

# Global Climate Change

## Reading the Signs of the Times

As planet Earth heats up due to the increase of greenhouse gases (GHGs) in the atmosphere and as the resulting impacts of climate change are already adversely affecting ecosystems and millions of people around the world, we must face the human connection and our collective responsibility for this crisis of global warming. Climate change is above all a moral, ethical and spiritual issue about our relationship with God's whole wondrous creation.

Global climate change is fundamentally altering God's creation. Bird and fish migration patterns are changing, permafrost is melting, freshwater sources and coastal wetlands are disappearing as a result of sea level rise. The Intergovernmental Panel on Climate Change (IPCC) estimates that 20–30 percent of plant and animal species are at risk for extinction and that acidification of the oceans will fundamentally change marine life. Overall, global climate change is predicted to bring increases in flooding, severe storm events, and drought. And the expected toll on human society is staggering. The additional number of people affected by malnutrition could rise to 600 million by 2080.

An additional 1.8 billion people could be living in a water-scarce environment by 2080. An additional 220-400 million people could be exposed to malaria.<sup>1</sup> Although global climate change affects all human populations around the globe, it hits those living in poverty the hardest because they depend on the surrounding physical environment to supply their needs and they have limited ability to cope with climate variability and extremes.

The worst climate effects are currently borne and will be borne in the future, by those most vulnerable—the poor and marginalized, those living in low-lying island states and coastal areas, melting glacial regions, and spreading deserts. Those least able to adapt are least resilient to catastrophic changes—and climate justice demands that those most able and most historically responsible take immediate action to drastically lower their GHG emissions to stabilize the climate. Global climate change reduces access to drinking water, limits access to food, and negatively impacts human health particularly in Africa, Asia, and Latin America. According to the Fourth Assessment Report of the IPCC, developing countries are expected to suffer the most from the negative impacts of climate change.

For instance, Lake Chad, a water source for five countries and 20 million people in Africa, is drying up because of droughts. In 1960 Lake Chad covered more than 26,000 km<sup>2</sup>. By 2000 it was down to 1,500 km<sup>2</sup>. When weather patterns change in Africa, crops fail and people go hungry. The challenges of global climate change will not be in just developing countries. In the United States, for example, the town of Shismaref, Alaska, with a per capita income around \$10,500, will need to be relocated because of shoreline erosion caused by the melting of protective sea ice.<sup>3</sup>

The infestation of the mountain pine beetle, predicted to destroy 80 percent of the Canadian pine forest in British Columbia by 2013, is a direct result of its larvae surviving the warmer winters, and the entire Northern boreal forest is also under threat.<sup>4</sup> The devastation of habitats for wildlife

and livelihoods for human communities is one of the most immediately felt impacts of climate change.

Our call as people of faith—to protect the vulnerable and to be stewards of God’s Earth—means we must act to stop global climate change. Because the effects of global climate change are already impacting those who can least afford to deal with it, addressing global climate change is also a justice issue.

*Portions excerpted from “The Poverty of Global Climate Change” published by the National Council of Churches Eco-Justice Program*

<sup>1</sup> Watkins, Kevin. *Human Development Report 2007/2008. Fighting Climate Change: Human Solidarity in a Divided World*. United Nations Development Program. December 2007.

<sup>2</sup> *Lake Chad* [www.wikipedia.org](http://www.wikipedia.org) Dec. 20, 2007

<sup>3</sup> *Photo Essay: Sea Change* [www.motherjones.org](http://www.motherjones.org) Dec. 20, 2007

<sup>4</sup> *The beetle and the damage done*. Paul Jay. CBC News. April 23, 2008

<http://www.cbc.ca/news/background/science/beetle.html>

#### *Film*

*Renewing the Sacred Balance—Greening Sacred Spaces* examines the impact of our human footprint on the Earth, calls for climate justice, energy consciousness and greenhouse gas emissions reductions through lifestyle changes in churches, homes and communities. It highlights the actions of some faith leaders—in their teaching, preaching, and in greening their buildings—and encourages viewers to respect Creation and address the serious issue of climate change.

