Global Warming Action Kit

Volume 1



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Unitarian Universalist Ministry for Earth 1034 SW 13th Avenue Portland, OR 97205 503-595-9392 http://uuministryforearth.org/



Unitarian Universalist Ministry for Earth is an independent organization related to the Unitarian Universalist Association.

Our mission is to facilitate and support the work of Unitarian Universalists, by affirming and promoting the seven principles of the Unitarian Universalist Association, including the seventh: "to affirm and promote respect for the interdependent web of all existence of which we are all a part." We do this by focusing on the theological, spiritual, and ethical aspects of human values and activities that affect the health and sustainability of living Earth.

Our vision is that Unitarian Universalists recognize and embrace the moral imperative to live in covenant with the web of life through personal, congregational, and denominational practices.

As you use these materials, we hope that you will make an opportunity to educate yourself and others about the important mission and work of Unitarian Universalist Ministry for Earth. Please feel welcome to contact us at office@uuministryforearth.org for information about our current programs.

This resource is made possible by the generosity of individual donors and congregations. Please consider **making a donation today**. Your gift will help UU Ministry for Earth develop additional resources.

You may donate online (https://www.z2systems.com/np/clients/uuministry4earth/giftstore.jsp) or send your contribution to Unitarian Universalist Ministry for Earth, 1034 SW 13th Ave., Portland, OR 97205.

Thank you for your commitment to Earth ministry. Working together, we will transform our individual and congregational lives into acts of religious witness, discarding our harmful habits for new behaviors and practices that will sustain life on Earth.

Additional materials and resources are available on the UU Ministry for Earth website at http://www.uuministryforearth.org. You are welcome to adapt the materials in this Manual to make it as easy as possible for you to design a curriculum for your congregation. If you use or adapt the materials, please credit the original authors when applicable and reference UU Ministry for Earth in any reprints or adaptations. We encourage you to print sparingly, using recycled paper and soy ink.

In addition, we invite your participation in the UU Ministry for Earth email discussion group on global warming. To join, go to http://lists.uua.org/mailman/listinfo/globalwarming

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Introduction to the Action Kit

Global warming threatens all of life. This moral and religious crisis calls us to deepened reflection on what it means to be human as part of an interdependent community of life and to immediate action at all levels of our lives. The Global Warming Action Kit focuses on action. Here you will find tools for planting trees, documenting your current energy use, and much more.

The Action Kit is intended to interface with additional global warming resources and other UU Ministry for Earth resources that are available on the UU Ministry for Earth website: http://www.uuministryforearth.org. Please check there often for new materials. In addition, we invite your participation in the UU Ministry for Earth email discussion group on global warming. To join, go to: http://lists.uua.org/mailman/listinfo/globalwarming

NOTES:

Some URLs in the 2006 edition are not accessible in 2013. The URLs that are not currently found are shaded in the text. Links to similar websites are provided.

You may want to update the unit costs used in the Pledge Forms and the Footprint Reduction Kit.

Global Warming/Climate Change Quotes

A generous collection of quotes relating to global warming and climate change, which are useful when "just the right words" are important.

"To the reticent nations, including the United States, I would say this: there is such a thing as a global conscience, and now is the time to listen to it."

Paul Martin, former Canadian Prime Minister

"This candle will symbolize that what we suffer from is not simply a technological, economic or ecological crisis, but a spiritual crisis."

Dr. David G. Hallman, World Council of Churches (WCC) climate change program coordinator, in lighting a candle at the Montreal conference (Dec. 2005)

"What if the secret behind civilization is that we've had really good weather? Humankind has prospered and multiplied during one of the most benign climate eras in the history of the planet. One would have to go back 115,000 years to find a time as tranquil and warm as the present."

Eugene Linden, "Cloudy with A Chance of Chaos." Fortune Magazine, January 2006

"First, I worry about climate change...It's the only thing that I believe has the power to fundamentally end the march of civilization as we know it, and make a lot of the other efforts that we're making irrelevant and impossible."

Former President Bill Clinton, at Davos, Switzerland, addressing the World Economic Forum

"The U.S. must pass a market-based cap on global warming pollution as the first meaningful step to reduce our emissions and spur private sector investment in the new energy technologies the president supports."

Steve Cochran, Chairman, Environmental Defense, Campaign to Stop Global Warming

"It is clear from the work presented that the risks of climate change may well be greater than we thought. It is now plain that the emission of greenhouse gases, associated with industrialization and economic growth from a world population that has increased six-fold in 200 years, is causing global warming at a rate that is unsustainable."

Tony Blair, British Prime Minister

"We have lived by the assumption that what was good for us would be good for the world. We have been wrong. We must change our lives, so that it will be possible to live by the contrary assumption that what is good for the world will be good for us . . . for it is only on the condition of humility and reverence before the world that our species will be able to remain in it."

Paul Hawken, Amory Lovins, & L. Hunter Lovins, in Natural Capitalism

"The Great Barrier Reef has been living on this planet for 18 million years and we've undermined its existence within our lifetimes."

Brian Huse, executive director of the Coral Reef Alliance, a US-based NGO dedicated to protecting the health of coral reefs

"Historians of science will be brutal on us. We are right now in a state of deep denial about how severe the problem is. Political people are saying, 'Well, it's not on my watch.' They're ducking for cover, because who's going to tell the American people?

"We know what to do: energy conservation, gas taxes and carbon taxes, more renewable energy sources like wind and solar power, and new (and safe) nuclear power plants. But our political system is paralyzed in the face of what may be the single biggest challenge to our planet.

"Are we an intelligent species or not? Right now, the evidence is against it."

Jerry Mahlman, climate expert, National Center for Atmospheric Research

"Just as atomic weapons changed the very way we thought about life, so too the potential of major climatic changes puts life as we know it in danger.

"This is not an issue for the future: severe consequences are already being experienced by millions of people. We can prevent catastrophic climate change . . . if we find effective ways of combining the voice of the churches with others who can make a difference. We must call on all churches to speak to the world with one voice on addressing the threat of climate change."

The Rev. Samuel Kobia, General Secretary, World Council of Churches

"Our children may forgive us the debts we're passing on to them, they may forgive us if terrorism persists, they may forgive us for waging war instead of pursuing peace, they may even forgive us for squandering the opportunity to put the nuclear genie back in the bottle. But they will spit on our bones and curse our names if we pass on a world that is barely habitable when it was in our power to prevent it.

"And they will be right to do so."

John Atcheson, author

"It is now clear that we face a deepening global climate crisis that requires us to act boldly, quickly, and wisely."

Al Gore, in his film "An Inconvenient Truth"

"We've known for some time that we have to worry about the impacts of climate change on our children's and grandchildren's generations. But now we have to worry about ourselves as well."

Margaret Becket, British Secretary of State for Environment (April 2002)

"To me the question of the environment is more ominous than that of peace and war . . . I'm more worried about global warming than I am of any military conflict."

Hans Blix, U.N. Weapons Inspector, (March 14, 2003)

"The most populous and wealthiest of the world face a moral challenge greater than colonialism or slavery. They are failing in that challenge. Men have lost reason in the fossil fuel economy . . . Inhabitants of small islands have not agreed [to be] sacrificial lambs on the altar of the wealth of the rich."

Ambassador Lionel Hurst, of Antigua-Barbuda (March, 2003)

"I am only one, but still I am one. I cannot do everything, but still I can do something. And because I cannot do everything, I will not refuse to do something that I can do."

Edward Everett Hale, UUA Affirmation #457

"Our lives begin to end the day we become silent about things that matter."

Martin Luther King, Jr

"This we know.

The earth does not belong to man:

Man belongs to the earth . . .

All things are connected,

Like the blood that unites one family . . .

Man did not weave the web of life.

He is merely a strand in it.

Whatever he does to his web

He does to himself."

Attributed to Chief Noah Seattle

"As the effects of global warming become more and more difficult to ignore, will we react by finally fashioning a global response? Or will we retreat into even narrower and more destructive forms of self-interest? It may seem impossible to imagine that a technologically advanced society could choose, in essence, to destroy itself, but that is what we are now in the process of doing."

Elizabeth Kolbert, Field Notes from a Catastrophe: Man, Nature, and Climate Change.

"It's frustrating for us to see our parents' generation making irresponsible decisions about our future and so I think we have an opportunity to organize and sort of be a conscience for our decision-makers."

Billy Parish, Energy Action Coordinator, nationwide college program: www.campusclimatechallenge.org

"Insurers must do more to understand the implications of climate change on their businesses or risk going out of business. Recent scientific evidence on the buildup of greenhouse gases has shown that some degree of climate change is now inevitable and could actually happen faster than was previously expected. The insurance industry must start actively adapting in response to greenhouse gas trends if it is to survive. Understanding and responding to it must become 'business as usual' for insurers and those they work with."

Lloyd's of London report: (May, 2006)

"What we eat affects not only our health but also our environment. Organic farms worldwide use 50 percent less petroleum-derived fuel and inputs than conventional farms. We need to begin today to vote with our knives and forks to improve our health, and to stabilize the climate for our children and step."

Ronnie Cummins, national director of the Organic Consumers Association (June, 2006)

"It is essential that the U.S. curb the release of harmful global warming emissions, but we have now reached another point as well. We must begin to prepare for the increasing threat of disasters driven by global warming, even as we grapple with the policy debate over how to manage carbon emissions."

Bracken Hendricks, Center for American Progress, (June 2006).

"Is there a company more dangerous to America's future than General Motors? Surely, the sooner this company gets taken over by Toyota, the better off our country will be."

Thomas Friedman, the New York Times: (May 31, 2006)

"It is a form of oil extraction where the intensity of environmental impacts is at an order of magnitude greater than any other form of oil extraction we have seen on the planet."

Dan Woynillowicz, environmental policy analyst, relative to oil sands

"Climate-change denial has gone through four stages. First the fossil-fuel lobbyists told us that global warming was a myth. Then they agreed that it was happening, but insisted that it was a good thing: we could grow wine in the Pennines and take Mediterranean holidays in Skegness. Then they admitted that the bad effects outweighed the good ones, but claimed that climate change would cost more to tackle than to tolerate. Now they have reached Stage Four. They concede that climate change would be cheaper to address than to neglect, but maintain that it's now too late. This is their most persuasive argument."

George Monbiot, The Guardian UK, on four stages of global warming denial

"Economic progress is upsetting the whole balance of nature. You know, if you look at the latest figures on climate change and global warming . . . they're terrifying, terrifying.

England's Prince Charles, CBS's "60 Minutes" (10.30.05)

"If we don't get a serious program in place for the long term in this post-Kyoto phase, we will simply not make it. We will be crossing limits which will basically produce impacts that are unacceptable. Such is the nature of global warming that the problem is always further along than it seems. The kinds of changes that are now becoming evident -- the rise in sea levels, the thawing of permafrost, the acidification of the oceans, the acceleration of ice streams -- mean that much larger changes are rapidly approaching. To continue to delay is not to put off catastrophe but, rather, to rush toward it."

Michael Oppenheimer, climate scientist, Princeton University

"Two issues are quite clear: the threat of climate change is real and potentially disastrous; and current policies to tackle it are not working. To get effective action we need to suspend normal politics, find agreement wherever possible, and commit to robust long-term policies which can

survive electoral cycles . . . of course we will not always agree on the details, but we owe it to our children, and to generations to come, to agree on the direction we need to take."

Peter Ainsworth, British Shadow Environment Secretary

"Of all the defects in Mr. Bush's State of the Union energy presentation, the greatest was his unwillingness to address global warming - an energy-related emergency every bit as critical as our reliance on foreign oil. Except for a few academics on retainer at the more backward energy companies, virtually no educated scientist disputes that the earth has grown warmer over the last few decades.

New York Times, editorial on 2006 State of the Union address

"There are many countries that have put their signature on the dotted line of Kyoto but aren't meeting its goals . . . the planet does not belong to those in power. We ought to embrace the Kyoto protocol in our own little way. It's the little things that we can do that are important."

Wangari Maathai, 2004 Nobel Peace Prize laureate & Kenyan environmentalist

"If we take action now we can still avoid the worst impacts of climate change by investing in clean renewable technology and energy efficiency. The attempts by government and business to reduce emissions have lacked ambition and there hasn't been the effort put in that is needed."

Tony Juniper, director, Friends of the Earth:

"This is really not a political issue, it is disguised as a political issue. It is a moral issue, it is an ethical issue. If we allow this to happen, we will destroy the habitability of the planet. We can't do that, and I am confident we won't do that. We have been blind to the fact that the human species is now having a crushing impact on the ecological system of the planet."

Al Gore

"Many conservative politicians and pundits seem to agree with [Sen.] James Inhofe, the chairman of the Senate Committee on Environment and Public Works, who has declared that 'man-made global warming is the greatest hoax ever perpetrated on the American people."

Paul Krugman, the New York Times (5.7.06)

"I am of the opinion that this is one of the greatest hoaxes ever perpetrated on the American people."

Prof. Bill Gray, director, National Hurricane Center in Washington Post, June 2006.

"Ours are the most fortunate generations that have ever lived. Ours are the most fortunate generations that ever will. We inhabit the brief historical interlude between ecological constraint and ecological catastrophe.

"I don't have to remind you of the two forces which are converging on our lives. We are faced with an impending shortage of the source of energy that is hardest to replace - liquid fossil fuels. And we are faced with the environmental consequences of the fossil fuel burning which has permitted us to be standing here now . . . all this is a great tottering pile balanced on a ball, a ball that is about to start rolling downhill.

"The struggle against climate change is a struggle against much of what we have become. It is a struggle against some of our most fundamental urges. We cannot call on others to stop flying if we still fly. We cannot ask the government to force us to change if we are not ready to change. The greatest fight of our lives will be fought not just out there, but also in here."

George Monbiot, excerpt from speech to the London Climate March, December 3rd, 2005

"We must find ways to live with nature in some kind of balance. The government mainly wants to control nature, which is what did all the harm in the first place."

Chai Erhong, Chinese environmentalist, on the spread of deserts in China. (6.8.06)

"When we see what others are doing to change the world, when we affirm each others longing for a healthier future, when we join hands to work together to make a difference, we are choosing hope instead of despair."

Rev. Katherine Jesch, UU Ministry for Earth

"If we continue to believe as we have always believed, we will continue to act as we have always acted. If we continue to act as we have always acted, we will continue to get what we have always gotten."

John Adams, Thinking Today as if Tomorrow Mattered: The Rise of Sustainable Consciousness, p. 93.

"No problem can be solved from the same consciousness that created it. We must learn to see the world anew."

Margaret Wheatley, Leadership and the New Science: Learning About Organization

"Any great change must expect opposition because it shakes the very foundation of privilege."

