

Testimony of
Dr. James Tonkowich
to the Environment and Public Works Committee
of the
United States Senate
Thursday, June 7, 2007

First, I want to thank you for this opportunity to present my testimony. The Institute on Religion & Democracy is an ecumenical alliance of US Christians working to reform their churches' social witness in order to contribute to the renewal of democratic society at home and abroad. Most of our constituents, let me add, are evangelicals who are members of the so-called "mainline" Protestant churches. They are involved with the IRD in part because they feel misrepresented by their denominational Washington offices and by groups like the National Council of Churches. Most are working within their denominations to bring about changed social witness policies that are consistent with biblical and historic Christian teachings.

This morning I would like to address two concerns regarding global warming, concerns where Christian theology had sometimes been misconstrued in the global warming debates. The first is the positive valuation of human population and human development. The second is the importance on not foreclosing prudential debates that should remain open.

This summer, our son is getting married in his bride's hometown just outside Yosemite Valley. So along with a wedding, there'll be hiking and fly fishing in the high country of Tuolumne Meadows.

Isn't that the way the world should be? After all, the biblical story begins in a garden—fresh, newly created, uncluttered, natural, a pristine wilderness.

Then came the breaking of God's law—the Fall.

“Cursed is the ground because of you,” said God. “Through painful toil you will eat of it all the days of your life.

It will produce thorns and thistles for you and you will eat the plants of the field.

By the sweat of your brow you will eat your food until you return to the ground, since from it you were taken; for dust you are and to dust you will return.”

(Genesis 3:17b-19).

After the expulsion from Eden, the story of humanity and of our relationship with God on this cursed ground seems as though it should end up back in the Garden. All the trash cleaned up and the marvelous, all-natural freshness of Eden restored. The Earth picked clean of human encroachment.

It's tempting to think about it that way. In fact recently National Association of Evangelicals Vice President for Governmental Affairs Richard Cizik told *Newsweek* that he

feels that God is saying, "...with my help, you can restore Eden."¹ The thought is tempting, the sound-bite attractive, but biblically and theologically, it's pure nonsense.

In the final analysis, the Bible is not a story of restoration. It's a story of re-creation. "Behold," says God in Revelation 21:5, "I'm making everything new." Eden will never be restored. That was never the intent. Instead something better will happen: all things will be made new—re-created with an unexpected twist. The grand story that began in a garden ends in a city. This final city, the New Jerusalem, descends out of the New Heavens to its place on the New Earth. It's a perfect city; a river and garden mark its heart, but it's a city nonetheless.

What is a city? First, a city is a complex of artifacts. Cities are not created out of nothing, nor do they grow out of the ground. Cities are shaped from the stuff of creation. Walls, doors, windows, paving stones, foundations fashioned out of stone that must be quarried, wood that must be harvested, and metal smelted from ore.

The Bible values humans as makers who take the raw material of creation—stone, trees, ores—and create. In fact, the creation is incomplete without human activity shaping it. Even in Eden, God called humans to tend the Garden and rule Earth's creatures (Genesis 1:28). This was not a call to maintain the Earth as an unpopulated wilderness area. The Bible sees human beings, human procreation, and human industry as positive goods. We improve what we are given. We build cities.

Second, a city is a habitation for people—people who belong on the Earth. "Be fruitful, multiply, fill the Earth" (Genesis 1:28).

This, as it turns out, is in contrast with much if not most environmentalist thinking.

For example, last year, the Texas Academy of Science named ecology professor Eric Pianka of the University of Texas its "Distinguished Texas Scientist" for 2006. In his acceptance speech Pianka said the only hope for Earth is the death of ninety percent of its human inhabitants. His remarks were greeted by what one observer called "loud, vigorous, and enthusiastic applause"² presumably by people who think they're part of the ten percent.

Pianka's remarks are consistent with a long history of environmentalist thinking that sees humans simply as consumers and polluters if not parasites and an infestation. This thinking leads many to insist that population control—including unlimited abortion on demand—is integral to any environmental agenda.

