

# North American

# WIND POWER

# Fast Facts

**U.S. wind power generating capacity at the end of 2021—135,225 megawatts (MW)**

The largest wind power project to come online during the year was the 1,056 MW Western Spirit project in New Mexico, owned and developed by Pattern Energy. It is now the largest operating wind project in the U.S.

**Wind generating capacity installed in 2021: 12,747 MW**

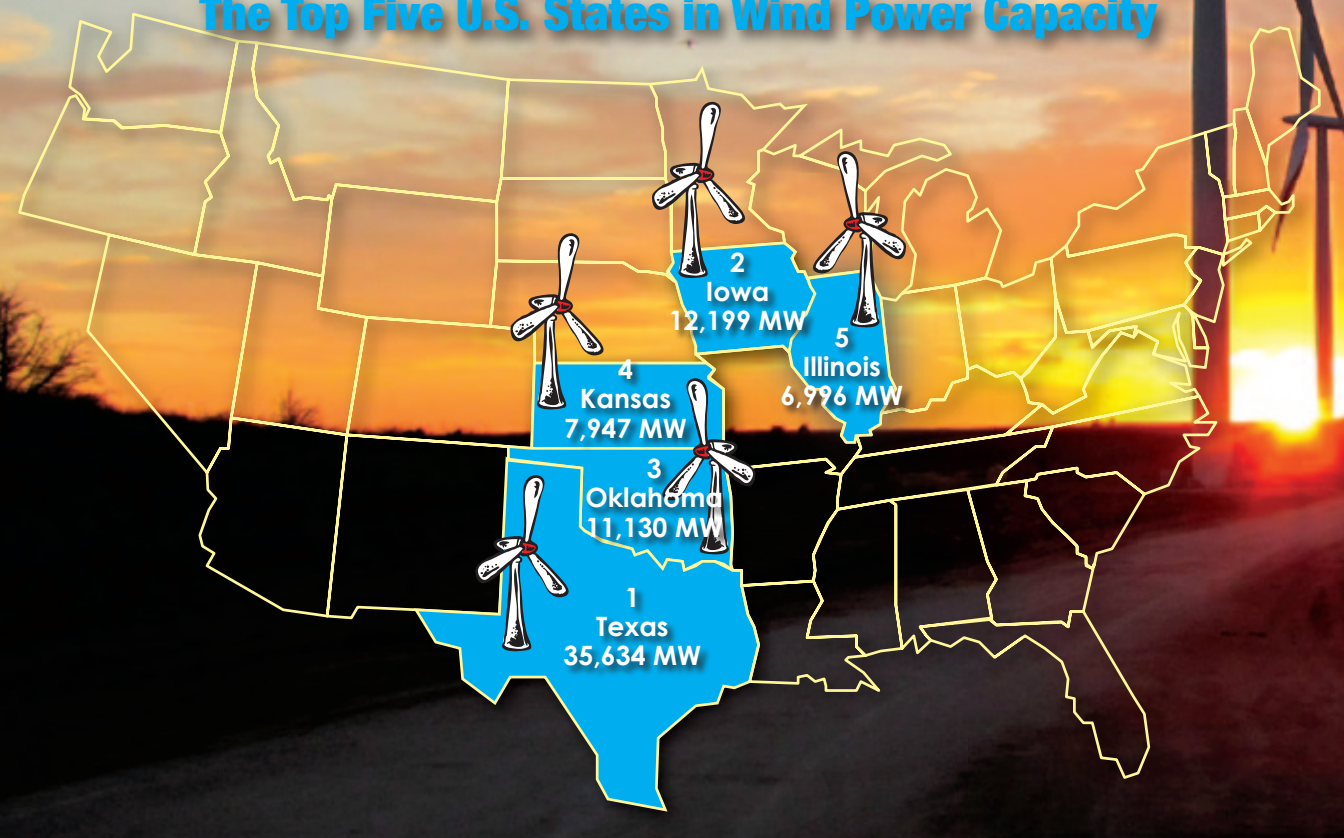
- ▶ The year 2021 was the third most active year for wind power installations, behind 2020, which was a record year, and 2012. Several projects simply pushed timelines and were expected online in early 2022. Others continue to battle supply chain constraints, trade barriers, rising costs, and other challenges.
- ▶ As of the end of 2021, there was 200,209 MW of clean power (wind and solar power) operating in the U.S. Land-based wind makes up the largest share of online clean power capacity, accounting for 67 percent of total capacity.
- ▶ In the fourth quarter, 93 project phases totaling 6,988 MW across 24 states started construction. Of the projects that started construction this quarter, 29 percent were wind power.

**Canadian wind energy operating capacity at the end of 2021—14,304 megawatts (MW)**

**Wind generating capacity installed in 2021: 677 MW**

- ▶ Canada now has 317 wind energy projects producing power across the country. National wind energy capacity grew by 5 percent across the country in 2021. Approximately 7 percent of Canada's 2020 electricity demand was met by wind and solar energy in 2021.
- ▶ Canada installed almost 1 GW of wind and solar energy in 2021, driven by strong growth in Alberta. Industry data for 2021 shows that Canada saw the biggest build-out of new utility-scale wind and solar energy capacity since 2015.
- ▶ More than half of the wind power growth in 2021 occurred in Alberta (358 MW) with additional growth in Saskatchewan, Ontario and British Columbia. Alberta accounted for more than 60 percent of new Canadian capacity installed in 2021, with Saskatchewan accounting for another 20 percent.

