



BCP

Build Canada Power Ltd.

Company **Profile**

Canadian BIPV solar glass & energy facades — turning building envelopes into power plants with CdTe “Power Glass”: technology, application modules, AI strategy, complex projects and Canadian manufacturing, in one document.

Turn building envelopes into power plants.

Who we are, and what this document covers.

Build Canada Power (BCP) brings advanced CdTe “Power Glass” to Canada — solar glass that replaces roofs and facades while generating clean electricity for decades. One material provides structure, weather protection and energy. BCP distributes proven OEM glass from a Fortune Global 500 manufacturer with exclusive North American distribution, builds the supply chain and installer channel behind it, and develops long-life energy assets of its own.

50 yr

Designed service life

~10%

More energy vs. silicon

−40°C

Rated for Canadian cold

1.92 m²

World's largest single panel



WHY POWER GLASS

- It replaces conventional roofing and cladding — the building pays for part of the material by generating power.
- It generates in diffuse and low-angle winter light, and sheds snow fast — engineered for Canadian conditions.
- It lasts: a 50-year designed generating life with a 25-year power output warranty, and it's recyclable at end of life.

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The science behind the glass.

CdTe Power Glass combines thin-film photovoltaics with architectural safety glass — certified, durable, and engineered for Canadian conditions.

HOW IT WORKS

A microns-thin cadmium-telluride semiconductor layer is deposited onto glass and sealed between tempered panes. Sunlight — including diffuse and low-angle winter light — frees electrons in the film to produce electricity, while the glass provides structure, insulation and weather protection. Because the active layer covers the whole pane uniformly, there are no hot spots — a common failure point in silicon panels.

SAFE TO LIVE WITH — AND TO RECYCLE

- Stable in fire: CdTe melts at 1041 °C, above typical flame temperatures; cadmium loss stays below 0.04%.
- No leaching when broken: insoluble in water and weak acids.
- Recyclable: professional recycling recovers >99% of cadmium and high-purity tellurium.
- Explicitly exempt under EU RoHS Directive 2011/65/EU — freely traded internationally.



BUILT FOR CANADIAN WINTERS

The glass-integrated film warms quickly even in diffuse winter sun, so snow slides off faster — cutting snow-related losses to under 1.5% a year versus 3–7% for conventional panels.

≥5400 Pa
front load
(façade to 7200 Pa)

Ø35 mm
hail impact
resistance

Class A
fire-resistance
rating

CSA/IEC
A440 · ASTM
E330 · 61730

LIFETIME ECONOMICS — MODELLED ON A 10 MW ALBERTA PROJECT VS. CRYSTALLINE SILICON

≈0.019

CAD/kWh levelized cost — 17–20% below silicon

+10%

more first-year generation at equal capacity

0.5%/yr

annual degradation vs. 0.7% for silicon

50 yr

proven generating life — roughly double silicon

WARRANTY

- 10-year product warranty — materials and workmanship under an ISO 9000 quality system.
- 25-year power warranty — guaranteed ≥85% of nameplate output at 25 years, tested to IEC 60904.
- Project-grade options — financing-friendly terms with self-explosion clauses and power-shortfall compensation.

Five ways to build with Power Glass.

Each module is pre-engineered and standardized — from a backyard garage to a utility-scale generating building. Pricing on inquiry.



Power Garage **RESIDENTIAL**

A 20×20 ft power-generating garage for duplexes and laneway homes. The triple-glazed Power Glass roof generates electricity, replaces roofing, and pairs with battery storage.

7.08 kW
24 × 295 W panels

7,788 kWh
per year

20×20 ft
footprint

9.21 kWh
optional battery



Power Carport **COMMERCIAL**

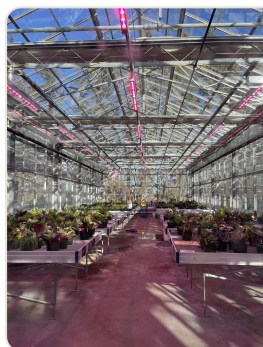
A solar-glass canopy covering ~10 parking stalls with ten integrated Level-2 EV chargers — ideal for hotels, plazas and warehouses with south-facing lots.

53.1 kW
180 × 295 W panels

58,410 kWh
per year

10
12 kW L2 EV chargers

~10
stalls covered



Power Greenhouse **AGRICULTURE / DATA**

Semi-transparent (20%) Power Glass that grows crops and generates at the same time — designed for farming and as the energy-and-heat partner for data centers.

115.8 kW
536 × 216 W panels

150,508 kWh
per year

550 m²
growing space

20%
light transmittance



Power Warehouse **INDUSTRIAL / INVESTMENT**

A 30,000 sqft generating building — utility-scale clean energy delivered as real estate. The envelope itself is the power plant, producing income for decades.

530 kW
installed capacity

600,000 kWh
per year

30,000 sqft
footprint

24.77 GWh
over 50-year life



Power Container **OFF-GRID · COMING SOON**

A deployable off-grid power and workspace unit for mining, oilfields, highway construction and remote farming — roughly six homes' worth of self-contained generation.

29 kW
installed capacity

31,900 kWh
per year

170 m²
indoor space

Off-grid
office & temporary living

An AI-native operating model for a scaling energy company.

The build plan — a phased roadmap designed with technology partner Zerus AI (zerus.ai/bcp), not yet deployed.

THE BET: SAME TECHNOLOGY, A LEANER WAY TO SCALE IT

First Solar took roughly 20 years and 8,000 people to become a CdTe-solar leader — the benchmark is real, since BCP builds on the same thin-film chemistry. BCP's target is comparable scale with a fraction of the people: an agentic AI layer does the white-collar and operations work a fast-scaling company would otherwise hire for. Heavy fabrication stays with BCP's OEM.