- "People are always and everywhere a blight on the landscape," said John Muir, founder of the Sierra Club³

¹ Richard Cizik in "16 Ideas for the Planet," *Newsweek*, April 16, 2007.
<http://www.msnbc.msn.com/id/17996835/site/newsweek/>

² Forrest M. Mims, "Meeting Doctor Doom" in *Citizen Scientist*, March 31, 2006.
http://www.sas.org/tcs/weeklyIssues_2006/2006-04-07/feature1p/index.html

³ Fort Worth Dallas Four Wheel Drive, 5 October 1999. "Quotes from some Green Advocate Group Members." Internet: www.fwd-fwd.org/quotes.html. Accessed on 19 January 2000.

- “Given the total, absolute disappearance of Homo sapiens,” wrote Paul Taylor, author of *Respect for Nature, A Theory of Environmental Ethics* “then not only would the Earth’s community of Life continue to exist, but in all probability, its well-being enhanced. Our presence, in short, is not needed.”⁴
- Gophilus, spokesman for Gaia Liberation Front, has said, “[W]e have no problem in principle with the humans reducing their numbers by killing one another. It’s an excellent way of making the humans extinct.”⁵
- And John Davis, editor of the journal *Earth First!* Commented, “Human beings, as a species, have no more value than slugs.”⁶

In a similar vein, Dr. Jay Richards of the Acton Institute received an email from a scientist who commented:

Surely, the Black Death was one of the best things that ever happened to Europe: elevating the worth of human labor, reducing environmental degradation, and, rather promptly, producing the Renaissance. From where I sit, Planet Earth could use another major human pandemic, and pronto!⁷

Now logically, you can support schemes for climate change without supporting population control. But for many environmentalists climate control is inextricably linked to population control. After all, since people use up natural resources, release carbon dioxide, and otherwise pollute the environment, fewer people means less harm to the environment. So, to save the Earth, we have to reduce the human population. And that thinking is creeping into the thinking of some Christians.

For example, the foundational document of the Evangelical Environmental Network states that environmental “degradations are signs that we are pressing against the finite limits God has set for creation. With continued population growth, these degradations will become more severe.”⁸ What solution is there to this problem except population control?

Karen Coshof who produced the film “The Great Warming”—a film enthusiastically endorsed by some evangelical leaders—said after the film’s release, “Population is the underlying problem—the catalyst for the whole thing, but we didn’t get into that in the film. That is the underlying problem—too many people—all in competition for the same resource.”⁹

⁴ Taylor, Paul, 1986. *Respect for Nature: A theory of Environmental Ethics*, Princeton, NJ: Princeton University Press, P. 115.

⁵ The Off-Road Network, 2000. *Genocide Threats from Green Terrorists*. Internet: www.off-road.com/green/genocide.html. Accessed on 19 January 2000.

⁶ Fort Worth/Dallas Four Wheel Drive, 5 October 1999. *Quotes From Some Green Advocate Group Members*. Internet: www.fwd-fwd.org/quotes.html. Accessed on 19 January 2000.

⁷ Jay Richards, “God and Man in the Environmental Debate.” Acton Institute, November 30, 2005. <http://www.acton.org/ppolicy/comment/article.php?article=298>

⁸ Evangelical Environmental Network, “On the Care of Creation: An Evangelical Declaration on the Care of Creation.” <http://www.creationcare.org/resources/declaration.php>.

⁹ Kate Monaghan, “Climate Movie: Conservative Worries Christians May Be Duped.” *CNS News*, November 6, 2006. <http://www.cnsnews.com/Culture/Archive/200611/CUL20061102a.html>

National Association of Evangelicals Vice President for Government Affairs, Richard Cizik told an audience at the World Bank, “We need to confront population control and we can—we’re not Roman Catholics after all—but it’s too hot to handle now.”¹⁰

Population control, which nearly always includes abortion on demand, is abhorrent to most Evangelical and Catholic Christians.