#### **View the video “Greening Sacred Spaces”**

<http://vidego.multicastmedia.com/player.php?v=z550m2iu>

#### **Study questions:**

1. As we examine the impact of our ecological footprint—both individually and collectively—on the Earth, the home that we all share, we can see that all too often human power has been used to “dominate” it and abuse its life-giving resources. To restore a more just and sustainable Earth Community we must regain a sense of our being a part of Creation and seek ways to re-invigorate our participation in God’s covenant with all living things. At the same time we must take seriously the “polluter pay” principle and our responsibility to pay for past and current excesses and to share the wealth that has been created, often at the expense of the environment, with those least able to pay. What can you and your faith community do to renew the Sacred Balance?
2. Because the increased concentration of greenhouse gases (GHGs) in the atmosphere is a direct result of human activity, particularly our North American overconsumption of fossil fuels, we must seek ways and means of lowering our emissions and becoming more energy-conscious and energy-efficient. What can you and your faith community contribute toward greening our sacred spaces and modeling the change we seek?
3. While the shift to renewable energy sources and better use of finite resources must become a priority for us all, at the same time enormous public subsidies are being paid to

the fossil fuel industry as it invests in exploration and extraction around the world, often contributing to conflict and human rights abuses. How can you and your faith community learn about the global links to local energy use? And how can you contribute to the eradication of fossil fuel based conflict and human rights abuses?

## Confessing our Faith

*Genesis 1:23-31 (NRSV)*

*And there was evening and there was morning, the fifth day. And God said, "Let the earth bring forth living creatures of every kind: cattle and creeping things and wild animals of the earth of every kind." And it was so. God made the wild animals of the earth of every kind, and the cattle of every kind, and everything that creeps upon the ground of every kind. And God saw that it was good.*

*Then God said, "Let us make humankind in our image, according to our likeness; and let them have dominion over the fish of the sea, and over the birds of the air, and over the cattle, and over all the wild animals of the earth, and over every creeping thing that creeps upon the earth." So God created humankind in his image, in the image of God he created them; male and female he created them. God blessed them, and God said to them, "Be fruitful and multiply, and fill the earth and subdue it; and have dominion over the fish of the sea and over the birds of the air and over every living thing that moves upon the earth."*

*God said, "See, I have given you every plant yielding seed that is upon the face of all the earth, and every tree with seed in its fruit; you shall have them for food. And to every beast of the earth, and to every bird of the air, and to everything that creeps on the earth, everything that has the breath of life, I have given every green plant for food." And it was so.*

*God saw everything that he had made, and indeed, it was very good. And there was evening and there was morning, the sixth day.*

1. Read Genesis 1:23–31 out loud as a group or alternately by different people.
2. Ask the following questions for discussion:
  - If we recognized everything as a creation of God, and a creation that God said was good, how would this change how we interact with it?
  - What does it mean to be “made in God’s own image?” How does this change how we interact with all of creation?
  - If everyone recognizes every other human being as created in the image of God, how shall we act justly to share the burden of the disproportionate impacts of climate change suffered by the most vulnerable?
3. Word study: *creation*
4. Open with the following observation: Often—too often—we talk of this as an environmental movement, or an ecological movement. When we do, we miss what makes this a matter of faith. This environment is the creation of God, and the word *creation* appears 55 times in Scripture. The Green Bible says there are over 1,000 references to Earth, compared to 490 to heaven and 530 to love.

5. Have participants locate at least one reference to creation in the Bible and have a few participants share their Bible passage. Afterwards have people write or draw an example of what creation means to them.
6. With the group, discuss current attitudes towards creation and global climate change. Discuss God's view of creation.

## **Covenanting for Justice**

The challenge of global climate change is enormous and can seem overwhelming—but there is much that faith communities can do to make a difference. They can advocate for policy changes and changes in government directions, contribute to necessary adaptation programs with partners experiencing difficulties, especially in developing countries, and they can demonstrate leadership in making lifestyle changes in their churches, their homes and their communities. You too can join the movement of greening sacred spaces and working for climate justice. Here are some ideas:

- Support legislation fighting climate change that includes assistance to those most adversely affected
- Plan a worship service around climate change.
- Create a “Green Team” in your faith community.
- Make your home, church, and/or community buildings more energy-efficient. For ideas, visit [www.faith-commongood.net](http://www.faith-commongood.net) or [www.nccecojustice.org/climate.html](http://www.nccecojustice.org/climate.html).

Here are some examples:

In March 2006 the Sisters of St. Dominic of Caldwell turned on 648 solar panels that now power 8 percent of the campus, making it the largest solar power program in New Jersey.

The Hebron Baptist Church in Dacula, Georgia, installed nearly 1,000 energy-efficiency lights, saving \$1,400 per month after loan payments. The church is saving \$32,000 each year and has reduced its carbon emissions by 1 million pounds.

