

# Watt's Happening?

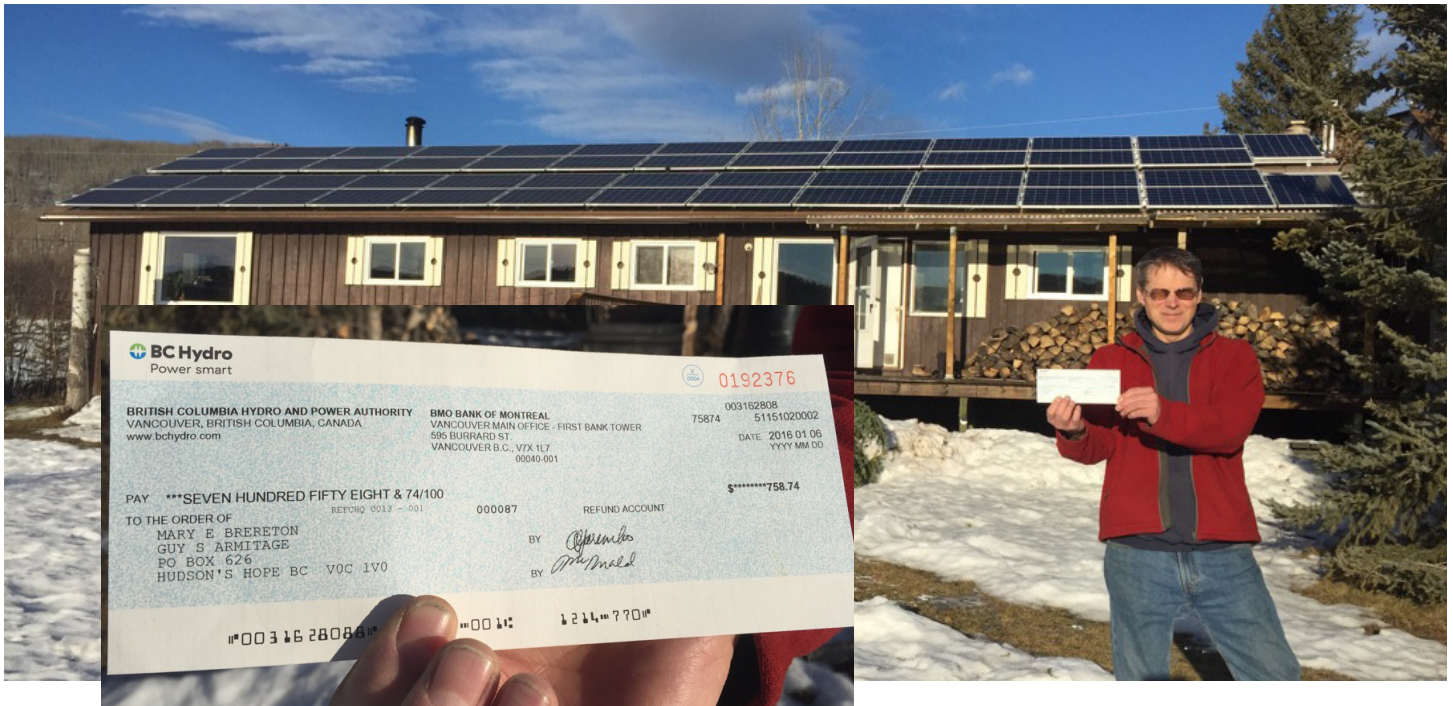
by Don Pettit

for Peace Energy Renewable Energy Cooperative

www.peaceenergy.ca ph 250-782-3882



## Got His Cheque!



*Guy Armitage of Hudson's Hope, BC displays his cheque for \$758.74 he just received from BC Hydro for a surplus of solar electricity he produced after one*

*complete year of operation. His 12 kilowatt rooftop solar system was purchased from and installed by Peace Energy Co-op of Dawson Creek, BC.*

**Y**es, the cheque has arrived. The cheque from BC Hydro, that is, for solar power Guy Armitage of Hudson's Hope fed into the grid last year. Yea!

