business Environmental Leadership Council, Pew Center on Global Climate Change  
“Profit Seeking, Value Creation, and the Public Good in Corporate Action on Climate Change”  
The presentation will consider concrete instances of corporate engagement on the climate issue from the perspective of short term financial metrics, longer term creation of value for a company and its primary stakeholders, and the broader social and environmental context. The types of corporate action discussed will include internal measures, such as emissions reduction and development of low-carbon products; business-to-business collaborations such as addressing climate impacts along a supply chain; and initiatives at the interface of business,

government, and civil society. The U.S. Climate Action Partnership (USCAP) will be a specific focus of the discussion.

**Panel—The Youth Climate Movement: Young People Taking Control of Their Future**

Panel Chair: Reagan Richmond, SPEAK, University of Tennessee

The youth climate movement is an important piece of the discussion on energy and responsibility. The work of young people across the nation displays the critical need for a just sustainable energy future. Global climate change has been imposed upon us all and increasingly on the next generation—our generation. The panel will consist of three members of the Energy Action Coalition, two co-founders and the director of the Environmental Justice and Climate Change Initiative. It will consist of three, twenty-minute presentations on the different aspects of the youth climate movement, with twenty-minute question and answer session following the presentation.

**Panel—The Legal, Environmental, Moral and Social Implications of Mountaintop Removal Strip-Mining for Coal**

*Participants:*

Dean Rivkin, The University of Tennessee Law School  
Ann League, Save Our Cumberland Mountains  
Patrick McGinley, University of West Virginia College of Law  
Rev. John Rausch, Catholic Committee on Appalachia

The panel will explore the intersections of legal, grassroots, and faith-based advocacy directed to halting the destructive practices of mountaintop removal strip-mining.

**Panel—Sustainability and Corporate Responsibility**

*Participants:*

Glen Schuler, University of Tennessee  
Anda Ray, Tennessee Valley Authority  
David Haft, Frito-Lay North America  
William Hederman, Congressional Research Service

It is clear that we need policies based on sound science, and the need to support changes in global emissions and reduced dependence on the finite fuel sources. Such policies need to consider unintended consequences of setting aggressive targets and goals without understanding the risks associated with second and third order effects of such policies, such as economic and environmental implications of the entire technology lifecycle, or its impact on other markets. The panel discussion is intended to further the development of sound policy related to

sustainable cleaner energy by discussing challenges and opportunities that should be considered as policy is developed.