Lucretia Coffin Mott, 1793-1880, minister, women's rights leader, abolitionist, peace activist, humanitarian

"The future is created by the stories we tell about who we are and where we are going."

Betty Sue Flowers, Natural Step Annual Conference, Atlanta, October 6, 2000

"We must draw our standards from the natural world. We must honor with the humility of the wise the bounds of that natural world and the mystery which lies beyond them, admitting that there is something in the order of being which evidently exceeds all our competence."

Vaclav Havel, President of the Czech Republic

"Our human responsibility as one voice among so many throughout the universe is to develop our capacities to listen as incessantly as the hovering hydrogen atoms, as profoundly as our primal ancestors and their faithful descendants in today's indigenous peoples. The adventure of the universe depends upon our capacity to listen."

Brian Swimme & Thomas Berry, The Universe Story

"You must be the change you wish to see in the world."

Gandhi

"We cannot obliterate the continuities of history, nor can we move into the future without guidance from existing cultural forms. Yet, somehow we must reach even further back, to where our human genetic coding connects with the other species codings of the larger Earth community. Only then can we overcome the limitations of the anthropocentrism that binds us."

Thomas Berry in The Great Work

"Peace will not come out of clash of arms, but out of justice lived."

Gandhi

"Socialism collapsed because it did not allow prices to tell the economic truth. Capitalism will collapse because it does not allow prices to tell the ecological truth."

Øystein Dahle, retired vice president of Esso. Norway and the North Sea

"Terrorism, war, economic and political power, religious and racial intolerance are not the driving forces of the universe. They are the patterns of people out of touch with who they are, patterns defined by centuries of living in a world that does not recognize its unity with the Creator and the awesome wonder of creation."

Andy Smith in "Connections"

"What's the use of a house if you haven't got a tolerable planet to put it on?"

Henry David Thoreau

"The first day or so we all pointed to our countries. The third or fourth day we were pointing to our continents. By the fifth day we were aware of only one Earth."

Sultan Bin Salman al-Saud, astronaut from The Kingdom of Saudi Arabia

"... we were made for something cosmic and will not fit peacefully into anything much smaller. And when we try to build our lives around anything much smaller than cosmos we become grotesque, and our institutions, be they religious or familial or educational or governmental are asked to do too much. They become misshapen and malformed and turn into instruments of cosmic and personal destruction."

Matthew Fox in Original Blessing

"A civilization built on dualism and war within and between persons, one that puts its most creative minds and its best engineers to sadistic work building more and more destructive weapons, is no civilization at all. It needs a radical transformation from the heart outwards. It needs to outgrow and outlaw war just as in the last century it outlawed slavery. The human race has outgrown war, but it hardly knows it yet."

Matthew Fox in Original Blessing

"No matter how far down the wrong path you have gone – turn back!"

An ancient Chinese philosopher

"The world is not going to survive very much longer as humanity's captive."

Daniel Quinn, Ishmael

"As long as the earth endures, seedtime and harvest, cold and heat, summer and winter, day and night, shall not cease."

Genesis 8:22

"We are about half a century away from being ecologically and economically bankrupt because of global warming."

Andrew Simms, quoted in "Demand for 'Kyoto tax' on the US," BBC News, 6 Dec 03

"Absent the rapid mobilization of climate advocates at every level -- and the pooling of all their energy, creativity, and resources into a coordinated, no-holds-barred campaign -- we will soon be crossing the threshold into climate hell."

Ross Gelbspan, Grist Magazine, 31 Jul 2002

"Everybody talks about the weather, but nobody does anything about it."

Attributed to Mark Twain (1835–1910)

"The IPCC (Intergovernmental Panel on Climate Change, a group of more than 2,500 scientists) has provided the world community with first class assessments of the soaring temperatures the world is facing, the devastating impacts of these rises and the ways in which we can try and avoid the worst effects of global warming. We now know climate change is real and the hand of humankind in this warming is becoming clearer and clearer."

Klaus Toepfer, executive director of the United Nations Environment Programme (UNEP), Environment News Service 2 Apr 01

"We have coastal erosion, droughts, and in the last decade we have also experienced an unusually high level of tropical cyclones. Salt-water intrusion is becoming a problem, and this has affected our traditional food crops. Perhaps the most pronounced effect of climate change that we are actually seeing is the flooding of low-lying areas. A couple of decades ago the flooding was not so bad as last year's, and to us living on the atolls, this is an increasing sign of the times... By refusing to ratify the protocol the US has effectively denied future generations of Tuvaluans their fundamental freedom to live where our ancestors have lived for thousands of years."

Paani Laupepa, assistant secretary of Ministry of Natural Resources, Energy and Environment, for island nation of Tuvalu

Response to Global Warming: 1-2-3 Pledge

This program represents a simple-but-effective method for personally beginning to reduce greenhouse gas emissions. UU Ministry for Earth thanks the original authors at First Unitarian Church, Portland, OR for the Q&A, the Pledge Form, and the action tips.

Questions and Answers about Global Warming

There's good news and there's bad news.

The bad news is that global warming is happening right now, it's getting worse and its effects are a threat to our very existence as we know it. The earth we will leave for future generations and ourselves is in jeopardy.

The good news is that we can do something to lessen the damages, *if we take significant action now.*

Unitarian Universalists, like members of every major religion, are treating this subject as more than a scientific question. This is a religious issue. Whether you believe in God, Creation, Nature, or other spiritual force, the sanctity and sustainability of the planet is a concern for people of all faiths.

We are, often unknowingly, desecrating our world through our individual and institutional actions. It is as if we, as passengers on a spaceship, are cutting off our own life support systems.

Q. What is global warming?

A. Gases in the earth's atmosphere hold heat from the sun close to the surface, allowing life to exist. This is the "greenhouse effect," normally a beneficial, stable phenomenon. However, human-induced activity has released enormous quantities of some of these gases since the Industrial Revolution, leading to an unbalanced, unnatural global warming – the greenhouse effect out of control.

Q. What causes it?

A. Carbon dioxide, produced primarily by the burning of coal, gasoline, natural gas and oil, is the main culprit. Methane, nitrous oxide and halocarbons also play a role. In Oregon, 81% of CO 2 emissions are from driving cars and trucks, burning of natural gas in homes and businesses, and generating electricity.

The other main human-caused factor is cutting down trees, which absorb carbon dioxide. The loss of old growth and mature second-growth forests is particularly devastating.

Q. How much warming is there?

A. In the last century, average temperatures worldwide have increased about 1 degree F. It may not sound like much, but small differences in temperature can make huge differences in habitability of the planet. The decade of the 1990's was the hottest in the past 1,000 years. The latest estimates are that the temperature will increase another **2 to 11 degrees by 2100**.

Q. Isn't it part of a cyclical pattern?

A. There are cyclical temperature patterns of warming and cooling. However, temperature increases of this magnitude are far beyond natural cyclical patterns and are primarily human-induced.

Q. Isn't there a debate about whether human-caused global warming even exists?

A. There may have been a real debate 20 years ago, but no longer. The most authoritative source is the Intergovernmental Panel on Climate Change (IPCC), which consists of over 2,000 leading scientists from all over the world. They have concluded that human-induced global warming is a

threat to the earth's delicate balance of ecosystems. Moreover, their 2000 report predicted warming potentially much greater than their 1995 report.

Other groups that have determined that global warming is real and a threat are the U.S. Environmental Protection Agency, National Oceanic and Atmospheric Administration, Union of Concerned Scientists, Environmental Defense Fund, World Health Organization, Sierra Club, National Council of Churches, and many more.

Businesses also recognize the magnitude of the situation. The CEOs of the world's 1,000 largest corporations voted climate change *the most urgent problem facing humanity* at the World Economic Forum in Davos, Switzerland in February 2000.

Of course, there are a few skeptics and they seem to get a disproportionate share of media time and space. But the evidence is overwhelming that what is happening is more than a natural cycle and that human behavior is a major cause.

Q. OK, so what if global warming is real? What's the problem?

A. Here's where it gets really scary. This is what's happened already and expected to worsen:

- · Glaciers and polar ice caps are melting.
- Ocean water is warming, killing coral and many species of fish.
- Ocean levels are rising, threatening coastal areas of such countries as the Netherlands,
 Bangladesh and Egypt. Many Pacific island nations are in danger of disappearing entirely.
- · Weather is becoming more unpredictable, with hurricanes, floods and droughts intensified.
- Disease-causing insects are migrating into latitudes and altitudes never before infested, including the U.S. There are an estimated 60 million more cases of malaria every year.

Synergistic effects are particularly unsettling. For instance, as more ice melts, less sunlight is reflected into the atmosphere, warming the earth even more. Although scientists can say with certainty that we're getting warmer, no one can say that it will happen gradually or at what rate. *There could be a dramatic shift occurring over as short a time as 5-10 years.*

Q. Will individual actions, even on a scale much wider than our church, be enough to make a difference?

A. They're a major part of the solution. Social change almost never starts with government—there must be a grass roots effort to both educate the public and encourage action. It will take **both** individual and institutional actions to work our way out of this crisis. One institution, our church, will become a "Green Sanctuary," a model for environmental action.

Q. What can I do?

A. Simply reduce the amount of fossil fuels you burn. By committing to the pledge, each household can reduce the carbon dioxide it generates by **over 1,300 pounds a year** and save nearly \$100 per year.

To start, it's as easy as 1-2-3!

NOTE: To print the form, print the next two pages back-to-back to use as a handout for households to complete. You can keep a tally of the completed forms and publicize the results.

You can print the Action Tips pages as a poster or (double-sided) as a handout.

Response to Global Warming Pledge Form

Q. Why Global Warming?

A. Of all the environmental threats to our existence and the lives of other species, global warming ranks as possibly the most devastating of all. A threat to one species is a threat to all, and global warming has the potential to seriously disrupt ecosystems everywhere. In fact, it has already started.

Q. Why Unitarian Universalists?

A. We are a religious community, a congregation that views gifts from the earth as far more than natural resources to be exploited. Our Seventh Principle is the "respect for the interdependent web of all existence of which we are a part."

We aren't alone. More than 4000 congregations across the United States are showing "An Inconvenient Truth" as part of the "Spotlight on Global Warming," an initiative of Interfaith Power and Light.

Q. Why a Green Sanctuary?

A. Our congregation has a history of courageous leadership in social action. By taking every measure possible to make our building and all activities in it environmentally conscious, we will visibly demonstrate our commitment. Our church

will accept its responsibility and "practice what we preach."

Q. Why individual action?

A. All major social movements, from the anti-slavery crusade to women's suffrage to desegregation, started at a grassroots level. Although government and corporate action is a necessity, individuals must take action themselves to lead the way for institutions.

Q. Why now?

A. Experts have been warning us for over 10 years to take immediate action to reduce consumption of fossil fuels.

Although there has been some activity, we have mainly ignored this serious problem. We're running out of time before changes become irreversible.

Q. Why us?

A. If ever there was a time to extend the Golden Rule to future generations, this is it. Moreover, we have a stewardship role to play for ALL species of the planet. The beauty of the earth and its capacity to sustain life hinges upon what we do at this critical juncture in our history. We have the intelligence, knowledge and capability to act responsibly. All we need is the will.

	Response to Global warming: 1-2-3 Pleage form
The	household (Email:
Signed:	
I/We ple	dge to do the following:
	1. \square Reduce the thermostat setting at home by 1 degree (or by degrees) during the heating season. <i>If you have air conditioning, increase the setting by 1 degree during the cooling season.</i>
	2. \square Reduce driving speed by 2 miles per hour (or by m.p.h.) from the speed I/we normally drive.
	3. \square Replace 3 incandescent light bulbs with LED or compact fluorescent bulbs in extensively used lighting fixtures at home.

The 1-2-3 Program

Q. Why 1 degree lower?

A. For every degree lower you set your thermostat in the heating season, you reduce fuel consumption by 3%. Many people will never even notice a difference. For others, simply putting on a warm long-sleeve shirt or sweater will more than restore your comfort level. If you have air conditioning, each degree higher in the cooling season saves 5% in energy use.

Q. Why 2 miles per hour slower?

A. For every mile per hour slower at highway speeds, you reduce fuel consumption by $1\frac{1}{2} - 2\%$. If you're worried about lost time or being late, consider this: Driving 2 m.p.h. faster will save you less than

4 minutes in a 100 mile trip. Isn't saving our environment worth a few extra minutes?

Why 3 compact fluorescent bulbs?

A. Compact fluorescent bulbs (CFLs) last up to 10 times as long as regular incandescent bulbs and use only one fourth as much energy for the same amount of light. They screw in just like regular bulbs, don't flicker and produce a "soft light" comparable to a regular bulb. They last so much longer and save so much in electricity that they pay for themselves quickly.

LEDs save even more energy than CFLs.

Sources: U.S. Environmental Protection Agency, Environmental Defense Fund, Union of Concerned Scientists, The Official Earth Day Guide to Planet Repair.

By pledging through the 1-2-3 program, you can help save our environment and save money at the same time:

Average Yearly Household Savings

1 DEGREE
330 Lbs. CO2

² MPH 390 Lbs. CO2

3 CFLs 600 Lbs. CO2

These 3 actions will also save you nearly \$100 per year.

1-2-3!



Response to Global Warming: Action Tips

Would you like to take steps beyond your 1-2-3 Pledge to counteract global warming? Here are more things you can do to make an even bigger difference in protecting our environment:

Transportation

- If you must drive, these are essential tips that can benefit everyone. By taking these actions, you will be amazed at how much money you can save and how many hundreds (or thousands) of pounds of carbon dioxide you can avoid releasing into the atmosphere over a year's driving:
 - a. Slow down even more when driving at high speeds (the difference between driving at 75 mph and 55 mph is <u>20-30</u> per cent savings in gasoline use).
 - b. Avoid jackrabbit starts and sudden stops.
 - c. Check your tires once a month to make sure they're properly inflated.
 - d. Combine several errands in one trip.
 - e. Keep your car well tuned and change oil regularly.
 - f. Don't carry any excess weight in your vehicle every extra 100 lbs. costs you 1% fuel efficiency.
- 2. If you STILL must drive:
 - a. Car pool to work! Ask your employer to assist with a carpooling program, or organize co-workers to share in driving. Check out online resources for carpooling including www.rideshare.us and www.carpoolconnect.com.
 - Car pool for other activities, especially taking kids to school activities, attending church and social outings and running errands or shopping.
 - c. Try to arrange at your job that you can work from home one day per week.

