Solar TO

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Environment and Climate Division

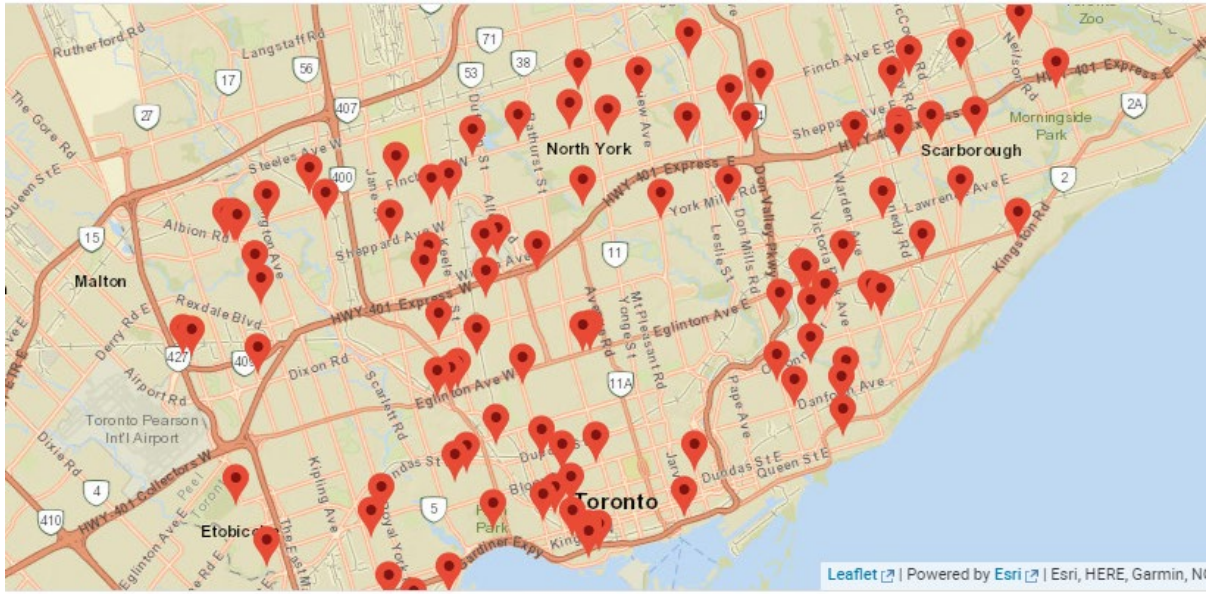
Agenda

1. SolarTO Program Overview
2. Solar Potential Map
3. Solar Assessment Services
4. Questions

SolarTO Program

Solar TO helps homeowners and businesses with their decisions to go solar

City staff has managed the installation of over 100 rooftop solar systems on a variety of City-owned buildings



SolarTO Webpage

SolarTO Map

Enter any address to find out the solar potential of your rooftop.

About Solar

Learn about the benefits of solar energy, how to assess the potential of your rooftop and available financing.

Installing Solar

Learn about the process of going solar, permitting requirements and some guidance on choosing an installer.

Financing & Incentives

Learn about options offered by the City and Federal Government for residents and businesses.

Key Considerations

A guide to determining if a solar is a good fit for your building.

Solar Plus Storage

Extend the benefits of solar with batteries.

Solar Directory

Find solar companies Greater Toronto Area.

Key Considerations

- Is My Roof Suitable for Solar? +
- What are My Options if my Roof is Unsuitable for Solar? +
- Solar Access & Shading +
- Solar System Losses: Degradation, Soiling & Snow +
- Maintenance & Monitoring +
- Warranties +
- Financial Considerations +
- Know Your Energy Use +
- Solar for New Buildings +
- Solar for Multi-Unit Buildings +
- Do-It-Yourself (DIY) Solar +

