

# Fast Facts

## The Hudson's Hope Community Solar Initiative



the Hudson's Hope  
"Solar Wave"



*"This is presently 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 \$74,000 per year. Allowing for expected rate increases, that amounts to savings of more than \$3 million over the next 30 years. We're saving money, saving electricity and helping the environment – that's something our community is very proud of."*

Gwen Johansson, Mayor





## **BACKGROUND:**

### **2016**

- The District of Hudson's Hope began implementation of a community solar initiative with the goal to offset electricity costs to the District and take a lead role in sustainable energy solutions by installing photovoltaic (PV) systems on community buildings.
- The District received \$1.35 million from the Strategic Priorities Fund/Federal Gas Tax Fund through the Union of BC Municipalities. Urban Systems (Fort St. John) was contracted to oversee the project.
- Peace Energy Renewable Energy Cooperative (Dawson Creek) was contracted to perform a "Community Scan" to determine which buildings or other locations would produce the best financial return with solar energy.

### **2017-18**

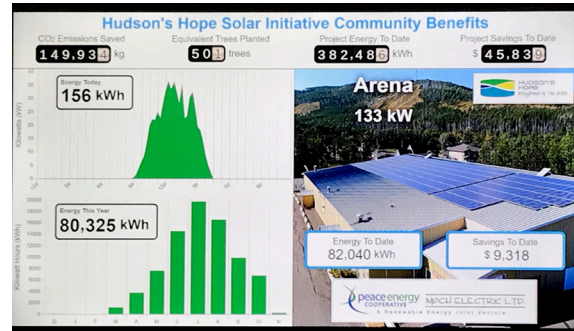
- Peace Energy Co-op/Moch Electric Ltd. Joint Venture was selected through a competitive RFP process to provide structural and electrical engineering and to supply, install and commission the PV arrays.
- Crews were on-site in Hudson's Hope installing the PV arrays through the summer and fall of 2017, and the spring of 2018.
- Seven Hudson's Hope highschool students were hired for the solar installation teams. Other solar education and training opportunities have been offered in Hudson's Hope during construction including several public information sessions and a Solar Celebration launch event. District personnel are being trained to monitor, operate and maintain the solar energy systems.

## **TECH SPECS:**

- Roof-mounted grid-tied solar arrays have been installed on seven municipal buildings as well as a ground-mounted grid-tied array at the sewage treatment lagoons, and another ground mount array at the District swimming pool (known as the "Solar Wave.")
- Total installed capacity of all the arrays combined will be just over 510 kW, making this the largest municipal solar project in British Columbia.
- "Grid-tied" means that solar generated electricity is fed into the grid when it is not needed, accumulating a credit with BC Hydro. That credit will be withdrawn later when the buildings need power, such as at night or in the winter.
- 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 with little or no maintenance for 30 years and probably much longer.
- Solar panels are solid-state devices that turn sunlight directly into electricity. They are silent, have no moving parts, require no fuel, produce no pollution and require very little maintenance.



- A kiosk display (shown at right) at the District Office and District website provides real-time information on each array and allows the District and the public to monitor how much power the solar arrays are producing and how much money the District is saving. Peace Energy Cooperative also monitors the arrays from their office in Dawson Creek.



☀️ The Hudson's Hope District Office has a 53 kW solar array providing about 80% of its electrical needs. The Bullhead Mountain Curling Club (behind, upper right) has a 72 kW solar array providing 100% of its electrical needs.



☀️ The Arena has a 132 kW solar array, which will provide about 52% of its electrical needs.



The new Hudson's Hope Public Works Shop has a 92 kW solar array, which will provide about 90% of its electrical needs.



122.4 kW of ground mounted solar at the newly upgraded Sewage Treatment Lagoons will provide about 50% of the facility's electrical needs.



Museum 7 kW



Beryl Prairie Fire Hall 7.5 kW



The Visitor Info Centre 10.1 kW



Swimming Pool *Solar Wave* 10.2 kW



Hudson's Hope District Office: 250-783-9901  
visit our website or join us on Facebook  
<http://hudsonshope.ca>



1204-103rd Ave. Dawson Creek, BC  
visit our website or join us on Facebook  
<http://peaceenergy.ca> 250-782-3882