Wind energy's contribution to U.S. electricity grows every year. Energy Department research says wind could provide up to 20% of the United States' electricity mix by 2030 and 35% by 2050. As wind energy companies grow to reach this potential—and to meet America's demand for clean, renewable energy—wind energy is expected to provide 230,000 jobs in less than 15 years!

The path to a rewarding career in wind energy starts before you fill out a college application. It begins in your own backyard. It begins in your classroom. **It begins now.**



FOR

Energy Efficiency & Renewable Energy

Wind Energy Could Be In Your Future



FOR SCHOOLS





THRE WIND ENERGY PLANT OWNER SRINGING WIND TO SCHOOLS

> The growing wind industry is creating thousands of good-paying jobs. According to current data from the U.S. Bureau of Labor Statistics, the fastest-growing job title in the country is "wind turbine technician." But this is just the start, with other wind-related careers in research, engineering, business, and more.

The sooner you begin your wind energy education, the sooner you're on your way to a fulfilling career in this field. That's why the Energy Department developed the Wind for Schools program. By delivering hands-on learning opportunities, new educational tools, and curricula, this program generates interest in wind energy, but also prepares students like you for careers in a growing industry.

Wind for Schools gives you the opportunity to experience hands-on activities designed to connect you with this exciting technology that will be part of the solution to global warming. With the help of your teacher, you and your classmates can engage in interactive research tasks, exercises, and discussions that will encourage your participation in this clean energy field.

Talk to your teacher about bringing the Wind for Schools program into your classroom.

And now it's time for... NDTRIVIAN

What causes wind?

- a. The sun heating the atmosphere
- b. Rotation of the Earth
- c. Variations in the Earth's surface
- d. All of the above

What is the earliest recorded use of windmills?

- a. Generating electricity
- b. Jousting
- c. Pumping water
- d. Grinding grain

Which of these is NOT part of a modern wind turbine?

- of a modern win
- a. Compressor
- b. Gearbox
- c. Nacelle
- d. Yaw drive

Which U.S. state gets the highest percentage of its electricity from wind?

- a. Iowa
- b. Kansas
- c. South Dakota
- d. Texas

By how much did the price of American wind power decrease from the 2000 to 2014?

- a. 60 percent
- b. 70 percent
- c. 80 percent
- d. 90 percent

How many jobs were supported by the U.S. wind power industry in 2015?

- a. 11,000
- b. 36,000
- c. 55,000
- d. 73,000

Which of these is NOT an example of distributed wind generation?

- a. A 50-kilowatt turbine at an office building
- b. A 100-megawatt wind farm
- c. A 1.5-megawatt turbine at a university campus
- d. A 5-kilowatt turbine at a home

What country produces the most energy from wind?

- a. Denmark
- b. China
- c. Germany
- d. United States

Over the past 20 years, wind energy has received more U.S. financial support (subsidies) than traditional energy technologies (like fossil fuels and nuclear power).

- a. True
- b. False

How many homes does a 2-megawatt wind turbine power?

- a. 10-20 homes
- b. 100-500 homes
- c. 600-700 homes
- d. 1,000 to 5,000 homes
- ANSWERS

To find the answers to the questions above you'll need to decode them! Hint: The letters have been shifted to the right five times.

1. Fqq tk ymj fgtaj

- 5. Grinding grain
- 3. Htruwjxxtw
- Texas
- 5. xjajsyd ujwhjsy
- 9. 73,000

- 7. F tsj mzsiwji-rjlfbfyy bnsi kfwr
- 8[.] United States
- 9. Kfqxj
- 10. xnc mzsiwji yt xjajs mzsiwji mtrjx

FOR SCHOOLS

Designed for Educators Like

As an educator, you play a key role in developing the wind-industry workforce of the future.

The Wind for Schools program offers valuable resources you'll need to do this. From hands-on, interactive wind-energy curricula to teacher-training workshops in your state, Wind for Schools supports your students' success through you.

Start a Wind for Schools Affiliate Program at Your School

Wind for Schools affiliate projects let schools leverage existing materials to implement activities. By joining the Wind for Schools affiliate program, you and your school will have access to:

- Age-based wind-energy curricula
- Free Wind for Schools teaching tools
- Scholarships for teacher training
- Advice on how to fund your own turbine installation
- The Wind Applications Center network
- Data-collection equipment connected to the Wind for Schools network.

An exciting way to engage your students in learning about wind energy is to install a small wind turbine at your school. More than 145 schools have installed turbines, giving their students the opportunity to study and experience an actual system that also provides power to their school. And the connection to the Wind for Schools network allows you to compare your energy data to that of other school turbines.



Energy Efficiency & Renewable Energy Help your students prepare for futures in the promising wind energy industry. Contact Wind for Schools today. Mark Jacobson, Senior Project Leader Mark.Jacobson@nrel.gov 303-384-6902 Visit Wind for Schools: http://go.usa.gov/xKuwc

DOE/GO-102016-4912 • October 2016

Front cover photos from iStock 70312847 and Dennis Schroder, NREL. Inside left: photos from iStock 39637832, 99692191 and 85282255. Back cover photo from iStock 42450700.