Canadian Renewable Energy Association

2025

THE CANADIAN RENEWABLE ENERGY ASSOCIATION (CANREA)

Annual Data Release

Clearing the path for a future powered by wind, solar and storage

www.renewablesassociation.ca

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INTRODUCTION

TThe Canadian Renewable Energy Association (CanREA) is the voice for wind, solar and energy storage solutions that will power Canada's energy future. We work to create the conditions for a modern energy system through stakeholder engagement and policy advocacy. CanREA is a go-to source for credible data on wind, solar and energy storage projects being built in Canada.

CanREA's data team collects information throughout the year from member companies, provincial governments, utilities and electricity system operators. In the first weeks of each calendar year, the data is packaged and published on CanREA's website.

In addition to this annual data release, CanREA produces:

- The Clean Energy Procurement Calendar, which tracks and consolidates procurement opportunities in wind, solar and energy storage across Canada and is updated periodically throughout the year.

- A comprehensive Canadian market outlook for wind, solar and energy storage. In 2025, CanREA and Dunsky Climate + Energy Advisors published *Canada's Renewable Energy Market Outlook 2025: Wind. Solar. Storage.* The report includes the national profile and deep dives into five markets. It offers electricity sector stakeholders robust and data-driven intelligence and insights that quantify opportunities in Canada from 2025 to 2050.

With this trifecta of core data products, CanREA paints a detailed picture of renewable energy and energy storage from coast to coast: what has been built in the past year, which projects are under construction or will soon be; and what markets, costs and project impacts will look like in the coming years and decades.

This short report summarizes the data on new wind, solar and energy storage builds in Canada in 2025 and offers insights on the key themes and trends.

WHAT DOES THE DATA SAY?

A modest number of wind and solar projects were completed in Canada compared to recent years, while energy storage grew substantially:

- **Storage:** In Ontario, the Independent Electricity System Operator's (IESO) E-LT1 procurements and bilateral agreements resulted in 502 MW of grid-connected battery energy storage in 2025, with another 8 MW of energy storage added in Alberta.
- **Wind:** Three wind farms, located in Quebec, Alberta and New Brunswick and totalling 347 MW, came online.
- **Solar:** 57 MW of utility-scale solar projects in Alberta, British Columbia and the Yukon became operational.

For the past five years, Alberta led Canada's clean energy growth, accounting for roughly 80% of new installed capacity. Today, the story is national.

Utilities are still collecting their data on wind, solar and energy storage installed behind customer utility meters in 2025. When tallied, these projects are expected to contribute significantly to Canada's growth, pushing total new additions in the past year to approximately 1,000 MW (1 GW).

Canada's total installed capacity of wind, solar and energy storage now stands at approximately 25 GW.

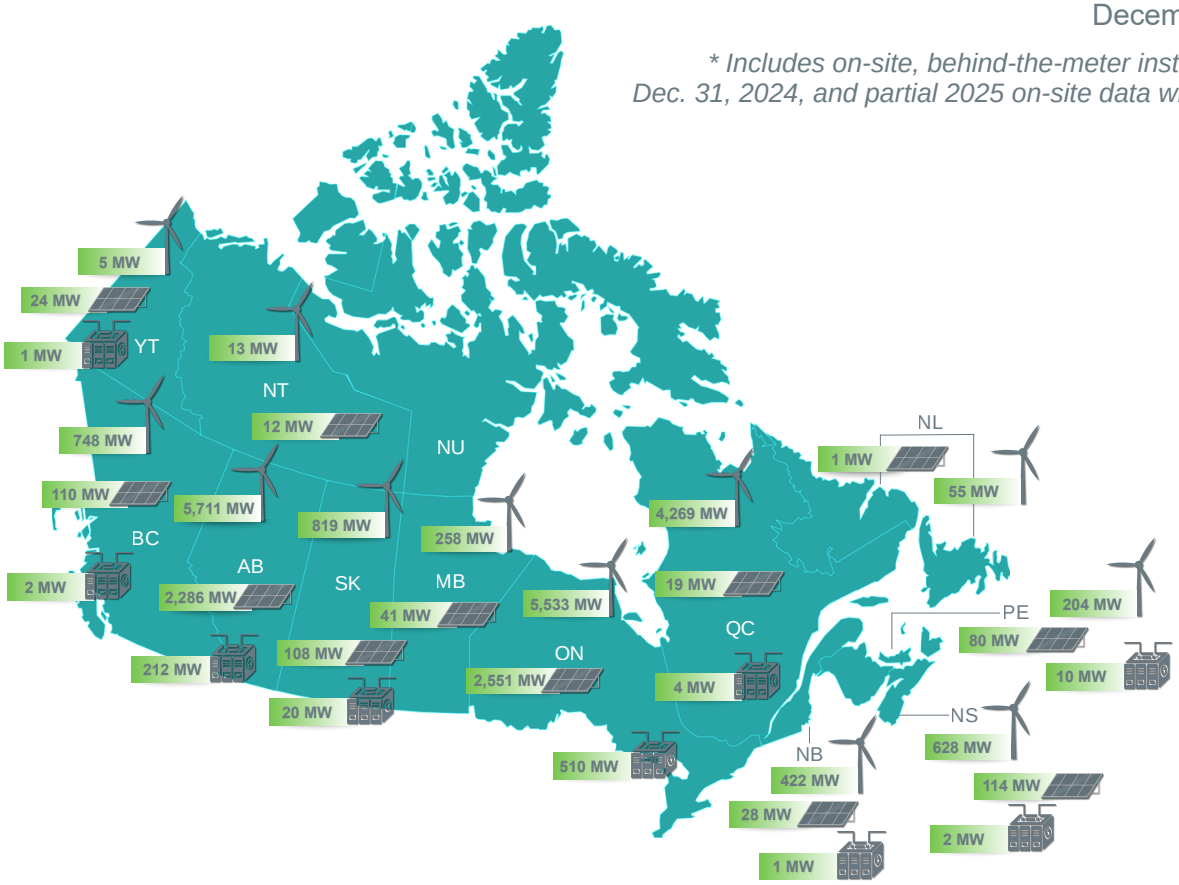
The table below illustrates the new additions in 2025 and the total installed capacity for each of CanREA's three technologies, and the map breaks these numbers down by province and territory.

