TESTIMONY OF
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The Evangelical Climate Initiative

"AN EVANGELICAL CHRISTIAN PERSPECTIVE ON WHY CLIMATE CHANGE MUST BE ADDRESSED"

Before the
COMMITTEE ON THE ENVIRONMENT AND PUBLIC WORKS
U.S. SENATE
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Good morning. Thank you Chairwoman Boxer and Senator Inhofe for the opportunity to testify before you and the Environment and Public Works Committee. It is an honor to be here.

My name is the Reverend Jim Ball. I am an evangelical Christian who professes Jesus Christ to be my personal Savior and Lord. I am president and CEO of the Evangelical Environmental Network (EEN) and I am testifying before this committee as a signatory of the Evangelical Climate Initiative, a group of more than 100 senior evangelical leaders who believe that a vigorous response to global warming is a spiritual and moral imperative – now recognized as such by a majority of evangelical Christians and taken seriously by a new generation of evangelical leaders.

None of the witnesses before this committee today – except for Bishop Jefferts Schori – is a scientist. But some of us—myself included—have studied the developing science for many years, and we see today a growing number of religious and national leaders, including last week President Bush, who acknowledge recent scientific reports that the human contribution to climate change is virtually certain. This human contribution makes concrete action to reduce global warming pollution an inescapably spiritual act.

Introduction: The Evangelical Climate Initiative (ECI) Within the Evangelical Context

The Evangelical Climate Initiative was launched on February 8, 2006. Evangelical leaders who are part of the ECI include megachurch pastors such as Rick Warren, author of the *Purpose Driven Life*, Leith Anderson of Wooddale Church in St. Paul who is also president of the National Association of Evangelicals, Bill Hybels of Willowcreek Community Church in the Chicago area, and Joel Hunter of Northland Church near Orlando.

ECI leaders include Richard Stearns of World Vision U.S., the largest Christian relief and development organization in the world; Todd Bassett, former national commander of the Salvation Army, the largest charity in the US, Duane Litfin, president of Wheaton College, perhaps evangelicalism's most prestigious institution of higher learning, David Neff, editor of

Christianity Today, and David Clark, former chairman of the National Religious Broadcasters and founding Dean of Regent University.

Denominational leaders who joined the ECI include: Dr. Jack Hayford, president, International Church of the Foursquare Gospel; Rev. Michael J. Glodo, former stated clerk, Evangelical Presbyterian Church; Dr. Peter Borgdorff, executive director emeritus, Christian Reformed Church; Bishop James D. Leggett, general chair, Pentecostal World Fellowship; Rev. Glenn R. Palmberg**,** president, Evangelical Covenant Church, and all of the bishops of the Free Methodist Church of North America.

Some evangelical leaders have not yet joined in this campaign, but today it is clear that to be concerned about global warming is recognized as a distinguishing characteristic of new evangelical leadership coming to the fore, leadership that--while embracing the vital concerns of every generation of evangelical Christians--is challenging our spiritual community and our national leaders to focus on a broader set of issues.[1]

The ECI's *Call to Action* begins by stating that:

> We are proud of the evangelical community's long-standing commitment to the sanctity of human life. But we also offer moral witness in many venues and on many issues. Sometimes the issues that we have taken on, such as sex trafficking, genocide in the Sudan, and the AIDS epidemic in Africa, have surprised outside observers. While individuals and organizations can be called to concentrate on certain issues, we are not a single-issue movement. We seek to be true to our calling as Christian leaders, and above all faithful to Jesus Christ our Lord. Our attention, therefore, goes to whatever issues our faith requires us to address.[2]

In the statement, the ECI leaders affirm that "For most of us, until recently this has not been treated as a pressing issue or major priority. Indeed, many of us have required considerable convincing before becoming persuaded that climate change is a real problem and that it ought to matter to us as Christians."[3]

But once convinced, the ECI leaders have remained true to their pledge even in the face of criticism and pressure to recant by some members of the community.[4]

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[1] "Emphasis Shifts for New Breed of Evangelicals" in the May 21, 2007 New York Times cites the ECI as an example of the maturing of the evangelical church. http://www.nytimes.com/2007/05/21/us/21evangelical.html?pagewanted=1&en=a2a799f19fee40e3&ex=1337486400&partner=permalink&exprod=permalink&ei=5124. See also an editorial in *Christianity Today*, http://www.christianitytoday.com/42965.