Guy has joined the ranks of a small but growing number of solar energy producers in BC who are "grid-tied" and who are reducing or eliminating their electrical bills by feeding solar power into the grid.

### WHAT IS GRID-TIE?

BC Hydro should be given full credit for making grid-tie super-simple. Here's how it works:

- Your inspected and approved solar power system feeds power into the grid through your existing power panel.
- Your Smart Meter tracks both the power you pull out of the grid and the power you feed in. This is called "Net Metering."
- You pay only for the difference = reduced electrical bills.
- If you put more power into the grid than you took out over a one-year pay period (as Guy did), BC Hydro pays you for that excess at 10 cents/kwh (this can be either a cheque or a credit on your account. Guy took the cheque!)

## WHY “GO SOLAR” NOW?

- The price for solar panels has dropped by 80% over the last 10 years, making solar power very affordable.
- Solar technology is mature, high quality and reliable. Solar panels come with a 25-year warranty, and will probably be working just fine 50 years from now, making them a good long-term investment.
- Making your own solar electricity helps fight climate change. YES, it really does!
- A growing number of solar designers and installers (like our local Peace Energy Cooperative based in Dawson Creek) makes “going solar” easy. They will design your own custom solar power system, offer good pricing on top-quality equipment, and provide qualified local installation.

## HOW MUCH POWER CAN I PRODUCE?

A small, efficient Canadian home uses about 5,000-kilowatt hours (kwh) of electricity per year, and a large home about 13,000 kwh per year.

Most rooftop home-sized solar arrays are about 3 to 8 kilowatts in size, and will produce, in a good solar location like the BC or Alberta Peace Region, about 4,000 to 10,000 kWh per year, respectively.

Guy Armitage’s large 12 kilowatt system produces considerably more power than he needs, so he gets paid for the surplus he produces that he feeds into the grid.

## GOOD, BUT NOT PERFECT

“In most areas of the world and even in much of Canada,” explains Guy Armitage, “receiving a cheque for producing power from renewable energy would not

be a cause to celebrate. It would be commonplace. In BC it is rare.

“Fortunately, BC Hydro’s Net Metering program exists, allowing private energy producers like me to feed the grid. The program is administered by a single dedicated person in the BC Hydro office, and although it is an important program, it falls far short of it’s potential, paying a mere 10 cents per kilowatt hour, far below industry standards.

“I am grateful for BC Hydro’s net metering program,” continues Guy, “and especially for the helpful and enthusiastic gal who operates it. My sincere thanks is also directed toward the dedicated folks who made my solar power system possible, the folks at Peace Energy Co-op in Dawson Creek.

“Peace Energy is a pioneer in renewable energy in BC, and designed and installed my 12 kilowatt rooftop system. Since I flipped the switch in September 2014 it has performed flawlessly, with no maintenance, as I have watched my electrical bills fall and then essentially disappear. Now I am producing more electricity than I use, and getting paid for it, thanks to BC Hydro’s net metering program and Peace Energy Co-op.

“For the handful of BC’ers like me who have joined the millions of roof-top solar energy producers around the world, we celebrate our small windfall, but envision a province with not just hundreds but thousands or millions of these systems flooding the grid with clean solar energy.

“Meanwhile we wait and watch for our government to wake up and join the rest of the world,” says Guy, “by investing in clean, renewable, reliable and sustainable energy industries like roof-top solar.”

Congratulations, Guy Armitage of Hudson’s Hope, BC!

## Quick Fact: CHINA AND DENMARK MOVING FAST

Instead of a climate culprit, China is moving quickly to become a climate leader. China installed more wind power last year than any other country, adding 32.5 GW (billion watts) of capacity and putting its 2020 climate target well within reach. Chinese solar capacity jumped 74 per cent to 43.18 GW, while it’s coal use continued to drop.

Meanwhile, wind turbines supplied 42 percent of Denmark’s power last year, and they are on-target to meet their goal of 100 per cent renewables by 2035.