ALL WEATHER AT HOME™

FACT SHEET

All Weather at Home Rooftop Solar Industrial Field

Edmonton showroom, manufacturing plant and head office

Overview: All Weather at Home has installed Canada's largest rooftop solar industrial field on a window, door and glass manufacturing site at its Edmonton showroom and manufacturing plant. The array is also among the largest rooftop solar industrial fields on any commercial building in Alberta and across Canada. The project supports the company's commitment to energy efficiency, green living and innovation that reduces production costs and environmental impact.

Key facts at a glance

Fact	Detail
Project type	Rooftop solar industrial field on a window, door and glass manufacturing site.
Location	All Weather at Home showroom, manufacturing plant and head office in Edmonton, Alberta.
Solar modules	2,040 Thornova 580-watt solar panels.
System capacity	1,183 kWdc (kilowatt direct current).
Annual generation	1.3 gigawatt hours (GWh) of electricity per year.
Annual electricity reduction	35 per cent reduction in electricity needed to produce windows, doors and glass products.
Annual emissions reduction	632 tonnes of carbon dioxide (CO_2) per year.
Roof coverage	110,000 square feet of panels on a 206,000-square-foot roof surface, covering more than 50 per cent of the roof.
Manufacturing Facility	261,000 square feet manufacturing plant.
Mounting system	More than 17,500 concrete ballast blocks, with no penetrations through the roof membrane.
Inverters	Five 185-kilowatt inverters.
Timeline	Construction began in February 2025 and the system was commissioned in late October 2025.
Payback period	Approximately seven and a half years.

Energy and environmental impact

- The system is expected to generate 1.3 GWh of electricity each year, enough to drive an electric vehicle more than 5.7 million kilometres or power 1,548 typical Alberta single-family homes for one year.
- The installation will reduce annual electricity needed for production by 35 per cent and save 632 tonnes of CO_2 per year.
- On weekends, power generated beyond manufacturing plant demand will feed into Alberta's electricity grid. On the May 23 weekend, the system produced 14 megawatt hours (MWh); the manufacturing plant used 7.59 MWh and 6.38 MWh were fed into the grid.

Business case and funding

- All Weather at Home invested in the project to support energy efficiency and green living while reducing the cost to the consumer and the environment.
- The company did not receive grants to build the project. It is using the federal Clean Technology Investment Tax Credit and Alberta carbon offset rebates under the Technology Innovation and Emissions Reduction (TIER) system, both of which factored into ROI calculations.
- All Weather at Home invested millions into the project. The project is expected to provide a clear return from both production-cost and environmental perspectives.

Technical execution

- The project required complex design work, permitting and technical approvals; it was not a standard plug-and-play solar installation.
- The facility did not initially have the structural capacity to hold the solar array. Structural engineers and roofing specialists tested and weighed the roof assembly, then vacuumed off strips of roof gravel to free up enough capacity for the solar industrial field.
- The main electrical distribution panel was upgraded from 2,000 amps to 3,000 amps in 36 hours over the Labour Day long weekend, with the plant back up and running by early Labour Day morning.
- InfernoEnergy collaborated with All Weather at Home on the project. EPCOR supported the process, including registration of the system as a Distributed Energy Resource (DER).

Solar technology

- Thornova 580-watt solar panels were selected for energy capture and durability in Edmonton weather conditions, including wind, major hailstorms and extreme cold.
- Solar panel systems have advanced significantly over the past decade. Comparable systems built 10 years ago used 250-watt modules and 10-to-20-kilowatt inverters; this installation uses 580-watt modules and five 185-kilowatt inverters.

Sustainability context

- The solar industrial field builds on a conservation strategy that includes recycling most scrap and manufacturing by-products and using LEAN manufacturing processes to improve operational efficiency and reduce overall energy consumption.
- Each day, All Weather at Home facilities recycle more than 2,000 pounds of uPVC, along with glass, cardboard, plastics and aluminum.
- All Weather at Home is a 10-time ENERGY STAR® award recipient, including five-time ENERGY STAR® Manufacturer of the Year award recipient.

- The company works with environmental and building organizations including the Canada Green Building Council, the Canadian Home Builders' Association, Net Zero Council and BUILT GREEN Canada.

Comparison and public position

- The project is Canada's largest rooftop solar industrial field on a window, door and glass manufacturing site.
- Across Canada, the solar industrial field ranks among the top 10 rooftop solar fields on a commercial building. At 110,000 square feet, the All Weather at Home rooftop solar industrial field is the second largest within the Edmonton city limits and fourth largest in the Edmonton area.