[2] The official site of the Evangelical Climate Initiative is www.christiansandclimate.org. The ECI statement, *Climate Change: An Evangelical Call to Action*, can be found at http://www.christiansandclimate.org/statement, both as html and pdf. The present quotation can be found in the printed or pdf version in the Preamble on page 2.

[3] Ibid.

[4] When the ECI launched on February 8, 2006, there were 86 signatories to the statement. Since then 20 have asked that their names be added while three have asked for their names to be removed, bringing the current total to 103.

It is not only evangelical leaders who are concerned. A national poll of evangelicals conducted by Ellison Research in September 2005 revealed that:

- 70% believe global warming will pose a serious threat to future generations;
- 63% believe that although global warming may be a long-term problem, it is being caused today and therefore we must start addressing it immediately;
- 51% said that steps should be taken to reduce global warming, even if there is a high economic cost to the U.S.[5]

Finally, many of our ECI leaders have seen that it is evangelicals 30-and-under who are increasingly concerned about environmental or creation-care problems in general and global warming in particular. These anecdotal reports are backed up by a recent Pew poll showing a significant difference between older and younger evangelicals in their concern about creation-care or environmental issues: 59% of those 18-to-30 were concerned that the country was "losing ground" on environmental problems, while only 37% of older evangelicals thought so.[6] On other issues this poll found no significant difference between older and younger evangelicals. Younger evangelicals are looking for leadership in the area of creation-care. The leaders of the ECI are supplying it.

Thus, in the evangelical community there is widespread concern about global warming and our ECI leaders are helping to lead the way into the future in calling for significant action.

The Message of the Evangelical Climate Initiative

We estimate, based on extensive media coverage and national advertising, that the message of the ECI has been heard by more than 30 million Americans.[7] And what is that message?

The ECI's *Call to Action* makes four basic claims.

1. Human-induced climate change is real

As Christian leaders who are not scientific experts in climate change we rely on the world's leading scientists to provide the best scientific information upon which we can make moral judgments. As referenced in our *Call to Action*, in making our first claim that human-induced climate change is real we have utilized the work of the Inter-governmental Panel on Climate Change or IPCC, the world's most authoritative body on the subject, as well as the work of the U.S. National Academy of Sciences. The work of the IPCC has been endorsed by the National Academies of Science of all G8 countries (including the US), plus China, India, and Brazil. In

[5] A brief report by Ellison Research on the national poll of evangelicals they conducted in September 2005 is available at: http://www.christiansandclimate.org/press.
[6] Pew Research Center Survey, February 7, 2007.
[7] This estimate is based upon the fact that all three major newscasts ran stories and we had 300-plus news articles, not counting radio and local TV coverage. To ensure our evangelical audience received the message, our TV spot ran for two weeks on popular evening shows on Fox News and on Pat Robertson's 700 Club; in addition, our radio spot ran for two weeks on popular shows on Christian radio.

their joint statement they described the IPCC as representing the "international scientific consensus."[8]

That the IPCC's scientific assessment (called Working Group I) was headed up from 1988-2002 by Sir John Houghton, an evangelical Christian, also gives us added confidence in the IPCC's conclusions.

The latest IPCC report on the science of climate change released in February of this year concluded that global warming is "unequivocal," and that there is at least a 90% probability that the warming over the last 50 years is mainly due to human activities.[9]

ECI leaders believe it is well past time to move beyond the debate about whether human-induced global warming is happening. It is time to start solving the problem.

2. The Consequences of Climate Change Will Be Significant, and Will Hit the Poor the Hardest

This may be best illustrated by a personal story, the story Anna Nangolol, a teenager who lives in Northwest Kenya--one of the harshest landscapes on the planet. Her nomadic tribe had been well-adapted to this fierce environment. However, over the past 30 years the droughts there have been extreme and dangerous. Consistent with what climate change models predict, there has been 25 percent less rainfall. Their herds are reaching the tipping point of their existence. "This drought has been very bad," explains Anna. "Past droughts have been short and rains have come. This one seems never to finish and our goats and cattle are not multiplying. Even if the rains do finally come now, it will take a long, long time for us to get back all of our animals." Indeed in Kenya over 3 million people are in need of food aid because of the extreme drought – nearly double the number receiving aid even just a few years ago.[10] Something troubling is going on with their climate. The impacts of global warming are already starting to be felt in the world's most vulnerable areas such as Anna's.

It is important for us to remember as we discuss a problem being created in the atmosphere and as we cite large abstract numbers that it is individuals like Anna, someone's son or daughter, someone's grandchild, who will be impacted. Millions of families will suffer, especially the children. It is important to keep Anna and her family in mind as we talk about global warming.