SolarTO Map

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SolarTO Map: Results

Solar Potential

System size: 12.8 kw

Annual electricity generation: 14650 kwh

Roof size suitable for solar: 3,260 sq ft

Financial Benefits

System cost: $31,848

First Year Bill Savings: $2,293

25 Year Bill Savings: $102,176

Payback period: 7.8 years

Enviroment Benefits

Annual greenhouse gases reduction: 1,030 kg CO2e

Total greenhouse gases reduction over 25 years: 25,600 kg CO2e

Number of Trees grown for 10 years: 428

Number of Cars off the road: 6

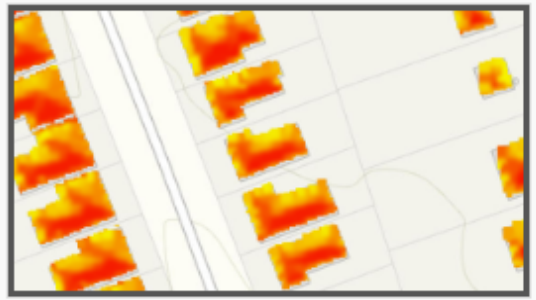
Note: The above data pertains to Net Metered projects only.

Estimated Solar PV System

$31,848

Estimated Savings over 25 years

$102,176



Note: The map suggests the max system size for the building based on available roof space

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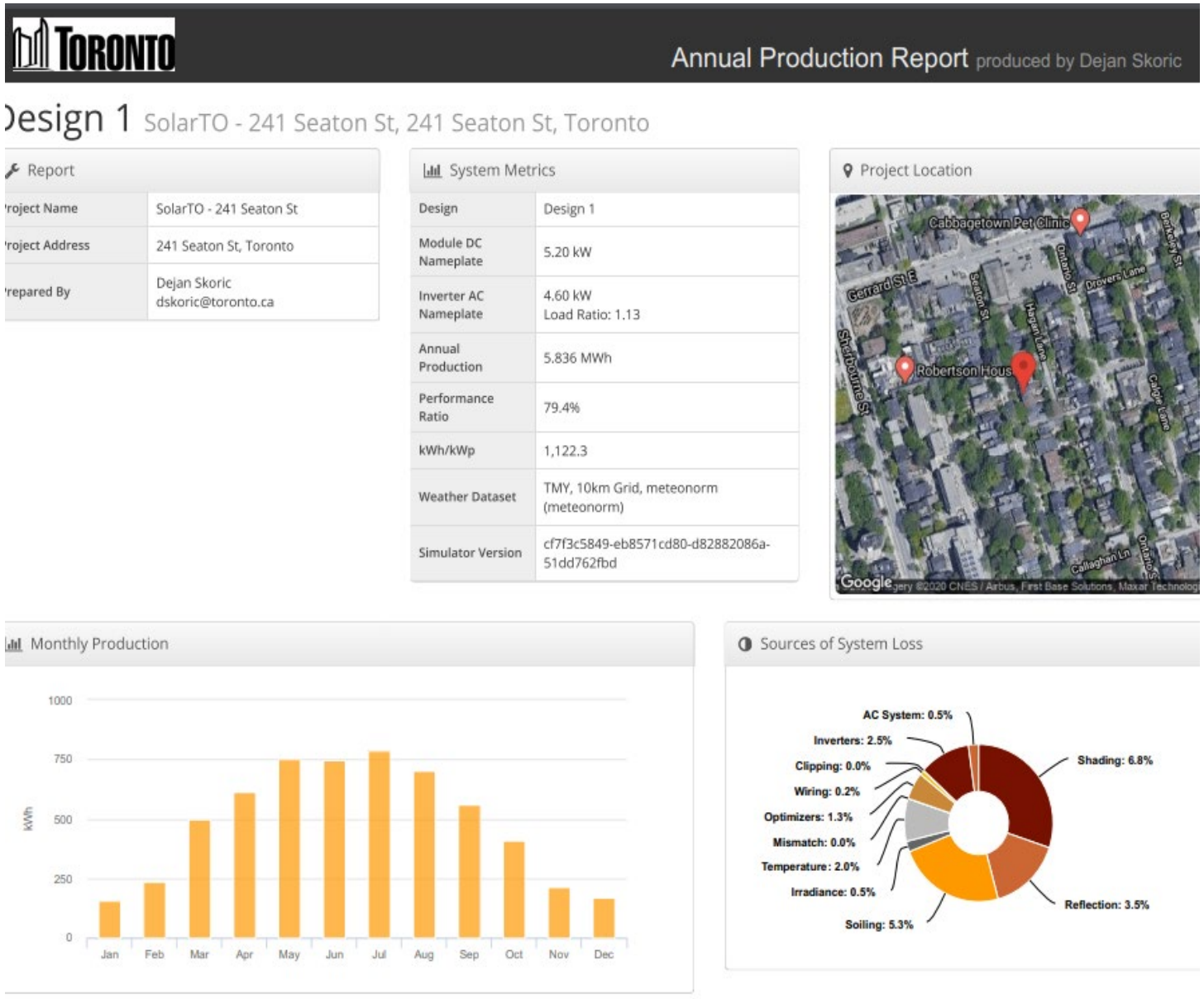
Solar Assessments

