



# Thinking about Solar for Your Home?

## A Resource for Homeowners

Investing in solar energy can be a great way to reduce electricity costs, increase resiliency, and utilize an abundant renewable energy source. However, solar energy is a large investment and will produce differing results depending on various factors, including the efficiency of your home. This document will provide you with a starting point in considering whether solar energy is the right option for you and your property.

### **Frequently Asked Questions:**

#### Does Summerland get enough sunshine for solar energy to be viable?

Absolutely! Summerland has one of Canada's most favourable solar climates, with more than 2,000 hours of sunshine annually. According to a summary of Environment Canada climate data, Summerland is distinguished by more days with sunshine during the spring than other Canadian locations with climate data. Periods of sunshine have been recorded on average 88.4 days each spring. Extra hours of direct solar irradiance in spring are beneficial for the early seasonal production of solar energy.

#### Why Go Solar?

Solar energy is a very simple and proven source of renewable energy, with few moving parts and little maintenance or operating costs. It is also easy to expand a solar array, to fix or replace damaged panels, and to integrate into an existing electrical grid. Residents with solar on their property are able to reduce their electricity costs, as well as sell any excess energy back to the District of Summerland through our Distributed Generation (net-metering) Program. Customers who produce their own energy help contribute to making Summerland a more sustainable, resilient community with less dependence on outside energy sources.

#### What do I Need to Consider before Investing in Solar?

- **Energy Efficiency:** Whether you are aiming to reduce electricity costs or reduce your emissions, conducting energy efficiency measures should be your first step. Replacing old appliances, improving insulation, sealing air leaks, etc. can significantly reduce the amount of energy your home uses, lower electricity bills, and improve the health of those within the home. Visit [www.betterhomesbc.ca](http://www.betterhomesbc.ca) for more information.
- **Home/Property Conditions:** When considering a solar installation on your roof, it is important to ensure your roof is in good condition and will not need to be replaced before your panels do. No matter if it's on the roof, ground, or otherwise, you will also need to consider the amount of direct sunlight your array is likely to get, which can be influenced by panel placement, tilt, and possible shading. Review [Natural Resource Canada's Photovoltaic Ready Guidelines](#) to learn more about which conditions are important when considering solar placement.
- **Utility Rates:** When estimating how much money a solar installation will save your home in the future, it is important to consider the role of changing utility rates, and how this will affect your savings. Check [www.summerland.ca/netmetering](http://www.summerland.ca/netmetering) for the latest information about rates for energy you produce and purchase in Summerland.

## **Solar and Your Home - Where to Start:**

- 1) Conduct sensible energy efficiency measures, as possible. Go to / contact Efficiency BC to see what improvements can be made to your home to save energy and what rebates are available to help ([www.betterhomesbc.ca](http://www.betterhomesbc.ca)).
- 2) Preliminary solar self-assessment:
  - Assess your roof (condition of shingles, ability to handle extra weight, shading, etc.)
  - Assess your finances
  - Assess your annual electricity consumption
  - Consider future electricity consumption changes
- 3) Contact solar PV installation firms for: system size confirmation, system design (ask about aesthetics), and quotes/assessment (free if possible). Some things to consider asking:
  - Do they subcontract, or do the work themselves
  - Insurance – liability & WCB (Workers Compensation Board)
  - Warranties on components & system (e.g. 10 yrs panels, 5 yrs inverters)
  - Experience (no. of systems, years in business, etc.)
  - References (local, & several, & similar projects)
  - Training / certification
  - Will they do local government grid-connection applications for you
  - Timeframes
  - System maintenance
  - Tracking power production
  - Potential future system expansion
  - Panel efficiency (15-18% is fairly typical)
  - Panel toxicity etc. (check out Solar Scorecard <http://www.solarscorecard.com>)
  - Dispute resolution procedures
- 4) Compare quotes received (ideally 2-4), plus experience, references, warranties, etc.
- 5) Check the business case yourself (estimated electrical generation, electrical rates, potential increases in rates for purchased power).
- 6) Get an agreement in writing that outlines everything you've discussed and agreed to, including price, equipment, any potential extra costs, and what will happen in case of delays

**For more information on whether solar energy is the right option for your home, visit these resources:**

- [Going Solar: A Guide for Consumers](#)
- [NREL PVWatts Calculator](#)
- [www.letsgosolar.com](http://www.letsgosolar.com)