Bethesda Lutheran Church in Ames, Iowa, replaced incandescent lighting with compact fluorescent lighting, installed computer controls to heat and cool occupied rooms, purchased new energy-efficient freezers, and installed new storm windows over the stained glass windows. They are saving \$5,000 each year and have reduced their carbon emissions by 100,286 pounds.

Solana Beach Presbyterian Church in Solana Beach, California, upgraded its incandescent lamps with fluorescent lighting, added occupancy sensors, installed LED exit signs, and new air conditioning and heating systems. They are saving \$6,620 each year and have reduced their carbon emissions by 120,000 pounds.

Greening Sacred Spaces, a project of Faith and the Common Good in Canada, has partnered with provincial and municipal governments to conduct hundreds of energy audits leading to retrofits. They are motivating people to change by building partnerships with organizations doing

community-based social marketing to design and evaluate programs that foster sustainable behaviour. Working ecumenically and in an interfaith context they have helped many faith communities begin to develop their own green teams and have produced a downloadable guide and resources.

## **Closing Litany**

### ***Excerpted from the Accra Confession: Covenanting for Justice in the Economy and the Earth***

We believe in God, Creator and Sustainer of all life, who calls us as partners in the creation and redemption of the world. We live under the promise that Jesus Christ came so that all might have life in fullness (John 10:10). Guided and upheld by the Holy Spirit, we open ourselves to the reality of our world.

We believe that God is sovereign over all creation. “The Earth is the Lord’s and the fullness thereof” (Psalm 24:1).

Therefore, we reject the current world economic order imposed by global neoliberal capitalism and any other economic system, including absolute planned economies, that defy God’s covenant by excluding the poor, the vulnerable and the whole of creation from the fullness of life. We reject any claim of economic, political, and military empire that subverts God’s sovereignty over life and acts contrary to God’s just rule.

We believe that God has made a covenant with all of creation (Genesis 9:8–12). God has brought into being an Earth community based on the vision of justice and peace. The covenant is a gift of grace that is not for sale in the marketplace (Isaiah 55:1). It is an economy of grace for the household of all of creation. Jesus shows that this is an inclusive covenant in which the poor and marginalized are preferential partners and calls us to put justice for the “least of these” (Matthew 25:40) at the centre of the community of life. All creation is blessed and included in this covenant (Hosea 2:18ff).

### ***Prayer***

#### ***For the Beauty of Creation***

Almighty and everlasting God, you created the world as a bountiful garden, bringing life to every creature that moves and breathes. We thank you for the vitality, beauty and fruit of your creation. We pray that our roots would grow deep in the rich soil of your Word. Water us daily with the subterranean river of life. From seed to sapling, may we grow to be sturdy oaks of righteousness, radiating light in dark places. With time may the girth of our trunks be hearty and sap-thick in protection against those who destroy. May our branches reach out to the high heavens and our falling leaves drift to lands far and wide for the healing of the nations. Rejoice, O ye Earth, rejoice! We wait and watch with the eyes of ravens and the patience of ancient trees for that day when the trump shall sound and the trees of the fields shall clap their hands. Let thy Spirit go forth quickly, that it may renew the face of the Earth. Friends on Earth and friends above, let’s burst forth God’s peace and love; through Jesus Christ our Lord.

**Amen.**

Peter Goodwin Heltzel, New York Theological Seminary

In *Prayers for the New Social Awakening*, Elizabeth Hinson-Hasty and Christian Iosso, eds. (Louisville, KY: Westminster/John Knox Press), 2008.

*For Justice, Peace and the Integrity of Creation:*

Sisters and brothers, God has formed us from the dust of the Earth and has breathed into us the spirit of life. This spirit calls us to join in the holy act of creation and preservation of all that God has made. This gracious invitation confronts us with choices. We have set before us this day choices of life and death. When we pray, “Giver of life, sustain your creation,” we commit ourselves to choosing life, for the healing of the nations and for the care and redemption of all that God has made.

Let us join together to affirm our choice for life, and our commitment to cherish God’s world and to work to sustain all of creation.

Eternal God, our beginning and our end,

be our starting point and our heaven

and accompany us on this day’s journey.

Use our hands to do the work of your creation

and use our lives to bring others to the new life you give this world

in Jesus Christ, Redeemer of all.