Evangelicals care about what happens to people like Anna Nangolol and her family. We have donated billions of dollars over the years to our relief and development agencies to combat the very problems global warming will make worse: water scarcity, hunger and malnutrition, basic health concerns, and the problem of refugees. That is why those who lead most of the major evangelical relief and development agencies have become ECI leaders – including Richard

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[8] Joint Academies' Statement: Global Response to Climate Change, p. 2, footnote 2; http://www.royalsoc.ac.uk/displaypagedoc.asp?id=20742.

[9] Intergovernmental Panel on Climate Change, Summary for Policymakers, Climate *Change 2007: The Physical Science Basis*, pages 5, 10; http://ipcc-wg1.ucar.edu/wg1/wg1-report.html.

[10] New Economics Foundation, *Up in Smoke? Threats from, and Responses to, the Impact of Global Warming on Human Development*, Oct. 2004p.7; http://www.itdg.org/docs/advocacy/up_in_smoke.pdf

Stearns, President of World Vision US, Ben Homan, President of both Food for the Hungry and the Association of Evangelical Relief and Development Organizations (AERDO), Michael Nyenhuis, President of MAP International, Gordon MacDonald, Chair of World Relief (the relief arm of the National Association of Evangelicals), and Jo Anne Lyon, President of World Hope International.

As the latest IPCC report demonstrates, harmful impacts are already starting to occur. Here are some illustrative examples of the magnitude of the impacts of global warming on the poor in this century:

- Agricultural output in many poorer countries could be significantly reduced. An additional 90 million poor people could be at risk of hunger and malnutrition.[11]
- 1-2 billion people or more will face water scarcity.[12]
- By 2020 in Africa 75-250 million will face water scarcity, and crop yields could be reduced by 50% in some areas.[13]
- Hurricane Katrina demonstrated that even in the U.S. the poor are the most vulnerable to extreme weather events. Poorer countries are much less able to withstand the devastation caused by extreme weather events, and climate change is likely to increase such events. For example, global warming could increase the number of people impacted by flooding by 50 million.[14]
- Hundreds of millions of people will be at increased risk of malaria, dengue fever, yellow fever, encephalitis, and other infectious diseases because of global warming.[15]
- Each of these stressors increases the likelihood of environmental refugees and violent conflicts.
- A heat wave in Europe in 2003 due primarily to global warming killed at least 20,000, mainly the poor and elderly. Such summers are projected to be the average by the middle of this century.[16]
- In addition to impacts on human beings, up to 30% of God's creatures could be committed to extinction by 2050, making global warming the largest single threat to biodiversity.[17]

Table 1 from the IPCC also illustrates projected impacts.[18]

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[11] IPCC's *Climate Change 2001: Impacts, Adaptation, and Vulnerability*: section 19.4.2, Box 19-3; http://www.grida.no/climate/ipcc_tar/wg2/674.htm .

[12] IPCC Summary for Policymakers, *Climate Change 2007: Impacts, Adaptation, and Vulnerability*, pp. 5, 8; http://www.ipcc.ch/.

[13] Ibid, p. 8.

