

# NEWSLETTER

SPRING 2014

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## A Great Start to 2014!

**G**reetings to all our members. The board, on behalf of our members, is pleased to announce an addition to our staff. Wayne Cleve has agreed to join us as Peace Energy's new sales representative for all Renewable Energy (RE) products. Wayne has been retained as a commissioned salesperson and reports to the Executive Director and the Board. More details on Wayne's credentials can be found elsewhere in this newsletter.



Wayne is available to see you and any of your neighbors and acquaintances for a consultation if you are thinking of adding value to your property with the addition of solar PV, solar thermal, or small wind turbines. With Hydro rates steadily increasing, this may be an opportunity to feed back power into the grid with your own power source, offsetting your energy costs.

Fred Feddema, our Executive Director, will now be able to concentrate on keeping his administrative duties going with a reduced number of hours, now that he is not a salesman as well.

### Renewable Energy Product Sales

We decided to hire a salesperson because we have over 20 prospective RE sales on the books thanks in most part to the efforts of Fred Feddema and Don Pettit, with more enquiries coming every day. The Peace Energy board sees this move to retail sales as a strong move toward making your cooperative more financially sustainable, with the ultimate goal, of course, of rewarding our members with a significant return on their investment.

The quantity of inquiries and solid orders for renewable energy equipment – solar hot water heaters, photovoltaics, and home-scale wind generators – that have been flooding into our office has been remarkable. Clearly, there is a strong interest in the money saving, independence, security and enviro-friendly aspects of RE, for home, farm, and business. The Peace Energy board sees this as a remarkable opportunity to move into the retail market and generate significant profits for your cooperative.

Folks, this is how we can all participate in the renewable energy scene. Renewables add value to your home and give you a greater sense of security as well as the knowledge that you are doing your part to off-set your carbon footprint and your home/ business energy costs. If you have been following Don's blogs/ articles in the media you know this is a worthwhile investment. Now your coop has gathered together the suppliers and expertise needed to help design RE systems, order the very best renewable energy equipment and connect you with qualified, experienced installers. We're here to make it easy for you!

Please read the other contributed articles to get more updates and details on what we have been up to on your behalf. If you have a story to tell on energy savings or questions about RE, call the office and leave a message; share with us. Don would love to hear from you as the editor of this newsletter, and Fred and Wayne are ready to answer your questions.

Also, our AGM is coming shortly where we will be able to tell you much more about the exciting directions that are opening up for your cooperative. We are waiting on our auditor before we can set a date. Every member will be notified.

Thank you for your continued support of your cooperative, and enjoy the rest of Spring (when it gets here!!).

*Rupert Kirk, President*

## From the desk of our Executive Director:

Spring is fast approaching, the sun will be shining and it will be time to be thinking of how you can put that sun to work for you. Well, Peace Energy Cooperative can help with that – we are now retailing solar PV, solar thermal hot water as well as small wind generators.



We are pleased to announce the addition of Wayne Cleve as our RE product sales representative. Wayne brings expertise in solar hot water (he is a certified installer) and a wide range of home energy solutions. Contact Wayne, 250-784-8963, for an estimate

We will be hosting an open house in May to showcase the solar PV installations at Peace photoGraphics and South Peace Chiropractic. You will be able to see how the installation was done, what is required to grid tie and what you will need if you are thinking about a battery backup system.

Be sure to catch us on April 11 – 13, 2014 at the Kiwanis Trade Show in Dawson Creek, booth #373, where we will be featuring solar products, Bergey small wind turbines and Motorino electric bikes & scooters.

Peace Energy Cooperative's AGM is on the horizon, mid to late April. A notification will be sent to all members once the date has been set. If you are interested in running for the board, please give us a call as we will be holding elections for two, three-year terms.

Don't waste the wind & sun, harness its power to work for you and your family, and reduce both your utility bills and greenhouse gas emissions. If you have questions or would like more information give us a call or we can arrange to meet and discuss your solar or wind needs.

*Fred Feddema, Executive Director*  
*fred@peaceenergy.ca*  
*office: 250-782-3882*

## Wayne Cleve: renewable energy product sales

I am excited to be Peace Energy Cooperative's new sales representative for renewable energy products. I relish the challenge of transitioning into a role that will allow me to share my enthusiasm for alternative energy. As a plumber/gasfitter I am uniquely situated to advise potential customers on their individual requirements.