**Amen.**

In *Worshipping Ecumenically, Orders of Service from Global Meetings with Suggestions for Global Use*, Per Harling, ed. Geneva, Switzerland: WCC Publications, World Council of Churches, pp. 122–123. 1995.

*Benediction*

(Julian of Norwich, 14<sup>th</sup>-century Benedictine sister)

Be a gardener for Creation.

dig, toil and sweat, and turn the Earth upside down,

seek the deepness,

and water the plants in time.

Continue this labour, and make sweet floods to run,

and noble abundant fruits to spring.

Then take this food, drink, and beauty,

and carry it to God as your true worship.

**Thanks be to God!**

## **Additional Resources**

**For scientific information, visit:**

1. The National Academy of Sciences: [www4.nationalacademies.org/nas/nashome.nsf](http://www4.nationalacademies.org/nas/nashome.nsf)

2. Intergovernmental Panel on Climate Change: [www.ipcc.ch](http://www.ipcc.ch)
3. Union of Concerned Scientists: [www.ucsusa.org](http://www.ucsusa.org)
4. Climate Solutions: [www.climatesolutions.org](http://www.climatesolutions.org)
5. Science for Peace: [scienceforpeace.sa.utoronto.ca](http://scienceforpeace.sa.utoronto.ca)

**For information on connecting faith and care for Earth, check out the following organizations:**

**(United States)**

1. The Interfaith Climate and Energy Campaign (a joint project of the Coalition on the Environment and Jewish Life and the National Council of Churches of Christ): [www.protectingcreation.org](http://www.protectingcreation.org)
2. The National Religious Partnership for the Environment: [www.nrpe.org](http://www.nrpe.org)
3. Earth Ministry: [www.Earthministry.org](http://www.Earthministry.org)
4. Web of Creation: [www.webofcreation.org](http://www.webofcreation.org)
5. The Coalition on the Environment and Jewish Life: [www.coejl.org](http://www.coejl.org)
6. The National Council of Churches of Christ: [www.webofcreation.org/ncc](http://www.webofcreation.org/ncc)
7. The Evangelical Environmental Network: [www.creationcare.org](http://www.creationcare.org)
8. United States Catholic Conference: [www.nccbuscc.org/sdwp/ejp](http://www.nccbuscc.org/sdwp/ejp)
9. Partners for Environmental Quality: [www.peqnj.org](http://www.peqnj.org)
10. Eco-Justice Ministries: [www.eco-justice.org](http://www.eco-justice.org)
11. The National Council of Churches Eco-Justice Program: [www.ncecojustice.org](http://www.ncecojustice.org)
12. The Forum on Religion and Ecology: [fore.research.yale.edu](http://fore.research.yale.edu)
13. EcoEquity: [www.eco-equity.org](http://www.eco-equity.org)
14. Interfaith Power and Light: [www.theregenerationproject.org](http://www.theregenerationproject.org)

**(Canada)**

1. Faith and the Common Good—Greening Sacred Spaces: [www.faith-commongood.net](http://www.faith-commongood.net)
2. KAIROS—Canadian Ecumenical Justice Initiatives: [www.kairoscanada.org](http://www.kairoscanada.org)
3. Re-Energize—Time for a Carbon Sabbath: [www.re-energize.org](http://www.re-energize.org)
4. Climate Action Network-Réseau action climat—Canada: [www.climateactionnetwork.ca](http://www.climateactionnetwork.ca)
5. Canadian Youth Climate Coalition (CYCC): [www.ourclimate.ca](http://www.ourclimate.ca)
6. TakingITGlobal (see Youth Guide to Action): [www.takingitglobal.org](http://www.takingitglobal.org)
7. David Suzuki Foundation: [www.davidsuzuki.org](http://www.davidsuzuki.org)
8. Community-based Social Marketing: [www.cbsm.com](http://www.cbsm.com)
9. [www.goforgreen.ca/gardening/pdf/cbsm.pdf](http://www.goforgreen.ca/gardening/pdf/cbsm.pdf)
10. Zero Footprint: [zerofootprint.net](http://zerofootprint.net) and [www.toronto.zerofootprint.net](http://www.toronto.zerofootprint.net)
11. Tools of Change: [www.toolsofchange.com](http://www.toolsofchange.com)
12. The Art of Advocacy—a short guide to influencing government policy-making: [www.ccednet-rcdec.ca/en/docs/pubs/AdvocacyHandbook-FIN2.pdf](http://www.ccednet-rcdec.ca/en/docs/pubs/AdvocacyHandbook-FIN2.pdf)