Preliminary solar assessment

- Layout Report
- Shading Report
- Budget estimates



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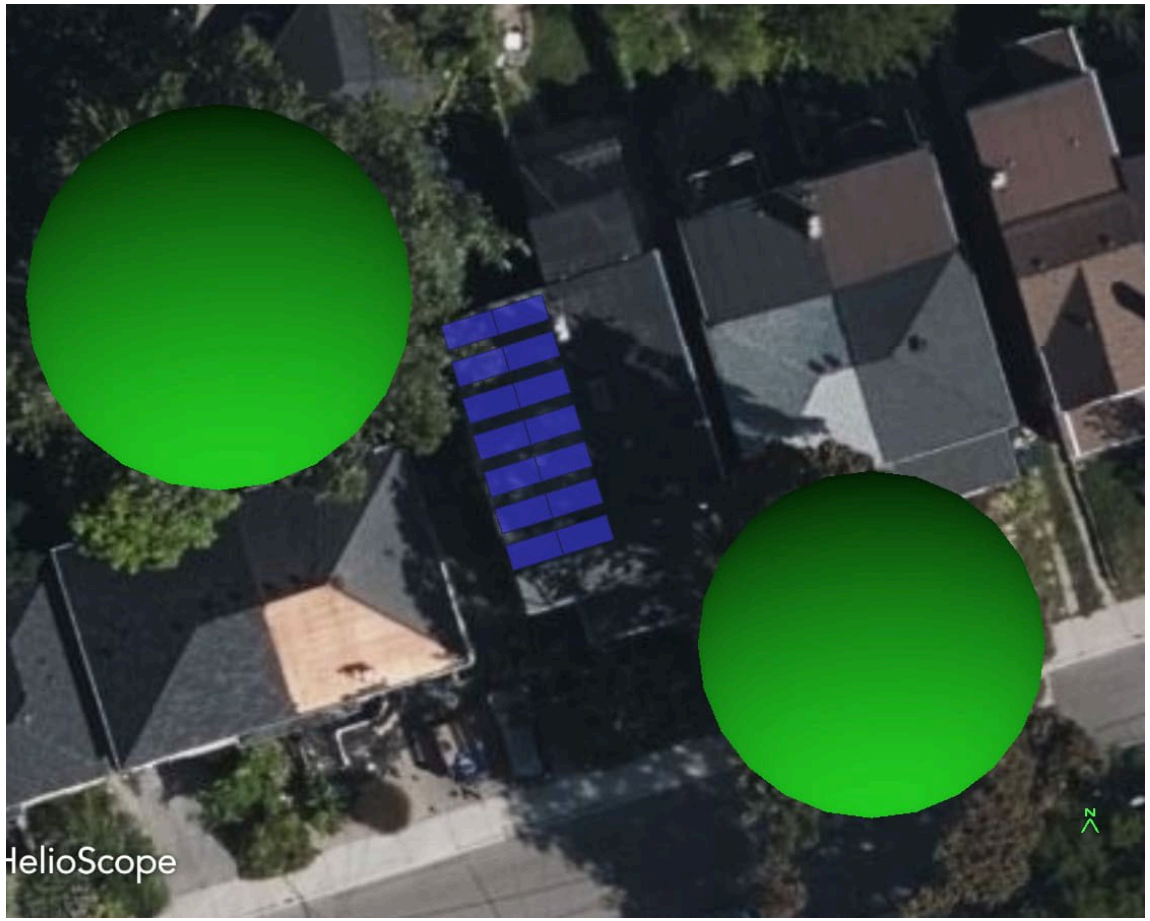
Layout Report