I have operated a successful home-based business in various locations throughout B.C. including Dawson Creek since 1995 (I was also born in Dawson Creek). I currently possess a B.C. Trades Qualification plumbing ticket with an inter-provincial endorsement, as well as B.C. and Alberta Gas Fitter Licenses.

I am well-versed in residential, commercial and industrial job worksites, and am experienced in service, maintenance and construction work. I have completed the Northern Lights College solar hot water heater installation program, and have installed several solar hot water systems in the area. I look forward to installing more!

I became a member of Peace Energy Coop in its early stages (I am proudly member #56) and have become increasingly enthusiastic about renewable energy (RE) as technology has progressed. I believe we have reached the point where RE has become the only rational choice. As prices for RE equipment continue to come down, going renewable has become a much more practical option for everyone: home owners, businesses and farms and ranches. We can all save money, reduce our footprint, and become energy producers, not just energy consumers.

With renewables, the future is bright. I look forward to working hard to make that brighter future a reality in the Peace Country. If you are interested in how RE can work for you, please give me a call!

*Wayne Cleve, PEC sales rep.*  
*cell: 250-784-8963*

# Update: Solar PV Installs by Peace Energy



Ron Moch of Moch Electric Ltd. Installing the 5 kw. inverter that feeds solar power into the grid.

## Peace photoGraphics/Peace Energy offices, Dawson Creek 5 kilowatt, grid-tie – **UP AND RUNNING!**

This system was chosen for its simplicity and relatively low cost. All of the components were ordered through Peace Energy Coop. It consists of a solar array flush-mounted on the roof and an inverter that feeds power into the grid. Nothing else.

The existing Smart Meter tracks how much power is used by the building as well as how much is generated by the solar array. The owner is billed only for the difference, and if at the end of the year a surplus has been generated, BC Hydro pays the owner for that surplus at 10 cents per kilowatt hour, a bit more than the 7 cents that consumers usually pay for power.

**INSTALLATION:** Everything was quickly and expertly installed by Moch Electric with help from RJ Stam Construction Ltd. It took one day (two people and helper) to install the racking system on the roof, another day to install the panels and wire them together, and part of a third day to wire in the inverter. It was electrically inspected and commissioned in November, and after filling out a simple one-page form, approved by BC Hydro for grid-tie almost immediately.

**SNOW COVER:** When thick snow completely covers the panels, output drops to zero. When partly covered, they put out partial power. It was good to see the

panels clearing quickly with even the slightest warming of weather due to the fairly steep roof slope, the dark coloured panels and their slippery glass surface. Ninety percent of the power will be generated in the spring, summer and fall, so any power generated in the winter is considered a bonus.

**OUTPUT:** Even in January, with our very low sun angle, the array put out about 2000 watts when clear of snow on a sunny day. Now, in late March, it is already putting out its rated peak output of 5000 watts. By looking at previous electrical bills and estimating yearly solar output, it was calculated that this PV array should supply all of the electrical needs of this commercial building and the electrical bills should average out to zero.

**CONSERVATION:** A solar-powered building makes one more aware of wasted electricity. LED lights are being added to the existing compact fluorescents and fluorescent tubes. A large and unnecessary outdoor yard light was eliminated (a motion sensor yard light would be a sensible option). At the end of the work day, computers and all lights are turned off, except for a few LED security lights. Common sense conservation.

**TOURS and INFO:** call the Peace Energy office for a tour of this working solar grid-tie system.



## South Peace Chiropractic, Dawson Creek

### 4 kilowatt, grid-tie with battery back-up – **UP AND RUNNING, ALMOST!**

This was designed as a “deluxe” system with all of the bells and whistles. The owner, Dr. Chris Garwah, wanted back-up battery power so that when the grid goes down, his practice can function for at least a day or part of a day. That means keeping the lights on, the computers and diagnostic equipment running, and the furnace fan blowing. Not having to close the doors on those no-grid days means providing uninterrupted quality care to patients, decreased expense, and overall better customer service.

**SYSTEM:** A four kilowatt solar array was flush mounted on the roof using the high-quality Unirac system. The array feeds power to a grid-tie inverter, as well as a battery charging system that keeps a battery bank ready for grid failure. When the grid goes down, the inverter feeds battery power into the building’s electrical system to keep everything up and running. The battery bank was sized to run the building on its own for roughly a day, depending on how cold the weather is and therefore how much the gas furnace blower has to run. The switch from grid to battery power (and back again when grid power is restored) is automatic and instantaneous.

