

CLIMATE CHANGE IMPACTS ON GEORGIA

WHAT IS CLIMATE CHANGE?

The earth's climate is changing because of excess carbon dioxide pollution in the atmosphere, generated when fossil fuels like coal, oil, and natural gas are burned. This extra carbon traps more heat, like a greenhouse, which explains why 2000 to 2009 was the hottest decade ever recorded and there have been over 400 consecutive months with hotter-than-average global temperatures. Modern civilization developed in a stable climate and we have built our economy and way of life accordingly. Changes to our climate means that we are facing emerging hardships and vulnerabilities as the impacts of climate change unfold.



Extreme weather events, like the "polar vortex" of 2014, are becoming more common in a warmer climate.

Some impacts from climate change include extreme storms, flooding from sea level rise, heat waves, and drought. These impacts have consequences for public health, safety, the economy, the environment, and our way of life.

Fortunately, we can protect against the worst impacts by limiting carbon pollution with energy efficiency and using clean renewable energy, like solar and wind.



Over the last decade, GA fossil fuel power plants emitted an average of 71 million metric tons of carbon pollution each year.

HOW WILL CLIMATE CHANGE IMPACT GA?

It is difficult to link any one event directly to climate change, and it is important to recognize that most climate data is regional or even global in scope. However, decades of expert research and centuries of historical records can be compared with recent trends to illustrate how climate change is already impacting parts of the Southeastern United States. These impacts, combined with possible future impacts, are both cause for concern and the imperative for action.

- Extreme weather, including severe storms, heat waves, and more intense hurricanes are all becoming more typical in a warmer world.
 These events have a large toll in terms of physical damage, lost productivity, higher insurance costs, and public health. Cold snaps may become more common, like the 2014 "polar vortex," which crippled Atlanta with road gridlock while thousands of children had to spend the night at school because their parents couldn't reach them.
- Heritage foods of Georgia are suffering because of carbon pollution and climate change. Heat and drought stress is expected to increase with global warming, similar to what has happened to peanut, bean, pasture/hay/beef, and corn production in recent years. Drought caused Gov. Perdue to declare a state of emergency in 2007, 151 counties to be declared disasters in 2010, and 150 counties again in 2011. Fruit and nut farmers are experiencing crop losses from unreliable winter weather and late spring freezes, which are expected to become more frequent. In 2007, 2017, and 2018, such freezes wiped out 50-70% of the peach and blueberry crops and caused hundreds of millions of dollars in damage.
- Some of Georgia's most **treasured coastal places**, like historic Savannah and Georgia's many islands, are **flooding** and **eroding away**—along with the pastimes and economies they provide—due in part to sea level rise from climate change, <u>projected</u> to rise by 1 to 4 feet, but as much as 8 feet, throughout the 21st century. <u>Several studies</u> have shown that property values are being eroded by coastal properties' flooding vulnerability.



IT'S TIME FOR SOLUTIONS!

PROMOTE CLEAN ENERGY

Clean energy, such as solar, wind, and energy efficiency, produces no pollution and provides jobs to our economy. Studies show that the United States could easily generate 80% of its power from clean sources by 2050. Energy efficiency can dramatically reduce the amount of power we use in our homes and businesses and lower our bills. Wind and solar energy are now the least expensive forms of new electricity in the country and Georgia has abundant resources of each. Electric vehicles are now widely available and reduce our reliance on oil. Our state policies should seek to level the playing field between clean energy and riskier fossil power plants.

OPPOSE HIGH RISK ENERGY

Some energy sources have greater risks associated with their use. Old, inefficient and dirty coal power plants must be retired to reduce levels of pollution that trigger asthma attacks and heart and lung disease, put mercury in our water, and cause climate change. Nuclear power plants don't emit carbon directly, but are extremely expensive to build, require large amounts of water to operate, generate dangerous, highly radioactive waste, and can have devastating consequences should an accident occur. Our coast is too precious to be compromised by spills from offshore drilling. Clean energy is a positive alternative to each of these risky energy sources.



TAKE ACTION TODAY!

Find & Contact Your Elected Officials www.bit.ly/legislator-search

Support Our Work & Become a Member of SACE Today www.cleanenergy.org/donate

Join the Southeast Coastal Climate Network

www.cleanenergy.org/seccn



CONTACT YOUR ELECTED OFFICIALS

National and state-level climate and energy policies are imperative to ensure protection from the worst impacts of climate change and to secure the benefits of clean energy. Contact your elected officials in Washington D.C. and Atlanta and tell them we must have climate and energy policies that:

- Invest in job-creating energy efficiency and clean energy
- Limit carbon pollution
 Preserve and strengthen the Clean Air Act
 - Hold polluters accountable and end fossil-fuel subsidies

References and links available on the online version of this factsheet: http://www.cleanenergy.org/ga-climate-impacts