

# WIND ENERGY AND WILDLIFE

Wind energy is one of the most environmentally friendly forms of electrical generation on the planet. That is because wind energy emits no air or water pollution, requires no mining or drilling for fuel, uses virtually no water, and creates no hazardous or radioactive waste. Clean, renewable wind energy also displaces harmful emissions from fossil fuel power plants and offsets carbon emissions, making it a safer generation option for people, wildlife, and natural ecosystems.

## National Wildlife Organizations Support Wind Energy

Properly sited wind energy projects protect birds and wildlife by producing no dangerous pollutants or carbon emissions. According to the Audubon Society's website:

"Audubon strongly supports properly sited wind power as a renewable energy source that helps reduce the threat posed to birds and people by climate change. However, we also advocate that wind power facilities should be planned, sited, and operated in ways that minimize harm to birds and other wildlife ..."

To ensure that our projects are responsibly sited for wildlife, Apex conducts environmental impact studies for every project. We coordinate with federal and state wildlife agencies to make sure that our projects are sited in areas where impacts to birds or bats are minimized and appropriately mitigated if necessary.

In 2012, the National Wildlife Federation, ConservAmerica, and 116 other sportsmen, business, and conservation groups signed a letter asking Congress to support renewable energy projects around the country.

While birds do occasionally collide with turbine blades, modern wind farms are far less harmful to birds than buildings, communication towers, power lines, and vehicles. In fact, turbines account for only a small fraction, about .0003%, of all human-related bird deaths.

## Wind Energy Has No Known Impact on Deer Population or Hunting

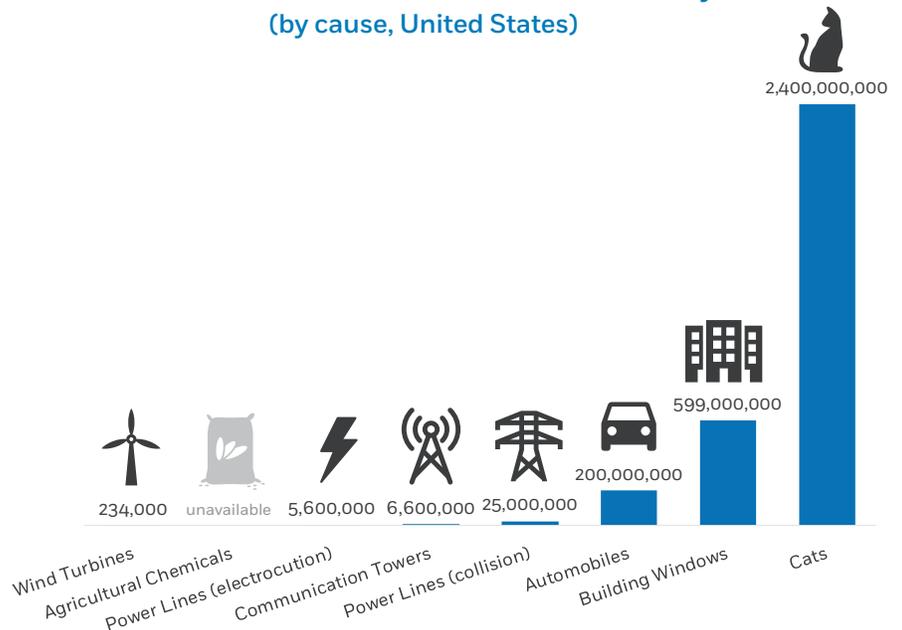
Just as the deer population adapts to construction of new homes, buildings, and other new sights and sounds near their habitats, deer also become accustomed to wind farms. It is not uncommon to find deer and other wildlife feeding or resting near the bases of turbines. Cattle, horses, goats and other livestock are also 100% compatible with wind energy technology.

## Wind Energy Reduces Air Pollution

The amount of electricity produced by wind energy during 2016 alone displaced approximately 393 million pounds of sulfur dioxide (SO<sub>2</sub>) and 243 million pounds of nitrogen oxides (NO<sub>x</sub>), dangerous particulate air pollutants that are associated with conventional electric generation.\* In addition, a typical new wind turbine will avoid nearly 2.8 million pounds of CO<sub>2</sub> annually, the equivalent of over 900 cars' worth of carbon emissions. This carbon savings helps birds and wildlife by minimizing the worst impacts of climate change, which according to scientists, could threaten between a quarter and half of all bird species.

\* American Wind Energy Association

Estimated Number of Birds Killed Annually (by cause, United States)



Data source: North American Bird Conservation Initiative, U.S. Committee. 2014. *The State of the Birds Report 2014*. U.S. Department of Interior, Washington, DC. p 11.