System Metrics	
Design	Design 1
Module DC Nameplate	6.30 kW
Inverter AC Nameplate	5.00 kW Load Ratio: 1.26
Annual Production	6.550 MWh
Performance Ratio	72.1%
kWh/kWp	1,039.7
Weather Dataset	TMY, 10km Grid, meteonorm (meteonorm)
Simulator Version	618879a04b-a65f959b90-668837a848-460061af17



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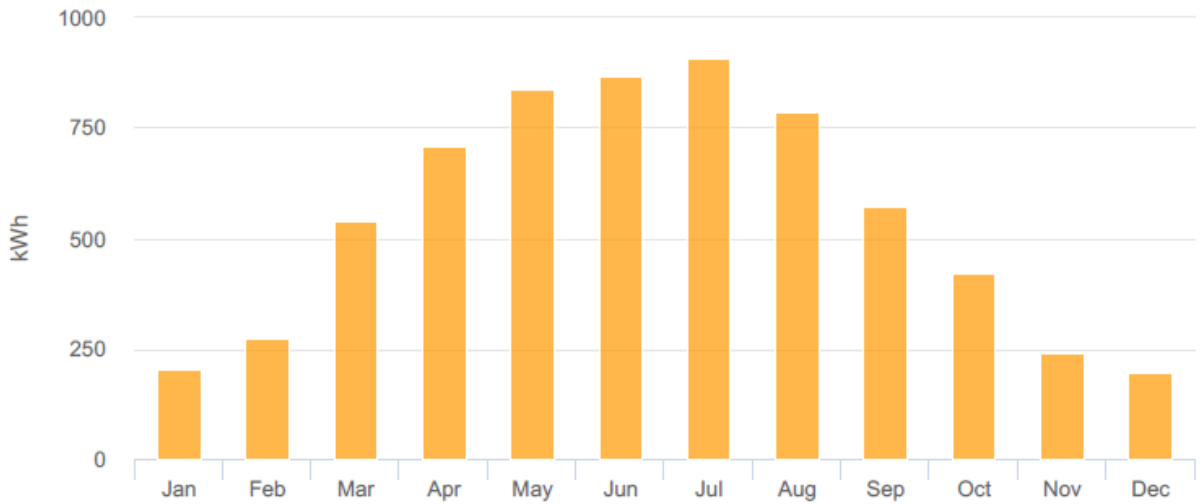
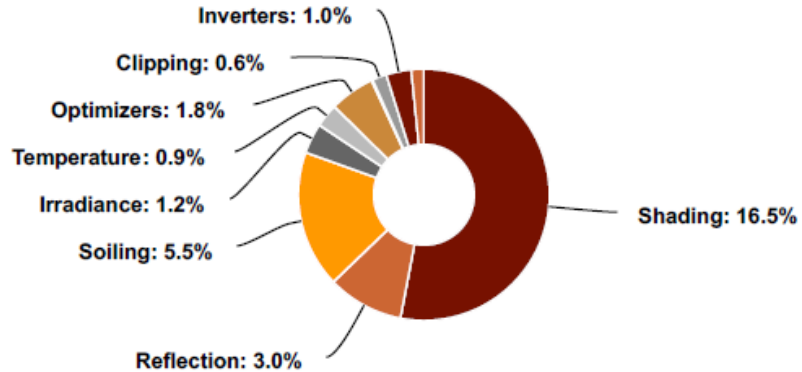
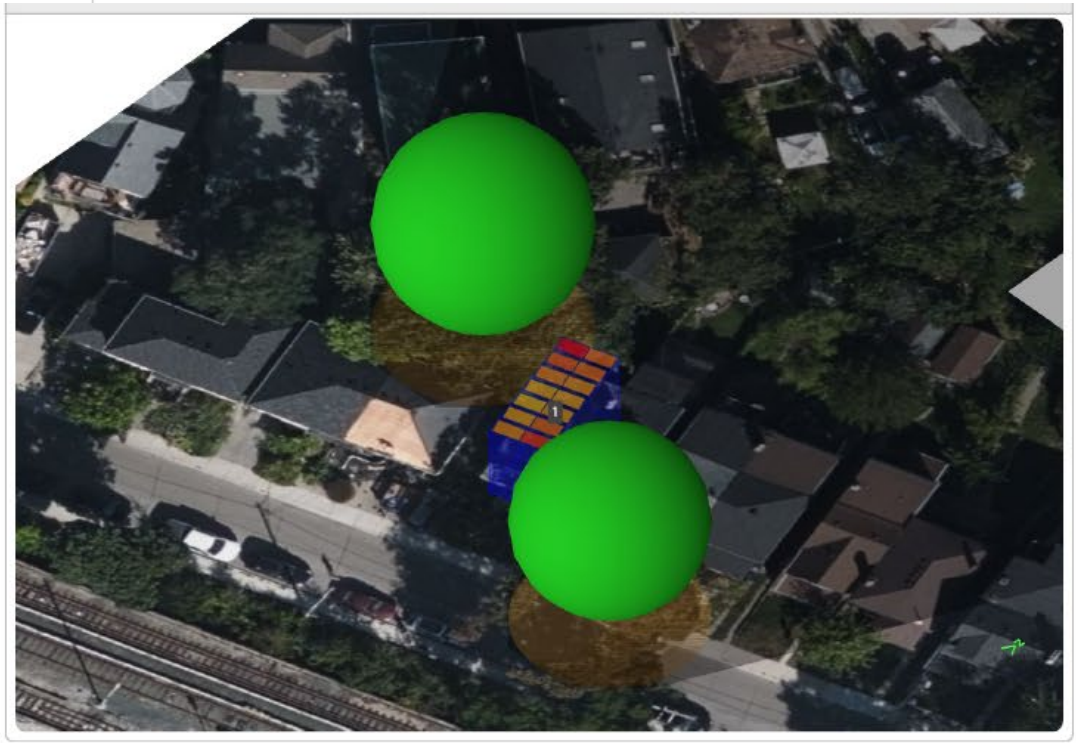
Monthly Production



