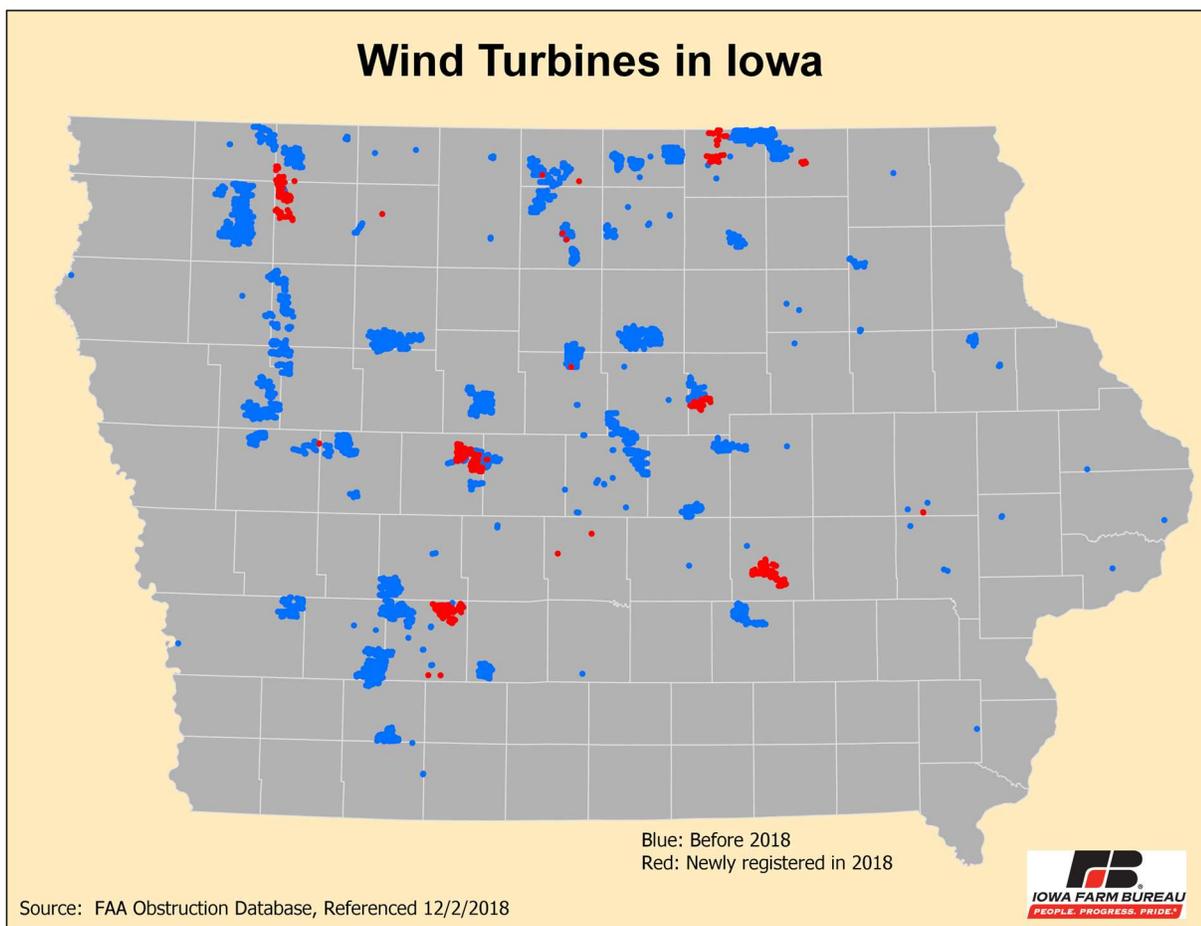


## **Renewable Energy**

As of December 2018, Iowa wind power capacity installed was equal to 8,422 megawatts and was ranked second in the country for install wind capacity. Iowa has 4,637 wind turbines installed in 112 wind projects in operation. Another 1,667 megawatts is under construction. In 2017, Iowa ranked first in the country in terms of wind power generation in proportion to the total-state electricity generation. Iowa generated 20.82 million megawatt-hours from wind power and contributed 37 percent of the states' electricity supply.

There have been 361 new turbines installed this year in Iowa. Now 60 Iowa counties have wind turbines installed. Thirty percent of all turbines in the state are located in six counties: O'Brien (318 turbines), Hancock (241), Worth (231), Pocahontas (215), Adair (198) and Franklin (181). Overall, there are 18 counties in Iowa with more than 100 turbines installed. The counties with more added turbines so far this year are Greene (87 turbines), Poweshiek (68), and Clay (59). With these additions the total number of turbines in these three counties increased to 158, 69, and 64, respectively. Figure 2 shows the location of wind turbines across Iowa. The blue dots in the map indicate turbines installed prior to 2018, while red dots show turbines added this year.

