



# WIND ENERGY & BIRDS

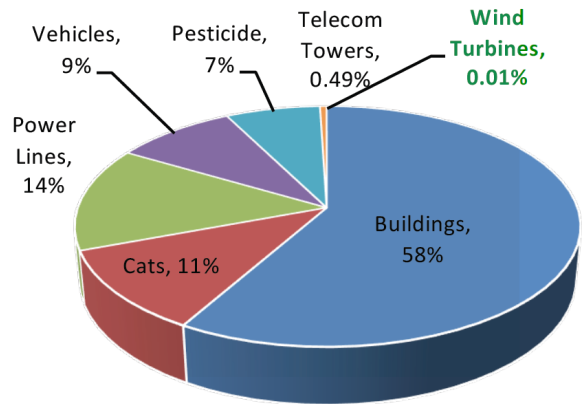
All human activity affects natural surroundings, and renewable energy is not without environmental impacts. These impacts are only meaningful in comparison to the alternatives. The threat of wind turbines to birds and other wildlife is very small when compared to impacts of traditional energy sources.

Leading studies find wind energy has a tiny impact on birds.

**Only .01 percent of human-caused bird fatalities can be attributed to windpower.**

- U.S. Department of Agriculture (at right)

*Human-Caused Bird Fatality Sources<sup>1</sup>*



Wildlife conservation groups understand the urgent need for more wind energy:

- “The threat posed by renewable energy pales in comparison to the threat of climate change.”

**National Audobon Society President David Yarnold<sup>3</sup>**

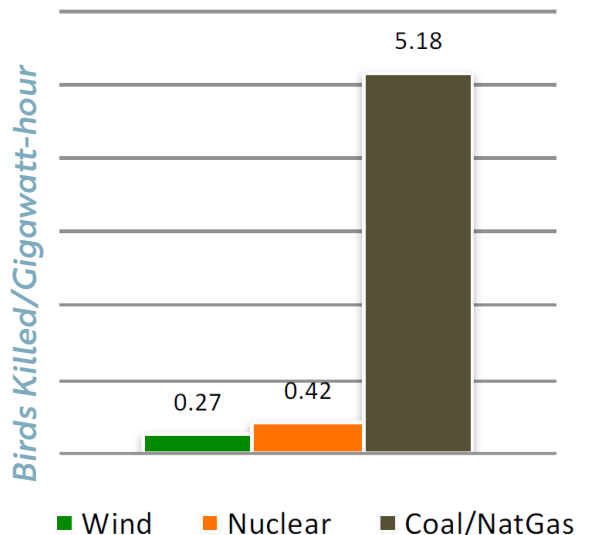
- “The climate change threat to migratory birds equals the sum of all other human-caused threats combined, with 94 percent of migratory bird species facing some type of climate change threat.”

**-World Wildlife Fund<sup>4</sup>**

It’s not a choice between wind and nothing, it’s a choice between wind and fossil fuels. Studies show coal and natural gas extraction and combustion present far greater threats to birds (at right).

Wind is the lowest-impact type of energy generation, but developers still adhere to strict regulations from states and the U.S. Fish & Wildlife Service. The wind industry continues working to reduce bird and bat impacts through the American Wind Wildlife Institute and the Bats & Wind Energy Collaborative.

*Bird Mortalities, by Energy Source<sup>2</sup>*



Sources:  
 1. USDA Forest Service: [http://www.fs.fed.us/psw/publications/documents/psw\\_gtr191/psw\\_gtr191\\_1029-1042\\_erickson.pdf](http://www.fs.fed.us/psw/publications/documents/psw_gtr191/psw_gtr191_1029-1042_erickson.pdf)  
 2. Energy Policy: <http://www.sciencedirect.com/science/article/pii/S0301421509001074>  
 3. Politico: <http://www.politico.com/story/2014/09/climate-change-isnt-for-the-birds-110733.html>  
 4. World Wildlife Fund: [https://www.wwf.or.jp/activities/lib/pdf\\_climate/environment/birdsFullReport.pdf](https://www.wwf.or.jp/activities/lib/pdf_climate/environment/birdsFullReport.pdf)