



Living in God's amazing grace

EVANGELICAL LUTHERAN CHURCH IN AMERICA

ISSUE BRIEF

GLOBAL WARMING

ELCA Policy Base

The ELCA social statement on the environment, *Caring for Creation: Vision, Hope and Justice*, says: "The earth is a planet of beauty and abundance; the earth system is wonderfully intricate and incredibly complex. But today living creatures, and the air, soil, and water that support them, face unprecedented threats. Many threats are global; most stem directly from human activity. Our current practices may so alter the living world that it will be unable to sustain life in the manner we know."

The social statement recognizes the threat of "dangerous global warming, caused by the buildup of greenhouse gases, especially carbon dioxide" and commits the church to advocacy and to action on behalf of all creation. Already, global warming has damaged the precious balance of God's creation, including increasing the number of threatened species, causing long-term drought, and melting Arctic ice. It is crucial we heed the call to be faithful stewards and caretakers of God's creation by limiting the future impacts of global warming on God's Earth.

Global warming's societal impact already falls, and will continue to fall, most heavily on the people around the world who are least able to mitigate the impacts—people living in poverty in the United States and in developing countries. As a leading industrialized nation that has disproportionately contributed to greenhouse gas emissions, it is incumbent upon us to rectify this injustice. The ELCA is committed to "equitable sharing of the costs of maintaining a healthy environment," according to the social statement.

We can't achieve significant reductions in global warming emissions unless we make changes in our lifestyles, and particularly in our energy consumption. As the social statement says, "In a world of finite resources, for all to have enough requires that those among us who have more than enough will need to address our patterns of acquisition and consumption."

Background

Carbon dioxide and other global warming gases are collecting in earth's atmosphere like a thickening blanket, trapping the sun's heat and causing the planet to grow warmer. The Intergovernmental Panel on Climate Change (IPCC), established by the World Meteorological Organization (WMO) and the United Nations Environment Program (UNEP), issued a report in 2007 written by leading climate scientists that confirms human use of fossil fuel is the main source of these gases and the primary cause of global warming. Every time we burn fossil fuels by driving a car, using electricity from coal- or gas-fired power plants, or heating our homes with oil or natural gas, we release carbon dioxide and other heat-trapping gases into the air.

Since pre-industrial times, the atmospheric concentration of carbon dioxide has increased by 31 percent. Over the same period, atmospheric methane, another global warming gas, has risen by 151 percent, mostly from agricultural activities like growing rice and raising cattle.



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GLOBAL WARMING ISSUE BRIEF

As the concentration of these gases grows, more heat is trapped by the atmosphere and less escapes back into space. The increase in trapped heat changes the climate, causing altered weather patterns that can bring unusually intense precipitation or dry spells and more severe storms.

Though Americans make up just 4 percent of the world's population, we produce 25 percent of the carbon dioxide pollution from fossil-fuel burning—by far the largest share of any country. Coal-burning power plants are the largest U.S. source of carbon dioxide pollution—they produce 2.5 billion tons every year. Automobiles, the second largest source, create nearly 1.5 billion tons of carbon dioxide annually.

Global temperatures are already rising, and the impacts of this warming include loss of Arctic ice, melting permafrost, heat waves, and droughts. Some argue that increases in global temperatures have occurred in the past and that this is just such a “warming period.” However, although local temperatures fluctuate naturally, over the past 50 years the average global temperature has increased at the fastest rate in recorded history, and scientists confirm that this is due not to natural causes, but rather to human activity. Global average temperatures have risen over the twentieth century, and when scientists have attempted to reproduce these twentieth-century trends in their climate models, they are only able to do so when they include emissions from human use of fossil fuels in their models in addition to natural fluctuations in temperature.

Unless we curb global warming emissions, average U.S. temperatures could rise ten degrees by the end of the century. In order to prevent the catastrophic impacts of this increase in temperature, climate scientists say that we must reduce our emissions of carbon dioxide and other gases that contribute to global warming by 80 percent by the middle of this century. To accomplish this, we must make changes in our economy, our communities, our homes and our daily lives.

Sample Questions to Ask Your Candidates

- ✓ Do you believe that global warming is happening? If your answer is yes, what do you believe is causing it?

- ✓ Scientists tell us that unless we curb global warming emissions, average U.S. temperatures could rise ten degrees by the end of the century. Would you support mandatory reductions in the emissions of carbon dioxide and other global warming gases?

- ✓ Reducing greenhouse gas emissions will require changes in our economy as companies and consumers switch to cleaner sources of energy and adopt energy-efficient technologies. In the short term, these changes are likely to increase consumer costs for electricity and for consumer goods like cars and appliances, and will result in job losses in some industries, although “green technology” industries will gain jobs.



Living in God's amazing grace

GLOBAL WARMING ISSUE BRIEF

How would you address the impacts of increased energy costs and job loss on low-income Americans?

✓ People living in poverty in some of the world's most vulnerable countries are already seeing substantial impacts from global warming. Flooding in low-lying coastal areas of Bangladesh and drought in sub-Saharan Africa are examples of problems that will only become worse as global temperatures rise. Would you support increased international aid to poor countries to help them mitigate the impacts of global warming on their people, such as drought and flooding?

✓ Automobile and appliance manufacturers argue that increases in energy efficiency standards cost them money and lead to layoffs and other economic impacts. These standards can also lead to higher prices for consumer goods. But greater energy efficiency is an important way to reduce energy use and also allows consumers to save money over the long run. Do you support measures to save energy, such as increasing federal fuel economy standards for cars and trucks and setting energy efficiency standards for appliances?

✓ Very little of the U.S. electricity supply currently comes from renewable energy sources, such as wind and solar power. Would you support a requirement that electric utilities generate an increasing percentage of their electricity with renewable energy? Are there other ways that you would encourage people to switch to renewable energy sources?

✓ Funding for renewable energy and energy-efficiency research is currently a very small part of the federal government's research budget. Do you support increased funding for renewable energy research and energy efficiency measures?

✓ Nuclear power plants do not release carbon dioxide as they generate electricity. However, refining uranium for use in nuclear power requires large amounts of electricity, which currently comes primarily from burning fossil fuels. In addition, the waste from nuclear reactors is highly toxic and dangerous and persists in the environment for thousands of years. Do you believe that the United States should increase its use of nuclear energy and build new nuclear power plants?

Sources

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Living in God's amazing grace

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