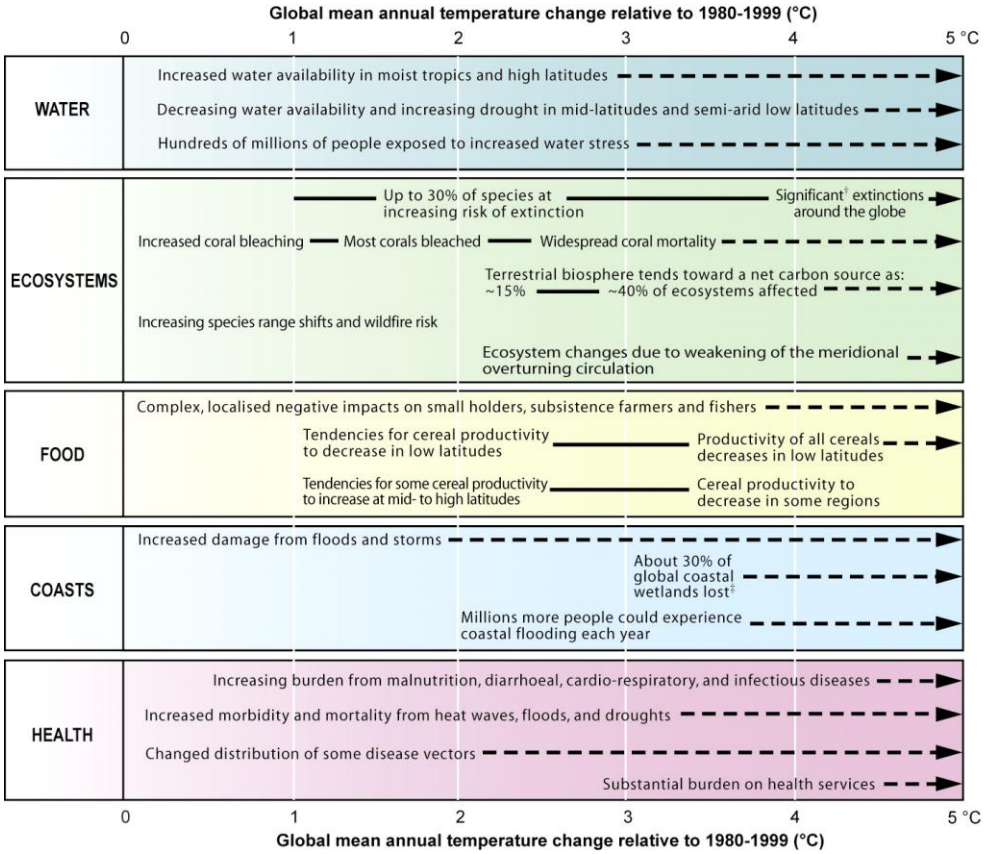
[14] Ibid, p. 4; see also IPCC's *Climate Change 2001: Impacts, Adaptation, and Vulnerability* (2001): section 7.2.2.2, http://www.grida.no/climate/ipcc_tar/wg2/310.htm#72214.

[15] IPCC Summary for Policymakers, *Climate Change 2007: Impacts, Adaptation, and Vulnerability*, pp. 7-8; http://www.ipcc.ch/; see also IPCC's *Climate Change 2001: Impacts, Adaptation, and Vulnerability* (2001): section 7.2.2.2, http://www.grida.no/climate/ipcc_tar/wg2/310.htm#72214.

[16] IPCC Summary for Policymakers, *Climate Change 2007: Impacts, Adaptation, and Vulnerability*, p. 11. See also Sir John Houghton; http://www.creationcare.org/files/houghton_NAE_briefing.pdf.

[17] IPCC Summary for Policymakers, *Climate Change 2007: Impacts, Adaptation, and Vulnerability*, p. 6.

[18] Ibid., p. 15. The SPM GW2 explains the information in Table 1 as follows: "Illustrative examples of global impacts projected for climate changes (and sea-level and atmospheric carbon dioxide where relevant) associated with different amounts of increase in global average surface temperature in the 21st century. [T20.7] The black lines



Illustrative examples of global impacts projected for climate changes associated with different amounts of increase in global average surface temperature in the 21st century.

The new projections for Africa cited above are especially troubling because of the speed of their arrival – by 2020. This means that significant consequences for Africa will occur quite soon. (Such impacts are not simply a humanitarian concern. They could have national security implications as well, given that the U.S. imports more oil from sub-Saharan Africa than we do from the Middle East, and are projected to get up to 40 percent of our oil from there by 2015.[19])

The ECI believes that when you look at the consequences of global warming you understand that the problem has been framed incorrectly. It is not primarily an "environmental" problem. It is

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link impacts, dotted arrows indicate impacts continuing with increasing temperature. Entries are placed so that the left hand side of text indicates approximate onset of a given impact. Quantitative entries for water scarcity and flooding represent the additional impacts of climate change relative to the conditions projected across the range of SRES scenarios A1FI, A2, B1 and B2 (see Endbox 3). Adaptation to climate change is not included in these estimations."

[19] See a recently released report by 11 former Generals and Admirals, *National Security and the Threat of Climate Change*, p. 20; http://securityandclimate.cna.org/. See also the testimony of Gen. Chuck Wald before the Senate Foreign Relations Committee on May 7, 2007, http://www.senate.gov/~foreign/hearings/2007/hrg070509a.html.

the major relief and development problem of the 21st century, because it will make all of the basic relief and development problems much worse. It will be an insidious reversal of our efforts to help the poor. Billions will be adversely affected. Millions upon millions – people like Anna Nangolol – will be threatened with death.

3. Christian Moral Convictions Demand Our Response to the Climate Change Problem

For Christians who have confessed Jesus to be the Lord of our lives, it is crucial for us to know his teachings and reflect upon how to apply them to our day-to-day existence.