- d. Buy a car that gets at least 30 miles per gallon, combined city/highway (the new Toyota Prius and Honda Insight, both gas/electric hybrids, get over 50 mpg).
- 3. BEST IDEA DON'T DRIVE: These actions save by far the most money for you and the most carbon dioxide released into the atmosphere:
 - a. Learn about and use public transportation options. Tired of fighting rush hour traffic? You don't know how relaxing a commute can be sit back, read the paper, take a little snooze and smile about how much you're not spending for gasoline, parking and maintenance.
 - Bike or walk Great exercise, free or little cost, absolutely no pollutants created.



Home

- Set your hot water heater no higher than 120 degrees. For every 10 degrees lower, you save about 13% on your water heating energy bill.
- 2. Wrap your hot water heater in an insulating jacket.
- 3. Install a high-efficiency showerhead. This can save up to 50% of water heated.
- 4. Wash only full loads in your dishwasher.
- Reduce paper and save trees from being cut:
 - Use both sides of a piece of paper before recycling.
 - Buy canvass bags and use each time you go grocery shopping.
 - Use cloth napkins instead of paper.
- 6. Making aluminum requires enormous amounts of electricity. Use glass containers whenever possible. If you must use aluminum, always recycle.
- 7. When buying a new appliance, look for the Energy Star label. For more information, call 888-STAR-YES or check the website at www.energystar.gov.
- 8. Turn down your thermostat to your overnight temperature a half-hour before you go to bed most likely, you'll never notice a difference.
- 9. Turn down your thermostat to your overnight temperature whenever you leave your home.
- Insulate! Caulking, weather-stripping and adding insulation to your attic and walls are excellent ways to keep cold air from entering your home.
- 11. When you're not in a room, simply <u>turn off</u> <u>the lights!</u> (Many of us can still hear our fathers asking us if we own stock in the electric company.)
- 12. If you're not using your computer monitor for more than 5-10 minutes, turn it off – it uses as much electricity as a 60-watt bulb. Turn off your computer completely if you won't be using it for a few hours or more.

- Buy blocks of renewable energy from your local power company

 they can help support development of non-polluting sources of electricity.
- 14. Volunteer to help make your church a Green Sanctuary – an environmentally friendly program and building that will take a leadership role in promoting sustainable practices.
- 15. And Two More That You Might Never Have Considered:
 - a. Eat less meat. Cows and pigs produce an enormous amount of methane gas, second only to carbon dioxide in causing global warming.
 - b. Buy locally grown and locally produced food as much as possible and support local farmers. The food we buy travels an average of 1200 miles to reach us. The amount of fossil fuel burned to bring it to us is astronomical.



The 10 Tree Challenge

UU Spirituality Down to Earth, Reaching toward the heavens

Here is a simple project that your congregation will really **dig**. In true UU style, it is up to the individual congregation how to implement this effort. You can do it politically or spiritually, with fanfare or simplicity. This is a proven plan for restoring and/or establishing green areas of our carbon dioxide-devouring friends: trees. It is applicable for all ages.

Population growth and urban sprawl have resulted in tremendous tree loss, and cumulative harmful effects upon our environment. Join us in and lead the way to reverse the trend and replenish our planet's tree population. If every UU congregations plants 10 trees, the result will be 10,500 new trees. Most churches could easily plant and adopt 10 trees every year. Trees heal our environment in many ways. They slow global warming, improve air quality, and provide shade, beauty, and much-needed infrastructure for wildlife.

This project began at the Community UU Church (CUUC) in San Antonio, Texas. CUUC's goal is to get 100 local groups to plant and adopt 1000 trees in 2006. As of 2006, over 60 groups participated and 300 trees have been donated. Boy Scouts and Girl Scouts, neighborhood associations, and political and service organizations have planted trees in parks, schoolyards, and private property.

Participation is easy. Here' how it goes:

- 1. ONE PERSON (it could be you) asks your congregation, or particular committee (RE, social action, etc.) to participate and accept the 10 Tree Challenge.
- 2. PUBLICIZE THE PROJECT. Write an article for your newsletter (and local newspaper). With a little information, you will be ready to help this project to take root in your congregation.
- 3. GET OFFICIAL ENDORSEMENT. A church committee or board of directors votes to endorse and support "the 10 Tree Challenge." This vote means that your group commits to planting 10 native or non-invasive trees this year. Members of your group adopt the trees and water them until they are established. A little web search will yield you a list of trees best suited for your region.
- 4. GET OTHER PEOPLE to sign up at your next meeting. It usually works well if there is at least 1 person adopting each tree, but you can structure your project in whatever way suits you best. Choose a person as Project Coordinator or committee chair.
- 5. MAKE PLANS TO GET YOUR TREES. Small trees can be found easily for free or little cost. If you want to plant larger trees, you will need to raise a little money or find a nursery to donate. This is not as hard as you might think, especially if you are planting trees as community service. There will many people in your congregation that will be happy to donate a tree or contribute to a tree fund. Do some research to identify trees that are native to your area or are highly adapted (for example, low water requirements).

- 6. KEEP YOUR CONGREGATION AND THE PRESS INFORMED OF YOUR PLANS especially if you are planning a tree planting ceremony. Tree planting is excellent public relations.
- 7. PLANT THE TREES. This is where your creativity can come in. There are many ways to accomplish your goal memorials, demonstrations, educational or youth action events, tree planting ceremonies. Trees may be planted wherever it's legal; on church property, on members' properties, or as community service in a park, inner-city neighborhood, in yards elderly or disabled people, or on a school yard with permission.
- 8. Members adopt individual trees, WATER AND CARE FOR THE TREES UNTIL THEY ARE WELL ESTABLISHED. The roots of newly planted trees must be kept relatively moist. .
- 9. CELEBRATE and acknowledge the efforts of your tree planters and of our national efforts.
- 10. If you want to help take this project a big step further, you can organize churches, neighborhood associations and many other organizations to follow your lead.

UU Ministry for Earth recognizes Rev. Phil Schulman for developing and promoting this program. The 10 Tree Challenge can be used as a project for the UUA's Green Sanctuary program. This program is "up for adoption," as described on the GS blog:

http://greensanctuary.blogs.uua.org/resources/up-for-adoption-the-10-tree-challenge/



The 20% Footprint Reduction Kit

Introduction

The tools in this kit will enable you to educate members of your congregation about how much energy and fossil fuel they are actually using and about how much their energy habits are costing—good first steps in reducing energy footprints. These materials have been adapted from materials originally developed by the Environmental Sustainability Committee of the UU Congregation of the Upper Valley in Norwich, VT.

How Much Does It Cost to Drive My Car?



Vehicle costs fall into three categories: operating costs, ownership costs, and costs to the community and the environment.

Operating and Ownership Cost

Use this worksheet to figure the operation and ownership cost of your car. Record your results on the dashboard reminder card and place one in each of your vehicles as a gentle reminder to drive less.

1.	FUEL COST. Fill the gas tank. Divide the cost of filling the tank by the miles	
	driven before the next fill-up. Do this for several tanks of gas and average the	
	results. This will give you the fuel cost to drive a mile. [Note, the national	
	average MPG for cars is (21.4), SUVs (17.)]	
2.	DEPRECIATION COST. Subtract the likely resale or trade-in price of your car	
	from the price you paid for it. Divide by the number of miles you are likely to	
	drive it. This will give you an approximate depreciation cost per mile. (The	
	farther you drive the car, the lower this cost. If you like numbers, work out the	
	factors for inflation, loan costs, etc.).	
3.	REPAIR/MAINTENANCE COSTS. Add up your maintenance and repair costs for	
	the past year or two. Divide by total mileage during that time. This will give you	
	cost per mile. (Try estimating the next few years, as costs probably will go up	
	with age of the car. More miles driven now will bring your higher future costs	
	sooner.).	
4.	REGISTRATION AND INSURANCE. You pay these whether you drive or not, so	
	another mile doesn't raise these costs, though insurance rates may be higher if	
	you drive more miles.	
5.	FINANCE CHARGES. Note interest charges if you borrowed money to buy the	
	vehicle.	
6.	TOTAL OPERATING AND OWNERSHIP COST. Combine the per-mile costs	
	from #1-5. This tells you what it costs to drive the car a mile.	

Community Costs

None of the above figures factor in the environmental, health, or social costs of owning a car. According to the U.S. Environmental Protection Agency, the numbers of cars and trucks on the road and the miles they are driven have doubled in the last 20 years. The EPA estimates that vehicles are now driven two trillion miles each year in the United States, with the national average 11,904 miles per vehicle. Each of these automobiles has a heavy impact on the Earth including:

Air Pollution

According to the Federal Highway Administration Transportation Air Quality: Selected Facts and Figures 2002, burning gasoline emits pollutants into the air we breathe including:

- 34% Oxides of Nitrogen, the precursor to ground-level ozone (smog), which damages the respiratory system and injures plants
- 51% Carbon Monoxide (CO)
- 33% of Carbon Dioxide (CO2), a primary contributor to global warming

Water and Soil Contamination

Oil and other automotive fluids contaminate water and soil, and large tracts of land are lost as they are covered with asphalt to make roads and parking lots.

- A 1996 EPA survey of 693,905 river miles estimated that urban runoff was the leading source of impairment for 13% of the river miles that were impaired.
- One quart of motor oil can contaminate a million gallons of fresh water. The US EPA estimates 13.4% of used motor oil is illegally dumped, while another 10.1% is landfilled.

Land Use

Cars require a lot of space. In urban areas, road surfaces cover about 1/5 of all available land. Rural roads in 1997 covered an estimated 13,363 square miles of land, an area larger the state of Maryland. Urban roads covered an additional 4,012 square miles, an area larger than Delaware.

Solid Waste

Over 11 million automobiles were scrapped in 1996. About 75% of the scrapped material was recycled, while the remaining 25% was landfilled. In that same year, an estimated 266 million tires were scrapped, 76% of which was recovered and recycled, used as fuel, or exported to other countries. The 63 million tires that were not recovered were presumably dumped, adding to the approximately 800 million tires currently stockpiled in dumps around the country.

Effects on Wildlife

It is estimated motor vehicles kill over a million animals in collisions every day in the US.

Aug. 1, 2002, article in the Wall St. Journal, "In the Headlights: As Man and Beast Clash on Highways, Both Sides Lose" by James P. Sterba

NOTE: Most of the data for this page came from two US Environmental Protection Agency reports, *Indicators of the Environmental Impacts of Transportation: Highway, Rail, Aviation, and Maritime Transport* and *Indicators of the Environmental Impacts of Transportation: Updated Second Edition.*

Reduce Your Transportation Footprint



Take the UU Ministry for Earth 20% Challenge! Use this chart to calculate your miles driven and gallons of gas consumed. Adopt conservation measures and try to reduce your consumption by 20 % in the coming year.

Month	Starting mileage	Ending mileage	Total miles/ month	Gal gas	Gal gas	Gal gas	Gal gas	Gal gas	Total Gas
JAN									
FEB									
MAR									
APR									
MAY									
JUNE									
JULY									
AUG									
SEPT									
ОСТ									
NOV									
DEC									
Annual Total									
To calcu	late your	car's miles	s per gallo	on (mpg):	_1	_1	_1	<u> </u>	1
		S			= mile	eage per m	onth	divided	by total

To calculate your car's i	miles per gallon (mpg):			
Ending mileage gallons=	Starting mileage _MPG.	_ = mileage per m	onth	divided by total
To calculate your carbon lbs. CO2.	footprint for driving your ca	r, multiply the annu	ual total gallons	s of gas by 19.5
Your CO2 Driving Footpri	nt = Annual Total gallo	ons of gas	_ x 19.5 =	lbs. CO2

Reduce Your Electricity Footprint



Take the UU Ministry for Earth 20% Challenge! Use this chart to record your monthly use and cost of electricity, beginning with last year's amounts if utility bills are available. Adopt conservation measures and try to reduce your usage by 20% or more from last year.

		Last Year			This Year			Next Year	
Manth	IZVAZ	Last rear			IIIIS TEAT	•	IZVAZ	INEXT LEGI	•
Month	KW hours	KWh/day	\$	KW hours	KWh/day	\$	KW hours	KWh/day	\$
JAN									
FEB									
MAR									
APR									
MAY									
JUNE									
JULY									
AUG									
SEPT									
ОСТ									
NOV									
DEC									
JAN									
ANNUAL TOTAL									

To calculate the carbon footprint of your electricity usage, multiply your annual total KWh by one of the following factors, depending on the primary source of your electricity generation:

- 2 lbs./KWh CO2 if coal-generated
- 0 lbs./KWh CO2 if hydropower
- 1.7 lbs./KWh CO2 if oil
- 1.25 lbs./KWh CO2 if natural gas
- 0 lbs./KWh CO2 if solar, wind, or nuclear

Your CO2 Footprint =	Annual Total KWhs	X I	bs. CO2/KWh =	

Reduce Your Heating Footprint



Take the UU Ministry for Earth 20% Challenge! Use this chart to record your monthly use and cost of heating fuel, beginning with last year's amounts if fuel bills are available. Adopt conservation measures and try to reduce your usage by 20% or more from last year.

		Last Year		This Year		Next Year	
Month	Gal/CFF/ Therm	Amt/day	\$ Gal/CFF/ Therm	Amt/day	\$ Gal/CFF/ Therm	Amt/day	\$
JAN							
FEB							
MAR							
APR							
MAY							
JUNE							
JULY							
AUG							
SEPT							
ОСТ							
NOV							
DEC							
JAN							
ANNUAL TOTAL							

To calculate the carbon footprint of your heating fuel, multiply your annual total by one of the following factors, depending on the primary fuel source:

Natural gas = 12.0593 lbs. of CO2/CCF or 11.708 lbs. of CO2/Therm	
Oil = 22.384 lbs. of CO2/Gallon,	
Propane = 12.669 lbs. of CO2/Gallon.	
Your CO2 Heating Footprint = Annual Total Gal/CCF/Therm Xlbs. CO2/unit =	

Offsetting Your Carbon Emissions

Build renewable energy resources by offsetting your carbon emissions via The UU Ministry for Earth partnership with CARBONFUND. Use the form in this kit or submit your donation online at http://www.carbonfund.org. Please use UUMFE as your referral.

UU Ministry for Earth Clean Power Pledge



Introduction

The Clean Power Pledge can be used in numerous ways. Used in conjunction with the **20% Footprint Reduction Toolkit**, this is one way for individuals and congregations to take action immediately while they undertake their commitment to reduce energy consumption.

In many states, consumers have the option of choosing green electricity from their utility; so in those states consumers may simply make sure that they contact their utility and choose this option. In other states, this is not possible. Therefore, many individuals, organizations, and businesses are choosing green tags or renewable energy certificates from certified renewable resource providers as an alternative.