	NEW CAPACITY ADDED IN 2025	TOTAL CAPACITY
Energy storage	Over 511 MW	Nearly 1 GW
Wind	347 MW	Nearly 19 GW
Solar	57 MW (utility-scale)	More than 5 GW
Total	≈ 1 GW	≈ 25 GW

Canada's Current Installed Wind, Solar and Energy Storage Capacity

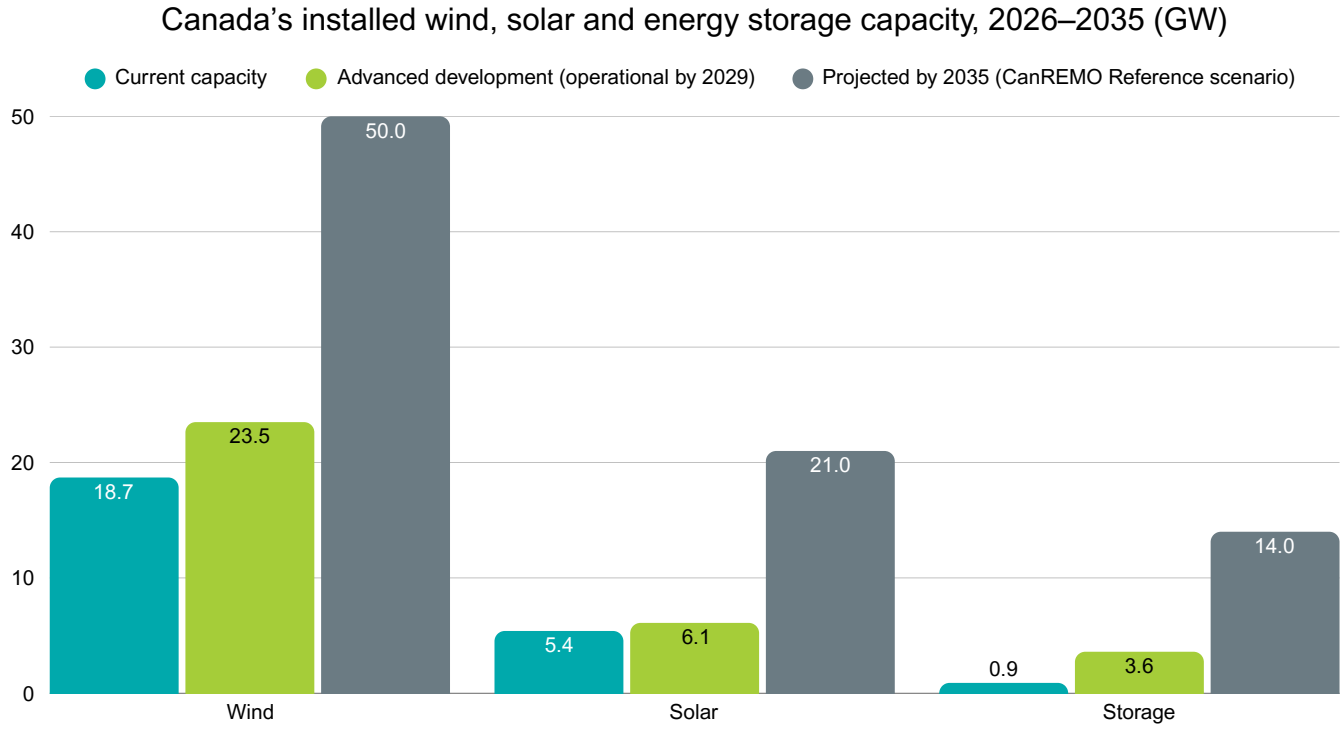
December 31, 2025

** Includes on-site, behind-the-meter installations up to Dec. 31, 2024, and partial 2025 on-site data where available.*



While not a record-breaking year for capacity growth, it is clearer now than ever before that Canada's future will be powered by wind, solar and storage. Based on projects under construction and in advanced stages of development, CanREA is tracking approximately 8 GW of utility-scale wind, solar and energy storage expected to come online by 2029. That's a 32% increase from total installed capacity at the end of 2025 and does not include projects connected behind customer utility meters. Announced procurements now total nearly 24 GW of opportunities in the next 10 years, which represents a potential doubling of the current total capacity.

The bar chart below compares the current wind, solar and energy storage installed capacity to expected future capacity, divided into two data points: projects already in development that will be operational by 2029, and total capacity additions projected by 2035 under the Reference scenario in CanREA and Dunsky's 2025 market outlook report.



WHAT DOES IT MEAN?

The strong slate of projects now under construction, combined with advancing procurements, made 2025 the year a regional energy story become a national, Canadian story.This is a critical moment that will require clearing the path of policy and regulatory obstacles to make way for the momentum of electricity demand growth, grid modernization and decarbonization.

Economic growth

Economic growth is front and centre right now, and plans are being formed and executed to meet this moment. Wind, solar and energy storage are playing a key role from coast to coast to coast in delivering affordable power that can scale with electrification of energy demands. CanREA and Dunsky's 2025 market outlook report provided a window into Canada's energy future. Looking ahead to existing and proposed policies, the report anticipated at least 59 GW of new projects to come online by 2035. These new projects will:

