

# Global Warming Questions & Answers

## There's good news and there's bad news.

The bad news is that global warming is happening right now, it's getting worse and its effects are a threat to our very existence as we know it. The earth we will leave for ourselves and future generations is in jeopardy.

The good news is that we can do something to lessen the damages, *if we take significant action now.*

The First Unitarian Church's Seventh Principle Committee is committed to assuming leadership in addressing global warming.

Unitarian Universalists, like members of every major religion, are treating this subject as more than a scientific question. This is a religious issue. Whether you believe in God, Creation, Nature, or other spiritual force, the sanctity and sustainability of the planet is a concern for people of all faiths.



We are, often unknowingly, desecrating our world through our individual and institutional actions. It is as if we, as passengers on a spaceship, are cutting off our own life support systems.

## Q. What is global warming?

**A.** Gases in the earth's atmosphere hold heat from the sun close to the surface, allowing life to exist. This is the "greenhouse effect," normally a beneficial, stable phenomenon. However, human-induced activity has released enormous quantities of some of these gases since the Industrial Revolution, leading to an unbalanced, unnatural global warming – the greenhouse effect out of control.

## Q. What causes it?

**A.** Carbon dioxide, produced primarily by the burning of coal, gasoline, natural gas and oil, is the main culprit. Methane, nitrous oxide and halocarbons also play a role. In Oregon, 81% of CO<sub>2</sub> emissions are from driving cars and trucks, burning of natural gas in homes and businesses, and generating electricity.

The other main human-caused factor is cutting down trees, which absorb carbon dioxide. The loss of old growth and mature second-growth forests is particularly devastating.

## Q. How much warming is there?

**A.** In the last century, average temperatures worldwide have increased about 1 degree F. It may not sound like much, but small differences in temperature can make huge differences in habitability of the planet. The 1990's was the hottest decade in the past 1,000 years. The latest estimates are that the temperature will increase another *2.5–10.4 degrees Fahrenheit by 2100.*

## Q. Isn't it part of a cyclical pattern?

**A.** There are cyclical temperature patterns of warming and cooling. However, temperature increases of this magnitude are far beyond natural cyclical patterns and are primarily human-induced.

## Q. Isn't there a debate whether human-caused global warming even exists?

**A.** There may have been a real debate 20 years ago, but no longer. The most authoritative source is the Intergovernmental Panel on Climate Change (IPCC), which consists of over 2,000 leading scientists from all over the world. They have concluded that human-induced global warming is a threat to the earth's delicate balance of ecosystems. Moreover, their 2000 report predicted warming potentially much greater than their 1995 report.

Other groups that have determined that global warming is real and a threat are the U.S. Environmental Protection Agency, National Oceanic and Atmospheric Administration, Union of Con-

cerned Scientists, Environmental Defense Fund, World Health Organization, Sierra Club, National Council of Churches, and many more.

Businesses also recognize the magnitude of the situation. The CEO's of the world's 1,000 largest corporations voted climate change the most urgent problem facing humanity at the World Economic Forum in Davos, Switzerland in February 2000.

Of course, there are a few skeptics and they seem to get a disproportionate share of media time and space. But the evidence is overwhelming that what is happening is more than a natural cycle and that human behavior is a major cause.

### **Q. OK, so what if global warming is real? What's the problem?**

**A.** Here's where it gets really scary. This is what's happened already and expected to worsen:

- Glaciers and polar ice caps are melting.
- Ocean water is warming, killing coral and many species of fish.
- Ocean levels are rising, threatening coastal areas of such countries as the Netherlands, Bangladesh and Egypt. Many Pacific island nations are in danger of disappearing entirely.
- Weather is becoming more unpredictable, with hurricanes, floods and droughts intensified.
- Disease-causing insects are migrating into latitudes and altitudes never before infested, including the U.S. There are an estimated 60 million more cases of malaria every year.

Synergistic effects are particularly unsettling. For instance, as more ice melts, less sunlight is reflected into the atmosphere, warming the earth even more. Although scientists can say with certainty that we're getting warmer, no one can say that it will happen gradually or at what rate. There could be a dramatic shift occurring over as short a time as 5-10 years.

### **Q. Will individual actions, even on a scale much wider than our church, be enough to make a difference?**

**A.** They're a major part of the solution. Social change almost never starts with government – there must be a grass roots effort to both educate the public and encourage action. It will take **both** individual and institutional actions to work our way out of this crisis. One institution, our church, will become a "Green Sanctuary," a model for environmental action.

### **Q. What can I do?**

**A.** Simply reduce the amount of fossil fuels you burn. By committing to the pledge, each household can reduce the carbon dioxide it generates by over 1,300 pounds a year and save nearly \$100 per year.

**To start, it's as easy as...**

