



CASE STUDY

A MULTI-FACILITY SOLAR SOLUTION FOR VISION GROUP



How a **2.7 MW onsite solar system** reduced grid dependence and peak demand exposure



CUSTOMER PROFILE

VISION GROUP INDUSTRY:
Polymer Extrusion

Geography: North America
(Woodbridge, ON)

AT A GLANCE

CHALLENGES



High Operational Costs:

Faced significant electricity expenses, particularly from Global Adjustment (GA) charges and peak demand.



Price Volatility:

Needed to hedge against rising energy costs and fluctuating grid electricity prices to improve financial predictability.



Sustainability Targets:

Under increasing pressure to reduce their carbon footprint and meet corporate social responsibility (CSR) goals.

Summary

Circuit Energy delivered a comprehensive, turn-key solar solution for Vision Group, transforming their extensive industrial roof space into a high-yield power plant.

By implementing advanced load displacement systems, Vision Group successfully reduced their reliance on the grid and significantly mitigated Global Adjustment charges.

The positive impact on operational stability and carbon reduction underscores the effectiveness of Circuit Energy's customized engineering and financial modeling in meeting the specific needs of high-demand manufacturing.

RESULTS

\$739,903+
ANNUAL
ESTIMATED
SAVINGS

PV CAPACITY
2.7 MW

PAYBACK PERIOD
3.9
YEARS



Challenge

Vision Group, a leader in polymer extrusion and technical production, faced the challenge of escalating electricity consumption across multiple manufacturing sites.

As Class A consumers in Ontario, their energy costs were heavily influenced by their Peak Demand Factor. The company sought a solution to maximize roof utility, decrease reliance on grid power during peak periods, and establish long-term price stability through renewable energy.

Solution

Vision Group implemented a large-scale, multi-site solar PV portfolio designed and built by Circuit Energy.

- **Behind-the-Meter (BTM) Generation:** Engineered to prioritize on-site solar use, these systems maximize energy self-sufficiency and minimize reliance on the grid.
 - **High-Efficiency Hardware:** Installed Tier 1 Canadian Solar PV modules and Solis inverters for maximum yield and reliability.
 - **Non-Penetrative Mounting:** Utilized ballasted racking systems to protect roof integrity while securing the array against wind uplift.
 - **Strategic Financing:** Carefully structured to capture all available government incentives, boosting project returns.
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RESULTS

Delivering almost 4 million kWh of clean energy per year, the project has optimized facility energy use, reduced grid reliance, and maximized ROI.



Reliable Rebates

Secured over **\$\$2.365M in IESO Save on Energy** incentives and **\$667,000+** in Investment Tax Credits.



Engineering Reliability

Systems designed to last **25+ years** under normal operating conditions with high-quality workmanship standards.



Load Displacement

Strategically lowered the facility's Peak Demand Factor during top-five peak hours.

About Us

Circuit Energy is an engineering-driven firm providing specialized energy solutions for complex industrial facilities across Ontario.

We deliver customized, turnkey renewable systems—including solar PV, battery storage, and power conditioning—designed to reduce carbon footprints and maximize financial returns.

By seamlessly integrating advanced technology with existing electrical infrastructure, we empower businesses to mitigate price volatility.



Reliable Power Delivered

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