

Watt's Happening

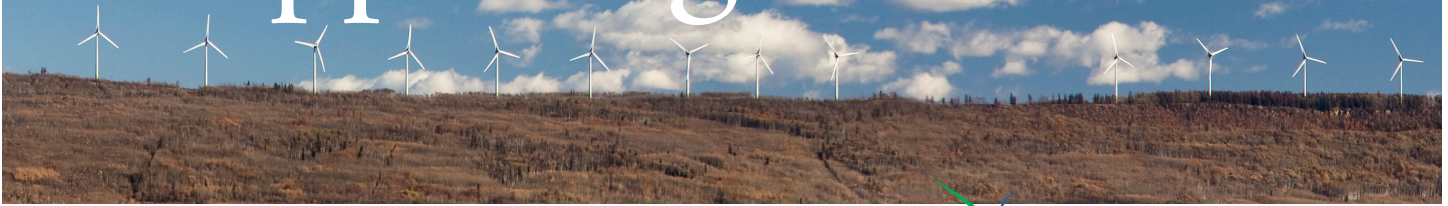
Peace Energy Cooperative Newsletter

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Message from the President



Hudson's Hope goes solar - big time!

Summer greetings, Members:

We have exciting news for our Co-op which we can now share publicly. This summer we are installing the largest municipal solar photovoltaic (PV) project in the province of BC. This project will install grid-tied solar PV arrays on municipal buildings in Hudson's Hope (HH), with a combined output capacity of some 500 kilowatts. For comparison, the average residential home has an array from 5 to 10 kW in size.

We pursued this project for almost three years, starting when our own Don Pettit assisted the municipality with the grant application for federal funding, followed by PV design work for Urban Systems, the project manager selected by HH for this project.

Our PV designs became the foundational design documents in the call for Expressions of Interest from qualified bidders to do the actual final designs, and supply and install all of

the solar PV systems. PEC made the shortlist of qualified bidders. With that, a small, dedicated, hard-working team produced what we hoped would be the best proposal. A joint venture was formed with Moch Electric Ltd., to make sure we had the expertise and resources to perform the work.

The HH municipal council evaluated five proposals. Ours was selected because it would give HH the best value for their money. As you can imagine, we were elated to be chosen.

However, winning the bid was not the final step. We entered into discussions with HH and Urban Systems to arrive at a contract that would secure the interests of both PEC and HH. That accomplished, contracts signed, PV designs finalized and approved, the project is underway with crews of local workers now on-site in HH.

We are confident this project will open new opportunities for PEC to obtain more large-scale solar PV contracts, and bring us recognition as

a leader in solar design and installation. The revenue from this project will put PEC in a greatly improved financial position going forward. We are already contemplating next projects and will be developing our options over the winter months.

This is the best news we've had since the Bear Mountain Wind project got the go-ahead more than ten years ago. We believe this is the beginning of more good news for PEC, as the future for solar power is bright indeed.

Thank you all for your continuing support of your Co-op.

Joyfully,

Steve Rison,
President



*"When there is a huge solar energy spill,
it is called A REALLY NICE DAY!"*

Chief Gordon Planes, T'Sou'ke First Nation



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Community Solar Initiative 2017



“When completed, this will be the largest municipal solar array in BC. We are proud to be a leader in electricity self-generation, and appreciate the BC Hydro net-metering initiative that helps us achieve it. We anticipate reduction in the District

electricity costs to be in the neighborhood of \$70,000 per year. Over 30 years, that amounts to savings of \$2 million. That’s calculated using present rates and future rate increases will enhance that savings considerably.”

Gwen Johansson, Mayor, District of Hudson’s Hope

Peace Energy Cooperative is proud to be chosen by the District of Hudson’s Hope to design, supply and install 500 kW of grid-tied solar on their municipal buildings, greatly reducing their electrical bills for decades to come. To follow progress as this world-class solar project takes shape over the next few months, check it out on Facebook: [peace energy-a renewable cooperative](#).



Hudson’s Hope Solar TECH SPECS:

- Roof-mounted grid-tied solar arrays will be mounted on five (5) municipal buildings.
- One (1) ground mounted grid-tied array will be installed at the sewage treatment lagoons.
- Total peak output of all the arrays combined will be approximately 500 kilowatts (kW).
- This will be the largest municipal solar project in British Columbia.
- “Grid-tied” means solar generated electricity is fed into the grid when it is not needed, accumulating a credit with BC Hydro. That credit can be withdrawn later when the buildings need power, such as at night or in the winter.

Recent Solar Projects by Peace Energy Cooperative



The Bullhead Mountain Curling Club building will receive 67 kW of solar, which will provide 100% of its electrical needs (photo simulation).