When asked what the greatest commandment in the Law is, Jesus answered, "'Love the Lord your God with all your heart and with all of your soul and with all of your mind and with all of your strength.' The second is this: 'Love your neighbor as yourself.' There is no commandment greater than these" (Mark 12:29-31).[20] These have come to be known as the Great Commandments, and all Christian biblical ethics is based upon them.

Jesus also taught a version of what is commonly called the Golden Rule, "In everything, do to others what you would have them do to you, for this sums up the Law and the Prophets" (Matthew 7:12).[21]

In his ministry Jesus had a special concern for the poor and vulnerable. As recounted in Luke, he begins his ministry by saying that "'The Spirit of the Lord is on me, because he has anointed me to preach good news to the poor'" (4:18). He treats them like family by feeding and healing them throughout his ministry. In Matthew 25 he says that what we do to "the least of these" we do to him (v. 40). He so loves them, he so identifies with them, that what we do to them we do to him.

The Scriptures also teach that we are to be stewards of the Lord's creation (Genesis 1:28; 2:15). In the New Testament we come to understand that all things actually belong to Christ. Colossians 1:16 teaches that "all things were created by him and for him." Hebrews proclaims that he is the heir of all things (1:3). So Christians are called to be caretakers of Christ's creation, to treat it how He would treat it.

In light of the impacts of global warming described above, the ECI leaders believe that the commands to love God and our neighbor, to do unto others as we would have them do unto us, to care for the least of these as if they were Christ Himself, and to steward or care for His creation as He would, all require us to respond to climate change with moral passion and concrete action.

4. The Need to Act Now is Urgent. Governments, Businesses, Churches, and Individuals All Have a Role to Play in Addressing Climate Change – Starting Now

The ECI leaders believe there is a need for urgency for three reasons.

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[20] All quotations from the New International Version, unless otherwise indicated. See also Matthew 22:34-40, Luke 10:25-28, Romans 13:9, Galatians 5:14, and James. 2:8. Jesus was quoting Deutronomy 6:8 and Leviticus 19:18.
[21] See also Luke 6:31.

First, deadly impacts are happening now, as confirmed by the latest IPCC report.[22]

Second, the oceans warm slowly, creating a lag in experiencing the consequences. In addition, carbon dioxide (CO_2) traps heat for 200 years. Both of these facts mean the consequences of the global warming pollution we create now will be visited upon our children and grandchildren.

Third, as individuals and as a society we are making long-term decisions today that will determine how much carbon dioxide we will emit in the future, such as whether to purchase energy efficient vehicles and appliances that will last for 10-20 years, or whether to build more coal-burning power plants that last for 50 years.

As for all of the roles that need to be fulfilled, we believe that individuals have an important responsibility to do what we can to reduce our own emissions. To help them do so, we have recently created an ECI version of an individual offsets program called "Cooling Creation" whereby individuals can reduce their global warming pollution to zero.[23]

Churches have a vital role of educating their members about the teachings of Jesus that can be applied to this and other important moral issues, of praying for our country and its leaders to fulfill the law of love and protect the poor and vulnerable, and of modeling good behavior through its own facilities and programs.

Businesses should find ways to be good corporate citizens on climate change regardless of whether the law requires them to or not. We encourage them to find ways to reduce their emissions and also save money such as through energy efficiency improvements. The Environmental Protection Agency's Energy Star program has numerous examples of companies large and small doing just that.[24] Businesses should also find ways to make money by selling climate-friendly products. Both of these activities will allow businesses to do well by doing good. Finally, businesses should work constructively with government officials and others to help create legislation that is both business-and-climate-friendly.

We commend the commitments made by corporations such as ConocoPhilips, General Motors, General Electric, and Duke Energy who are a part of the US Climate Action Partnership (US-CAP), as well as others such as Wal-Mart, who is investing $500 million per year in sustainable technologies and innovations, reducing global warming pollution at their stores by 20% over the next five years, and improving their vehicle fleet's efficiency by 25% in three years and 100% in 10 years.[25]

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[22] IPCC Summary for Policymakers, *Climate Change 2007: Impacts, Adaptation, and Vulnerability*, pp. 1-4; http://www.ipcc.ch/

[23] See www.coolingcreation.org for ECI's offset program.

[24] See http://www.energystar.gov/index.cfm?c=pt_awards.pt_es_awards and http://www.energystar.gov/index.cfm?c=sb_success.sb_winners.