By contrast, a view that is consistent with biblical and historic Christian teaching is that Earth was shaped by a benevolent Creator to be the habitat that sustains and enriches human life even as humans sustain and enrich the Earth through human creativity and human industry.

Is there sin that destroys the environment? Of course. There’s sin in everything, but the ethical way to control sin—environmental sin, personal sin, economic sin—is not to reduce the population of sinners. We need instead to find ways to empower people—particularly the global poor—to shape creation for the common good.

While there is nothing necessarily wrong with the thoughtful procreation of children, the notion of some fixed carrying capacity of the entire Earth is highly speculative. And it does not take into account that large portions of the Earth’s surface are uninhabited, most inhabitants are not using the best technologies available, and there’s no reason to assume that technological innovations have suddenly come to a halt.

The problem is not population. It’s how to create just, peaceful, educated societies in which people can use and develop technologies to meet their needs. And if the truth be told, population growth slows in more technologically advanced societies. So even if we wanted to slow population growth, the most humane way to do that would be to seek the greatest economic benefit for the poor. And in order to do that we must make sufficient quantities of inexpensive energy available to the global poor—something believers in catastrophic global warming are unwilling to do.

And it is not just a matter of withholding energy from those who need it. According to the Congressional Budget Office, cap-and-trade policies of the sort that are advocated by many, including the Evangelical Climate Initiative¹¹, will disproportionately hurt the poor.

Regardless of how the allowances were distributed, most of the cost of meeting a cap on CO₂ emissions would be borne by consumers, who would face persistently higher prices for products such as electricity and gasoline. Those price increases would be regressive in that poorer households would bear a larger burden relative to their income than wealthier households would.¹²

¹⁰ Myron Ebell, Personal e-mail (May 2, 2006). Ebell is Director, Energy and Global Warming Policy at the Competitive Enterprise Institute.

¹¹ Evangelical Climate Initiative, “Principles for Federal Policy on Climate Change.” <http://pub.christiansandclimate.org/pub/PrinciplesforFederalPolicyonClimateChange.pdf>

¹² Congressional Budget Office, “Trade-Offs in Allocating Allowances for CO₂ Emissions” April 25, 2007, page 1.

A solution to an environmental problem that will trap the poor in their poverty is not a solution.

An ethical environmental policy must elevate human beings, lifting them from poverty and pollution. Wealthier is healthier for humans and for the environment. Writing in the Winter 2006 *Wilson Quarterly*, Bjorn Lomborg, the Danish statistician who says he once held “left-wing Greenpeace views,” wrote:

...if we are smart, our main contribution to the global environment 30 years from now will be to have helped lift hundreds of millions out of poverty, sickness, and malnutrition while giving them a chance to compete in our markets. This will make a richer developing world, whose people will clean up the air and water, replant forests, and go green.¹³

The second concern I want to raise is over the debate about global warming. “Debate?” someone may ask, “What debate?” That is exactly the problem.

The proponents of the idea of catastrophic global warming have declared that the debate is over. No further discussion is required and no further disagreement is welcome, no argument is engaged.

I was appalled recently at a moderated discussion between evangelicals on both sides of the global warming issue. One side presented facts, arguments, and questions while the other, those who believe in catastrophic global warming, responded with nothing but bald assertions. When pressed, one participant—as if on cue—reverted to an *ad hominem* attack on his opponents. He then went on to simply assert that he believes whatever the scientists tell him because the scientists all agree. But the scientists do not all agree.

Consider the questions that need to be answered:

- How is the climate changing?
- What are the causes?
- What is the likely extend of future change?
- Is it better to adjust to climate change or attempt to prevent it?
- What measures, if any, would prevent climate change?
- How much would such measures cost and would the benefits be worth the potentially massive cost?

In my reading of the literature and listening to the debate, I have not seen consensus on any of those questions.

Attached is an appendix listing scientists with relevant expertise who do not see the evidence that the current warming is primarily caused by humans and catastrophic.

