Texas and Iowa are two of the top wind energy producing states in the United States. Both states have significant wind resources and have invested heavily in wind power development. However, Texas is the largest wind power producing state in the US, while Iowa ranks second.

In terms of installed wind capacity, Texas is far ahead of Iowa. As of 2021, Texas had a total installed wind capacity of over 32,000 megawatts (MW), which is more than three times the installed wind capacity of Iowa, which was around 10,000 MW.

Texas has a higher potential for wind energy due to its larger land area and wind speeds. The state has large wind farms that have been installed in its vast wind-rich regions, such as the West Texas region, where wind speeds average between 17 and 20 miles per hour.

In contrast, Iowa has a more diverse mix of energy resources, with wind being a significant contributor. Iowa has invested in smaller wind farms scattered throughout the state, rather than relying on larger installations. Iowa has an excellent wind resource, particularly in the northern part of the state, with an average wind speed of 16.6 miles per hour.

Iowa has the highest density of wind power generation capacity in the USA that is more than 8 percent of wind turbines in the country. Power capacity of a wind turbine describes how much electrical power a wind turbine can generate with optimal wind resources. Iowa has emerged as a pioneering state in wind energy, with th ehighest proportion electricity generated by wind power in the nation. As of 2022, wind energy accounts for ever 57 percent of the state’s total electricity production, suprassing ever stae in the country. In fact, Iowa holds the distinction of being the first state to generate more than 57 percent of its electricity from wind power.

Both Texas and Iowa have made significant progress in transitioning their energy mix to renewables. However, Texas still has a higher installed wind capacity and a more significant potential for wind energy, while Iowa has been able to incorporate wind energy into its energy mix more seamlessly due to its location and smaller energy demands.