- Increase the contribution of wind and solar to Canada's total electricity supply from 10% in 2025 to 21%–29% by 2035
- Represent an annual investment of approximately $14–$20 billion
- Create a total investment opportunity of $143–$205 billion in the next 10 years

The current set of active procurements is just the beginning of a new era of progress in the industry.

Ontario sets new precedent

The 250 MW / 1,000 MWh Oneida Energy Storage project enjoyed accolades this year as the largest battery energy storage system (BESS) to date in Canada. Northland Power developed and operates the facility through a collaborative partnership with Indigenous companies, including the Six Nations of the Grand River Development Corporation (SNGRDC) and the Mississaugas of the Credit Business Corporation (MCBC).

In 2026, even larger energy storage projects are coming. The Skyview 2 BESS is expected to bring 411 MW / 1,560 MWh of capacity online, and the Hagersville BESS will see 300 MW / 1,200 MWh added to the grid. These two projects alone will nearly double the entire country's utility-scale battery capacity.

In 2025, Ontario also awarded new contracts for 963 MW of wind energy to existing wind farms that will exceed their original 20-year contracts. Ontario ratepayers will continue to reap the benefits of these facilities, with most contracts set to extend operations for five more years. Global experience indicates that wind farms can continue to operate for more than a decade beyond their original 20-year contracted lifecycle.

Indigenous leadership

Over 70% of the new grid-connected projects installed in 2025 were built with some level of Indigenous ownership or involvement. According to the Indigenous Energy Monitor, there are currently 118 Indigenous-owned wind, solar and energy storage projects in operation across the country.

Two new 1–2 MW projects are now powering the Haida Gwaii community in B.C. and the Beaver Creek community in the Yukon. The projects were the first of their kind in several respects, and both contribute to local microgrids, with energy storage existing or planned to unlock the full value of these modernized networks.

Almost every major wind, solar and energy storage procurement process in Canada in 2025 had specific criteria or incentives regarding Indigenous participation or ownership. The same is true for large procurements underway or set to be announced in 2026 in B.C., Manitoba and Quebec.

