

There are also concerns about threats to biological diversity in some desert lands with the development of new, large-scale solar power plants that cover large territories. A 2015 study, published by the Carnegie Institution for Science and Stanford University, showed that the ecological footprint of solar power development could grow to more than 27,500 square miles, or roughly the land area of South Carolina, if the United States were to adopt a more ambitious climate goal.⁵ The study showed that when thousands of solar panels are built in undeveloped natural areas, the panels crowd out sensitive wildlife and destroy their natural habitat, including shrub and scrublands.



In some instances, wildlife is severely impacted by the development of renewable energy. For instance, the Golden Gate Audubon

Society reported that as many as 4,700 birds die annually as a result of the propeller-like blades on wind turbines in the Altamont Pass Wind Resource Area⁶. Solar energy projects can be equally dangerous, with towers that can reach up to 1,000 degrees Fahrenheit. According to Nature World News⁷, there are documented instances where hundreds of migrating birds have been lit on fire mid-flight through redirected concentrated solar energy.

While renewables certainly have their place now and in the foreseeable future, there are tradeoffs and impacts in the use of all energy sources. Natural gas is the foundation for the sustained use

⁵ Scientific American, Solar Power Expansion Could Pose Ecological Risks, 2015
<http://www.scientificamerican.com/article/solar-power-expansion-could-pose-ecological-risks/>

⁶ Golden Gate Audubon Society
<http://goldengateaudubon.org/conservation/birds-at-risk/avian-mortality-at-altamont-pass/>

⁷ Nature World News, How a Solar Farm Set Hundreds of Birds Ablaze
<http://www.natureworldnews.com/articles/12918/20150223/solar-farm-set-hundreds-birds-ablaze.htm>