¹³ Bjorn Lomborg, “What is the Most Pressing Environmental Question?” in *Wilson Quarterly*, Winter 2006, page 40.

The kind of radical fideism that some evangelical Christians are exhibiting toward catastrophic global warming is a betrayal of science and a betrayal of the Christian intellectual tradition. It is a betrayal of science because science is not about voting. Science is about facts, interpretations of those facts, and conclusions that either align with reality or don't. Scientific consensus has been wrong before and it will be wrong again. Thank God for skeptics. They have saved millions of lives. "Skeptic" should be a badge of honor among scientists, and yet it is being tossed about in this debate as a term of derision.

As Carl Sagan wrote, "On the one hand it [science] requires an almost complete openness to all ideas, no matter how bizarre and weird they sound, a propensity to wonder. ... But at the same time, science requires the most vigorous and uncompromising skepticism, because the vast majority of ideas are simply wrong, and the only way you can distinguish the right from the wrong, the wheat from the chaff, is by critical experiment and analysis."¹⁴ Declaring that the debate is over based on an alleged consensus and a rejection of skepticism is a betrayal of science.

It is also a betrayal of the Christian intellectual tradition. Christianity, contrary to what some claim, is not pure faith. Christians have always relied on faith and reason to understand the world. Protestant Christians have stressed the authority and responsibility of the individual in making judgments. We test would-be authorities by the light of faith and reason. We ask questions.

The refusal to engage in thoughtful debate about global warming, while choosing instead to make dubious assertions about the debate being over or all scientists agreeing, is not a Christian approach to the issue—particularly when the livelihood and lives of the global poor are at stake. As sixty scientists wrote to Canadian Prime Minister Stephen Harper, "Climate change is real' is a meaningless phrase used repeatedly by activists to convince the public that a climate catastrophe is looming and humanity is the cause."¹⁵ We can and must do better than the repetition of mantras based on what is wished to be true.

For Christians, stewardship of God's creation is non-negotiable. Environmental issues deserve a well-informed and thoroughly Christian response. That response must be one that thoughtfully considers *all* the scientific evidence and eschews a public relations campaign of endless repetition. Further, we must also refuse the dangerous misanthropy of modern environmentalist ideology. We must take an approach that, by contrast, promotes a culture of life and that affirms that humans and human activity are valuable, worthy, and, in fact, indispensable in God's good plan for this good Earth.

¹⁴ Carl Sagan, "Wonder and Skepticism" in *Skeptical Enquire*, Volume 19, Issue 1, January-February 1995. <http://www.positiveatheism.org/writ/saganws.htm>.

¹⁵ Dr. Ian Clark, *et. al.* "An open letter to Prime Minister Stephen Harper" in *National Post*, April 6, 2006. <http://www.canada.com/nationalpost/financialpost/story.html?id=3711460e-bd5a-475d-a6be-4db87559d605>

Appendix

A Selected List of Scientists and Scholars with Relevant Experience Who Question the Validity of the Theory of Catastrophic, Human-Caused Global Warming