[25] Testimony of Wal-Mart's James Stanway before the Senate subcommittee on Private Sector and Consumer Solutions of the Environment and Public Works Committee, May 9, 2007, p. 2; see http://epw.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=f83bac05-7158-41be-b6c9-7ed1ccbc5c5b.

As for governments, we commend the efforts of local communities, such as the 300-plus mayors representing over 50 million citizens who have signed The U.S. Mayors Climate Protection Agreement.[26]

We also praise the many Governors and states who have taken the lead, especially two who have signed laws that require an 80 percent reduction of CO_2 by 2050 –Governors Schwarzenegger (R-CA)[27] and Pawlenty (R-MN), who is an evangelical Christian. At the time he signed the bill Gov. Pawlenty stated: "The best time to have taken action on energy issues would've been 30 years ago. The second best time is right now."[28]

Given that the problem is global, and that nation-states are primary seats of government authority, the ECI recognizes that important decisions must be made at the national level and between nations at the international level. While state actions and voluntary initiatives have resulted in positive benefits in the U.S., national emissions have continued to rise at a level inconsistent with long-term climate protection. In addition, businesses are now facing an inefficient patchwork of regulations. Thus, **an economy-wide federal policy with mandatory targets and timetables for major sources of emissions is needed**. However, this policy should allow for maximum freedom for businesses and the states.

Principles for Public Policy

To help Members of Congress and the Executive Branch understand our views on how to address climate change we have created a document entitled *Principles for Federal Policy on Climate Change*. We have attached this as a separate document and I ask that it be included in the record. I would like to provide a few highlights.

First, we agree with the objective of the Framework Convention on Climate Change (FCCC), a treaty that President George H. W. Bush signed and that was ratified by the Senate unanimously. The FCCC's objective is "to achieve stabilization of greenhouse gas concentrations in the atmosphere at a low enough level to prevent dangerous anthropogenic interference with the climate system."

Based upon the latest findings of the Inter-governmental Panel on Climate Change (IPCC), in the U.S. reductions from the year 2000 levels on the order of **80 percent by 2050** will be necessary

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[26] For more on the US Mayors Climate Protection Agreement, go to: http://www.usmayors.org/climateprotection/.

[27] California Governor Arnold Schwarzenegger signed Executive Order S-3-05 on June 1, 2005. The action established short-, medium-, and long-term greenhouse gas emission reduction targets for California, including a reduction of 80% below 1990 levels by the year 2050 (http://gov.ca.gov). On September 27, 2006, the Governor signed into law Assembly Bill 32, which enacted the medium-term limits (returning to 1990 levels by 2020) for major industries statewide. (http://www.leginfo.ca.gov/pub/05-06/bill/asm/ab_0001-0050/ab_32_bill_20060927_chaptered.pdf).

[28] According to a press release dated May 25, 2007, from Minnesota Governor Tim Pawlenty's office, "The bill [the Next Generation Energy Act signed by Gov. Pawlenty] establishes statewide GHG reduction goals of 15 percent by 2015, 30 percent by 2025, and 80 percent by 2050" (http://www.governor.state.mn.us/mediacenter/pressreleases/PROD008146.html).

to prevent such dangerous human-induced interference with the climate system.[29] Given that a voluntary approach has been tried for over a decade and has not achieved the required domestic results, we believe this target must be mandatory.

At the same time, we believe that we must **maximize freedom in solving the problem**. Freedom flourishes when the rule of law prevents chaos. In the case of global warming, a proper policy framework will establish the "rules of the road" and what businesses call "regulatory certainty." This can enhance freedom by allowing us to begin to solve a problem whose impacts will severely limit that freedom in the future if not addressed. To protect freedom, unnecessary government regulations must be avoided. Government policies should be structured to allow the free market to solve the problem to the greatest extent possible. We should use the least amount of government power necessary to achieve the objective.

We must also take special care to **protect the most vulnerable**. This means we must solve the problem through both adaptation and mitigation efforts, the latter including the 80% by 2050 emissions reduction.

But any climate legislation must also protect low-income households in this country. Legislation should include policies (e.g. consumer assistance such as LIHEAP, weatherization assistance, tax cuts) to offset any regressive consequences of implementation. As a recent report from the Congressional Budget Office demonstrates, how you structure the policy can result in small increases or decreases in household income for those on tight budgets.[30] Legislation should also be structured to make it easy and economical for businesses to pass their energy cost savings onto consumers.

