# **HOME SOLAR:** how does it work?





## 800,000 watts!

That's how much solar Peace Energy Co-op has installed in the Peace Region over the last few years.

Why do people put solar on their homes? It's about the money! These systems go up fast, run for decades with little or no maintenance, come with generous warranties and, most importantly, the home owner's electrical bills go way, way down, often down to zero!

How does all this work? Here are the answers to a few very common questions:

### What is GRID-TIED solar?

After your solar power system is installed, inspected and approved (Peace Energy Co-op will handle the paperwork) your solar array feeds power into the grid through your existing power panel.

This solar energy, generated even during overcast and cloudy days, powers your home first, then feeds excess power into the grid through your electrical meter. This meter keeps track of both how much power you pull out of the grid and how much you put in from your solar array. You pay only for the difference. That means reduced or eliminated electrical bills!

• LOCATION: Fort St. John, BC

• ROOF: east-facing

• REDUCTION IN ELECTRICITY COSTS: 100% Net Zero

• ARRAY SIZE: 6,800 watts grid-tied

• **SOLAR CONTRACTOR:** Peace Energy Co-op

### What is "NET ZERO"?

Many of the home solar power systems we design, supply and install are sized to provide ALL of the home owner's electricity needs over a one-year billing cycle. That means they are "Net Zero" – they are essentially paying

zero dollars over the year for their electricity.

#### What about WINTER?

In northern BC and Alberta, 90% of our solar energy arrives from the sun in the spring, summer and fall. Only 10% of our yearly solar resource falls in the winter, when your solar array may be covered with snow anyway.

No big deal. We make a lot of extra power during our long days of summer here, which builds up as a credit on our account, which we then use up in the following billing cycles. Because of this, grid-tied solar works great in the north . . . or anywhere else for that matter!

#### Do I need BATTERIES?

No! That's the beauty of solar gridtie: the grid is sort of acting as a big battery. Sure, if you want emergency backup you can install a battery system or generator that will kick in should the grid go down, but that's an option, not a necessity.

### Do solar panels need to be CLEANED or MAINTAINED?

Your solar power system is completely "solid state" – it has no moving parts. Panels are made with very tough tempered glass and are maintenance-free for their 40-year or more lifespan. Solar panels come with a 25-year warranty, and most other parts have 12-year or more warranties.

A bit of rain washes the panels off. No cleaning is required.

Solar electricity for your home is now affordable, practical and reliable.