California led the world in wind energy development throughout much of the 1980s and 1990s. Today, California remains a national leader in the wind industry, ranking fifth in the U.S. for wind power installations while boasting at least 13 wind-related manufacturing facilities. California’s well-known wind resource areas include Altamont Pass, outside San Francisco in Alameda and Contra Costa County; San Gorgonio Pass, near Palm Springs in Riverside County; and Tehachapi Pass, near Tehachapi in Kern County. The largest wind project in the United States, the Alta Wind Project, is also located in Tehachapi.

Jobs & Economic Benefits
The U.S. wind industry is a major economic development driver. In addition to job creation and billions of dollars in project investment, the wind industry invests heavily in local communities, providing significant revenue in the form of property, state, and local taxes.

- Direct wind industry jobs in 2018: 4,001 to 5,000
- Capital investment in wind projects through 2018*: $14.8 billion
- Annual state and local tax payments by wind projects: $87.5 million
- Annual land lease payments*: $15 - $20 million

*Source: Based on state and national averages from LBNL, NREL

Wind-Related Manufacturing
Over 500 manufacturing facilities in the U.S. make products for the wind industry, from blades, towers, and turbine nacelles to raw components such as fiberglass and steel.

- Number of active manufacturing facilities in the state: 13
Wind Projects as of 4Q 2019

- Installed wind capacity: **5,973 MW**
  - State rank for installed wind capacity: 5th
- Number of wind turbines: **6,613**
  - State rank for number of wind turbines: 2nd
- Wind projects online: **106** (Projects larger than 10 MW: 65)
- Wind capacity under construction: **104 MW**
- Wind capacity in advanced development: **317 MW**

Wind Generation
In 2018, wind energy provided **6.5%** of all in-state electricity production.

- State rank for share of electricity: 18th
- Equivalent number of homes powered by wind in 2018: **1,312,500**

Wind Energy Potential

- Land-based technical wind potential at 80 m hub height: **303,376 MW**
  - Source: AWS Truepower, NREL
- Offshore net technical wind potential at 100 m hub height: **112,455 MW**
  - Source: NREL

Environmental Benefits
Generating wind power creates no emissions and uses virtually no water.

- 2018 annual state water consumption savings*: **2.9 billion gallons**
- 2018 equivalent number of water bottles saved: **22 billion**
- 2018 annual state carbon dioxide (CO₂) emissions avoided: **6.7 million metric tons**
- 2018 equivalent cars' worth of emissions avoided: **1.4 million**

*Based on national average water consumption factors for coal and gas plants.

Renewable Portfolio Standard
First enacted in 2002, California increased its renewable portfolio standard (RPS) again in 2018, requiring 60% of all utility retail sales to come from renewable resources by 2030. California also established a new goal for the state to obtain 100% of its electricity from clean energy sources by 2045.