Finally, we should solve the problem utilizing market forces and by protecting property rights. Harnessing the power of the market will allow innovation, ingenuity, and entrepreneurship to generate climate solutions, and will ensure that U.S. businesses can compete internationally in clean technologies. To help ensure competitiveness, climate policy should provide: (1) a stable, long-term, substantial research and development program; (2) long-term regulatory certainty, and; (3) a robust price signal that reflects the true social cost of greenhouse gas pollution. We feel it is important to recognize along with Mark Sanford, the Governor of South Carolina, that global warming pollution invades the property rights of all its victims, and restricts their freedom by forcing them to bear costs they should not have to pay because of the actions of others—"in either the quality of the air they breathe, the geography they hold dear, the insurance costs they

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[29] Intergovernmental Panel on Climate Change Summary for Policymakers, *Climate Change 2007: Mitigation of Climate Change*; www.ipcc.ch. In this SPM AR4 WG3, conservative estimates for the reductions in global CO_2 emissions in 2050 (as a % of 2000 emissions) range from 50 to 85 percent, with more aggressive reductions being more likely to achieve the requisite atmospheric concentrations 450 ppm CO_2-eq to keep global mean temperature increases below 2 ˚ C (see pp. 21-25, and especially Row A1 of Table SPM.5 on p. 22). The SPM warns that these may be underestimates. If global emissions (including countries which have contributed relatively little to the problem) are required to be reduced by close to 85%, then U.S. emissions reductions should certainly be close to 85% and possibly steeper, given our greater historical and current contribution to CO_2 emissions and our relatively higher standard of living. Hence our conservative policy recommendation for the U.S. of an 80% reduction in emissions by 2050 relative to year 2000 emissions.

[30] Congressional Budget Office, Economic and Budget Issue Brief, "Trade-offs in Allocating Allowances for CO_2 Emissions," April 25, 2007; http://www.cbo.gov/ftpdocs/80xx/doc8027/04-25-Cap_Trade.pdf.

bear, or the future environment of the children they love."[31] Climate policy should ensure that the costs of global warming pollution are reflected in the price of goods and services that produce greenhouse gases. When prices are right, the free market can do its job.

We believe that the preferable market-based mechanisms will be the ones that are politically achievable in the near term. The U.S. now has extensive experience in managing a successful cap-and-trade program for sulfur dioxide (SO_2), and there is growing political support for a cap-and-trade system. This could also allow us access to a global trading system, providing further efficiencies. We support a cap-and trade approach, by itself or in combination with a revenue neutral global warming pollution tax whereby those who act to reduce global warming pollution receive a tax cut. If there is a cap and trade approach, again, those with low incomes should be protected from regressivity. The CBO report suggests that the optimum approach is to have the proceeds of the auction of allocation permits returned to citizens in the form of a lump-sum payment.[32]

All of our activities as a country up to this point have been like warming-up before the start of a long race. The crack of the starting gun will be the passage of significant mandatory federal legislation. That will not be the end, but merely the beginning.

A Tremendous Opportunity

Finally, let me say that we are optimistic. The challenge is large, but our vision, our beliefs, our values are larger. Some are fearful of tackling global warming, but where others fear to go we see opportunity to do well by doing good.

We have the opportunity to unite our country, and indeed the world, in a common cause to create a better future for our children, to make sound investments for their well-being.

In so doing we will:

- save millions of lives of the poorest and most vulnerable people in our country and around the world, generation after generation[33];
- clean up our air and water, including the mercury poisoning of the unborn[34];

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[31] Mark Sanford, "A Conservative Conservationist?" *Washington Post*, Friday, February 23, 2007; A19.
[32] CBO, "Trade-offs," pp. 6-8.
[33] See footnotes 11-18 above. See also IPCC Summary for Policymakers, *Climate Change 2007: Impacts, Adaptation, and Vulnerability*, and R. Warren, 2006, "Impacts of Global Climate Change at Different Annual Mean Global Temperature Increases," Chapter 11 in H.J. Schellnhuber (ed.), *Avoiding Dangerous Climate Change*, Cambridge University Press. Increases in global average temperatures greater than 2˚C from pre-industrial, which pollution mitigation will help to avoid, include water stress for billions of people, increased hunger from falling food production for hundreds of millions of people, displacement of coastal dwellers, increase in exposure to diseases like dengue fever.
[34] "Energy use and agricultural practices are the main sources of both air pollution and climate change. Therefore, many measures to cut air pollution also benefit climate through reduction of greenhouse gas emissions and vice versa. Understanding these synergies and addressing local, regional and global objectives simultaneously makes economic sense." From "A Good Climate For Clean Air: Linkages Between Climate Change And Air Pollution: An Editorial Essay" *Climatic Change* 66: 263–269, 2004. On mercury and the unborn, see the Evangelical