In 2006, UU Ministry for Earth began a partnership with one such provider, Carbonfund.org. When UUs choose to offset the carbon produced by their present energy consumption or to purchase renewable energy certificates from Carbonfund.org, a small portion of the donation amount is transferred to UU Ministry for Earth to advance our programs. To learn more about this partnership, please see Carbon **Offsets and Green Power.**

If you use this pledge as a congregational project, please email Office@uuministryforearth.org and share the results. We will maintain a tally of UUs taking the pledge!

Note: You can make copies of the following page, cut in half, and hand out to your congregation to complete and return.



UU Ministry for Earth CLEAN POWER PLEDGE CARD

As a Unitarian Universalist concerned about reducing my contribution to global warming, I choose to not use my energy dollars for polluting fossil fuel. Instead, I pledge to be more efficient in my use of electricity, and, when offered the opportunity, I intend to purchase affordably priced clean power from certified renewable resource providers or to purchase affordably priced green tags (renewable energy certificates) to support the generation of clean power by certified renewable resource providers.

Name(s):		
Congregation:	Date:	
When you choose CARBONFUND.ORG as	your provider of green tags, a small portion of your donation supports work of UU Ministry for Earth.	the



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When you choose CARBONFUND.ORG as your provider of green tags, a small portion of your donation supports the work of UU Ministry for Earth.

Carbon Offsets and Green Power





UUMFE/Carbonfund Partnership Offers Unitarian Universalists a Simple and Effective Way to Address Global Warming

Global Warming

Global warming is the changing of the global climate due to the build-up of carbon dioxide emissions from burning fossil fuels. UUMFE believes that global warming is an urgent moral crisis that demands unprecedented changes in how we live our lives, while recognizing the reality that most of us cannot immediately give up our cars, remodel our homes with alternative energy options for heat and electricity, or avoid some air travel. As we work hard to change our behaviors and to move our society as rapidly as possible towards sustainable solutions, what can we begin to do right now?

We Can Reduce Our Carbon Footprints

By calculating how much carbon is produced in our daily activities and offsetting that carbon with dollars that can be used to support the development of renewable energy sources, we can build positive change. We are all responsible for climate change when we use electricity from coal plants to power our homes, gasoline in our cars and jet fuel in planes. Everything we consume – clothes, food, electronics, etc. – is made using energy which contributes to climate change. We can all be part of the solution to reduce CO₂.

What are Carbon Offsets?

Carbon offsets represent the reduction of CO_2 in one location to offset the CO_2 produced in another, like your home or car. For instance, a clean, zero CO_2 wind farm in Iowa can offset the carbon dioxide produced by a coal-fired power plant near your home. Carbon offsets help reduce the cost of clean, renewable energy, which further helps develop technology.

An Easy, Effective & Low Cost Solution

Carbon offsets are a very affordable and effective means for you and your congregation to reduce the threat of climate change. In a UUMFE survey of attendees at GA 2004, 90% of respondents said they would pay \$15/month or more to reduce their impact on climate change.

Carbonfund.org reduces CO_2 for just \$10 per metric ton. With the average American responsible for about 10 tons of CO_2 annually from their home, car and air travel and 24 tons covering their entire impact, this amounts to just \$8.33 – \$20.00 per month to offset your climate footprint by supporting renewable energy, energy efficiency, and reforestation projects.

In addition, we invite your congregations to offset all or some portion of their annual carbon footprint as a powerful ecojustice action and act of witness.

About Carbonfund.org

Carbonfund.org is a Maryland-based 501(c)(3) nonprofit organization founded by UUs. Carbonfund.org supports only high quality projects verified and audited by third parties.

Your Offsets Support UUMFE

When UUs choose to offset their energy consumption through this partnership, 7.5% of your donation will be used to support UUMFE's ongoing advocacy for sustainable UUA practices and the development and distribution of resources for worship and education to promote: "respect for the interdependent web of all creation of which we are a part." To join or learn more about our work, please visit www.uuministryforearth.org.

How to Participate

For individual carbon offsets, make a personal contribution at www.Carbonfund.org and choose 'UUMFE' as the referral. For District and Congregational carbon offsets, email info@carbonfund.org for assistance with calculations or send your check with "UUMFE" in the memo line. You may also choose to designate your donation towards Renewables, Energy Efficiency or Reforestation in the memo line.

What is Green Power

Green Power is electrical energy that is generated from sources that are 'clean' such as wind, solar, or biomass, as opposed to 'dirty' such as fossil fuels (coal). 'Clean' and 'dirty' refer to how much CO2 and other gases are released into the atmosphere when using these energy generation technologies. For example, to generate 1 MWh of electricity from a wind turbine produces zero CO2, while the average coal plant emits 2000 pounds of CO2 to produce the same 1 MWh.

What exactly am I Contributing too?

When you contribute to the Green Power Program from Carbonfund.org, we purchase Renewable Energy Credits (RECs) on your behalf. These RECs, which represent the environmental attributes of the energy generated from the Green Power project, are then retired from further trading or use by Carbonfund.org. Carbonfund.org provides 100% certified new wind energy. You do not need to change your utility, and you will not see any changes on your utility bill.

When I Sign Up, Does Green Power Start Coming to My Home?

When you contribute to the Green Power Program, you are requesting that more wind energy enter the electricity grid, and at the same time reducing the amount of dirty electricity going in. Think of the electrical grid as a vast pool, with dirty water and clean water. Right now, less than ½ of 1% of our national electric the pool is filled with clean energy. The rest is dirty. When you contribute to our Green Power program, you are scooping out a little dirty water and adding in clean, which is then piped to your home for use.

What are the Benefits of Doing This?

- As mentioned above, you are adding more clean power to the national electricity grid.
- You are encouraging and supporting the development of wind power across the United States.
- Because Carbonfund.org is a registered non-profit 501(c)(3) organization, your contribution is tax deductible. In addition, 7.5 % of your donation supports the work of UU Ministry for Earth.

Does My Green Power Contribution Reduce My CO2 Footprint?

Yes. Your carbon footprint is the total sum of carbon emissions you generate when you go about your daily life. The most common sources are: electricity and natural gas use, and air and car travel. When you contribute to use wind energy, you are also lowering your carbon footprint. The average American emits between 18-24 metric tons of CO2 per year. Choosing any Green Power option over \$8.25 a month will offset one person's emissions. To do an exact calculation, go to www.carbonfund.org, use our handy calculator, and contribute!

Make A Choice & Make a Difference!

Carbonfund.org Foundation, 3 Bethesda Metro Center - Suite 700, Bethesda, MD 20814

EIN# 20-0231609 • a 501(c)(3) charitable, nonprofit organization • (240) 247-0630

Green Power Purchase Form



Carbonfund.org supports 100% New Wind. Your Contribution is tax deductible. Contribution per kWh: \$0.005.	Check one: 1,000 kWh - \$5.00 a month 1,500 kWh - \$7.50 a month 2,000 kWh - \$10.00 a month 2,500 kWh - \$12.50 a month kWh @ \$0.005 =
Your Details	Payment Method
Name	□ Visa□ Master Card□ AMEX
Mailing Address	Credit Card #
City State Zip Code	Expiration Date: Card Security Code:
E-mail Address	<u> </u>
Is this a Gift? Y/N	Signature Date
Gift Recipient's Name Gift Mailing Address – If to be sent by	You will receive an e-mail confirmation from Carbonfund.org and GroundSpring, our credit card processing partner. In the confirmation will be a password with which you can cancel your contribution at any time.
Carbonfund.org City State Zip Code	Questions? Contact us at info@carbonfund.org or call at (240) 247-0630.

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A Play:
The Case of
MOTHER EARTH
vs.
WORLD'S PEOPLE

Perhaps the most important trial in the history of civilization

• • •

As documented by Doug Stewart

2006

Introduction to the Play

By Doug Stewart

Doug Stewart's new play is a dramatic interpretation of the historic trial in which Mother Earth brings charges against World's People in the International Court of Last Resort for "acting in ways to cause her grievous personal harm and limit her inherent civil rights to a fruitful existence." As the trial judge noted at the time, "A serious charge, indeed!

Based on official court records, the production documents Mother Earth summoning a series of witnesses from around her earth to testify concerning the tragic effects global warming and climate change are having upon her. As examples, Mr. Rising Oceans claims it is not his fault that World's People are burning so much fossil fuel that he may eventually rise to levels covering the world's coastal cities, while Ms. Melting Glacier explains to the jury why she and her glacier friends are now shrinking, melting the entire year and having terrible effects on the people in the valleys below.

Mother Earth's case is made more difficult by the World's People's defense attorney, who supports the current U.S. administration's skeptical view of the whole global warming phenomena and cleverly challenges witnesses' testimony.

The jury hearing this tremendously important case consists of the courtroom audience. Upon hearing the closing statements of both sides, the jury must decide if Mother Earth's evidence is sufficient to find World's People "guilty as charged." Fortunately, the production has two available endings, depending upon the jury's decision. In either ending, the ways in which jury members themselves can help mitigate the effects of global warming are spelled out for them by Mother Earth.

The production can easily be adjusted for length, depending upon how many witnesses Mother Earth chooses to call, with a satisfactory minimum length being approximately 20 minutes. As a script-in-hand staged reading, the production is suitable for children, adults, or mixed casts, with a minimal amount of rehearsal time. The script is complete, including prop list, costume suggestions, director's notes, and a context-setting narrator's introduction by Bill McKibben.

Featuring a cast of congregation members, the play premiered in April 2006, to an enthusiastic audience at the First Unitarian Church of Albuquerque NM.

Director's Notes, by Doug Stewart, Playwright

Here are my playwright's thoughts regarding "Mother Earth vs. World's People" that may prove useful as you consider staging it for an audience.

INTENT. My intent in writing the play was to leave audiences with a) an enjoyable theatre experience; b) a much higher awareness of how our fossil fuel emissions are affecting precipitous changes in the world's climate and the beings on it; c) a motivation to take action; and d) several specific things they can do to help mitigate global warming's effects.

A big order, it's true, but isn't that what theatre challenges are all about? And performance experience with the play has already proven that it's doable.

STYLE. Perhaps the closest theatre style might be considered "melodrama-with-a-message." It can be played broadly, with fun and creative costumes, and still deliver its important message regarding global warming and climate change. Given the opportunity for inventive costumes, props, and locale, it can also be considered as a "live animated cartoon." The main thing to remember, of course, is that if it is to accomplish its GW educational purpose, it must be memorable. The style will help with that.

PROLOGUE. The script is accompanied by an edited (for length) piece by Bill McKibben that makes an excellent context-setting prologue to be read by a Narrator. This need not be the only prologue used, however, as any number of other creative approaches may be appropriate, depending upon time,

talent, and materials. For example, music, dance, quotes, hymns, other readings, images; i.e., there are no limits to the creative ways the play may be put into context. Don't hesitate to use any – or none – of them.

CASTING. Casting the play may be done in a number of ways, depending upon the talent that's available: auditions/try-outs, volunteers, director's selection, actors' requests, or who's available. Since it can most easily be done as a staged reading (script-in-hand), the ability to memorize dialogue is not a factor. In fact, age, gender, or ethnicity need not be a factor for any character, with the possible exception of Mother Earth.

The main thing is that the cast has fun doing the production. You may need to occasionally remind them, if the cast gets too hard on itself, that this isn't intended for Broadway, but to help save a planet. And we know from experience that if the cast is having fun, so will the audience – especially in those situations where audience members are also friends of the cast.

I suggest getting the cast as involved in the production as possible – they have more fun, work better together, and often come up with creative ideas that I've never even thought of!

CHANGES. One of the advantages of a non-plot-driven play such as this is that it allows a great deal of freedom in its production. Therefore, feel free to make any changes in wording, sequencing, props, costumes, vocabulary level, blocking, or cast genders that make the play more amenable to your production situation. (You need not ask permission.)

For example, the only cast member who (probably) needs to be female is "Mother Earth," while none are required to be male. Witnesses can even be added, so long as they are consistent with the style and intent of the play.

As you'll note, each witness has her/his own separate section of script, allowing for easy changes in sequence, number, and/or character of the witnesses selected. It also allows for the length of the production to be determined by how many witnesses Mother Earth calls to testify.

Because the audience functions as the "jury" for the trial, I have provided two endings, one each for verdicts of "Guilty" or "Innocent." As you'll note, however, whichever way the "jury" votes, they will get the same global warming information before the trial is over.

POST-PLAY DISCUSSION. An added dimension to the educational intent of the play can be a post-production guided discussion. Discussion questions might include:

- Was there information in the play that surprised you?
- Which was/were your favorite character(s)? With which could you most easily identify?
- In what way(s) did the play help you understand more about global warming/climate change?
- How is climate change being experienced here in (*your area*)? Which of the play's witnesses would be most appropriate for that situation? Is there another witness that could be added to the play that would be even more appropriate to our local situation?
- Did the play raise questions about global warming and climate change about which you'd like further information or clarity?
- Where else would you like to see this play performed? Would you like to be a member of the cast?
- Did seeing the play raise your level of motivation to do something, or do even more, to help mitigate the apparent human factors in global warming? What might you and/or our group do?

PLAYWRIGHT CONTACT. If I may be of help in any way with your production, please don't hesitate to contact me: Stewart@rt66.com

Prologue by Bill McKibben: What the Warming World Needs Now is Art, Sweet Art

Here's the paradox: If the scientists are right, we're living through the biggest thing that's happened since human civilization emerged. One species – ours – has by itself in the course of a couple of generations managed to powerfully raise the temperature of an entire planet . . . to knock its most basic systems out of kilter.

But oddly, though we know about it, we don't know about it. It hasn't registered in our gut; it isn't part of our culture. Where are the books? The poems? The plays? The thundering operas? I mean, when people someday look back on our moment, the single most significant item will doubtless be the sudden spiking temperature. But they'll have a hell of a time figuring out what it meant to us.

Why is that? Well, some of the reasons are obvious. For one thing, it's way too big. When something is happening everywhere all at once, it threatens constantly to become backdrop, context, instead of "Event." And in this case, since the context is the natural world that more and more of us have forgotten how to read, the changes seem small.

Conversely, when global warming does attempt to show its teeth, the immediate event is usually overdramatic, so vast that the event itself grabs all the attention, leaving none behind for the motive cause. Four hurricanes sweep across Florida in a summer, which is just the kind of result computer modeling says is becoming more likely. But who has time for computer modeling and carbon when there is "Storm Surge" and "Blown-Over Mobile Home" and "Waiting in Line for Ice," all of which are a lot easier to take pictures of?

