

Grid-Tie Hybrid

In order for your conversation with us to be most effective, we suggest that you have a look at this page before you contact us.

We are happy to talk with you without your having done this, but it will make the process much easier for everyone if you do a little homework first.

Most people who choose a grid-tie hybrid system are not looking for the off-grid lifestyle, but to supplement their power bill plus have back-up power during outages. This will involve establishing an essential loads breaker panel. This means separating out the wiring and breakers for things that you wish to run during a power outage. These will be run off of your batteries and solar.

Do I have sun? Where? 1

This may seem a silly question, but here's the thing: if you don't have good solar exposure, you don't make any solar power.

Many people choose to put their panels on a roof for a grid-tie system, but using an independent rack in a nearby location is also an option if you have the room. This does have advantages in the North, as roof panels will be covered in snow in the winter, not making power. (That's an expensive roof ornament...).

An independent racking system can be adjustable to avoid snow-cover and make power year round. But it will cost more to install. Pros and Cons always to everything.

With this in mind, go outside and look at your roof and surrounding area. Do you have a south-facing roof? Or a nearby area that is? Is your roof or other location free and clear of things like trees, buildings, and hills that would cast a shadow on your panels? If not, can it be made to be?

2 Next have a look at your power bill. (Ouch)

In British Columbia grid-tie solar is a bill offset program. You will not see cash directly.

Because of this, you do not want to generate more power than you are using. So the first step is to have a look at your power bill and determine how much power (kWh) you have used in a year.

3 Decide on your budget.

Have a look at your finances and decide what you can afford. Feeding back into the grid in BC isn't super lucrative, so have a good look at what you will save vs what you can afford to spend.

There are a couple of things to keep in mind when considering cost:

- What amperage is the electrical service to your house? 200A service with a 225A buss bar is best if you want to add solar. You can add some solar if you have 100A service with a 125A buss bar, but it will be a limited amount.
- Will your roof need to be replaced within 25 years? Solar panels are said to last 25 years (or more). If you have an older roof, it is going to be a pain to install your panels and then have to replace your shingles in 5 years!

4 What do you want to run in an outage?

Think about what electrical items you want to have running during a power outage. We call this your essential loads.

Most people think of things like fridge, freezer, well

pump, lights, internet.

Enter these into a solar load calculator. (We will have one here soon!)

This helps to choose what size of battery bank you will need.

5 **Consultation and Site Assessment**

Finally, contact us for a consultation and site assessment, we will work together with you to create an ideal system for you.

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