

COMMITMENT TO CLIMATE ACTION
by the
Unitarian Universalist Congregation of Binghamton

Approved by Congregational Vote – June 14, 2015

“We do not inherit the Earth from our Ancestors;
we borrow it from our Children.”



CLIMATE CHANGE: THE SCIENCE

Earth's climate derives from many factors, including its orbit, axis, volcanic eruptions, meteor impacts, and concentrations of atmospheric "greenhouse" gases. Greenhouse gases, including carbon dioxide and methane, are "transparent" to incoming shorter wavelength solar energy but "opaque" to longer wavelength infra-red energy radiated from the Earth's surface, thereby trapping heat. Greenhouse gases may be thought of as the "blanket" that has kept the temperature of the Earth more or less "friendly" to life at an average of about 60 degrees F.

Human Activity Is Changing the Climate

The Industrial Revolution, starting in the 1800s—by burning carbon-rich fuels laid down in earlier geologic periods and by removing forests—has increased atmospheric carbon dioxide by more than 40%, from 280 parts per million (ppm) to over 400 ppm. NASA's Goddard Institute for Space Studies estimates an average global temperature increase of 1.4 °F over the last 200 years, with two-thirds of the warming occurring over the past 40 years. Related changes in the Earth's climate and natural systems include:

- 1. Increase in the Earth's average surface temperature:** According to the Intergovernmental Panel on Climate Change (IPCC), the average for all land and surface temperatures rose 1.6°F between 1880 and 2012. NASA and NOAA rank 2014 as the warmest year ever recorded and note that the 10 warmest years ever recorded have all occurred since 1998. Because carbon dioxide resides in the atmosphere for more than 100 years, the carbon already in the atmosphere plus the carbon we are likely to add during the remainder of the 21st century will raise the average global temperature, thereby accelerating climate change.
- 2. Ocean warming:** The 2013 IPCC report states that the oceans have absorbed more than 90% of planetary warming since 1971. NASA reports a 10% per decade loss of summer Arctic sea ice.
<http://earthobservatory.nasa.gov/IOTD/view.php?id=82094> Because sea ice *reflects* about 90% of the sun's energy, and open ocean *absorbs* about 90%, Arctic ice cap shrinkage intensifies ocean warming and accelerates climate change.
- 3. Sea level rise:** Atmospheric greenhouse gases contribute to rising oceans in two ways: a) warming water expands and 2) melting glaciers and ice caps add water to the oceans. The EPA reports: "After a period of approximately 2,000 years of little change . . . global average sea level rose throughout the 20th century and the rate of change has accelerated in recent years."
<http://www.epa.gov/climatechange/science/indicators/oceans/sea-level.html>
http://www.ipcc.ch/pdf/unfccc/cop19/3_gregory13sbsta.pdf
- 4. Increase in ocean acidity:** As oceans absorb more atmospheric carbon dioxide, they become more acidic. Since the late 1800s the acidity of the oceans has risen by 30%. This is already starting to interfere with calcium shell formation and will adversely affect many marine life forms.

5. **Accelerating Arctic permafrost melt:** This has caused the release of large amounts of carbon dioxide and methane—an example of a “positive feedback loop” where climate change itself leads to more climate change.
6. **Changing precipitation patterns:** Precipitation has **increased** in eastern parts of North and South America and northern Europe and **decreased** in the southwest U.S., the Mediterranean, southern Africa, and parts of southern Asia.
7. **Changing seasons and environments:** In terrestrial ecosystems, spring now arrives earlier while fall arrives later. Plant and animal ranges are shifting poleward (and, where possible, to higher elevations). Marine and freshwater systems are experiencing analogous shifts. Cold days and cold nights and frosts are less frequent over most land areas. Hot days and hot nights and heat waves are more frequent over most land areas. Heavy precipitation events are more frequent over many areas.

Time to Act Is Running Out

The Global Carbon Project reports that worldwide 2014 carbon dioxide emissions exceeded 40 billion tons, a 65% rise over 1990 when international carbon control negotiations began.

Writing in *Nature Geoscience*, Global Carbon Project scientist Pierre Friedlingstein cautions:

The time for a quiet evolution in our attitudes towards climate change is now over. Delaying action is not an option - we need to act together, and act quickly

We have already used two-thirds of the total amount of carbon we can burn, in order to keep warming below the crucial 2°C level. If we carry on at the current rate we will reach our limit in as little as 30 years' time – and that is without any continued growth in emission levels. The implication of no immediate action is worryingly clear – either we take a collective responsibility to make a difference, and soon, or it will be too late.
<http://phys.org/news/2014-09-co2-emissions-billion-ton-high.html>

RELATIONSHIP TO UNITARIAN UNIVERSALIST PRINCIPLES

2nd Principle: Justice, equity and compassion in human relations

Climate change affects first and hardest those who are least able to cope -- the poor, children, the elderly, and minorities. This is a grave injustice because these tend to be the people who have been the least responsible for creating this problem. We must protect and empower those who are most vulnerable. Regarding intergenerational justice and equity, Edith Brown Weiss of Georgetown University has written:

The present generation must pass the Earth and our natural and cultural resources on in at least as good a condition as it received them so they [succeeding generations] can meet their own needs.