And the dramatis personae are deficient as well, being us. Too many villains can mar a plot as easily as too few, and "starring everyone with a car" is a large cast indeed. We don't much want to be told that we're the problem, primarily because it implies we would have to change some of our ways. In a consumer society, those habits constitute a large part of our identity, not to mention our net worth.

Especially since there's no real chance of a happy ending. We can do better, or we can certainly do much worse -- but we've already pushed the carbon concentration past the point where the atmosphere can easily heal itself. So far we've increased the world's temperature about one degree Fahrenheit; the best guess is we've stoked the fires enough that another two degrees are essentially inevitable. Past that, what we do now matters deeply. But the difference between miserable and catastrophic is not a compelling dramatic device.

Time rushes on, in ways that humans have never before contemplated. That famous picture of the earth from outer space that Apollo beamed back in the late 1960s --already that's not the world we inhabit; its poles are melting, its oceans rising. We can register what is happening with satellites and scientific instruments, but can we register it in our imaginations, the most sensitive of all our devices, for we are all actors in this drama, more of us at every moment.

The great subplot of these few years involves the introduction of Indians and Chinese as principal players, a fascinating confrontation between old privilege and new assertion. It may well be that because no one stands outside the scene, no one has the distance to make art from it.

But we've got to try, for Art, like Religion, is one of the ways we digest what is happening to us . . . make the sense out of it that proceeds to action. Otherwise, the only role left to us – noble, but also enraging in its impotence – is simply to pay witness.

The world is never going to be, in human time, more intact than it is at this moment. Therefore it falls to those of us alive now to watch and to document this buzzing, glorious, cruel, mysterious planet we were born onto, before in our carelessness we leave it far less sweet for those who would follow.

Bill McKibben is the author of Enough: Staying Human in an Engineered Age and The End of Nature.

Props & Costume Suggestions

For "Mother Earth vs. World's People" - Notes from Doug Stewart, playwright

It's important that the cast also contributes their ideas for both props and costumes. It gives them a greater sense of ownership – and their ideas, as they get into the piece, may be even better than those that follow. That's good theatre.

SETTING -- Suggested props

- 1. Judge/Bailiff's table
 - Gavel
 - · Black cloth covering
 - Atlas or world map
 - · 2 glasses of water
 - A bell
 - · Several misc. documents
 - Very comfortable office chair (Judge)
 - Simple office chair (Bailiff)
 - "COURT OF LAST RESORT" sign on front of table
- 2. Counselors' table (Mother Earth & Defense Attorney)
 - 2 simple chairs
 - · 2 glasses of water
 - · Mother Earth's documents
 - Pad & pencil (for Defense Attorney)

CAST – Suggested props & costumes

1. Bailiff

Costume - In black, with a "special" hat

Prop(s) – Mop (to mop up after Melting Glacier)

2. Mr. COALFIRED POWERPLANT

Costume - Coveralls, dust mask, work boots/shoes & gloves, work hat, work goggles

Prop(s) - Carrying coal shovel

3. Ms. CORAL REEF

Costume - light gray lacy outfit, no makeup, slippers

Prop(s) - handkerchief(s)

4. DEFENSE ATTORNEY

Costume – Formal business attire (3-piece suit, if possible)

Prop(s) – Business document case

5. Mrs. DRI DROUGHT

Costume - Very hot-weather clothing & shoes; sun hat

Prop(s) – Sunglasses; obvious sunscreen; canteen; water bottle

6. Miss GULF STREAM

Costume - Jogging outfit, running shoes, headband

Prop(s) – wrist compass

7. Mr. HUMMER DINGER

Costume – Informal business w/bolo or ribbon tie, cowboy hat, boots

Prop(s) - Driving gloves

8. Ms. HURRICAN KATRINA

Costume - Provocative, very disheveled hair & costume; bright skirt, suitable for twirling

Prop(s) - none

9. JUDGE

Costume - Robe (preferably black), wig or "special" hat

Prop(s) – none

10. Ms. MELTING GLACIER

Costume – White sheet as large, flowing robe; white hat/cap

Prop(s) - Fan

11. MOTHER EARTH

Costume – Long earth-colored flowing garments; long wig or "nature" hat; appropriate shoes

Prop(s) – None

12. Mr. PEAT BOGGS

Costume – Scruffy dark browns & greens clothes, shoes, & socks; some dark face paint; long dark hair or wig

Prop(s) - None

13. Mrs. POLAR BEAR

Costume – White close-fitting outfit (shaggy, if possible), gloves, shoes

Prop(s) - None

14. Mr. RISING OCEANS

Costume – Pant legs rolled up; barefoot, flip-flops, or swim fins; draped with apparent "sea weed"; (perhaps raincoat, rain hat)

Prop(s) – Swim mask; a child's water-toy

The Case of Mother Earth vs. World's People

Perhaps the Most Important Trial in the History of Civilization



A Play by Doug Stewart

A fun but thought-provoking play regarding global warming in which Mother Earth brings World's People to court, charging them with grievous personal harm and denial of the civil right to a fruitful existence.

Unitarian Universalist Ministry for Earth 1034 SW 13th Ave., Portland, OR 97205

http://uuministryforearth.org/

OFFICIAL COURT DOCUMENT

The Case of Mother Earth vs. World's People

Being a case brought by Mother Earth, charging World's People with acting in ways to cause her grievous personal harm and limit her inherent civil rights to a fruitful existence

A Trial by Jury,

The International Court of Last Resort

Doug Stewart, Court Recorder

CAST:

JUDGE	Your Honor
BAILIFF	Nobody's Fool
JURY	A gathering
MOTHER EARTH	Plaintiff
DEFENSE ATTORNEY	(Played by him/herself)

AVAILABLE PLAINTIFF'S WITNESSES:

- Mr. Coalfired Powerplant
- Ms. Coral Reef
- Mrs. Dri Drought
- Miss Gulf Stream
- Mr. Hummer Dinger

- Ms. Hurricane Katrina
- Ms. Melting Glacier
- Mr. Peat Boggs
- Mrs. Polar Bear & Cub
- Mr. Rising Oceans

[NOTE: Witnesses so indicated (•) have been called by Mother Earth to appear in this trial]

ACTI

SETTING: At Center Stage, a table covered in black. On it are two candelabras, one on each end of the table, an atlas, a glass of (colored) water, a gavel, a bell, a flashlight, a pad and pencil, and several documents. Downstage Left is a rather formal and uncomfortable-looking wooden chair (for Witnesses), while at the table itself is a much more comfortable-looking padded office chair (for Your Honor). A smaller straight chair (for Bailiff) is beside it, Stage Left. At Stage Right of the larger table is a smaller table and chairs for Mother Earth and Defense Attorney, containing two glasses of water and several documents.

AT RISE: BAILIFF is seated in his/her chair, reading notes. HIS HONOR is nowhere to be seen. WITNESSES are gathered where convenient, talking among themselves. BAILIFF looks at watch and sounds bell. Everyone quiets.

* *

BAILIFF (BF): (standing) Ladies and gentlemen of the jury. Please stand.

[Indicates to audience /"jury" to stand as HIS HONOR enters, goes to the padded chair and sits.]

The jury may be seated. [ALL sit]

[Raps gavel] The International Court of Last Resort is now in session!

HIS HONOR (HH): (to BAILIFF, stage whisper) What's going on here today, Bailiff?

BF: Your Honor, we have the case of Mother Earth vs. World's People.

HH: Really? What's the charge?

BF: Mother Earth is charging World's People with acting in ways that cause her grievous personal harm and limit her inherent civil rights to a fruitful existence

HH: (to Mother Earth) That's a very serious charge, Mother Earth.

MOTHER EARTH (ME): Yes, Your Honor. But it's a very serious situation. I have been patient with World's People long enough. I'm here to take action!

HH: (to BAILIFF) This is most unusual. Mother Earth seems really upset. Has she ever done this before?

BF: I believe so, Your Honor. Just ask the dinosaurs.

HH: (thoughtfully) Hmmmmm. Of course. (to Mother Earth) The Court rules this to be an important and valid case, Mother Earth. You may call your first witness.

DEFENSE ATTORNEY (DA): (*leaping up*) Objection, Your Honor! This isn't fair! There's no solid proof of global warming – even our president knows *that* – so the majority of World's People don't even realize they're collectively acting against Mother Earth. Therefore, they're innocent. I call for dismissal of all charges!

HH: Ignorance of irresponsible behavior is no defense, sir. (bangs gavel) Objection overruled. You may proceed, Mother Earth.

[DA sits back down, looking unhappy]

MS MELTING GLACIER

ME: Your Honor, I call Ms. Melting Glacier.

[MELTING GLACIER, covered with a flowing white sheet, comes on stage and sits in the witness chair; she is fanning herself. BAILIFF follows her with a mop, cleaning up the apparent water from her melting.]

Ms. Glacier, would you please tell the jury the location of your home? MG: On Mont Blanc, ma'am, in France.

ME: And what is happening to you and your friends, the other glaciers on that well-known mountain . . . and around the world?

MG: We're melting. Yes, 86% of us around the world are melting.

DA: Objection, Your Honor! Glaciers melt every summer!

HH: Is this true, Ms. Glacier?

MG: Yes, Your Honor – or at least they used to. But now it is different.

HH: How so?

MG: Normally we melt in the summer and in the winter the snows come and we freeze again. So over thousands of years, we have remained the same size.

HH: And now?

MG: Everything has changed, Your Honor. The winters are no longer cold enough to freeze us again. We're melting all year long.

HH: Thank you, Ms. Glacier. Objection overruled. (bangs gavel)

ME: And in the United States?

MG: When Glacier National Park was opened in Montana about 60 years ago, 150 of my glacier cousins called it home. Now there are only 37 of my family left there – and they are melting, too!

ME: Tell the jury what all this melting causes, Ms. Glacier.

MG: Gladly, ma'am. (to jury) Because we are all melting so fast, we are flooding the lands below us, washing out crops, roads, bridges . . . sometimes entire villages.

ME: And then?

MG: As we melt we are getting smaller and smaller. If this continues, some day we will be completely gone.

ME: And what if you are, Ms. Glacier?

MG: If we are completely gone, our runoff water is gone with us. The people will have no harvest to eat, no water to drink, or bathe, or wash their clothes. Don't know where they will go or what they will do. You know us, Mother Earth – my glacier family and I contain 24% of the world's fresh water.

(to HH) In China alone, Your Honor, 300 million people depend on our run-off . . . and we're disappearing! What will they do? Without our run-off, their rivers will dry up and die.

ME: Please tell the jury about the plants and animals, Ms. Glacier.

MG: With these things happening so fast, many plants and animals can't adapt quickly enough to survive. We fear some day they may be gone, too, along with us.

HH: Ms. Glacier, what seems to be causing your rapid melting problem?

MG: It is getting too warm, Your Honor, much too warm. We have never had such warm winters as this before . . . not for thousands and thousands of years.

ME: Thank you, Ms. Glacier. You may step down.

[Ms. MELTING GLACIER steps down and exits, followed by BAILIFF with mop, returning after Ms. GLACIER has completely exited.]

Mr. RISING OCEANS

ME: Your Honor, for my next witness I call Mr. Rising Oceans.

[RISING OCEANS steps forward and sits in the witness chair.]

Mr. Oceans, I and many others around the world observe that you are rising . . . that if you continue, some day you will cover many of my lovely coastal cities— Miami, Tokyo, London, Bombay, San Francisco, New York. Large parts of Holland, Bangladesh, Florida, and many other areas would also be under water.

DA: Objection! That is only scientific speculation, Your Honor. There is no specific timetable.

HH: Is that true, Mother Earth?

ME: I'm afraid so, Your Honor. There is no specific timetable.

HH: Then objection sustained. (bangs gavel) [DA sits down, looking pleased] Bailiff, strike that from the record.

BF: Yes, sir.

HH. But is what she says *true*, Mr. Oceans? About you possibly covering major coastal cities? And small ones, too?

RO: I'm afraid it is, Your Honor. But it's not my fault! World's People are burning so much fossil fuel giving off carbon dioxide that it's making Mother Earth's temperature rise. Just look at her – she's all flushed!

HH: (stands up to peer at Mother Earth) Now that you mention it, she is! RO: As Ms. Glacier already told you – when it gets warmer, ice melts and sends water down to me and I get higher. And when I'm warmer, thermal expansion also makes me bigger and higher. So it's really not my fault. Blame World's People for burning so much fossil fuel!

DA: (*jumping up again*) Objection, Your Honor, objection! Our very own President has said that global warming may not be caused by humans burning fossil fuels . . . that the scientific results are still inconclusive and we need to do a lot more research . . . you know, take our time, spend more

money . . . maybe even hire help from Halliburton. (*to Mother Earth*) Saves time, you know – don't have to go through the bidding process.

ME: Your Honor, over 2500 of the world's leading scientists have unanimously agreed that World People's burning of fossil fuels has contributed substantially to global warming and the climate changes Mr. Oceans has just described.

HH: 2500 scientists, you say?

ME: Yes, sir.

HH: That's good enough for me. Objection overruled. (bangs gavel) (DA, not happy, sits down again)

ME: Now, Mr. Oceans, please tell the jury what *else* lies beneath your warming waters.

RO: You mean the . . .?

ME: Yes, Mr. Oceans, those.

RO: I hesitated to bring them up, ma'am. They even scare me – and I'm *big*.

ME: No, go ahead and tell the jury. They need to know.

RO: All right, if you say so, ma'am. (*to the jury*) Lying on the bottom of some of my oceans, well out of sight, are tons – *gigatons* – of the most powerful of all the so-called "greenhouse" gases – methane. It's 20 times more powerful than its better-known cousin, Carbon Dioxide.

HH: But methane is a *gas*, Mr. Oceans. We all know that. How can it be on the bottom of an *ocean*?

RO: Well, sir, gases can be liquefied. And liquids can be frozen. And that's the state it's in – lying frozen on my cold seabeds in the form of solid methane hydrates . . . sort of like methane ice.

HH: And there's lots of it?

RO: Your scientists estimate I have as much methane hydrates under my oceans as there is coal in the entire world! After all, I cover almost 71% of Mother Earth's surface.

HH: And if you oceans get warm enough to start melting those tons and tons of methane hydrates, Mr. Oceans?

ME: (aside to jury, pointing to Mr. Oceans) When no one's listening, I call him my "wet blanket."

RO: To put it as politely as I can, Your Honor, all hell would break loose. What your scientists are now calling a "methane burp –" but far more powerful at disrupting Mother Earth's atmosphere than any burping baby's mother could ever imagine.

HH: And what can you do to prevent such a disaster?

