



Solar Photovoltaic Power Generation in Canada

18650 3.7V
Li-ion
RECHARGEABLE BATTERY
2000mAh



Overview

There are 48K solar energy installations in Canada. Ontario makes up for 98% of Canada's solar power generation. The Claresholm Solar PV farm has 477K panels and powers 33K. This web mapping application gives estimates of photovoltaic potential (in kWh/kWp) and of the mean daily global insolation (in MJ/m² and in kWh/m²) for any location in Canada on a 60 arc seconds ~2 km grid. The photovoltaic (PV) potential represents the expected lifetime average electricity. Photovoltaic (PV) cells are increasingly used as standalone units, mostly as off-grid distributed electricity generation to power remote homes, telecommunications equipment, oil and pipeline monitoring stations and navigational devices. This measure is calculated using the average solar insolation, which is a measure of the amount of sunlight that falls on a surface over a certain period. For analysis and insight on the current state of the industry, growth and forecasts, see CanREA's most recent annual data release: For a list of the country's. National Average Solar Energy Production Potential: 1133 kWh/kW/yr This page contains solar energy maps, along with monthly solar production estimates, for every province and territory in Canada.



Article Content

By the Numbers

In 2025, renewable energy met 9.7% of Canada's total electricity demand. The Canada Greener Homes Initiative, which supported solar photovoltaic and wound down in October 2025, served over 50,000 ...

Photovoltaic potential and solar resource maps of Canada

This web mapping application gives estimates of photovoltaic potential (in kWh/kWp) and of the mean daily global insolation (in MJ/m² and in kWh/m²) ...

Solar Power in Canada: 12 Facts

Did you know that Canada is home to 196 major solar power projects and over 43,000 solar photovoltaic installations on commercial, ...

Solar Energy Maps Canada 2023 (Every Province)

A complete set of solar energy maps (insolation maps, photovoltaic maps, irradiance maps) for every province and territory in Canada.

Solar Energy in Canada: PV Potential Rankings (Updated 2026)

Find out where your province and city are ranked in terms of solar energy potential. With charts and maps you will easily be able to make comparisons across Canada.

Canada and solar power

Research conducted by CanREA shows that for Canada to fulfill its pledge of net zero greenhouse gas emissions by 2050, it will need to build more than 5,000 MW of new wind and solar energy each year ...

Solar power in Canada

Historically, the main applications of solar energy technologies in Canada have been non-electric active solar system applications for space heating, water heating and drying crops and lumber. In 2001, there were more than 12,000 residential solar water heating systems and 300 commercial/industrial solar hot water systems in use. These systems presently comprise a small fraction of Canada's energy use, but some government s...

CER - Provincial and Territorial Energy Profiles - Canada

Generation from wind farms and solar photovoltaic panels grew from 1.5% of total electricity generation in 2010 to 7% in 2021. In 2021, Canada's wind power ...

12 Solar Energy Statistics in Canada (2026 Update)

There are 48K solar energy installations in Canada. Saskatchewan and Alberta have the highest solar PV generation potential (6.5–7.15 kW.h/m²). ...

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://www.proton-engineering.eu>

Email: info@proton-engineering.eu

Phone: +1 832 471 8952

Address: 12345 Lake City Way, Suite 200, Houston, TX 77001, USA

This document is for informational purposes only. Specifications subject to change without notice.

