

What is Global Warming?

Global warming is caused by carbon dioxide (CO₂) and other heat-trapping pollution – mainly from cars, power plants and industrial sources that burn fossil fuels – that collects in the atmosphere like an insulating blanket. As a result, the planet is getting warmer. The Earth's surface temperature rose by 1.6 degrees F in the past century, and 2006 was the warmest year on record in the United States.

South Carolina Global Warming Fact Sheet



In 2007, the world's leading authority on global warming, the Intergovernmental Panel on Climate Change (IPCC), stated with 90% certainty that global warming is occurring and that human-caused pollution is the main factor in warming since 1950. A 2007 report released by the National Environmental Trust entitled *Taking Responsibility* concluded that South Carolina emits nearly 90 million metric tons of CO2 annually equaling the emissions of 75 developing countries.

Global Warming Impacts in South Carolina



South Carolina's coastal marshes are threatened by sea level rise and loss of habitat.

- Recent findings indicate that global warming is likely to cause worldwide sea level rise by 7 to 23 inches by 2100. Rising sea levels along South Carolina's coast will increase erosion and loss of habitat along our marshlands and barrier islands, impacting places like Cape Romain National Wildlife Refuge.
- Hotter conditions may lead to significant reductions in crop productivity among our region's primary crops, such as soybeans, cotton and corn.
- Catastrophic storms like Hurricane Hugo, which caused a 20 foot storm surge just north of Charleston, may occur with greater intensity as the climate changes and contribute to excessive erosion, flooding and storm surges, loss of human life, devastating losses to property, and increases in insurance costs for residents throughout the state.

Global Warming Solutions

Global warming is one of the most urgent and serious problems of our time and, solutions exist at all levels of government. Here are some examples of the solutions we need at the national and state level and what you can do to support the forward momentum for change.

What Our Country Can Do

- Scientists say we need to reduce global warming pollution at least 80% by 2050 to avoid the catastrophic impacts of global warming. In order to achieve this goal, we need a national climate policy to reduce our global warming pollution.
- 2. A national climate policy should auction, rather than give away, pollution credits so the revenues can incentivize clean energy sources.
- 3. To support a national climate policy, we also need federal renewable energy and energy efficiency standards as well as tax incentives to support investments in clean, efficient energy use and production.

What South Carolina Can Do

- In 2007, Governor Sanford created the Climate, Energy and Commerce Advisory Committee to create strategies for reducing our global warming pollution.
- SC Lawmakers must pass laws to implement these pollution reducing strategies and to encourage homeowners and businesses to invest in renewable energy and energy efficiency.



Solar power is a viable source of energy in SC and more homeowners and businesses would invest in solar power if our state had policies allowing them to sell their excess energy back to the grid through "net metering."

What You Can Do

- Contact your South Carolina Senators Graham and DeMint and ask them for their support of a national climate policy.
- Find your Congressional representative here: https://forms.house.gov/wyr/welcome.shtml and ask for their support of a national climate policy, too.
- 3. Contact your state senator and ask them to join Senator Glenn McConnell in encouraging energy efficiency in South Carolina.
- 4. Join Southern Alliance for Clean Energy TODAY we are working for all of these solutions and your membership keeps us going!

For more information contact
Southern Alliance for Clean Energy
1-866-522-SACE (7223) • www.cleanenergy.org