~8,000

people — First Solar's path (~20 years)

8×

output per person — the gap AI closes

~1,000

people — BCP's 10-year target

ONE AGENTIC LAYER ACROSS THE WHOLE BUSINESS

Not nine point tools — one layer of cooperating agents running BCP's workflows, with people supervising instead of executing:

- **Agentic procurement** — sourcing, RFQs and customs paperwork across cross-border suppliers; landed cost optimized.
- **Autonomous ERP & finance** — bookkeeping, reconciliation, AP/AR and a live executive dashboard.
- **Intelligent logistics** — forecasting and inventory across 6 hubs and 25 branches; a 7-day delivery promise without overstock.
- **AI sales & channel** — lead qualification, automated module quoting, deal protection and reseller enablement, bilingual and around the clock.
- **Project development & permitting** — a copilot that turns a site address into a costed design, permit package and draft grant application.
- **Certification & compliance** — a continuously current CSA dossier and requirement matrix, keeping the gating step moving.
- **Manufacturing intelligence** — scheduling, computer-vision quality inspection and predictive maintenance for the Alberta lines.
- **Energy-asset operations** — a virtual power plant across the owned fleet, including the greenhouse ⇄ data-centre heat loop.
- **Marketing & investor relations** — multilingual content and an always-current investor data room with financial and ESG reporting.

WHERE WE ARE

Now — in build: BCP's digital platform, product positioning and the AI systems roadmap. **Next:** go-to-market agents (lead qualification, quoting, intake, proposals). **Later:** operations at scale — procurement, ERP, logistics, manufacturing intelligence and energy-asset operations, phased with the physical buildout. Stated plainly: this is the build plan, not a list of deployed systems.

Where energy, computing and food share one site.

Our flagship Power Greenhouse + data-center complex turns sunlight into electricity, computing into heat, and heat back into food — a circular system designed for the Alberta prairie.



A CLOSED ENERGY & HEAT LOOP

Power Glass greenhouses generate clean electricity and grow crops. Most of that power runs an on-site data center; the data center's waste heat is captured and returned to the greenhouses to keep them warm through Alberta winters. Nothing is wasted.

75%

of power supplies the data center

45%

of greenhouse heat from waste heat

100 MW

greenhouse generation

300 MW

energy storage

FLAGSHIP COMPLEX — 160 ACRES OF INTEGRATED INFRASTRUCTURE

160 ac

total site area

100 MW

Power Glass greenhouse generation

10 MW

on-site data-center capacity

~5 yr

projected payback period

PILOT — START WITH A 1/20-SCALE PROOF-OF-CONCEPT AI POINT

Before the full build, a 1/20-scale pilot proves the model end-to-end — generation, storage, computing and heat recovery working together — and can be built in about ten months: 5 MW greenhouse generation, 15 MW storage, 0.5 MW data center. We work with developers, investors and institutions on feasibility, modelling and pilot deployment.

Made in Canada, supported end to end.

Local assembly capacity and a complete components ecosystem — so Power Glass projects are supplied, installed and serviced close to home.

A CANADIAN POWER GLASS ASSEMBLY PLANT

A 30,000 sqft assembly facility built around a 23-station semi-automated line. Beyond shorter lead times and local quality control, it creates skilled Canadian jobs and keeps investment in the community.

30,000 sqft
assembly facility

23 stations
semi-automated line

20 jobs
full-time local roles

\$6.6M
direct local investment (CAD)

EV CHARGER ASSEMBLY PLANT (UPCOMING)

A second facility will produce 12 kW Level-2 chargers and 320 kW DC fast chargers — the natural complement to Power Carports and a fast-growing market across Canada.



THE SUPPORTING ECOSYSTEM — COMPONENTS & PARTS

- **GFRP rebar** — corrosion-proof fiberglass reinforcing bar for coastal, saline and chemical environments where steel rusts. Lightweight, non-conductive and maintenance-free.
- **GFRP solar structures** — composite mounting that beats aluminum and galvanized steel: no rust, no galvanic corrosion, low thermal expansion, light weight, no repainting.
- **Inverter + storage** — all-in-one inverter and battery units, e.g. a 12 kW inverter with 9.21 kWh of storage, configurable from roughly 5 to 30 kWh to match the project.
- **Regional hubs + city branches** — a distribution network for fast, nationwide delivery.

A first-mover in North American BIPV.

Highlights from our investor summary — the full one-pager and data room are available on request.

~\$6.6B

Canada BIPV market by 2030

9

signed reseller LOIs (AB, SK, BC)

~18

named project leads

3

channels: franchise, agency,
corporate

THE OPPORTUNITY

- No comparable large-scale BIPV glass produced in North America.
- Proven product from a Fortune Global 500 manufacturer; exclusive N.A. distribution.
- Partners: Red Deer Polytechnic, Olds College, Town of Innisfail.

CAPITAL ROADMAP

- Seed ~\$2M (raising now) → Expansion \$30M → Pre-IPO \$400M.
- Seed funds: pilots, CSA certification, first inventory, channel, working capital.
- 5-year revenue target (illustrative): Y1 \$30M → Y5 \$600M.

Let's put Power Glass on your project.

Homeowner, builder, developer, investor or partner — tell us about your site or goals and we'll follow up with the right options and information.

CONTACT

- **Web** — buildcanadapower.com
- **Email** — info@buildcanadapower.com
- **Location** — Alberta, Canada
- **Technology partner** — Zerus AI (zerus.ai)

Investor figures are targets and estimates, not guarantees. Not an offer to sell securities. Private placement to eligible investors only. Product specifications are drawn from the pages of buildcanadapower.com and may be updated there.