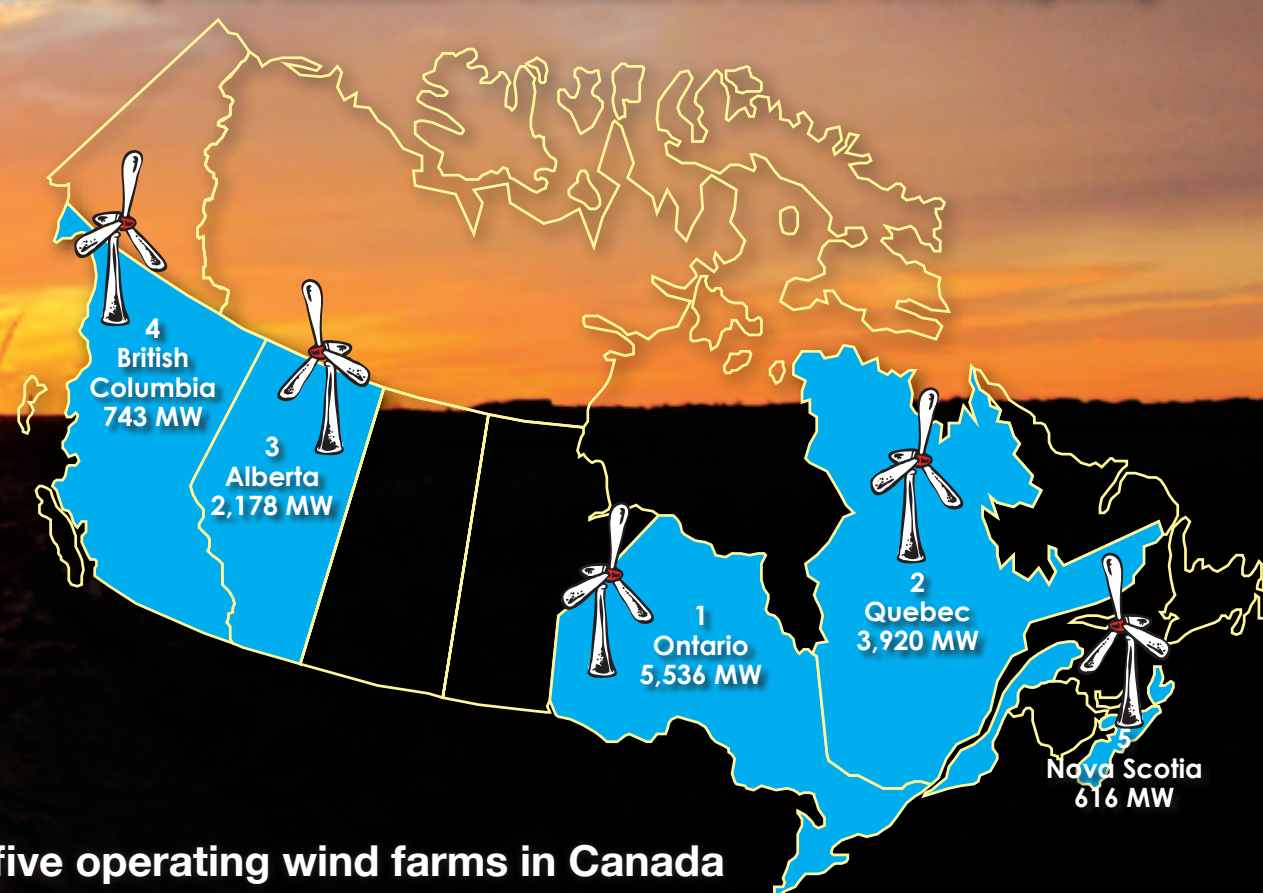
## The Top Five U.S. States in Wind Power Capacity



## Top five operating U.S. wind farms

1. Western Spirit, 1056 MW, New Mexico
2. Traverse City Wind Energy Center, 998 MW, Oklahoma
3. Alta Wind Project, 946 MW, California
4. Los Vientos, 912 MW, Texas
5. Shepherds Flat, 845 MW, Oregon

## The Top Five Canadian Provinces in Wind Power Capacity



## Top five operating wind farms in Canada

1. Henvey Inlet - 300 MW, Ontario
2. Blackspring Ridge Wind Project - 299 MW, Alberta
3. South Kent Wind Farm - 270 MW, Ontario
4. K2 Wind Power Facility - 270 MW, Ontario
5. Niagara Region Wind Farm - 230 MW, Ontario

All numbers are to the end of December 2021.  
Sources: American Clean Power Association: [www.cleanpower.org](http://www.cleanpower.org), the Canadian Renewable Energy Association (CanREA) [www.renewablesassociation.ca](http://www.renewablesassociation.ca)

Note: Some Canadian wind projects have been done in phases. The largest multi-phase sites are the Whittle Wind project in Alberta, with phases 1, 2, and 3 totaling 352.8 MW, and the Rivière du Moulin wind project in Quebec, with phases 1 and 2 totaling 350 MW.