

Support Smart Energy Solutions



Arizona is the fastest growing state in our nation. Most of our electricity is generated from coal and nuclear, but we also have a significant dependency on natural gas. As the energy demand within our state grows, we will continue to see more pollution, additional power lines and power plants, and increased greenhouse gas emissions, unless we shift our focus toward energy efficiency and renewable energy sources.



The scientific community has concluded that burning fossil fuels (oil, coal, and natural gas) to power our cars, homes, and businesses is causing global temperatures to rise. The Intergovernmental Panel on Climate Change projects that during our children's lifetimes, global warming will raise the average temperatures on Earth by 2.7 to 10.5 degrees Fahrenheit. The national science academies of the United States, England, France, Russia, Germany, Japan, Italy, Canada, Brazil, China, and India issued the following joint declaration: "The scientific understanding of climate change is now sufficiently clear to justify nations taking prompt action." The world's leading scientists ask us to "recognize that delayed action will increase the risk of adverse environmental effects and will likely incur a greater cost" [Source: "Joint Science Academies' Statement: Global Response to Climate Change," June 2005].





We have the technology to tackle some of our most pressing problems, like global warming, air pollution, and our dependence on nuclear, oil, and coal. Encouraging energy efficiency and renewable energy programs is part of that. For nearly all of the thousands of ways we use energy, we have the technology to use less – reducing pollution and lowering our energy bills. Energy efficiency is a source of energy, just like coal, gas, or nuclear, except instead of drilling or mining the energy, we can tap into this clean energy source by using ingenuity to do more with the energy we already generate. In every home, office, and factory, we can use energy more efficiently by putting to work currently available products like advanced lighting and windows that better insulate from the heat and cold.



Renewable energy sources are abundant. The sun is the ultimate source of energy. All of the energy stored in the Earth's reserves of coal, oil, and natural gas is equal to the energy from only 20 days of sunshine. With today's technologies, we can harness this energy to produce electricity. When appropriately sited, solar energy creates zero pollution and is the most environmentally friendly source of power currently available. Thanks in part to successful research and development, the cost of solar technologies has been reduced in recent decades. Arizona has over 325 days of sunshine annually and is ideally situated to become a leader in using solar energy and manufacturing solar technologies.

How does global warming affect you?

Who cares about a couple of degrees increase in temperature, right? Wrong. We are already seeing the effects of global warming in our backyard and can expect even more devastating effects in the near future.

-  Arizona is an arid state that experiences natural cycles of drought. However, higher temperatures, changes in precipitation patterns, and increased demand for water intensify Arizona's sensitivity to drought impacts. The quantity of water in rivers, such as the Colorado River, is being diminished, and severe water shortages are expected across the state.
-  Although wildfires are a natural part of most ecosystems, drier conditions have increased the occurrence and intensity of fires. These frequent, intense fires are highly destructive to forest and desert ecosystems and also pose a human safety issue.
-  Habitats for many of Arizona's native species are being destroyed as a result of development and other human activities. Global warming further exacerbates this problem and threatens to eliminate habitat for endangered species such as the Mt. Graham red squirrel and the southwestern willow flycatcher.
-  Human illnesses and deaths will escalate. In Arizona, outbreaks of mosquito-borne illnesses, including encephalitis and West Nile Virus, are increasing as temperatures rise. Occurrences of other diseases such as hantavirus are also expected to increase.

Make a difference!

-  Learn about simple, money-saving steps that you can take every day to have a positive impact on the causes of global warming. For ideas, visit www.sierraclub.org/globalwarming, www.climatecrisis.org, or www.epa.gov/globalwarming.
-  Urge leaders to increase fuel economy standards, invest in clean, renewable energy, and increase overall efficiency.
-  Encourage Governor Napolitano to act on the 49 recommendations to reduce greenhouse gas emissions provided by the Arizona Climate Change Advisory Group. The recommendations can be viewed online at www.azclimatechange.us. The governor can be reached at 602-542-4331 or azgov@az.gov.
-  Spread the word! Tell your friends and family how they can make a difference.



Get Involved!

For more information, please contact Jon Findley, the Grand Canyon Chapter's volunteer energy chair, at 480-756-2912 or energy@grandcanyon.sierraclub.org or Sandy Bahr at 602-253-8633 or sandy.bahr@sierraclub.org.

Visit our website at www.arizona.sierraclub.org.