Chris also chose the new “Smart Panels” that optimize output regardless of shading. These panels allow Chris to monitor the output of each panel or the whole array from any on-line computer or his smart phone, 24/7.

**INSTALLATION:** all components were ordered from Peace Energy Coop and are now in place thanks to the expert work of Moch Electric Ltd. Because this is a more complex system, wiring and commissioning will take a little longer than the simpler Peace photoGraphics system described earlier . . . but we’re close! Stay tuned for further updates as this system goes on-line!

*Right: the battery bank is shown during installation. Maintenance-free sealed batteries were chosen.*



**VISIT the Peace Energy Coop booth  
at the **KIWANIS TRADE SHOW** – April 11, 12, 13**



Featured this year at our Kiwanis Trade Show booth in Dawson Creek will be our new line of

**Motorino Electric Bikes, Scooters  
and Motorcycles.**

Check 'em out. They're amazing, they're all-electric, and they're very cool! Now available in the Peace Country from your Cooperative!

## **OPEN HOUSE**

Peace Energy Coop will be hosting an open house (well, houses actually) at Peace photoGraphics and South Peace Chiropractic on 103rd Ave. in Dawson Creek, in late May (exact date will be announced to members and covered in the media).

Join us for **refreshments and tours** of these

**state-of-the-art solar power systems!**

Call the Peace Energy office at 250-782-3882 for more information. **Everyone welcome.**

## **HELP WANTED: Electrical & Plumbing Contractors**

Peace Energy Coop is compiling a list of Electrical Contractors for solar PV and small wind installation, & Plumbing Contractors for solar hot water installation. If you are interested, please contact our Renewable Energy sales rep. Wayne Cleve at 250-784-8903.

## **Watt's Happening? Quick Fact:**

**PANELS, PANELS EVERYWHERE:** some one million Europeans, two million Australians and almost one million Japanese homes are now powered with photovoltaic (PV) panels on their roofs, and the number is growing rapidly. The world-wide solar PV market is expected to grow to US \$155 billion by 2018, with China and the United States leading the way. Total installed solar capacity is expected to reach 61.7 gigawatts (61,700 megawatts) by the same year. In 2012, the world invested more in renewables than in fossil-fueled and nuclear generation combined.

## Why we joined Peace Energy Cooperative

**W**hy did we join the Peace Energy Cooperative and why do we stay? For both Greg and I, our social connections first led us to people talking about healthy choices and the world around us. I was involved in the arts community in Dawson Creek through the marching band and the symphonette and choir. Greg met people during his days operating Physiques Fitness.

As a new teacher, I listened and watched students preparing for their lives after school. Greg was in the gym, likewise, providing a platform for people preparing and growing. I suppose, deep down we're both children of the '60s and '70s because it soon became apparent to both of us the truth in McLuhan's "the medium is the message" message.

I realized that as much as teachers prepare materials and lessons for their students, they are, at the end of it all, "the lesson plan". Children will learn what they live and what you, the teacher, live. The same was true for Greg in the gym. It's pretty hard to advocate working towards living a balanced and fit lifestyle unless you are doing

the same.

Gardening, composting, and recycling were all natural extensions for us. We'd both grown up here in the Peace and had parents and grandparents born in times of reducing and reusing as much as possible and making do with what you have. We became interested in our personal energy use and choices available to us in British Columbia.

By human nature, peoples' intentions are inherently good, especially where the planet and their children are concerned; however, a blur of competing interests and demands rush into all of our lives all the time. By participating in the Peace Energy Cooperative, we continue to make sure that our daily choices are in alignment with a bright and healthy future and that such resources are also available to others.

*Joanne Dueck, Peace Energy Coop director*



## Connect with us on Facebook!

Peace Energy director Joanne Dueck has volunteered to set up and maintain our new Facebook page!

Here's the link: <https://www.facebook.com/pages/Peace-Energy-A-Renewable-Energy-Cooperative/169121919893246?ref=hl>

Or look for "**Peace Energy - A Renewable Cooperative**" and "like" our page.

Joanne is posting links to our popular "Watt's Happening?" blog by Don Pettit, as well as links to articles related to renewable energy and technology from around the world. Members are also adding their own links to amazing videos and information about renewable energy. CHECK IT OUT!