RO: Frankly, sir, nothing. But it's not my fault! If Worlds' People continue burning fossil fuels like there's no tomorrow . . . well, we oceans are just going to get warmer and warmer. And then some terrible day for Mother Earth – maybe sooner and maybe later – we oceans will start burping methane.

ME: And if they do, I will really get hot!

RO: And for World's People, that could mean there *is* no tomorrow.

ME: (to HH) Your Honor, do you see why I am so angry?

HH: I think I'm beginning to understand, Mother Earth, I'm beginning to understand.

ME: (to Mr. Oceans) Thank you, Mr. Oceans, you have been most helpful.

RW: (as he gets up and leaves) But just remember, it's not my fault!

Ms. HURRICANE KATRINA

ME: For my next witness, Your Honor, I call one of the most infamous hurricanes in American history, Ms. Hurricane Katrina.

HH & BF: (together) The Hurricane Katrina?

ME: Yes, Your Honor. The very one.

HH: Please proceed; I'm all ears.

[HURRICANE KATRINA enters, twirling and promenading a bit before the jury, then sits in the witness chair, continuing to pose. Understandably, her hair and clothes are wildly disheveled.]

ME: Ms. Katrina . . .

HK: (coquettishly, with Southern accent) You may call me "Hurricane."

ME: Hurricane. How would you describe yourself?

HK: Modesty forbids my bragging, of course, but I *was* the most deadly and costly hurricane ever recorded in American history.

ME: And you were not alone, is that true?

HK: Well, yes, there were several others of us last season.

ME: 26 others, if I'm correct?

HK: I guess there were. I didn't keep track after I did in New Orleans. I know my sister Wilma was the strongest ever recorded. And my stubborn little sister Zelda kept the season going clear into January, the latest Atlantic hurricane *ever!* We're all so proud of her!

ME: And how do you and your family account for your . . . ah . . . "success," last season, Hurricane?

HK: To tell the truth, ma'am, though not everyone agrees with us, we owe it all to warming. In this case, the whole Gulf of Mexico.

ME: Can you be more specific?

HK: Of course. We hurricanes are like any other tourists – we love cruising over warm waters! It's like a shot of adrenaline, it really is. Global Warming is doing just great by us! And on that beautiful day last August, the Gulf temperature off New Orleans was over 90 degrees! Believe me, with that kind of energy available, takin' down those old levees was a cakewalk!

HH: Any questions of the witness, Mr. Defense Attorney?

DA: Just one, Your Honor. Ms. Katrina, scientists disagree as to the relationship between you hurricanes and global warming. Can you *prove*, beyond a shadow of a doubt, that human-caused global warming had *anything* to do with your monstrous rampage through the Gulf? Can you? Terrible hurricanes have occurred in the Gulf before, you know.

HK: (suddenly *losing her Southern accent and becoming all business*) And can *you* prove, beyond a shadow of a doubt, (Mr./Ms.) Attorney, that human-caused global warming was *not* responsible for my admittedly wild behavior in the Gulf?

DA: Well, no, I guess not. (sits down, looking defeated)

HK: Let me make myself very clear, (Mr./Ms.) Attorney. We hurricanes do *not* make moral judgments. We do *not* decide which old levees collapse and which hold back my storm surges. We do *not* decide who gets evacuated and who gets left behind to die. That's your business . . . your

problem . . . not ours. When World's People give us warmer waters to play on, we do what hurricanes do – we blow even harder. The warmer waters decision is yours, not ours . . . it is *you* who burn fossil fuels, not us.

[She stands up, gives one very expressive twirl, and sits again.]

(Reverting back to Southern accent)

Have I made myself clear, (Mr./Ms.) Legal Mind?

ME: Thank you, Ms. Katrina . . . thank you *very much*.

[HURRICANE steps down twirling and promenades off the stage.]

Mr. COALFIRED POWERPLANT

ME: For my next witness, Your Honor, I call Mr. Coalfired Powerplant.

[Mr. COALFIRED POWERPLANT, dressed in coveralls, protective surgical mask, etc., and carrying a coal shovel, comes forward and sits in the witness chair.]

As a witness in this court of law, Mr. Powerplant, you do understand how important it is to tell the truth?

CP: Oh yes, ma'am, I do.

ME: Good. Then is it true, Mr. Powerplant, that you are owned by a business organization composed of World's People?

CP: Yes, ma'am.

ME: And that you make a profit – a *considerable* profit – from selling World's People the electricity you generate through the burning of coal, a fossil fuel?

CP: That's also true, ma'am.

ME: And that as far as you know, World's People use that electricity in a number of ways, including extravagantly lighting such cities as Las Vegas, Nevada, warming hot tubs year round for occasional pleasures, or powering millions – perhaps *billions* – of television sets featuring reality shows, soap operas, and political speeches? Is that true, sir?

CP: Of course I have no direct knowledge, ma'am, but I've heard that is true. DA: Objection, Your Honor! The witness is admitting that his testimony is based only on hearsay.

HH: (looking *increasingly annoyed by the continuing interruptions*) The witness is simply identifying the source of what he knows. Objection overruled.

(bangs gavel)

ME: And furthermore, Mr. Powerplant, are you aware that you are putting into my atmosphere carbon dioxide and other emissions that scientists say are to global warming and climate change, making them a threat to life on my planet? Are you, sir?

CP: (*very n*ervous) I have heard some of my World's People operators discuss that possibility, but I don't understand it very well. I'm just a simple being that burns the coal World's People give me to turn my generators, put out the generated electricity on the big wires, and go to bed at night thinking I've done a good job. That's all, ma'am. I didn't know I was doing anything wrong. Really.

ME: (*sympathetic*) *I* understand, Mr. Powerplant, and I'm not accusing you of being part of the actions taken against me, but you *are* about 41% of the total emissions problem. Would you tell the jury if your World's People managers or owners are doing anything to clean up the smoke from your

burners . . . anything *at all* to limit the emission of greenhouse gases? *Anything*?

CP: Not that I know of, ma'am. And if anything was being done, I'm the one who'd know it.

ME: Thank you, Coalfired. You've been very helpful. You may step down.

CP: Thank you, ma'am. I'm glad to help – especially if there are kids involved. I have three of my own, you know. [he exits]

* * *

Mrs. DRI DROUGHT

ME: Your Honor, I call as witness Mrs. Dri Drought, professional Earthdryer.

[Mrs. DRI DROUGHT enters and sits in the witness chair. She is dressed for hot weather and has a bottle of water in one hand and a canteen over her shoulder.]

Mrs. Drought, would you tell the jury the nature of your work?

DD: Of course, ma'am. I am an accomplished Earth-dryer.

ME: An earth-dryer. Could you be more specific for the jury?

DD: (to jury) I move into an area that normally gets some moisture during the year and interrupt the normal precipitation cycle. In a few months the earth is dry, reservoirs are getting empty, streams are mere trickles, animals are thirsty, green plants turn brown, and farmers are getting bank loans to tide them over until I'm gone. Once I've done my job, I usually go away in a few months. (pause) OK, sometimes a few years. Frankly, hanging around too long gets boring.

ME: You referred to "doing my job." Are you employed to do Earthdrying, Mrs. Drought?

DD: No, ma'am, I'm not employed. It's really more of a hobby.

ME: Would you share with the jury the condition of your so-called "hobby" at this time, Mrs. Drought?

DD: Glad to. I've got excellent droughts going in Spain, Portugal, Hawaii, the Mediterranean coast of Europe, areas of China, Brazil's Amazon Basin, Africa (where we have three major deserts closing in on agriculture!), and of course, the American Southwest. And my Florida drought is *really* exciting – over 2000 wildfires this year in just four months!

ME: I know. Your hobby hurts me deeply. And would you explain to the jury why your earth-drying hobby is doing so well just now, Mrs. Drought?

DD: Well, ma'am, Worlds' People are doing such a wonderful job of burning fossil fuels – you know, transportation, manufacturing, energy production . . . all that stuff – that the emission levels just keep going up and up. And that raises my heat levels. I love it!

ME: So in short, Mrs. Drought, you're saying that global warming is of great assistance in helping you with your earth-drying "hobby." Is that correct?

DD: Absolutely, ma'am, absolutely.

ME: Thank you, Mrs. Drought. You may step down.

DD: You're welcome, ma'am. (as she exits) And by the way, is there a drinking fountain in this courthouse?

ME: Not any more, Mrs. Drought. Thanks to you, the water source dried up a month ago.

DD: Oh. I'm sorry. (she exits)

Mrs. POLAR BEAR

* * *

ME: Your Honor, for my next witness I call Mrs. Polar Bear, and her cub, Little Bear. (Mrs. POLAR BEAR enters and sits in the witness chair.)
Welcome, Mrs. Bear. But where is Little Bear? I understood she was coming with you.

POLAR BEAR (PB): She was. She was really looking forward to it.

ME: So what happened?

PB: Actually, ma'am, it's more what *didn't* happen.

ME: I think I know what that was, put please, tell the jury.

PB: (to jury) What didn't happen this year was Winter.

HH: (*interrupting*) Winter didn't happen? But you live in the Arctic. Isn't it almost *always* winter? And what does that have to do with your cub not being here?

ME: Go ahead, Mrs. Bear, tell His Honor and the jury about this past winter.

PB: (to jury and His Honor) In a word, Winter was too warm. And when Winter is too warm, it doesn't refreeze the sea ice that melts in the summer. Even humans should be able to figure that out. And when it doesn't refreeze the sea ice, it leaves open water – lots of it – between where we are and where we want to hunt. And when we can't hunt, we can't eat.

(*getting more agitated as she speaks*) And when we can't eat, we can't feed our cubs. And when we can't feed our cubs, we . . .

ME: (quickly interrupting) Thank you, Mrs. Bear, thank you. But please, tell them about the open water situation.

PB: (*getting hold of herself*) Yes, yes, of course. (*calmer*) Excuse me, but feeding our cubs is so important.

ME: Of course.

PB: The open water areas are getting larger and larger all the time, until some of your humans say that in the summertime there may soon be open water from the Pacific clear to the Atlantic – right through *our* ice!

ME: And what does this mean to you and Little Bear?

PB: It means I have to swim farther and farther between the ice floes to find our favorite food, the seals. I can swim 40 miles or more, but . . .

HH: Excuse me, Mrs. Bear, but 40 miles?

PB: Yes, Your Honor. Well, it's more float-and-paddle – but it gets me to an icy hunting area. Me and Little Bear. I carry her on my back. Or at least I used to. But now there is so much open water that I'm having to swim farther and farther – and it's just too far to carry Little Bear. And we are hearing of friends who set out swimming but never come back. It is a very sad time.

ME: And that is why Little Bear is not with you?

PB: Yes, ma'am. I had to swim almost 60 miles to reach ice strong enough to hold me on the way here – and that is just too far to carry Little Bear. She was very disappointed.

ME: But I understand you may soon be declared an Endangered Species. How do you feel about that?

PB: Both frightened and encouraged. Being declared Endangered is very scary. But if it means something will happen to get World's People to stop putting out so much of . . . what do you call them, "greenhouse gases?" . . . why perhaps we can continue to live with the walruses, and the seals, and the caribou, and the white foxes, and all of our other Arctic neighbors. The warmth and the melting ice will affect all of them, too, you know.

ME: Yes, I know, Mrs. Bear – only too well do I know. And the time is growing short to help you, for every summer and winter now there is more and more open water. And the less snow and ice there is to reflect back the sun's rays, and the more dark water is exposed to soak up those rays, the warmer and warmer it all gets. Until it is too late to stop the process . . . the tipping point.

PB: Excuse me, ma'am, Your Honor, but I must get back to Little Bear. She will miss me – and it is now a long swim to get home.

ME: Thank you, Mrs. Polar Bear. And my warmest regards to Little Bear and all her friends. I will of course do everything I can to help, but it is now really up to World's People – only they can stop spewing out their emissions. Good-bye, my dear.

[Mrs. POLAR BEAR exits]

* * *

Mr. PEAT BOGGS

ME: (to HIS HONOR) Your Honor, as my next witness, I call Mr. Peat Boggs.

[PEAT BOGGS enters and sits in the witness chair]

Welcome, Mr. Boggs.

PEAT BOGG (PB): Thank you, ma'am. You can just call me "Peat." But please remember that it's P-e-a-t Boggs, Peat Boggs.

ME: I'll remember, Mr. Boggs. With a family as big as yours, how could I forget? (both laugh) In fact, why don't you begin by telling the members of the jury just how large you and your Boggs family really are?

PB: Gladly, ma'am. We're proud of our size. (*to jury*) Well, as far as we know, the largest branch of the family is in western Siberia . . . about the size of France and Germany combined.

HH: Excuse me, Mr. Boggs, but combined?

PB: Yes, Your Honor, combined. That branch of the family got started about 11,000 years ago, at the end of the last glaciation, when it started getting warmer. Been generating methane there ever since. At last count the estimate was about 70 *billion* tons under the frozen permafrost. And the permafrost is melting.

HH: And that's trouble?

PB: Not for us, Your Honor, but it can sure cause big problems for World's People. And we've got another big family branch in Manitoba, right under Churchill. That's the town, sir. In fact, we've got family all around the world. Maybe the best known is in Ireland, where they divide us up into small pieces and use us for fuel. Keeps everybody warm in the wintertime.

HH: For *fuel*? Whatever are you made of, Mr. Boggs?

PB: Frankly, sir, mostly rotting plants. As I said, in some places we've been around for thousands and thousands of years, so we've acquired a lot of dead plants.

HH: But if you've been around that long, what keeps you from just rotting away?

PB: In many parts of the world – the really cold parts, like Siberia – we've been frozen all these years. So we don't rot. We just sit there and wait for something to happen.

ME: Tell the jury what's happening to you now, Mr. Boggs.

PB: The world is getting warmer and we're thawing.

HH: But what does that have to do with global warming and climate change?

I guess I'm really wondering why you're here?

PB: Well, sir, it's kinda complicated, but it goes like this. Plants take in carbon dioxide and give off oxygen, right? But when a plant dies and starts to . . . well, rot . . . it gives off methane. And methane is about 20 times more powerful than carbon dioxide as a "greenhouse gas." Are you following me, sir?

HH: Yes, yes, go on.

PB: While we Boggs are frozen, the methane stays inside us. But when we start to melt, wow! Methane starts coming out all over the place!

HH: And since it's a greenhouse gas, it just makes things even warmer, which makes you melt even faster, which let s out more methane, and things just get worse and worse, right?

PB: Yes, Your Honor. You're a fast learner.

HH: Thank you. This trial is becoming quite a learning experience. Mother Earth.

ME: One more thing, Mr. Boggs. Would you tell the jury why you're now melting, after having been frozen all these years?