Sources of System Loss





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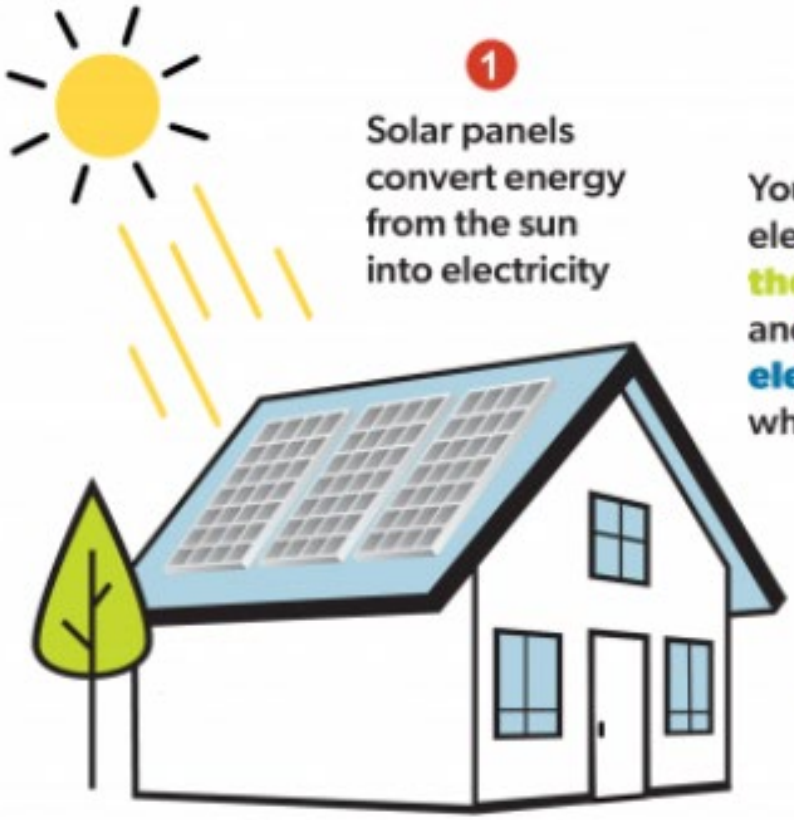
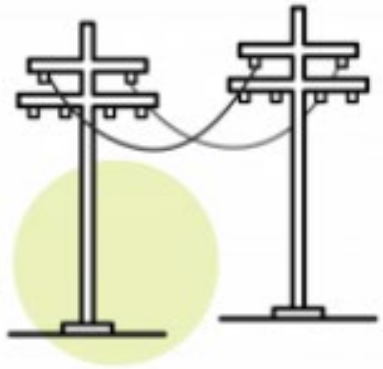
How Net Metering Works