This positive trend underscores the industry's concrete shift toward meaningful economic reconciliation.

Quebec is planning for massive growth

In Quebec, the first Hydro-Québec procurement of new wind power is starting to impact the industry. While tenders are underway for more than 2.5 GW of new wind and solar developments, one new 200 MW wind project—the Apuiat Wind Farm—came online last year in Quebec, boasting 50% Innu Nation ownership. This is part of a larger action plan intending to realize 10 GW of wind power and 3 GW of solar power by 2035. In addition, 300 MW of distributed solar is planned over the next 10 years, including 125,000 new installations on site by electricity customers.

Slow but steady growth in the Maritimes

New Brunswick saw the 25 MW Neweg Energy Project come online in 2025, a Natural Forces partnership with the Mi'gmaq United Investment Network (MUIN). Another 10 MW solar project co-owned by the Tobique First Nation and St. John Energy is planned to come online in 2026.

Prince Edward Island closed its behind-the-meter solar incentive program in 2025 due to oversubscription. The provincial government is now planning how it can best accommodate and support the strong demand for rooftop solar, batteries and electrification of heating and transportation.

Nova Scotia continues to set the stage for renewables growth. The province has onshore and offshore wind ambitions, a target of 80% clean electricity by 2030 and a distributed energy resources integration road mapping exercise underway. The provincial government expects to add approximately 1 GW of onshore wind power to the grid by 2030. In July 2025, four areas were designated off the coast of Nova Scotia for offshore wind energy. By October, the Canada – Nova Scotia Offshore Energy Regulator had initiated its 90-day offshore wind Call for Information. CanREA expects further progress in 2026, with licences for 5 GW of offshore wind to be issued by 2030.

Electricity customers are choosing solar and storage

Final numbers for on-site wind, solar and storage assets added in 2025 will be available in a few months. CanREA is tracking a tangible uptick in interest in small-scale projects across the country—from rooftop and balcony solar panels to community solar arrays and local microgrids.

At the end of 2024, there were nearly 96,000 on-site solar energy installations providing Canadians with more than 1 GW of clean electricity. In 2025, the buzz grew around an apparent shift from kilowatt- to megawatt-scale projects for on-site solar. Many projects larger than 1 MW were installed behind the meter this year and will be reported as utilities and system operators complete their reviews of newly installed capacity.

One example of this trend is that Loblaw Companies Ltd. installed Canada's largest-ever rooftop array in 2025 at its East Gwillimbury Distribution Centre in Ontario. The 7.5 MW behind-the-meter project will meet approximately 25% of the facility's electricity needs.

CanREA has also confirmed that over the past four years, the Canada Greener Homes Initiative served more than 50,000 homes, adding approximately 500 MW of installed solar capacity. This is a big success for the program, which supported solar photovoltaic installations and wrapped up in October 2025.

Policy uncertainty in Alberta

As forecasted, Alberta's policy-driven renewable energy slowdown is now fully evidenced in 2025, with just two Indigenous community solar projects totalling 38 MW and the second, 122 MW phase of the Halkirk Wind Farm connecting to the grid. Alberta led Canada in utility-scale developments early this decade, but uncertainties introduced into the market over the past couple of years will have a lasting effect throughout the second half of the 2020s. The Business Renewables Centre reported in January 2026 that corporate renewable energy power purchase agreements plummeted by 99% from 2023 levels in Alberta last year.

LOOKING AHEAD

2025 was a year of planning and procurement across the Canadian electricity sector. Provincial governments, utilities and system operators are forecasting significant growth in demand, as industries electrify, emerging sectors like AI, data centres and advanced manufacturing take hold, and households adopt new technologies.

The most recent procurement and market outlook data are unequivocal: wind, solar and storage will be vital to meeting this sharp rise in demand. The 2025 market outlook report from CanREA and Dunsky projects that these three technologies will account for more than 70% of all new electricity supply built out between 2025 and 2050, and that their share of Canada's total electricity supply will grow from 10% in 2025 to 25%–33% by 2050.

The continued growth of wind, solar and energy storage is a strategic imperative if Canada is to modernize and decarbonize its electricity grid, achieve energy security and build a resilient, future-ready economy. Renewable power today is affordable, reliable and fast to deploy, and it is critical for maintaining competitive rates for families and businesses while meeting rising demand. CanREA continues to collect the data needed to tell this unfolding story and support members as they navigate market and policy uncertainty and deliver on the promise of wind, solar and energy storage.

For more information on this year's data release, visit the By the Numbers section of CanREA's website.