

For Advocacy and Education on
Climate Change

"Indeed, God did not send the Son into the world to condemn the world, but in order that the world might be saved through him" (John 3:17)

The earth's climate has changed throughout history, sometimes drastically. However, the global climate change we experience now has two primary sources, deforestation and the burning of fossil fuels, both resulting in dangerous levels of greenhouse gases. Over 75% of carbon emissions today come from fossil fuels. This poses a direct and serious threat to human survival. The 2007 report of the Intergovernmental Panel on Climate Change (IPCC) says that documented temperature increases have already been observed in the following ways:

- (1) in the Arctic and Antarctic regions, with the melting of polar ice;
- (2) in sea-level rise contributing to the loss of coastal wetlands, damaging floods, and threats to coastal cities and their harbors;
- (3) on agriculture and forestry in the Northern Hemisphere (earlier spring plantings and forest disturbances due to fire and pests);
- (4) on agriculture in sub-Saharan Africa, where women are the primary farmers, and where warmer, drier conditions have reduced the growing season.
- (5) on human health, such as infectious diseases and the effects of allergenic pollen.

At the moment, we stand a critical juncture: will we take action quickly enough to avert possible catastrophe? The United Nations Foundation and the Society of Sigma Xi (The Scientific Research Society) have summarized what the consequences might be, if we don't take immediate action: The most likely outcome will be rises in the global average surface temperature to dangerous levels (by 0.2 to 0.4 degrees C per decade) throughout the 21st century. By 2100, our climate will have risen by 3-5 degrees since 1750 -- the beginning of the industrial revolution. Scientific evidence suggests that changes of this magnitude are likely to produce large, perhaps abrupt changes in climatic patterns. These will adversely impact agriculture, forestry, fisheries, the availability of fresh water, the geography of disease, the livability of human settlements, and more.

These scientists conclude that we must halt further temperature increases to a minimum of 0.2 degrees. Otherwise, climate change in the 21st century is likely to be disastrous. Increases in sea level, extreme weather, and the acidity of the oceans may not be reversible, which would result in disruptions of ecosystems beyond a point to which humankind as a whole can adapt. While it is possible

that some areas may temporarily benefit from these changes, the vast majority of people -- particularly the poor, women, the elderly and children -- in water-scarce regions may not survive.

Renewable Energy and Energy Consumption

The most obvious way to address the causes of climate change is to replace our use of fossil fuels with renewable energy -- hydro, solar, wind, geothermal -- and reduce our overall levels of energy consumption. Currently, about 15 percent of the world's energy production is based on renewables, and this figure can be significantly improved with committed, effective political leadership. The transition to renewable energy will require large scale investments in new energy technologies in the public and private sectors, and an equal commitment to development assistance for renewable energy in developing countries. However, simple reductions in energy consumption and energy waste can both reduce energy costs and curb carbon emissions. For example, it has been estimated that measures taken in Brazil to conserve energy since the 1970's may have reduced consumption by nearly 50 percent. Again, political leadership and community participation are necessary to achieve the results we need.

Global Climate Change and the Millennium Development Goals

Climate change has a direct impact on all of the Millennium Development Goals:

- (1) Eradicate Extreme Poverty and Hunger
- (2) Achieve Universal Primary Education
- (3) Promote Gender Equality and Empower Women
- (4) Reduce Child Mortality
- (5) Improve Maternal Health
- (6) Combat HIV/AIDS, malaria and other diseases
- (7) Ensure Environmental Sustainability
- (8) Develop a Global Partnership for Development

What the Churches Can Do:

- * reduce your carbon footprint (in diocesan and congregational buildings and in homes) by all possible means, and use renewable energy whenever possible;
- * bring before your governments the imperative to use all means, including legislation and removal of subsidies, to reduce greenhouse gases;

- * work with your local and national political leaders to develop and promote strategies to reduce carbon emissions and to adapt to changes that are already taking place;
- * Press for urgent participation and discussions leading to just and sustainable development through the Kyoto Agreements and other UN related initiatives;
- * educate our congregations about the moral and spiritual basis of environmental stewardship and its relation to universal human rights, gender equality, and the leadership roles women can and already do fulfill.
- * work on an interfaith basis, whenever possible, to strength community ties and mutual understanding in relation to environmental stewardship;
- * convene congregational discussions and workshops so all people can ask their own questions, express their concerns, and share their ideas and experience with.
- * Perhaps the best thing we can do, as people of faith, is simply to reduce our consumption of fossil fuels and of goods and services based on them.

Consequence of Global Climate Change: Trends and Consequences (adapted from the 2007 Report of the IPCC, Working Group II)

Trends	Examples of predicted Outcomes		
	Food	Water	Society
Heat waves increase	Reduced yields in warmer regions	Higher demand; quality decreases	Reduced quality of life; higher mortality for elderly and poor
Heavy precipitation events	Crop damage; inability to cultivate due to drenched soil	Contamination of surface and ground water	Disruption of settlements, transport and commerce
Areas affected by drought	Land degradation; crop failures; increased livestock deaths	More wide spread water stress	Reduced hydroelectric potential; malnutrition; disease
Intense cyclone activity	Damage to crops; damage to coral reefs	Power outages; disrupt public water supply	Disruption by floods and winds; population migration
Increased incidence of sea-level rise	Salinisation of irrigation water and drinking water	Decreased availability of fresh water	Potential for movement of entire coastal infrastructure.

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