PB: Of course. World's People are burning so much fossil fuel, giving off the greenhouse gases, that the atmosphere is just getting warmer and warmer.

DD: (*jumping up*) Objection, Your Honor! (*to Mr. Boggs*) Mr. Boggs, since, as you've just told the jury, much of your family has been frozen all these years, World's People couldn't possibly have had a role in your methane gas situation, now could they?

HH: Is that true, Mr. Boggs?

PB: It's true that *present* World's People didn't build up our Boggs' methane deposits, but World's People *are* burning fossil fuels – coal, natural gas, wood, gasoline – lots of things that give off greenhouse gases – and that's causing us to melt and release our carbon dioxide and methane. So I guess, yes, if you look at it that way, World's People *are* the main cause of our problem.

HH: Thank you, Mr. Boggs. (to DA) Objection overruled! (bangs gavel)

[DA sits again, looking disappointed]

ME: Thank you, Mr. Boggs . . . thank you very much.

PB: You're welcome, ma'am. (gets up to exit) But remember, it's "Peat" Boggs.

P-E-A-T. PEAT Boggs. (he exits)

ME: We'll remember, Mr. Boggs . . . Peat . . . we'll remember.

* * *

Miss CORAL REEF

ME: As my next witness, Your Honor, I call Miss Coral Reef. She is representing her coral reef families all over my world. Welcome, Miss Reef.

[Miss REEF enters and stands at the witness chair]

You may sit down, dear. Make yourself comfortable.

CORAL REEF (CR): Oh, I've been collapsing all over your world, ma'am. I think I'd rather just stand for a bit.

HH (*stage whisper to MOTHER EARTH*): What's wrong with her, Mother Earth? Every coral reef I've ever seen was all beautiful colors. You know, bright, cheerful. If I do say so, she looks *awful*.

ME: I'll let *her* tell you about it, sir. (*to Miss Reef*) Miss Reef... Coral... please tell His Honor and the jury what is happening to you and your brothers and sisters in oceans all over my world.

CR: Yes, ma'am. (pauses a moment to collect herself) (to jury) It's really sad. Putting it as simply as I can, we corals are dying. And when we die, the reefs go down with us. They're built from our shells, you know.

ME: And, Coral, share with us why your reefs are so important.

CR: Coral reefs have been called "the rain forests of the oceans," because of all the varieties of sea and plant life that live in, on, and around us. If we're gone, there is nowhere else for them to go, Mother, nowhere. All those beautiful little fish. (wipes her eyes of tears; Mother Earth puts an arm around her for a moment) (to HH) Can you believe this, sir? World's People have

just sunk an old aircraft carrier – an *aircraft carrier* – and are calling it a "reef"! What do *they* know, Your Honor?

ME: I understand, dear . . . believe me, I understand. Can you tell our jury how this happens . . . why you've lost your beautiful colors? Why some of World's People must not know the difference between an aircraft carrier and a coral reef?

CR: (brushing back tears) I'll try, ma'am. (to jury) You see, we corals like to live in water temperatures that are very close to the highest temperatures we can stand. Yes, we know that's dangerous, but that's just the way we are. So when the water gets just a couple of degrees too warm, the blessed little algae that live with us and give us our color and our food, have to leave. Then what remains is just us and the white calcium skeletons.

ME: And that's called "bleaching"?

CR: Yes, ma'am. And without our food, if the water doesn't cool quickly enough, we die.

HH: Why that's terrible, Miss Reef. Is this happening in many places? CR: (still attempting to hold back tears) (to His Honor) Yes, sir. It's . . . it's happening to my family's reefs all the way from the Florida Keys to Tobago, Barbados, Panama, Cuba and Costa Rica. And that's just in the Caribbean area, sir. It's also true in the Pacific and Indian Oceans . . . everywhere. In the Gulf of Florida almost 95% of my Elkhorn and Staghorn brothers have passed away. (stops to wipe her eyes again) We just don't know where or when it will happen next. World's People are giving off so many emissions that the oceans are getting warmer and warmer. And when they do, my family members die. (she covers her eyes with her handkerchief)

ME: (putting arm around Coral's shoulder again) That's all right, dear, it's not your fault.

CR: But why are World's People doing this to us, Mother Earth, *why*? For thousands of years we've protected their shorelines, given the fish a place to spawn and live, treated their tourists to colorful underwater experiences. Why are they doing this to my family? Australia's Great Barrier Reef is one of our proudest accomplishments – it's been there for almost 18 million years – yet World's People have undermined its very existence in less than one of their tiny little lifetimes! My family, my poor family! (*pauses*) May. . . may I sit down, Mother?

ME: Of course, dear.

[Coral sits in witness chair and buries her face in her handkerchief]
(to jury) You see before you the terrible effects World's People are causing to my inhabitants by their excessive burning of fossil fuels.

DA (*jumping up*): Objection, Your Honor! Mother Earth cannot be giving directions directly to the jury at this point in the trial!

HH: That's true. Objection sustained. (bangs gavel) Mother Earth, please limit your comments to the witness and to this bench.

ME: I'm sorry, Your Honor. Of course.

HH: You may proceed.

ME: Coral, thank you so much for your testimony. We all realize, don't we (*glares at Defense Attorney*), what a terrible ordeal you and the rest of your coral family are going through. We can only hope that testimony such as yours will wake World's People up to the damage and dangers their emissions are causing. Thank you again, my dear. (*helps CORAL out of the chair and gives her a quick hug*)

CR: And thank you, Mother. We're counting on you. (CORAL exits)

[MOTHER EARTH sits down in her chair, wipes her brow with a handkerchief and collects herself for a moment. Then she stands again, ready to continue the trial. This is obviously not easy for her, either.]

* * *

Mr. HUMMER DINGER

ME: Your Honor, as my next witness I call Mr. Hummer Dinger. That is if he can find a place big enough to park his vehicle. (HUMMER DINGER enters and stands by the witness chair.) Welcome, Mr. Dinger. And did you find a large enough place to park?

HUMMER DINGER (HD): Oh, yes, ma'am. No trouble at all. An 18-wheeler was pulling away from the courthouse loading dock just as I came in, so I parked in his spot. Fit just fine.

ME: I'm pleased to hear that. [he continues to stand by the chair.] Please be seated, Mr. Dinger. Make yourself comfortable.

BAILIFF: Yes, Mr. Dinger, we're sorry its not hand-stitched leather, with a built-in heater and electric adjustments, but we do what we can with a courthouse budget.

[As BAILIFF speaks, DINGER climbs up on the witness chair and sits on its back, with his feet on the seat.]

HD: There, that's better!

HH: What are you doing, sir?

HD: Well, Your Honor, I'm more used to sitting up a lot higher than other people. I call it "over-seeing." Just like I oversee all of my employees, from my Hummer I can also over-see just about everyone else on the road. Gives me a feeling of security . . . of power. Just like overseeing employees.

HH: Hmmmm . . . I see. And this feeling of power is a *good* feeling, Mr. Dinger?

HD: Oh, yes, sir. Definitely. Why, when the little woman and I are driving to war movies – my favorites – I can imagine I'm patrolling the streets of

Baghdad. You, know a .50 -caliber mounted on the roof and surrounded by armor plate. It's really quite a very secure feeling.

HH: Yes, I can imagine.

ME: Mr. Dinger, as you may have heard – perhaps accidentally – there is a high level of scientific concern about "global warming" . . . the warming of my atmosphere being accelerated by World People's burning of fossil fuels. Have your heard the term? It is sometimes connected with the term "climate change."

HD: Yeah, I think there was an article in the Journal a while back that mentioned something about it. I didn't pay much attention, though – there weren't any financials connected with it, so what was the point? As you know, ma'am, I'm a businessman, not one of these overpaid academic pseudo-scientists, running from one left-wing talk show to the next with some scaredy-cat warning. Not one of them has any business sense . . . any idea of what's made this country great. Production, that's what it's all about, ma'am, unfettered production. *That's* what has given us the world's best life-style . . . all the things we own and enjoy. Like my Hummer.

ME: Thank you for the business-school crash course, Mr. Dinger. You're right, of course, it's all about production. So would you be so kind as to share with the jury the gas mileage your Hummer produces?

HD: Sure. It's rated at 10 miles per gallon. But if I'm going cross-country, and none of the family is using the air-conditioning, the DVD player, the television, the all-electric Monopoly game, the rear-viewing TV camera, or the hot tub – and I have a strong enough tailwind – why, I can get it up to almost 11. Once I even got 11.5, but that was going downhill outside of Vegas. Why do you ask?

ME: Oh, just wondering, Mr. Dinger, just wondering. And how is your Hummer's mileage when you take it off-road, its originally intended use?

HD: Off-road? You've got to be joking, ma'am! Take this baby out into the boondocks? Oh, no, not this kid! Why, it takes two hours and nearly 100 gallons of water to get it cleaned up again if we so much as get rain sprinkles on a dusty day. No, siree! This baby stays on the highway!

ME: And could you share with the jury, Mr. Dinger, why you and your family happened to choose this vehicle?

HD: The family really didn't have much to do with it. I'm the Car Guy in our house and it was my choice. It's really a Guys' Vehicle, you know. In fact, I don't think I've ever seen a woman driving one. Not even at one of our Hummer Hoedowns. The wives and girlfriends are there, of course, but they don't drive. They just do the bar-BQ.

ME: Then how did *you* happen to choose it?

HD: I wanted something you don't see on every block in the neighborhood – even where I live . . . you know, something that stands out at the club. Every guy I know wants one. I should've opened a dealership.

ME: You've been very helpful, Mr. Dinger. I have just one more question.

HD: Shoot.

ME: Do you believe your Hummer driving habits would change much if gasoline went up to, say, \$5.00 a galleon . . . or even higher.

[HD starts to laugh, almost uncontrollably.]

HD: (trying to control his laughing enough to answer, but without much luck) Oh, Mother Earth, you are too much, just too much! (getting his laughter under more control) I paid \$143, 283 for my H-1 Hummer. For more formal stuff, I have a 300 SE Mercedes. My wife has a 450 Lexus and a little Miata,

just for fun. My son drives back and forth to A&M in a customized Corvette. Do you really think the price of gasoline would make even a tiny little difference in how – or what – we drive? Hardly! I mean, my Hummer has *two* 51-gallon diesel fuel tanks. Multiply that by the price of a gallon of diesel and you'll see that if I worried about price, I wouldn't even take it out of the driveway!

ME: (aside to His Honor) Not a bad idea. (to Hummer) I get your point, Mr. Dinger.

HD: But I have to run, ma'am. I imagine they'll be wanting my parking spot at the loading dock.

ME: I imagine so, Mr. Dinger. Thank you so much for coming. Your information has been most . . . ah . . . enlightening.

HD: You're most welcome. Any time. Just give me a call on the old cell phone! Ciao! [he hurriedly exits.]

Miss GULF STREAM

[NOTE: When Miss Gulf Stream is included as a witness, there needs to be a sweater or similar garment over the back of the Bailiff's and Mother Earth's chairs.]

ME: Your Honor, I now call as witness Miss Gulf Stream.

[Miss GULF STREAM enters, in jogging attire. She keeps walking quickly around the witness chair while she speaks.]

Welcome, Miss Gulf Stream. I'm glad you could include us in your route.

GULF STREAM (GS): Oh, yes, ma'am. I wouldn't miss this for anything!

ME: Miss Stream, could you tell the jury just how long *is* your route?

GS: The Atlantic *and* the Pacific, ma'am?

ME: Yes, if you please.

GS: (to jury) (continues walking quickly around the witness chair) Well, by the time I make my loops in both the Atlantic and the Pacific oceans, on my whole route I cover about . . . (thinks a moment) you know, I've never paced it off. I'm really not sure. But I do know it takes me about 1200 years in the Atlantic-to-Pacific section, and then several more centuries to get back to the Atlantic. They call me "The Ocean Conveyer Belt."

HH: But non-stop? You go all the way around *non-stop*?

GS: Yes, Your Honor. Just as I have for thousands and thousands of years. It's my role in life, you know . . . my mission.

ME: (*to HH*) It's true, sir. I don't know what I'd do without her. She's still young. She can do that millennium after millennium. Not me. Just keeping an eye on things around my earth is enough work. Gulf, dear, tell the jury what you do on your route.

GS: (directly to jury) Basically, my job is to move water.

HH: Water?

GS: (*includes HH*) Yes, I move water. I'm probably best known for moving warm water north to England and the rest of northern Europe. As long as I keep moving my water past them, Europe stays warm in winter.

DA: Objection, Your Honor!

HH: Yes, counselor?

DA: Well, it's not exactly a legal objection, sir . . . more of a request.

HH: Go on.

DA: Miss Stream's being in constant motion is making me dizzy! I can't take notes or focus on her words. I suspect it's a plan on the part of Mother

Earth to distract me. Can you make her stop walking round and round like that?

HH: Well, it's a bit distracting to me, too. Request granted. (bangs gavel) (to GULF STREAM) Miss Stream, it's the pleasure of the court that you stop walking around the chair like that. (as to a child) Please, just sit down in the witness chair and be quiet for a bit.

GS: (still walking) I don't think you want me to do that, Your Honor. I mean, stop like that.

HH: And why is that, Miss Stream?

GS: In my case, it's just not a good idea, sir. But if you insist . . .

HH: I do insist.

[GULF STREAM stops walking and sits down in the witness chair. She still fidgets a bit and swings her legs, like a child, but is basically still.]

There, isn't that better?

GS: Don't say I didn't warn you.

ME: Thank you, Gulf, dear. That is very helpful.

GS: You're welcome, ma'am. But . . . oh, never mind.

ME: Would you now tell the jury a little more about how your system works.

GS: (to jury) Sure. (speaking very fast) After my swing past Europe with the warm water, I start to cool – it's cold up around Newfoundland! – so I turn back south again to get warm. But a couple of things happen. My cold water is now heavier than the warm water still coming north, so it sinks down out of the way. Also, some of my water is freezing into sea ice up there, forcing the salt out of it into the water as it freezes, making the water

even saltier and heavier. That also helps to sink the water going south below the level of the warm water coming north. (*to ME*) Am I going too fast, ma'am?

ME: (putting the sweater from the back of her chair over her shoulders, as does BAILIFF. DA and HH start to shiver closer into their clothes)

BF: (to no one in particular) Seems like it's getting pretty chilly in here.

ME: (to GS) No, you're doing fine, Gulf. Keep going.

GS: (to jury) So it's important work that I do. Great Britain is at the same latitude as Siberia, you know. If I don't deliver the warm southern water, they could get pretty cold. They tell me I deliver 27 thousand times as much heat to them in the wintertime as all their power plants put together! Pretty impressive, huh?