6th Principle: The goal of world community with peace, liberty, and justice for all

The massive disruptions created by unchecked climate change would undo all of the progress we have made towards this goal.

7th Principle: Respect for the interdependent web of all existence of which we are a part

Human activities are causing mass extinction of many life forms and human-induced climate change is a major contributing factor. Recent studies suggest that the current extinction rate is roughly 1,000 times faster than the average pace in Earth's history. As with any finite system, the Earth is subject to limits and constraints. In her recent book, *This Changes Everything*, Naomi Klein quotes global system analyst Rodrigo Castro and colleagues who wrote in a 2014 paper:

It is our predicament that we live in a finite world, and yet we behave as if it were infinite. Steady exponential material growth with no limits on resource consumption and population is the dominant conceptual model used by today's decision makers. This is an approximation of reality that is no longer accurate and [has] started to break down.

[Klein, Naomi. *This Changes Everything*; Simon and Schuster, 2014, p161]

CALLING UNITARIAN UNIVERSALISTS TO BE MINDFUL

As Unitarian Universalists, if we agree with the findings of climate scientists and we embrace the values and beliefs cited above, then we should engage in those actions most likely to preserve the interdependent web of life, advance intergenerational justice and equity, create an economic system that recognizes the finite nature of the Earth, and enhance the well-being and environmental security of those most vulnerable to the impoverishing effects of a changing climate. UUCB members can:

- 1. Acknowledge that causes of and potential solutions to the climate crisis lie within each of us as individuals and also within our economic, cultural and governmental institutions.**
We will act individually and cooperatively to address solutions to the climate crisis.
- 2. Become well informed so that our individual and cooperative actions may be wise and effective.**
We will work to become better informed about the political, cultural, and economic contexts within which climate change is occurring.
- 3. Invest time and wealth to help ensure a planet that sustains life for its creatures.**
We will use our personal and collective resources to create a sustainable planet.
- 4. Acknowledge the power of special interests, especially the fossil fuel industry, to influence legislation and policy to favor a climate-destabilizing, high-carbon economy.**
We will strive to build countervailing political forces.
- 5. Acknowledge that our current economic system, predicated upon infinite material growth, is incompatible with a sustainable Earth.**
We will advocate and work to reform our economic system.
- 6. Acknowledge that wealthier nations and individuals produce far more climate-changing greenhouse gases.**
We will strive to consume less in order to stabilize the climate and sustain Earth's ecosystems.

UUCB's SPECIFIC COMMITMENTS TO CLIMATE ACTION

Because of the seriousness and urgency of climate change, our congregation commits itself to:

1. **Divest our endowment fund from the top 200 fossil fuel companies.** [Note: This commitment was met in January, 2015 by transferring all funds to UUA's Common Endowment Fund.]
2. **Make our building carbon neutral.** We will create and approve a plan for doing so by June 2016. The plan will:
 - a. Specify how we intend to reach that goal,
 - b. Include a target completion date,
 - c. Implement the plan in stages with specified milestones to enable measurement of progress over time.
3. **Review our religious education curriculum** to ensure that climate change is appropriately integrated.
4. **Work together and support each other** as we strive to minimize our energy use, consume only what we need, and adopt what may be unfamiliar practices in order to be stewards of the Earth.
5. **Nurture alliances** within Unitarian Universalism, with other faiths, and with secular organizations in order to promote understanding of the urgency of climate action, to address despair, and to find hope for the future.
6. **Strengthen our sense of community and practice of citizenship** so that, together, we can respond with effectiveness and resilience to the climate crisis.
7. **Advocate** for:
 - a. Protection of air, water, and food.
 - b. Solutions that address social, economic, and climate justice issues together.
 - c. United States engagement in international climate treaty negotiations in a manner that (1) accepts responsibility for our share of damage already done by fossil fuel emissions and (2) takes a leading role in curbing emissions.
 - d. Taxing fossil fuels so that the total price reflects their full social costs (including damage to human health, ecosystem impacts, sea level rise, ocean acidification, and extreme weather events).
 - e. A national goal and supporting policies to eliminate all net greenhouse gas emissions by 2050.

We undertake this work for those who follow.