

Wind energy in Canada



Canada is a global leader in wind energy

12,816 MW total installed wind energy capacity in Canada...

enough to power approximately

3.3 million homes **8th in the world**

That's ~6% of Canada's electricity demand!

for total onshore installed capacity (Global Wind Energy Council 2018)



Wind energy has been the largest source of new electricity generation in Canada for the past decade



299

Wind farms across Canada

6,596

Number of turbines in Canada

20%

10 year average annual growth rate of wind energy in Canada (~1,000 MW/year)



69%

Rate of decline of wind energy costs since 2009 (Lazard 12.0)

GROWTH IN 2018



566 MW new installed capacity

>\$1 billion investment in new wind energy

6 total new wind energy projects

2 new projects with Indigenous and local ownership stakes



Wind energy across Canada

Ontario

Largest wind market in Canada with nearly 40% of total installed capacity

- Current number of projects: 96
- 5,076 MW installed capacity
- 175 MW new in 2018
- 2,577 wind turbines
- Approximately 8% of electricity demand

Quebec

Second largest wind market in Canada with approximately 30% of total installed capacity

- Current number of projects: 47
- 3,882 MW installed capacity
- 1,990 wind turbines
- 371 MW new in 2018
- Approximately 5% of electricity demand

Alberta

Third largest market in Canada with nearly 12% of total installed capacity

- Current number of projects: 37
- 1,483 MW installed capacity
- 901 wind turbines
- Approximately 7% of electricity demand



Atlantic

Nova Scotia

- Current number of projects: 77
- 616 MW installed capacity
- 308 wind turbines
- Approximately 12% of electricity demand

New Brunswick

- 314 MW installed capacity
- 119 wind turbines
- Approximately 7% of electricity demand

Prince Edward Island

- 204 MW installed capacity
- 104 wind turbines
- Approximately 28% of electricity demand

Newfoundland and Labrador

- Current number of projects: 4
- 55 MW installed capacity
- 27 wind turbines
- Approximately 2% of electricity demand

British Columbia

- 698 MW installed capacity
- 288 wind turbines
- Approximately 2% of electricity demand

Manitoba

- 258 MW installed capacity
- 133 wind turbines
- Approximately 5% of electricity demand

Saskatchewan

- 221 MW installed capacity
- 143 wind turbines
- Approximately 4% of electricity demand

Northwest Territories

- 9.2 MW installed capacity
- Approximately 4% of electricity demand

Yukon

- 0.8 MW installed capacity

Sources: percentage of electricity demand – StatsCan 2017; all other figures – CanWEA December 2018 unless otherwise noted