- These high-efficiency polycrystalline solar panels come with a ten-year materials and workmanship warranty, and a 25-year energy production warranty.
- Solar panels are expected to run without maintenance for at least 30 years, probably much longer.
- Solar panels turn sunlight directly into electricity. They are silent, have no moving parts and produce no pollution.
- Roof-top solar arrays will be flush mounted parallel to roof surfaces to provide maximum energy at minimum cost. Flush mounting produces minimum load stress. All buildings have been assessed by a structural engineer.
- SolarEdge™ voltage optimizers and inverters will be used to ensure maximum efficiency from every panel. SolarEdge™ technology also provides remote internet monitoring of every panel in real time and records historical output data. This allows the District and Peace Energy Co-op to monitor how much power they are producing, how much money they are saving and whether arrays are operating correctly.
- Six students from Hudson's Hope High School have been hired for the solar installation teams. Other solar education and training opportunities will be offered in Hudson's Hope during construction. HH District personnel will be trained to monitor, operate and maintain the solar system.



Work begins on the Hudson's Hope Arena: above, some of the students hired for the solar installation crews plus supervisors Ron Moch (left) and Randy Stam (far right).



At 132 kW, the Arena solar array will be one of the largest in the province.

Recent Solar Projects by Peace Energy Cooperative



The new Hudson's Hope Public Works Shop will receive 86 kW of solar, which will provide about 90% of its electrical needs (photo simulation).



The Arena will receive 132 kW of solar, which will provide about 55% of its electrical needs (photo simulation).



The District Office will receive 53 kW of solar, which will provide about 80% of its electrical needs (photo simulation).



The Tourist Information Centre will have 10 kW of solar installed, which will provide about 50% of its electrical needs (photo simulation).



122 kW of ground mounted solar will be installed at the Sewage Treatment Lagoons.



Solar Sales Report: *looking good*

Retail and commercial solar sales and inquiries have continued to be brisk through this spring and summer, as expected.

We have sold and installed two residential systems in the Hudson's Hope area, with many more lined up almost ready to go all across the Peace. We are excited to design our first home-scale ground mounts (rather than roof mounts) for several clients in the region, and expect to have one or two up and running before snow flies.

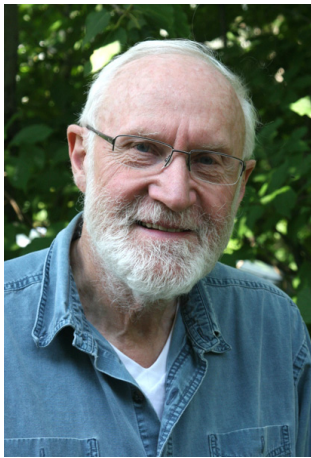
Of course, because of the Hudson's Hope solar project, we are beginning to get inquiries from other regional towns, cities and Districts,

both here and in northern Alberta.

The recent announcement of generous solar grants from the Alberta government will create a strong solar market for PEC in nearby northern Alberta. If you are a homeowner, small business owner, farmer, rancher or aboriginal community in Alberta, you are probably eligible for one of these solar grants. Call the Peace Energy office for more information (and call soon, the money the Alberta government is offering is limited and may be spoken for quickly!)

We are considering hiring another person to train as a solar sales consultant and help us keep up with our backlog of solar reports and designs. It's a good sign when it's hard to keep up!

Greg Dueck, Solar Consultant



Watt is Actually Happening??

Some closing words from your vice-president

If you have been following my *Watt's Happening* blog, you'll know that solar energy is taking off around the world as never before, way beyond predictions. So too here in the BC and

Alberta Peace Country.

Thanks to the very hard work of Greg Dueck (solar design and sales), Wendie Demyen (office admin.), probably me as an almost full-time volunteer (marketing and communications), Ron and Lynn Moch of Moch Electric Ltd. (solar installation and project management), and our volunteer board of directors with leadership provided by president Steve Rison, your Co-op has become the most experienced solar design and installation company in the province.

A big part of the reason for this rapid adoption of solar technology here and around the world (besides the falling price per watt) is

the chain-reaction-effect: one solar array leads to another. We have a steady stream of inquiries from home owners and small businesses wanting to reduce their electrical bills.

Similarly, other municipalities are asking how they can do what Hudson's Hope has accomplished – reduce the cost of operations (and thus the burden on taxpayers) by going solar. The new solar incentives recently announced by the province of Alberta will add to this wave of solar adoption . . . and keep us even busier at Peace Energy Co-op!

Your Cooperative is doing the right thing, at the right time, in the right place. I see only a bright, bright future ahead. Thanks for coming along with us on this exciting journey into a twenty-first century powered by clean renewable energy. We not only CAN do this, together we ARE doing it!

Don Pettit