1. Solar panels convert energy from the sun into electricity

2. Your home uses electricity **from the solar panels** and **from the electrical grid** when needed

3. Excess electricity from your solar panels flows into the electrical grid



4. Your utility's meter measures the electricity you send to and use from the electrical grid

5. Your utility credits your bill for the $ value of the electricity sent to the grid

Solar Financing & Incentives

City of Toronto

- Home Energy Loan Program (HELP)
- Energy Retrofit Loan (ERL) Program

Federal

- Canada Greener Homes Grant
- Canada Greener Homes Loan
- Investment Tax Credit

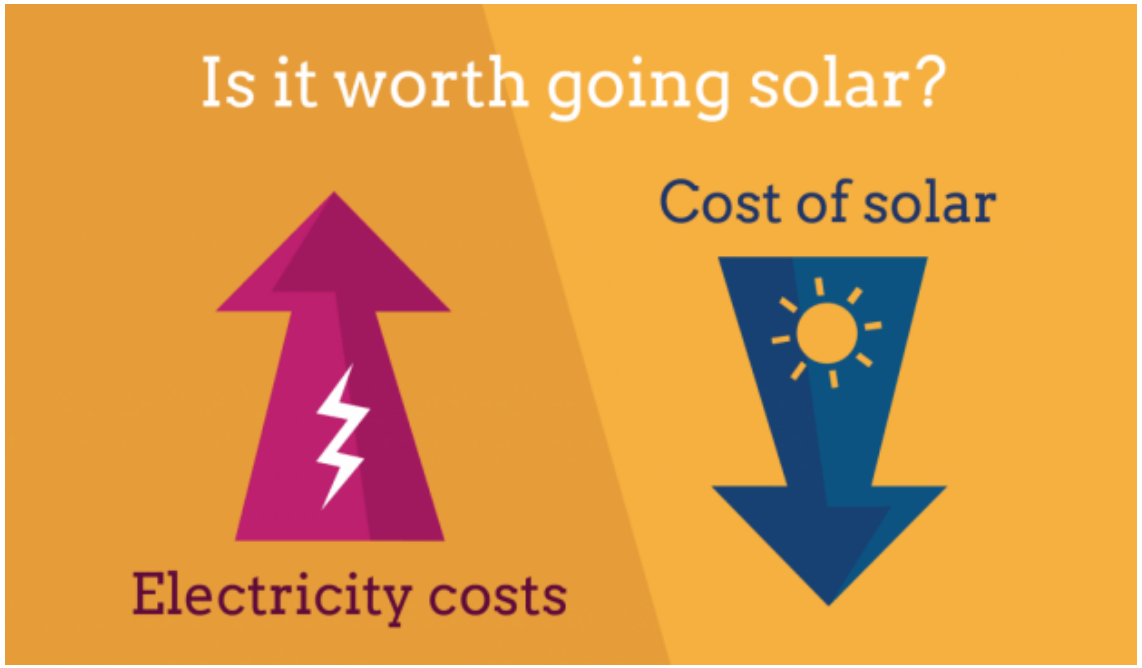
Solar Directory

Includes:

- company description
- service and product offering
- the building types serviced
- 'How to choose an installer' Guide

Benefits of Solar

- Reduce your utility bill
- Protection from Rising Utility Costs
- Reduce GHG emissions and carbon footprint
- Increase the value of your property
- Solar combined with battery storage provide increased resilience
- Toronto receives 2,066 hours of bright sunshine a year, why let it go to waste?



Questions

Link to our website: SolarTO

Link to the Map: SolarTO Map

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