- Dr. Ian D. Clark, professor, isotope hydrogeology and paleoclimatology, Dept. of Earth Sciences, University of Ottawa
- Dr. Tad Murty, former senior research scientist, Dept. of Fisheries and Oceans, former director of Australia's National Tidal Facility and professor of earth sciences, Flinders University, Adelaide; currently adjunct professor, Departments of Civil Engineering and Earth Sciences, University of Ottawa
- Dr. R. Timothy Patterson, professor, Dept. of Earth Sciences (paleoclimatology), Carleton University, Ottawa
- Dr. Fred Michel, director, Institute of Environmental Science and associate professor, Dept. of Earth Sciences, Carleton University, Ottawa
- Dr. Madhav Khandekar, former research scientist, Environment Canada. Member of editorial board of Climate Research and Natural Hazards
- Dr. Paul Copper, FRSC, professor emeritus, Dept. of Earth Sciences, Laurentian University, Sudbury, Ont.
- Dr. Ross McKittrick, environmental economics, Associate Professor and Director of Graduate Studies, University of Guelph. IPCC expert reviewer (Working Group 1)
- Dr. Tim Ball, former professor of climatology, University of Winnipeg; environmental consultant
- Dr. Andreas Prokoph, adjunct professor of earth sciences, University of Ottawa; consultant in statistics and geology
- Mr. David Nowell, M.Sc. (Meteorology), fellow of the Royal Meteorological Society, Canadian member and past chairman of the NATO Meteorological Group, Ottawa
- Dr. Christopher Essex, professor of applied mathematics and associate director of the Program in Theoretical Physics, University of Western Ontario, London, Ont.
- Dr. Gordon E. Swaters, professor of applied mathematics, Dept. of Mathematical Sciences, and member, Geophysical Fluid Dynamics Research Group, University of Alberta
- Dr. L. Graham Smith, associate professor, Dept. of Geography, University of Western Ontario, London, Ont.
- Dr. G. Cornelis van Kooten, professor and Canada Research Chair in environmental studies and climate change, Dept. of Economics, University of Victoria
- Dr. Petr Chylek, adjunct professor, Dept. of Physics and Atmospheric Science, Dalhousie University, Halifax
- Dr./Cdr. M. R. Morgan, FRMS, climate consultant, former meteorology advisor to the World Meteorological Organization. Previously research scientist in climatology at University of Exeter, U.K.
- Dr. Keith D. Hage, climate consultant and professor emeritus of Meteorology, University of Alberta

Dr. David E. Wojcik, P.Eng., energy consultant, Star Tannery, Va., and Sioux Lookout, Ont.

Rob Scagel, M.Sc., forest microclimate specialist, principal consultant, Pacific Phytometric Consultants, Surrey, B.C.

Dr. Douglas Leahey, meteorologist and air-quality consultant, Calgary

Paavo Siitam, M.Sc., agronomist, chemist, Cobourg, Ont.

Dr. Chris de Freitas, climate scientist, associate professor, The University of Auckland, N.Z.

Dr. Richard S. Lindzen, Alfred P. Sloan professor of meteorology, Dept. of Earth, Atmospheric and Planetary Sciences, Massachusetts Institute of Technology

Dr. Freeman J. Dyson, emeritus professor of physics, Institute for Advanced Studies, Princeton, N.J.

Mr. George Taylor, Dept. of Meteorology, Oregon State University; Oregon State climatologist; past president, American Association of State Climatologists

Dr. Ian Plimer, professor of geology, School of Earth and Environmental Sciences, University of Adelaide; emeritus professor of earth sciences, University of Melbourne, Australia

Dr. R.M. Carter, professor, Marine Geophysical Laboratory, James Cook University, Townsville, Australia

Mr. William Kininmonth, Australasian Climate Research, former Head National Climate Centre, Australian Bureau of Meteorology; former Australian delegate to World Meteorological Organization Commission for Climatology, Scientific and Technical Review

Dr. Hendrik Tennekes, former director of research, Royal Netherlands Meteorological Institute

Dr. Gerrit J. van der Lingen, geologist/paleoclimatologist, Climate Change Consultant, Geoscience Research and Investigations, New Zealand

Dr. Patrick J. Michaels, professor of environmental sciences, University of Virginia

Dr. Nils-Axel Morner, emeritus professor of paleogeophysics & geodynamics, Stockholm University, Stockholm, Sweden

Dr. Gary D. Sharp, Center for Climate/Ocean Resources Study, Salinas, Calif.

Dr. Roy W. Spencer, principal research scientist, Earth System Science Center, The University of Alabama, Huntsville

Dr. Al Pekarek, associate professor of geology, Earth and Atmospheric Sciences Dept., St. Cloud State University, St. Cloud, Minn.