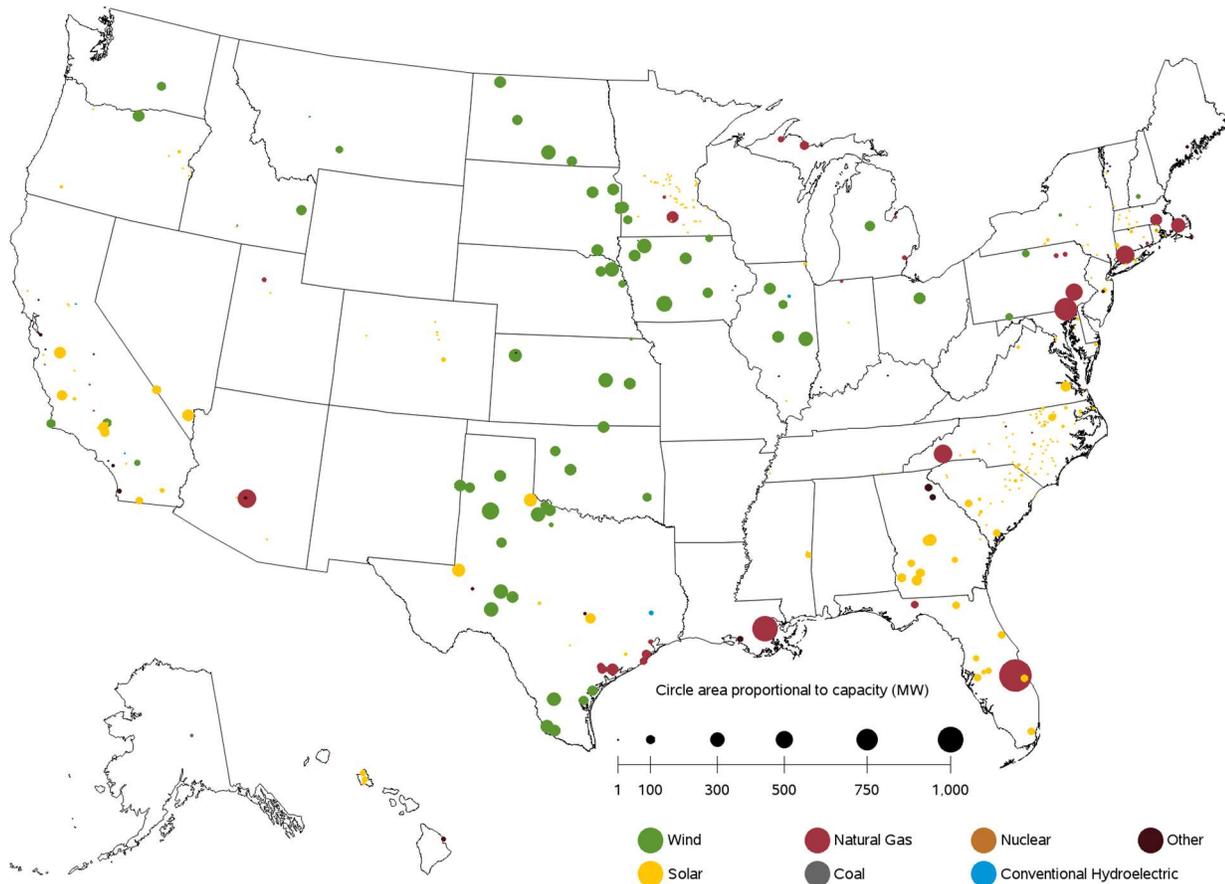


According to the American Wind Energy Association (AWEA), wind projects generate lease payments for landowners and increase the tax base of communities. 2017 AWEA data indicates, on average, the annual lease payments in Iowa were between \$20 and \$25 million annually. These lease payments were calculated based on national and state averages.

Currently, Iowa zoning laws give counties and cities jurisdiction to regulate the siting of wind farms. Counties may include regulations in a zoning ordinance or a separate wind energy ordinance. Over the past ten years, about half of Iowa's counties have decided to regulate wind development. The Iowa Utilities Board has taken the position in administrative proceedings that it does not have authority over

siting. An appeal of a Palo Alto County district court decision upholding the Utility Board’s decision is currently being heard by the Iowa Supreme Court. It is anticipated that Iowa will continue to see significant wind generation development.

Figure 6.1.C. Utility-Scale Generating Units Planned to Come Online from January 2019 to December 2019



Sources: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

Different types of renewable energy are treated differently when it comes to assessments and the generation of property taxes for local governments. Currently wind turbines are assessed as commercial property like any other commercial structure and property taxes are levied against their taxable value and the taxes generated are used by the local governments that serve the area. Solar panels are treated slightly different. If a solar panel is located on a residential property or on a building (including ag buildings), they are assessed as part of the structure. But any type of solar array with the singular purpose of generating electricity of use on the grid would be assessed differently. The power generated from a solar panel would be assessed based on the amount of electricity that is generated, not the value of the structure. The amount of taxes paid from the generated electricity goes to a statewide fund which is then distributed back to local governments who have electrical or gas transmissions lines/pipelines in their jurisdictions. All jurisdictions will receive some of the tax revenue back from the state. The distribution formula may send more or less back to the local government than being assessed as a commercial property might.

*Discussion Questions:*

1. Do you live in a county with wind farm development? Do you live near a wind turbine?
2. Have you ever engaged with the county zoning board or county supervisors about the siting of a wind turbine or about a wind ordinance?
3. Do you believe your county can adequately regulate the siting of a wind farm? Do you believe that state regulation would result in a different outcome?

4. Should renewable energy infrastructure be treated as commercial property or electrical generation property for assessment and taxing purposes.