

A Candidate's Guide to Climate Change



What we know about climate change:

- Over the last 50 years, human activities – particularly the burning of fossil fuels – have released sufficient quantities of greenhouse gasses to trap additional heat in our atmosphere. As a result, Earth's temperature is rising at its fastest rate in millions of years. April 2016 marked the 12th consecutive month in which the average temperature of each respective month was hotter than the average temperature recorded for that month dating back to 1880.
- These changes are already disrupting life on our planet: Sea levels are rising; extreme weather events are more intense and frequent; air and water pollution are worsening, land and water degradation are increasing; and scientists are documenting the massive loss of species and habitats.
- The upper limits of global temperature that will prevent catastrophic impacts on human habitation are unclear, but it is generally agreed that more than a 3.6° F increase from pre-industrial levels is perilous. We have already reached a 2.7°F increase. If we are unwilling to take action sufficient to prevent further warming, we will be playing Russian roulette with the civilization that has grown under the current, advantageous climate conditions.
- An early sign of climate change in the Midwest is increased rainfall and flooding. Climate models predict that an average annual temperature rise of 8°F will occur if emissions are not substantially reduced by mid-century. Combined with aquifer depletion, this could have a huge impact on agriculture and substantially increase energy demand for cooling.

What those responsible for governing must do:

- Face the reality of climate change. America has never faced a more daunting and difficult task to both adapt to changes already occurring and to make economic and societal transformations that will prevent the collapse of the earth's life support systems.
- Embrace emerging business opportunities as we transition to renewable energy. Become a visionary, courageous leader who advocate for funding basic research in renewable energy technologies and transportation systems as well as creating incentives for businesses to re-engineer themselves for a fossil fuel free future.
- Ease the transition of workers displaced by a changing energy environment. Retrain people who work in the petroleum, coal and related industries to work in the growing fields of renewable energy development, installation and maintenance; deploy displaced workers to retrofit our infrastructure – both public and private – to be more energy efficient.
- Ensure that America meets its global obligations to reduce emissions.
 - Support limits to fossil fuel exploration especially on public lands. Eliminate subsidies to the oil and gas industry.
 - Support implementation of the Clean Power Plan and Renewable Energy Portfolio Standards, both of which provide strong achievable standards for power plants while allowing states to customize their approaches for cutting carbon pollution.
- Create incentives for cities and neighborhoods to achieve energy independence.
- Make sure that trade agreements with other nations do nothing to undermine U.S. environmental and energy standards or allow fossil fuel companies to sue the U.S. government.

What climate change means for our health, our economy and our national security – the urgent challenges:

- The Pentagon calls climate change “an urgent and growing threat to national security”. The U.S. military will need to prepare for large scale military operations in areas of conflict including the deployment of resources to respond to epidemic diseases, border security issues, natural disasters and war – both at home and abroad.
- Health impacts will be significant from deterioration in air and drinking water quality and the contribution of high temperatures to deaths from cardiovascular and respiratory diseases like asthma. Warmer climates also increase the number of mosquitoes that spread disease. Children and the elderly are the most vulnerable.
- Food supplies will be at risk as higher temperatures bring changes to agriculture. Climate zones will shift, rainfall patterns will change, droughts will occur in new areas - all of which impact crop and livestock management practices.
- The economic impact of natural disasters – floods, droughts, and wildfires – is already becoming evident. These events destroy homes, devastate essential community services and dislocate food production. All of this adds an additional burden for taxpayers who have to pick up the tab for mitigation and post-disaster recovery.

What is already happening – reasons for optimism:

- Strides are being made world-wide as countries mobilize to meet targets set by their own governments and the Paris Climate Agreement. We are demonstrating that rapid change is possible when political and business leaders work together to transform their communities.
- Electric cars have taken the world by storm with global sales surpassing 1 million.
- Cities are taking energy efficiency seriously by passing ordinances requiring building owners to increase energy efficiency.
- Portugal recently announced that it had powered its entire country on renewable energy for one day. This follows announcements by Germany that it had powered 95% of its energy for one day, and Denmark’s announcement that it is exporting renewable energy. Bloomfield, Iowa has pledged energy independence by 2030.
- The growth in clean energy jobs has led Midwest businesses to be bullish on the future. There are now more than 568,000 clean energy and energy efficiency jobs in the Midwest! Kansas holds 27,000 of those.
- Investors, both nationally and globally, are beginning to shift their money from fossil fuel companies to companies that are bringing radical change in battery technologies, transportation, and energy storage. Smart money is beginning to recognize that there is significant risk in continuing to support energy companies whose main assets may become devalued as the economy retools.

For further information and full citations, visit KCClimate.org/candidate guide

Additional contacts: Jennifer Robinson, State Political Chair, Kanza Chapter, Sierra Club

jennifer.lee.robinson@gmail.com

Craig Wolfe, Communications Coordinator, KC Climate Coalition

protect@sierraclub-ks.info

Anne McGregor, Chair, Executive Committee, Thomas Hart Benton Sierra

Club amcgregormc2@aol.com