- reduce our dependence on foreign oil[35];
- enhance rural economic development[36];
- save money by having our homes, churches, businesses, and governments become more energy efficient[37];
- create sustainable jobs and a clean energy future[38];
- help our country lead the world in solving global warming.[39]

Moses, the great lawgiver, in his farewell address to the Hebrews, set before them the paths of life and death; life, by loving God and doing His will, and death, by forsaking God and His commands. "I call heaven and earth to witness against you today that I have set before you life

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Environmental Network fact sheet for citations, http://www.creationcare.org/resources/mercury/mercury_unborn.php.

[35] President Bush identified "addiction to oil" as a "serious problem" in his 2006 State of the Union address (http://www.whitehouse.gov/news/releases/2006/01/20060131-10.html). General Gordon R. Sullivan (ret.), former Army Chief of Staff, and chairman of the Military Advisory Board for the recently-released report "National Security and the Threat of Climate Change" (http://securityandclimate.cna.org/) commented last Thursday: "world leaders should not wait as scientists narrow any few remaining uncertainties about climate change. As a former military commander, I've learned that waiting for 100 percent certainty to begin planning an appropriate response can lead to disastrous consequences on the battlefield" (http://www.cna.org/documents/General%20Sullivan%20Statement%20on%20G-8.pdf).

[36] According to a report from the University of Tennessee on the benefits of having 25% of our energy come from renewable sources by 2025, "Including multiplier effects through the economy, the projected annual impact on the nation from producing and converting feedstocks into energy would be in excess of $700 billion in economic activity and 5.1 million jobs in 2025, most of that in rural areas" and "the total addition to net farm income could reach $180 billion" (see first page of Executive Summary). See Burton C. English, Daniel G. De La Torre Ugarte, Kim Jensen, Chad Hellwinckel, Jamey Menard, Brad Wilson, Roland Roberts, and Marie Walsh, *25% Renewable Energy for the United States By 2025: Agricultural and Economics Impacts* (November 2006).

See also IPCC Summary for Policymakers, *Climate Change 2007: Mitigation of Climate Change*, p. 19. "Agricultural practices collectively can make a significant contribution at low cost to increasing soil carbon sinks, to GHG emission reductions, and by contributing biomass feedstocks for energy use."

[37] IPCC Summary for Policymakers, *Climate Change 2007: Mitigation of Climate Change*, p. 18. "Energy efficiency options for new and existing buildings could considerably reduce CO_2 emissions *with net economic benefit*. Many barriers exist against tapping this potential, *but there are also large co-benefits*" (*italics* added). One European study found that nearly a quarter of the climate mitigation strategies that would be required to limit atmospheric CO_2 concentrations to 450 ppm had a zero or negative net life-cycle cost—they saved money as well as pollution, even with a change in climate policy. Removing institutional and organizational barriers to these changes in energy efficiency in the transportation and transport sectors would be welfare enhancing under any scenario (Per-Anders Enkvist, Tomas Nauclér, and Jerker Rosander, 2007, "A cost curve for greenhouse gas reduction", *The McKinsey Quarterly*, 2007, No. 1, pp. 35-45).

[38] Daniel M. Kammen, Kamal Kapadia, and Matthias Fripp. *Putting Renewables to Work: How Many Jobs Can the Clean Energy Industry Generate?* RAEL Report, Jan 2004. "Expanding the use of renewable energy is not only good for our energy self-sufficiency and the environment; it also has a significant positive impact on employment. This is the conclusion of 13 independent reports and studies that analyze the economic and employment impacts of the clean energy industry in the United States and Europe" (p. 1). "Across a broad range of scenarios, the renewable energy sector generates more jobs than the fossil fuel-based energy sector per unit of energy delivered (i.e., per average megawatt)" (p. 2).

[39] The Spring 2007 Foreign Affairs/Public Agenda survey on U.S. foreign policy found that 2/3 of Americans believed international cooperation could reduce global warming, and that the U.S. government has been doing too little to lead the world (61% gave the U.S. a "C" or below for working with other countries on global warming). Six in 10 wanted global warming specifically to be a focus on international cooperation (http://www.publicagenda.org/foreignpolicy/foreignpolicy_climate.htm).

and death, blessings and curses. Choose life so that you and your descendants may live" (Deuteronomy 30:19).

Let us choose life this day by addressing global warming.

Thank you.