Dr. Marcel Leroux, professor emeritus of climatology, University of Lyon, France; former director of Laboratory of Climatology, Risks and Environment, CNRS

Dr. Paul Reiter, professor, Institut Pasteur, Unit of Insects and Infectious Diseases, Paris, France. Expert reviewer, IPCC Working group II, chapter 8 (human health)

Dr. Zbigniew Jaworowski, physicist and chairman, Scientific Council of Central Laboratory for Radiological Protection, Warsaw, Poland

Dr. Sonja Boehmer-Christiansen, reader, Dept. of Geography, University of Hull, U.K.; editor, Energy & Environment

Dr. Hans H.J. Labohm, former advisor to the executive board, Clingendael Institute (The Netherlands Institute of International Relations) and an economist who has focused on climate change

Dr. Lee C. Gerhard, senior scientist emeritus, University of Kansas, past director and state geologist, Kansas Geological Survey

Dr. Asmund Moene, past head of the Forecasting Centre, Meteorological Institute, Norway

Dr. August H. Auer, past professor of atmospheric science, University of Wyoming; previously chief meteorologist, Meteorological Service (MetService) of New Zealand

Dr. Vincent Gray, expert reviewer for the IPCC and author of 'The Greenhouse Delusion: A Critique of 'Climate Change 2001,' Wellington, N.Z.

Dr. Howard Hayden, emeritus professor of physics, University of Connecticut

Dr Benny Peiser, professor of social anthropology, Faculty of Science, Liverpool John Moores University, U.K.

Dr. Jack Barrett, chemist and spectroscopist, formerly with Imperial College London, U.K.

Dr. William J.R. Alexander, professor emeritus, Dept. of Civil and Biosystems Engineering, University of Pretoria, South Africa. Member, United Nations Scientific and Technical Committee on Natural Disasters, 1994-2000

Dr. S. Fred Singer, professor emeritus of environmental sciences, University of Virginia; former director, U.S. Weather Satellite Service

Dr. Harry N.A. Priem, emeritus professor of planetary geology and isotope geophysics, Utrecht University; former director of the Netherlands Institute for Isotope Geosciences; past president of the Royal Netherlands Geological & Mining Society

Dr. Robert H. Essenhigh, E.G. Bailey professor of energy conversion, Dept. of Mechanical Engineering, The Ohio State University

Dr. Sallie Baliunas, astrophysicist and climate researcher, Boston, Mass.

Douglas Hoyt, senior scientist at Raytheon (retired) and co-author of the book 'The Role of the Sun in Climate Change'; previously with NCAR, NOAA, and the World Radiation Center, Davos, Switzerland

Dipl.-Ing. Peter Dietze, independent energy advisor and scientific climate and carbon modeller, official IPCC reviewer, Bavaria, Germany

Dr. Boris Winterhalter, senior marine researcher (retired), Geological Survey of Finland, former professor in marine geology, University of Helsinki, Finland

Dr. Wibjorn Karlen, emeritus professor, Dept. of Physical Geography and Quaternary Geology, Stockholm University, Sweden

Dr. Hugh W. Ellsaesser, physicist/meteorologist, previously with the Lawrence Livermore National Laboratory, Calif.; atmospheric consultant.

Dr. Art Robinson, founder, Oregon Institute of Science and Medicine, Cave Junction, Ore.

Dr. Arthur Rorsch, emeritus professor of molecular genetics, Leiden University, The Netherlands;
past board member, Netherlands organization for applied research (TNO) in environmental,
food and public health

Dr. Alister McFarquhar, Downing College, Cambridge, U.K.; international economist

Dr. Richard S. Courtney, climate and atmospheric science consultant, IPCC expert reviewer, U.K.

Dr. E. Calvin Beisner, Associate Professor of Social Ethics, Knox Theological Seminary. Author of
Where Garden Meets Wilderness: Evangelical Entry Into the Environmental Debate.

Paul K. Driessen, Esq., environmental ethicist, Senior Policy Advisor on energy and environmental
issues, Congress for Racial Equality

Dr. Roy W. Spencer, climatologist, principal research scientist, University of Alabama, Huntsville
and former senior scientist for climate studies, Marshall Space Flight Center, NASA