ME: But tell them what's happening now.

GS: World's People are burning so much fossil fuels and giving off so much emissions, that the northern climate is warming, faster than anywhere else on earth. That's melting the polar ice up there around Greenland. Then that runs down into my water that's trying to sink and get out of the way of the warm water coming north. But that fresh water from the ice is diluting my salt water and it's having trouble sinking.

ME: And then what?

GS: I'm slowing down. (*slows down*) By almost 30%, I'm-slow-ing-down. It's very frustrating, after all these years of running around the earth.

BF: (tries to drink from glass on her table) It's frozen! My water is frozen!

GS: I'm sorry – but I tried to warn you. When I stop moving, it gets *cold*.

HH: (shivering) I've changed my mind, Miss Stream. Please keep moving!

DA: (also shivering) Yes, keep moving!

[GULF STREAM gets up and starts walking around the chair again.

BAILIFF starts timing her again. [ME and BF take off the sweaters from around their shoulders, while DA and HH begin to look more comfortable.]

GS: I'll do what I can, sir, but I'm not the one producing emissions, not me. Talk to World's People. I'll keep going as long as I can. It's up to them.

ME: Thank you very much for your help, Gulf. Happy flowing.

GS: Thank you, ma'am. I'll do my best. 'Bye. (she exits jogging)

* * *

HH: (to Mother Earth and Defense Attorney) Thank you, Mother Earth. (to both) Are the principals ready to present their closing summaries to the jury?

DA: Yes, Your Honor.

ME: Yes, Your Honor.

HH: (*Mr./Ms.*) Defense Attorney, may I ask you to begin?

DA: Of course, Your Honor. Thank you.

(He/she rises from the chair, carefully adjusts his tie/ her sleeves, and addresses the jury, reading from her /his notes)

Ladies and Gentlemen of the jury. Honored guests. I stand here before you embarrassed, yes, embarrassed as a member of the legal profession. Embarrassed that a legal proceeding has forced you to sit here and listen to some of the most blatant pseudo-scientific drivel that I have ever heard in a courtroom.

I ask you, does Mother Earth here expect you to believe for even one minute that melting glaciers in France are caused by you driving your SUV to the grocery store here in (*this town*)? Drivel! That any rising sea level

around the world could be the result of burning wonderful-smelling pinion in your own fireplace on a cold winter's evening? Drivel! That Miss Hurricane Katrina was able to devastate New Orleans because you used a little extra electricity to keep your Christmas lights on to welcome Santa Claus? Excuse me, but I don't think so. Neither does our President, or our elected Congress, or even several government scientists.

Let's be honest about what some so-called "environmentalists" are reporting from a few isolated places in the world. Mother Earth, despite her whining here today, has been waxing hot and cold for millions of years. That happens to middle-aged women. We all know that. It is simply neither fair nor scientifically accurate for her to complain that it is caused by the daily activities of ordinary World's People.

And the so-called "scientists." Everyone knows that our "scientists" make their money on grants from liberal foundations. So without some cockamamie project to "research," they have no incomes and their liberal colleges and universities have no students. So-called "global warming" is really that simple – a dreamed-up event to promote some scientists' pet causes and to raise their incomes. That's all.

In closing, I surely hope that intelligent men and women such as yourselves have not been taken in by these ludicrous fictions and false charges against my innocent clients, World's People. Instead, I hope you realize the wonderful product-filled life fossil fuels allow us to have. And we wouldn't want to jeopardize that, now would we? And all the lucrative jobs that go with them? Of course not! So please save any further waste of your time and mine and vote to declare my World's People clients innocent of these downright silly charges.

Ladies & gentlemen of the jury, I thank you for your attention.

[DA, looking pleased with him/herself, sits back down.]

HH: Thank you, (Mr./Ms.) Defense Attorney. Mother Earth.

ME: Thank you, Your Honor. (addressing the jury)

Ladies & gentlemen of the jury. Distinguished guests. Members of the press. As you know, I have been around for a long, long time . . . time far beyond your very understanding. And during that time, I have kept myself reasonably in balance. (Mr./Ms.) Defense Attorney is correct in saying that over those eons of time, I have had many changes from hot to cold and back again. What he neglected to remind you, however, is that my temperature changes typically occurred over thousands of years . . . sometimes tens of thousands.

But not this time, ladies and gentlemen, not this time. Since World People's Industrial Revolution, the amount of warmth-producing gases in my atmosphere has climbed to the highest level in almost 650,000 years.

Global Warming is not new. Your scientists were alarmed by the rapid increase in greenhouse gases since your 1970's, some warning even then of the effects I am experiencing now. Yet even knowing that I would be harmed, World's People did not change their behaviors in any significant way to avoid harming me. That, ladies and gentlemen of the jury, is why I am bringing charges. I will not tolerate it! And neither should you.

As you well know, I am a very small planet in a vast Universe, but I am the only home for World's People – there is nowhere else for them to go. Frankly, I can get along quite well without them – but they certainly cannot get along without me.

Be assured that as long as I receive energy from our Sun, I can adapt to the changes World's People's emissions will cause me. But I must warn you – and out of my affection for you, I urge you to listen carefully – my methods of adapting may be such that World's People can no longer continue to live with me.

If that is ever the case, I will of course miss them. In some ways they've been fun, but in many ways they have not been good to me, so I may not miss them for long. The dinosaurs were fun, too, but when they were gone, I didn't really miss them for more than, oh, ten thousand years or so.

As you will recall, Mr. Powerplant mentioned his three children. I truly hope that in your deliberations, you, too, will consider the future stretching out before the world's children. With that sincere wish, I close with these words from author John Atcheson,

"Our children may forgive us the debts we're passing on to them, they may forgive us if terrorism persists, they may forgive us for waging war instead of pursuing peace . . . they may even forgive us for squandering the opportunity to put the nuclear genie back in the bottle. But they will spit on our bones and curse our names if we pass on a world that is barely habitable when it was within our power to prevent it.

And they will be right to do so."

Thank you for your respectful time and attention.

BF: Ladies and gentlemen of the jury, you will now take a *___-minute break for your deliberations. Please return when you hear my bell.

Everyone will please stand.

[All stand. HIS HONOR rises from his chair and leaves the "courtroom," with MOTHER EARTH, DEFENSE ATTORNEY, and BAILIFF following. The "deliberations" activities begin.]

[POSSIBLE "DELIBERATIONS" ACTIVITIES

- Meditation, focused on jury's possible decision
- Welcoming guests
- Offering
- Choir/hymn/music
- Announcements, etc.]

ACT II

[BAILIFF returns to the table and rings the bell. When the jury is again in their seats, he begins the 2nd half of the trial.]

BF: Everyone will please rise.

[HIS HONOR enters and sits in the judge's chair at the table.] (to jury) You may be seated. [Raps gavel]

Your Honor, your court is now in session.

HH: Thank you, Bailiff. (*to jury*) Now comes the most important moment of these proceedings. Are you prepared to render a decision in the case of Mother Earth vs. World's People?

BF: You may indicate by saying "I am." (jury indicates readiness) They are ready, Your Honor.

HH. Good. (*to jury*) As you know, the determination of guilt or innocence in a case such as this is determined by a simple majority vote of the jury. Bailiff, will you please monitor the count?

BF: Yes, Your Honor.

HH: Will all jurors who have found that World's People are **guilty** as charged of carrying out grievous damages against Mother Earth and limiting her civil rights to a fruitful existence, so signify by saying "Aye"? [jury "votes"] Thank you.

Will all those who found World's People **innocent** of the charges, so signify by saying "nay"? [jury "votes"] Thank you. Bailiff, what do you find to be the verdict?

BF: Your Honor, the jury has voted to find World's People

("guilty" /"innocent") of Mother Earth's charges.

HH: Thank you. Please certify the result in the Court Records.

[If found GUILTY]:

HH: (*to jury*) Stepping outside my official role as judge of this court, I must say that I am very pleased by your verdict. You have determined that World's People, through a collective combination of negligence and irresponsibility, have put civilization as we know it at risk.

Given your verdict, I sentence the guilty parties to Community Service, the length to be commensurate with the success of said public service in lowering greenhouse gas emissions.

Mother Earth, I leave the details of this Community Service to you. Would you please inform this jury of World's People what you require of them to help alleviate the grievous harm they are causing you?

ME: With pleasure, Your Honor! (to jury) I have three Community Service actions that every one of you can take to limit the harm you are now doing to my climate:

• Number one: Change your light bulbs!

Compact fluorescent light bulbs last for years and use a quarter of the energy of regular bulbs. Saving energy saves burning fossil fuels, and my witnesses have just told you what that's doing to my atmosphere and

planet. You may also save hundreds of household budget dollars over the long term because of their longer life.

If every American household replaced a burned-out bulb with a compact fluorescent bulb, it would prevent more than 13 *billion* pounds of CO2 from entering my atmosphere – which is equivalent to taking more than a million of your fossil fuel-burning cars off your jammed highways for an entire year!

• Number two: Drive your car differently – or drive a different car. The truth is that your car emits as much CO2 as your entire house! Anything you do to improve the fuel efficiency of your car will have a very positive impact on climate change. Buying a fuel-efficient car – like a hybrid – is wonderful. But not all of you can do that – at least, not immediately. I understand that. But in the meantime there are things you can do with your present car to be more fuel-efficient:

One: Drive less. Every year, Americans as a whole drive more miles than they did the year before.

Two: Telecommute to work whenever possible!

Three: Use public transportation at every opportunity!

Four: Get your car tuned up. Make it run as efficiently as possible. Five: Slow down! For every mile per hour you drive slower at highway speeds, you reduce your fuel consumption—and your gasoline bill – by1–2%.

• Number three: Your house – Keep it not too hot, not too cold! Tune up your heating system. Doing this one thing at least every two years can significantly reduce your use of energy. Clean its vents, close any unused vents, and change the filters.

Buy a programmable thermostat, which can regulate different temperatures at different times of the day. If you already have one, use it! I understand that three-quarters of you people with programmable thermostats don't even use them! Add two degrees to an air conditioner's thermostat in summer, and lower it two degrees in winter. If everyone did that, the energy saved would greatly help my atmosphere.

(*looks at watch*) That's all I have time for now, so I direct you to look for your own list of Community Services you can do for me. For starters, look on the <Earthday.net> web site for more ideas and ways to help me again control my climate.

I'm counting on you! Remember what Margaret Mead said many years ago: "Never doubt that a small group of thoughtful committed citizens can change the world. Indeed it's the only thing that ever has!"

Thank you for the help I know you'll give me. I truly hope we can live together for a long, long time. But remember – the choice of whether we can continue to live together is *yours*, *not mine*.

HH: Thank you, Mother Earth. (*to jury*) I charge you to carry out all three of Mother Earth's Community Services! You all are on probation with this court. If my probation officers tell me I need to see you back in here again, believe me, there will be Hell to pay!

Meanwhile, thank all of you for your excellent work here today. Good day to you all.

BF: (to jury) All rise, please.

[All rise, Your Honor leaves.]

Thank you all very much. (*Bangs gavel*) I declare this trial concluded and this International Court of Last Resort closed. God bless you all!

[MOTHER EARTH, DEFENSE ATTORNEY, and BAILIFF follow YOUR HONOR off stage.]

THE END

CURTAIN CALL

 $[CURTAIN\ CALL:\ Do\ the\ curtain\ call\ whichever\ way\ seems\ most\ comfortable,\ given\ the\ context\ of\ the\ presentation.]$

[If found **INNOCENT**]:

HH: (*to jury*) Stepping outside my official role as judge of this court, I must say that I am very disappointed by your verdict. Limited by time, you have unfortunately only heard from a small fraction of the witnesses available to report on the damages to Mother Earth now being witnessed by both inhabitants and scientists from around the world.

As I understand it, the general scientific consensus is that there is no time to waste in doing everything possible to limit the emission of greenhouse gases into her atmosphere. There no longer appears to be any doubt that such gases significantly contribute to the acceleration of climate change. As such, anything we can do to eliminate or reduce their emission will help to minimize the serious effects on Mother Earth and all of us living beings that she has so far permitted to live here with her.

(*To Mother Earth*) To that end, I ask Mother Earth if she will share with you a number of actions that you – and all with whom you have contact – can do to reduce the emissions of these dangerous greenhouse gases?

Mother Earth, will you be so kind?

ME: With pleasure, Your Honor! (to jury) I have three actions that every one of you can take to limit the harm you are now causing to my climate:

• Number one: Change your light bulbs!

Compact fluorescent light bulbs last for years and use a quarter of the energy of regular bulbs. Saving energy saves burning fossil fuels, and my witnesses have just told you what that's doing to my atmosphere. You may also save hundreds of household budget dollars over the long term because of their longer life. If every American household replaced a burned-out bulb with a compact fluorescent bulb, it would prevent more than 13 billion pounds of CO2 from entering my atmosphere – which is equal to taking more than a million of your fossil fuel-burning cars off your highways for an entire year!

• Number two: Drive your car differently – or drive a different car. The truth is that your car emits as much CO2 as your entire house! Anything you do to improve the fuel efficiency of your car will have an enormously positive impact on climate change. Buying a fuel-efficient car – like a hybrid– is wonderful. But not all of you can do that – at least, not immediately. I understand that. But in the meantime there are things you can do with your present car to be more fuel-efficient:

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Buy a programmable thermostat, which can regulate different temperatures at different times of the day. If you already have one, *use it!* I understand

three-quarters of you people with programmable thermostats don't even use them! Add two degrees to an air conditioner's thermostat in summer, and lower it two degrees in winter. If everyone did that, the energy saved would greatly help my atmosphere.

(*looks at watch*) That's all I have time for now, so I direct you to look for your own list of Community Services you can do for me. For starters, look on the UU Ministry for Earth and Earth Day Net websites for more ideas and ways to help me control my climate.

I'm counting on you! Remember what Margaret Mead said many years ago: "Never doubt that a small group of thoughtful committed citizens can change the world. Indeed it's the only thing that ever has!"

Thank you for the help I know you'll give me. I truly hope we can live together for a long, long time. But remember – the choice of whether we can continue to live together is *yours*, *not mine*.

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Meanwhile, thank all of you for your excellent work here today. Good day to you all.

BF: (to jury) All rise, please.

[All rise, Your Honor leaves.]

Thank you all very much. (*Bangs gavel*) I declare this trial concluded and this International Court of Last Resort closed. God bless you all!

[MOTHER EARTH, DEFENSE ATTORNEY, and BAILIFF follow YOUR HONOR off stage.]

THE END

CURTAIN CALL